

Faster Since '58

Vintage Book
Parts & Accessories
for 1926–1999 big twins



LOOKING FOR REPLACEMENT PARTS?

1984–1999 big twins

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S&S VINTAGE CONTENTS:

1984–1999 BIG TWIN

Performance products and service replacement parts for HD® Evolution® engines. The newest of these engines is over 20 years old and many are in need of an engine overhaul. Why not upgrade to a stroker or big bore kit while you have it apart? Why not replace it with a new engine? Just turn the page.

1926–1984 VINTAGE

Building an old school chopper, a retro vehicle or restoration? We have the engine components you need. Keep that old iron on the road!

TOOLS & SHOP SUPPLIES

Every job is easier with the right tools. Keep your bike running in top condition! You'll find special tools, shop supplies and fluids you need, whether you are a "do-it-yourselfer" or a professional servicing technician.

COMPANY POLICY & WARRANTY

Information on sales, ordering, shipments, S&S internet policy, and special orders. Warranty policies on all S&S parts and S&S assembled engines.

APPENDIX

Useful information for our customers: identify S&S components, measuring manifolds, calculating cylinder head bolt lengths.

A WORD ABOUT DYNO NUMBERS

With a motto like "Proven Performance®", which is a registered trademark of S&S® Cycle Inc., it is very important that we be able to back up our claims regarding performance. It is also vitally important to be able to evaluate new designs in our development process. One of the tools we depend on for both of these functions is the chassis dynamometer.

Something that needs to be understood about dynamometers is that the results from one dyno will not necessarily be identical to those from another dyno. So comparing results from different dynos is bound to create a certain amount of confusion. This is especially true with dynos from different manufacturers. However, results of tests run on the same machine can be compared with a high degree of confidence. We can determine, for example if a performance modification increased power or torque, but there is a problem if you expect absolute values.

There are several brands of dynamometers which are in common use in the performance industry. These dynos will yield very reliable values for comparison, especially when tests are performed on the same machine. However values obtained from these dynos may not always agree. Which value is correct? It depends on who you ask.

NO ABSOLUTES

In our literature and catalogs, we publish dyno results so our customers easily can see how our products improve performance over stock. However, it must be remembered that these are comparative values, and should not be taken as absolutes. If a similar or even identical engine or motorcycle is tested on another dynamometer, the results will more than likely differ.



SYMBOL KEY



CONFIGURE TO ORDER: CTO allows you to choose available options for a specific part or kit, and covers both "special order" parts and "made to order" kits. Some CTO kits have a base price with additional upcharges for the optional selections. In some cases, the entire price of a kit is determined by upcharges for the options selected. It is best to call an S&S customer service representative and configure the kit with exactly the options you want.



These are our latest innovations to the market.



VIDEO If you see this icon, there is a video available.

EMISSIONS SYMBOLS



Part numbers marked with this logo are replacement parts for specific S&S certified emission engines and are legal for sale and use on these engines. The number(s) listed by each logo in the catalog indicates the model(s) of S&S certified engines that use the part. Use the table below to reference your engine model to its number in the logo.



Example: This part is legal for use on V96E, V124C, and V124E engine models.

Engine Model Number	
V96E	1
V100C, V113E, V113C	2
V124E, V124C	3
X117E, X117C	4



Part numbers marked with this logo are legal to be sold for and used as replacement parts on Harley-Davidson® motorcycles in all 50 states. These parts may only be installed on a motorcycle model listed in the part's description. Selling or installing these parts on a pollution controlled motorcycle not listed is in violation of California and/or Federal emissions laws and could result in fines and penalties.



S&S Cycle's products designed to meet California's emissions standards.



S&S Cycle products that are EC-approved have an e mark from the European Commission in accordance with the mandatory members of the EU Directive and are legal for sale and use in Europe.

Note:

Vehicles 1977 model year and earlier are exempt from emissions regulations. Owners of such vehicles may install any parts desired without concern about violating exhaust emissions regulations. However, local noise ordinances still apply to these vehicles, so the owner of a 1977 or earlier vehicle can still receive a noise citation if the vehicle is too loud.

MISSION STATEMENT AND TRADEMARK INFORMATION

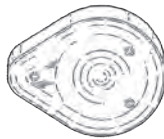
MISSION STATEMENT: Proven Performance® for the Powersports Industry.

THE FOLLOWING ARE TRADEMARKS OF HARLEY-DAVIDSON® MOTORCYCLE COMPANY: BUELL® • Dyna® • Evolution® • Evo™ • Harley® • Harley-Davidson® • HD® • H-D® • Heritage Softail® • Milwaukee-Eight® • Screamin' Eagle® • Softail® • Sportster® • Twin Cam 88® • Twin Cam 88B™ • Twin Cam 96™ • Twin Cam 96B™ • Twin Cam 103™ • Twin Cam 110™ • Tri Glide™

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Body Parts • Dealer Focus • EZFI • Frame Lock • G-Extreme • Hot Set Up Kit • IST • Performance Times • Power Tune • Proven Performance • S&S • S&S Service & Speed Center • Sidewinder • SPO • Super Stock • X-Wedge • Flathead Power • Viola V-Twin



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CUSTOMER SUPPORT HOURS: MONDAY–FRIDAY 8:00A.M.–5:00P.M. CST

Calls should be directed to (608) 627-1497. International customers should use this number to place orders from outside the United States. This number should also be used if you have a technical or warranty question, or to contact the Accounting departments. This is not a toll-free number.

S&S Cycle, Inc. reserves the right to change prices, terms, availability, and specifications without prior notice.

1984-'99 BIG TWINS



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SIDEWINDER® 2:1 EXHAUST

FITMENT

- 1995–2016 Harley-Davidson® touring models

FEATURES AND BENEFITS

- 2:1 styling for high-performance baggers
- Increased power and torque
- Available in show chrome or ceramic black finish
- Machined aluminum end cap
- Includes adapters that allow use of wide band or stock O2 sensors
- Stainless steel header construction
- Some fitments 50-State Legal: CARB EO# K-010-3
- Removable dB reducer included
- Made in the USA!



See next page for Left Side Shadow Pipe



SIDEWINDER® 2:1 EXHAUST SYSTEM FOR 1995–'09 FL MODELS — 1995–'03, 2007 FL MODELS — CA EMISSIONS LEGAL†

Finish	Part #
Chrome with Black Highlighted Machined End cap	550-0776
Black with Black Highlighted Machined End cap	550-0777

†DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. Not legal for sale or use on EPA pollution controlled vehicles originally equipped with catalyst.

*Qualified manufacturer declared emissions replacement part on FL touring models listed below.

California Models:


Fuel Injected Non-CVO FL Touring Model Years: 1995-2003 and 2007

CVO FL Touring Model Years: 2000-2003

49 State Models:

Fuel Injected Non-CVO FL Touring Model Years: 1995-2005 and 2007-2009

CVO FL Touring Model Years: 2000-2005

 WARNING: Cancer and Reproductive Harm

→ REPLACEMENT PARTS: SEE PAGE 104



SHADOW PIPE

FITMENT

- 1995–2020 touring models with S&S Sidewinder® 2:1 exhaust

FEATURES AND BENEFITS

- Available in show chrome and black ceramic finish
- Shadow muffler fills left side cutout in extended bags when running Sidewinder 2:1
- Matching end cap for left side is a mirror image of right side Sidewinder 2:1 Cap
- 4.5" design
- All hardware included



1995–2008 TOURING MODELS EQUIPPED WITH S&S® SIDEWINDER® 2:1 EXHAUST

Chrome	550-0828
Black	550-0830

If you have...			...you'll need
BIKE	FINISH	SIDEWINDER PART #	SHADOW PIPE PART #
1995–2008 Touring	Chrome	550-0776	550-0828
	Black	550-0777	550-0830

→ REPLACEMENT PARTS: SEE PAGE 105



SLASH CUT SLIP-ON MUFFLERS FOR DYNA® MODELS

FITMENT

- 1995–2009 Dyna® models with staggered exhaust

FEATURES AND BENEFITS

- Up to 16% more horsepower and 10% more torque (*when used with Stealth Air Cleaner Kit*)
- Wake up your bike without breaking your budget
- Classic slash cut styling
- Show chrome finish
- SAE J2825 sound level compliant
- 50-state legal
- Removable dB reducer
- Made in USA!



Removable dB reducer



SLASH CUT MUFFLERS FOR 1995–2009 DYNA® MODELS WITH STAGGERED EXHAUST

Finish	Part #
Chrome	550-0718

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES. Not legal for sale or use on EPA pollution controlled motorcycles originally equipped with mufflers containing catalyst.

*Qualified Manufacturer Declared Emissions Replacement Part on the Dyna Models Listed Below.

California Models: MY 2006–2007, Except CVO models

49 State Models: MY 1995–2009, Except CVO models

 WARNING: Cancer and Reproductive Harm

→ REPLACEMENT PARTS: SEE PAGE 106

GRAND NATIONAL® SLIP-ON MUFFLERS FOR DYNA® MODELS

FITMENT

- 1995-2009 Dyna® models with staggered exhaust

FEATURES AND BENEFITS

- Up to 17% more horsepower and 9% more torque (when used with Stealth Air Cleaner Kit)
- Race inspired Grand National end caps
- Show chrome or ceramic black finish
- Deep performance rumble
- SAE J2825 sound level compliant
- 50-state legal
- Removable dB reducer
- Made in USA!



Removable dB reducer



GRAND NATIONAL® MUFFLERS FOR 1995-2009 DYNA® MODELS WITH STAGGERED EXHAUST

Finish	Part #
Chrome	550-0719
Black	550-0721

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*Qualified Manufacturer Declared Emissions Replacement Part on the Dyna Models Listed Below.

California Models: MY 2006-2007, Except CVO models

49 State Models: MY 1995-2009, Except CVO models

WARNING: Cancer and Reproductive Harm

→ REPLACEMENT PARTS: SEE PAGE 106



SLASH CUT 4" SLIP-ON MUFFLERS

FITMENT

- 1995–2016 Harley-Davidson® touring models with non-catalyst mufflers

FEATURES AND BENEFITS

- Show quality chrome or ceramic black finish
- Economical price
- High flow baffle
- Aggressive sound & excellent HP
- SAE J2825 Sound Level Compliant
- Removable dB reducer
- Made in USA!



SLASH CUT 4" TOURING MUFFLERS FOR 1995–2016 BIG TWINS

Finish	Part #
Chrome	550-0691
Black	550-0692

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES. Not legal for sale or use on EPA pollution controlled motorcycles originally equipped with mufflers containing catalyst.

*Qualified manufacturer declared emissions replacement part on the FL touring models listed below.

California FL Touring Models:

Fuel Injected MY 1995-2003, 2007, and 2009-2016

CVO MY 2000-2003, and 2009-2016

49 State FL touring Models:

Carbureted MY 1995-2005

Fuel Injected MY 1995-2005, 2007-2016

CVO MY 2000-2005, and 2009-2016

 **WARNING:** Cancer and Reproductive Harm



Removable dB reducer

→ REPLACEMENT PARTS: SEE PAGE 107

GRAND NATIONAL® 4" SLIP-ON MUFFLERS

FITMENT

- 1995–2016 Harley-Davidson® touring models with non-catalyst mufflers

FEATURES AND BENEFITS

- Show quality chrome or ceramic black finish
- Economical price
- High flow baffle
- Aggressive sound & excellent HP
- SAE J2825 Sound Level Compliant
- Removable dB reducer
- Made in USA!



Grand National

GRAND NATIONAL® 4" MUFFLERS FOR 1995–2016 BIG TWINS

Finish	Part #
Chrome	550-0689
Black	550-0690

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*Qualified manufacturer declared emissions replacement part on the FL touring models listed below.

California FL Touring Models:

Fuel Injected MY 1995–2003, 2007, and 2009–2016

CVO MY 2000–2003, and 2009–2016

49 State FL touring Models:

Carbureted MY 1995–2005

Fuel Injected MY 1995–2005, 2007–2016

CVO MY 2000–2005, and 2009–2016

WARNING: Cancer and Reproductive Harm



Removable dB reducer

→ **REPLACEMENT PARTS: SEE PAGE 107**



Mk45 TOURING MUFFLERS

Mk45 4.5" Touring Mufflers are the result of decades of riding, racing and tuning. Combining both a stainless steel baffle and fiberglass packing, they create a deep rumble and improved horsepower and torque, all while adding a unique look with styled aluminum end caps.

FITMENT

- 1995–2016 Harley-Davidson® touring models

FEATURES AND BENEFITS

- 7 horsepower gain*
- Bold 4.5" design — with stainless steel baffle and RaceTEX cartridge packing
- Available in show quality chrome or ceramic black finish
- Choose from S&S® Thruster or Tracer end cap designs in chrome or black
- SAE J2825 Sound Level Compliant
- 50-state legal
- Removable dB reducer
- Made in USA!

*Tested with S&S PowerTune® Dual Header and Stealth Air Cleaner Kit



Mk45 4.5" TOURING MUFFLERS W/END CAPS

Muffler Body Finish	End cap Finish & Style	Part #
Chrome	Chrome Thruster	550-0620
	Black Highlight Machined Thruster	550-0619
	Chrome Tracer	550-0624
	Black Highlight Machined Tracer	550-0623
Ceramic black	Chrome Thruster	550-0622
	Black Highlight Machined Thruster	550-0621
	Chrome Tracer	550-0626
	Black Highlight Machined Tracer	550-0625



550-0620



550-0622



550-0619



550-0621



550-0624



550-0623



550-0625



550-0626

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES. Not legal for sale or use on EPA pollution controlled motorcycles originally equipped with mufflers containing catalyst.

*Qualified manufacturer declared emissions replacement part on the FL touring models listed below.

California FL Touring Models:

Fuel Injected MY 1995-2003, 2007, and 2009-2016

CVO MY 2000-2003, and 2009-2016

49 State FL Touring Models:

Carbureted MY 1995-2005

Fuel Injected MY 1995-2005, 2007-2016

CVO MY 2000-2005, and 2009-2016

 WARNING: Cancer and Reproductive Harm



Removable dB reducer

→ REPLACEMENT PARTS: SEE PAGE 103

POWER TUNE® DUAL HEADERS

FITMENT

- Non-catalyst equipped Harley-Davidson® touring models
- 1995-'08 touring big twins

FEATURES AND BENEFITS

- Adds 8 horsepower over stock header pipes
- Independent dual look with hidden crossover
- Exclusive design moves the rear cylinder header away from the passenger to reduce radiated heat
- Full chrome or ceramic black heat shielding with 220° coverage
- Updated styling to give the bike a modern look
- Oxygen sensor bungs**
- Spherical inlet design for improved sealing and exhaust gasket durability
- Hardware included to mount crossover pipe
- Exhaust port gaskets included
- Made in the U.S.A.



POWER TUNE® DUAL HEADERS

Fitment	Finish	Part #
1995-'08* big twins	Chrome	550-0003A
	Black	550-0142A

**Has 18mm sensor fittings in the stock locations for 2007-'08 bikes. If not equipped with oxygen sensors, the ports can be used for tuning. Plugs are included if ports are not used.

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. Not legal for sale or use on EPA pollution controlled vehicles originally equipped with catalyst.

*Qualified manufacturer declared emissions replacement part on FL touring models listed below.

California Models:

FL Touring Fuel Injected MY 1995-2003, and 2007

CVO FL Touring MY 2000-2003

49 State Models:

FL Touring Carbureted MY 1995-2005

FL Touring Fuel Injected MY 1995-2005 and 2007-2008

CVO FL Touring MY 2000-2005

⚠ WARNING: Cancer and Reproductive Harm

SPECIAL NOTES:

It may be necessary to re-jet the carburetor or recalibrate the fuel injection system for best performance when a change is made in the exhaust system.

Dyno results are from tests performed at the S&S® Research and Development facility in Viola, Wisconsin.

→ **REPLACEMENT PARTS: SEE PAGE 108**

STEALTH AIR CLEANER KITS

FITMENT

- 1993–'99 big twins

NOTE: Fuel injection tuning is not required for this product

→ **REPLACEMENT PARTS: SEE 88**

FEATURES AND BENEFITS

- Air directional stinger cone in the filter
- Use with any of several S&S designed covers. See PAGE 17
- Or use with your stock Harley-Davidson® Twin Cam 88®, 96™ or 103™ air cleaner cover — *the word "sleeper" comes to mind (except 2015 air cleaner covers)*
- High flow (1" taller) filter kit available



STEALTH AIR CLEANER KITS* — NO COVER

Application	Fuel System	Part #
1993–'99 bt	Stock CV	170-0100
	S&S Super E & G Carbs	170-0057

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STEALTH AIR CLEANER KITS FOR S&S ENGINES

Fitment	Fuel System	Part #
V111 Long Block 1984–'99 bt (p/n 310-0766)	S&S E or G Carburetor	170-0057
V111 Long Block 1984–'99 bt (p/n 310-0766)	Stock CV/EFI Delphi®	170-0100
V80 Long Block 1984–'99 bt (p/n 310-0233 & 310-0232)	S&S E or G Carburetor	170-0057
V80 Long Block 1984–'99 bt (p/n 310-0233 & 310-0232)	Stock CV/EFI Delphi®	170-0100
1995–1999 S&S Super Stock Engines	S&S Single Bore VFI 52mm Throttle Bodies, Super E/G	170-0287
1995–1999 EFI big twins	S&S Single Bore VFI 58mm Throttle Bodies	170-0283
1999–2017 EFI big twins	S&S Single Bore VFI 58mm Throttle Bodies	170-0284

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STEALTH AIR CLEANER KIT COVERS (COVERS ONLY)



Stealth Tribute



Teardrop



Carbon Fiber



Mini in Gloss Black



Tri-Spoke



Torker



Air 1



Airstream in Chrome



Airstream in Gloss Black



111



124



143

STEALTH COVERS

Tribute		Teardrop		Teardrop—Slasher		Carbon Fiber	Mini	
Chrome	Gloss Black	Chrome	Gloss Black	Chrome	Gloss Black	Black	Chrome	Gloss Black
170-0592	170-0593	170-0530	170-0531	170-0532	170-0533	170-0501	170-0367	170-0366
\$180.95	\$180.95	\$180.95	\$180.95	\$191.95	\$191.95	\$314.95	\$180.95	\$180.95

Tri-Spoke	Torker	Air 1	Airstream		Displacement		
Gloss Black w/Highlights	Gloss Black w/Highlights	Gloss Black w/Highlights	Chrome	Gloss Black	111	124	143
170-0210	170-0206	170-0214	170-0118	170-0396	170-0319	170-0321	170-0323
\$170.95	\$170.95	\$170.95	\$170.95	\$170.95	\$184.95	\$184.95	\$184.95

CLASSIC TEARDROP AIR CLEANER KIT

FITMENT

- 1984–'99 big twins
- S&S V-Series engines

FEATURES AND BENEFITS

- Uniquely designed backplate has air horn style radiused entryway to reduce turbulence
- Dimpled cover with directional air cone on inside creates smooth path for air
- Great addition to performance exhaust or cams

KIT CONTENTS

- Filter
- Classic Teardrop air cleaner cover
- Backing plate
- All mounting hardware



CLASSIC TEARDROP AIR CLEANER KITS

Model/Engine	Finish	Stock Carb/EFI	S&S Super E/G
1993–'06 carbureted big twins	Chrome	17-0450±	17-0404±
	Gloss Black	170-0181A	—
1990–'92	Chrome	—	17-0399±
1984–'89	Chrome	—	17-0399±
S&S 4½" Bore Engines	Slasher Chrome	—	17-0416±

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± ⚠️ WARNING: Cancer and Reproductive Harm

CLASSIC TEARDROP AIR CLEANER KITS S&S SINGLE BORE EFI

Model/Engine	Finish	58mm
S&S 4½" Bore Engines	Chrome	106-4668

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

⚠️ WARNING: Cancer and Reproductive Harm

➔ REPLACEMENT PARTS STARTING ON PAGE 90



CLASSIC TEARDROP AIR CLEANER COVERS

Style	Finish	Part #
Classic Teardrop	Chrome	17-0378±
	Gloss Black	170-0384A
Slasher Teardrop	Chrome	17-0004±
	Gloss Black	170-0419
Nostalgic Teardrop	Polished	17-0071

± ⚠️ WARNING: Cancer and Reproductive Harm

NOTE: Fuel delivery (carbureted or EFI) may need to be modified to maintain the correct air and fuel mixture.

SINGLE BORE TUNED INDUCTION SYSTEM

FITMENT

- 1984–'99 big twin
- S&S V-Series

FEATURES AND BENEFITS

- Bolt-on performance—over twice the filtering area over stock intake system
- Increases horsepower and torque across the rpm range using air column inertia and carefully timed gas dynamic pressure waves
- Smooth intake tract of carefully selected tuned lengths increases performance
- High flow washable and reusable cotton media provides performance, protection, and economy



SINGLE BORE TUNED INDUCTION SYSTEM KITS

Fitment	Fuel Delivery	Finish	Part #
4 1/8" Bore S&S V-Series (S&S bolt pattern w/vacuum breathing)	S&S Super E/G	Chrome/Red Filters	170-0084
1984–'99 big twins & S&S engines w/stock head breathing	S&S Super E/G	Chrome/Red Filters	170-0086
1984–'06 big twins	Stock CV	Chrome/Red Filters	170-0087

NOTES: Single bore tuned induction will not fit on motorcycles equipped with fairing lower glove boxes.

Tuned induction system does not fit Dyna® Wide Glide® models due to runner to gas tank interference.

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 WARNING: Cancer and Reproductive Harm

→ **REPLACEMENT PARTS: SEE PAGE 89**

BREATHER CONVERSION KIT

FITMENT

- 1993–'99 big twin

FEATURES AND BENEFITS

- Instead of o-rings, banjo fittings are sealed with durable silicon coated washers



Breather conversion kit for big twin engines updates earlier S&S air cleaner kits for 1993–'99 big twins to the latest breather hardware.

BREATHER CONVERSION KIT

Application	Part #
1993–'99 big twins	17-0486

PRE-FILTERS

FITMENT

- S&S® Stealth Air Filters

FEATURES AND BENEFITS

- Water resistant
- Prevents large debris from prematurely clogging filter
- Washable Nylon
- Promotes longer filter life
- Reduces the risk of water entering air intake system



170-0197

PRE-FILTERS

Application	Part #
Standard Stealth Air Filter	170-0193
1" Tall Stealth Air Filter	170-0197

HIGH FLOW AIR FILTER KITS

FITMENT

- S&S Classic Teardrop air cleaners for Super E & G carbs and S&S EFI throttle bodies

FEATURES AND BENEFITS

- Low restriction filter element comes pre-oiled for true plug and play installation
- 1" wider filtration area provides up to 37% more airflow over standard S&S filters
- Resulting band of exposed filter material imparts a high performance look

KIT CONTENTS

- Wide filter
- Filter spacers



170-0127



17-0045

HIGH FLOW AIR FILTERS

Description	Fitment	Part #
High Flow Air Filter Kit <i>(includes spacers)</i>	Classic Teardrop	17-0045
	Stealth, 1" Taller	170-0127*
1" Taller Filter Only	Super E/G	106-4724
	Stealth	170-0154
Spacer	Classic Teardrop & Stealth, 1" Taller	50-5009-S

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STANDARD REPLACEMENT FILTERS

STANDARD REPLACEMENT AIR FILTERS

Description	Fitment	Part #
Standard Filter Only	Classic Teardrop	106-4722
	Stealth	170-0126

PERFORMANCE KIT OVERVIEW FOR HD® EVOLUTION® BIG TWIN ENGINES



SIDEWINDER® KITS

S&S 3 5/8" big bore/stroker kits are available from 88" to 103" displacement (See PAGE 22). We recommend the 96" kit for most applications, and it is our most popular. The 96" Sidewinder is also available as a Hot Set Up Kit, which includes the extra performance goodies you need to make the most of the increased displacement. (See PAGE 23).



96" HOT SET UP KITS

The S&S 96" Hot Set Up Kit is built around our most popular 3 5/8" bore Sidewinder® kit. In addition to the standard flywheel assembly, cylinders, and pistons, the 96" Hot Set Up Kit includes S&S a cam shaft, carb, pushrods, and all required hardware and gaskets. The top of the line Hot Set Up Kit also includes S&S Super Stock® cylinder heads. Kits for stock heads include S&S valve springs to accommodate the high lift cam. Configure your own Hot Set Up Kit with the CTO Part #. (See PAGE 23).



89" STOCK BORE STROKER

S&S has been making stock bore stroker kits since the early 1960s. They're still popular today due to the excellent power gains for the money, as well as the easy installation. Stock bore strokers reuse the stock cylinders and crankcase, so the kits are economical to buy. Since they don't require expensive crankcase modifications, they are also economical to install (See PAGE 24). To ensure maximum performance, we suggest the 89" Stroker Hot Set Up Kit that also includes an S&S camshaft, carb, pushrods, and S&S cylinder heads. Configure your own Hot Set Up Kit with the CTO Part #.



80" HOT SET UP KITS

Boost your performance without splitting your crankcases with the 80" Hot Set Up Kit. The kit includes S&S Super Stock® cylinder heads, cam, carb, pushrods and gaskets. Installation is no more difficult than a stock top end job. Purchase pistons of the required oversize separately. (See PAGE 25).

PERFORMANCE KIT SPECIFICATIONS FOR HARLEY-DAVIDSON® EVOLUTION® BIG TWIN ENGINES									
KIT DESCRIPTION	BORE	STROKE	COMPRESSION RATIO				CAMSHAFT	HP	TORQUE
			Stock Heads	Performance Replacement Heads 76cc	Performance Replacement Heads 82cc	S&S® Super Stock® Heads		S&S Heads	
Sidewinder® Kit	3 5/8"	*	*	*	*	*	—	*	*
96" Hot Set Up Kit	3 5/8"	4 5/8"	9.25	10:1	9.5:1	10.2:1	585	99.5	109.9
89" Stroker Kit	3 1/2"	4 5/8"	9.25	9.4:1	8.9:1	10:1	—	95.0	97.6
89" Stroker Hot Set Up Kit	3 1/2"	4 5/8"	9.25:1	9.4:1	8.9:1	10:1	561	95.0	97.6
80" Hot Set Up Kit	3 1/2"	4 1/4"	—	—	—	10.2:1	561	83.0	85.5

*Specifications depend on kit selected. See PAGE 22.

PERFORMANCE KIT CONTENTS, OPTIONS AND REQUIREMENTS FOR HARLEY-DAVIDSON® EVOLUTION® BIG TWIN ENGINES											
KIT DESCRIPTION	PACKAGE CONTENTS								MACHINING REQUIRED	CTO OPTIONS	REJETTING OR CALIBRATION CHANGE
	Flywheels	Cylinders	Pistons w/rings	Pushrods	Camshaft	Valve Springs	Heads w/springs	Gaskets			
Sidewinder® Kit**		•	•				•	•	③ ④		•
96" Hot Set Up Kit	•	•	•	•	•	•	•	•	③ ④	⑤ ⑥ ⑦	•
89" Stroker Kit	•	⑦	①						② ③		•
89" Stroker Hot Set Up Kit	•	⑦	①	•	•	•	•	•	② ③	⑤ ⑥ ⑦	•
80" Hot Set Up Kit		⑦	①	•	•		•	•	②		•

① = Optional
 ② = Bore & hone cylinders
 ③ = Crankcase machining crankpin clearance
 ④ = Crankcase machining for cylinder spigots
 ⑤ = Camshaft selection
 ⑥ = Combustion chamber size selection
 ⑦ = Cylinder & piston set available

*The CTO option column lists only the major items offered. Virtually any option can be selected from our product offerings through the Configure To Order (CTO) program.
 **Specifications depend on kit selected



SIDEWINDER® KITS

FITMENT

- 1984–'99 carbureted
- 1995–'98 EFI engines

FEATURES AND BENEFITS

- Large displacement at a relatively small price
- Significant increase in horsepower and torque

OPTIONS

- 96" displacements available
- Top end kits for 80" engines and engines with S&S 89" stroker kits
- Valve train items — Cams, tappets, valve springs, rocker arms, rocker covers
- Fuel systems — Manifolds, carburetors, EFI throttle bodies, EFI modules
- Factory installation available



91-7660

COMPLETE S&S® SIDEWINDER® KITS FOR HARLEY-DAVIDSON® EVOLUTION® BIG TWIN ENGINES SPECIFICATIONS			
Displacement	Stroke	Compression Ratio	Cylinder Length
96"	4 7/8"	9.75:1	5.565"

COMPLETE S&S® SIDEWINDER® KITS FOR HARLEY-DAVIDSON® EVOLUTION® BIG TWIN ENGINES

Finish		MSRP
Natural	91-7202*	\$1,124.95
	91-7660	\$2,249.95
Wrinkle Black	91-7702*	\$1,237.95
	91-7661	\$2,249.95

*Denotes big bore Top End Kit only.

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NOTES: Cases must be bored to accept 3 7/8" bore cylinders, and a minor crankcase clearancing operation for the crankpin nut must be performed.

Extra parts needed: 1977–'89 style pinion gear and oil pump drive Gears must be used when installing S&S flywheels in 1990–'99 engines.

96" HOT SET UP KIT®

FITMENT

- 1984-'99 carbureted engines
- 1995-'98 EFI engines

FEATURES AND BENEFITS

- Economical route to a large displacement motor
- Enhance performance with the addition of S&S® Super Stock® cylinder heads
- Includes a 96" Sidewinder® kit with 4 $\frac{5}{8}$ " stroker flywheels assembled with mainshafts and rods, 3 $\frac{5}{8}$ " bore cylinder and piston kit, an S&S 585 cam, .585" valve springs, adjustable chromoly pushrods, an HL₂T kit, a Super E carb kit, and installation instructions

OPTIONS

- Kits are available with S&S Super Stock® heads or without heads if S&S Performance Replacement heads or stock heads will be used

S&S® 96" HOT SET UP KIT® SPECIFICATIONS

Displacement	Stroke	Bore	Compression Ratio			Piston Type	Cylinder Length
			Stock Heads	S&S Super Stock Heads	S&S 82cc Performance Replacement Heads		
96"	4 $\frac{5}{8}$ "	3 $\frac{5}{8}$ "	9.75:1	10.1:1	9.5:1	Forged	5.565"

96" HOT SET UP KIT® WITHOUT HEADS FOR HARLEY-DAVIDSON® EVOLUTION® ENGINES

Year Group	Stroke	Fuel Delivery	Cam	Finish	Part #
1984-'92 bt	4 $\frac{5}{8}$ "	Super E	585	Wrinkle Black	32-2298
1993-'99 bt	4 $\frac{5}{8}$ "	Super E	585	Natural	32-2297
				Wrinkle Black	32-2299



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NOTE: IMPORTANT: 1977-'89 style pinion gears, spacer, and nut are required when installing S&S flywheel assemblies. For installation in 1990-'99 or scratch built engines, order S&S Pinion Shaft Conversion Kit 33-4148.

89" STROKER KIT

FITMENT

- 1984–'99 carbureted engines
- 1995–'98 EFI engines

FEATURES AND BENEFITS

- Stock, S&S Super Stock® or performance replacement heads can be used with this configuration, depending on which pistons are purchased with the stroker flywheels.
- 89" strokers can be installed in carbureted or fuel injected engines. Note that recalibration of the fuel injection system is required.
- Requires a simple crankcase clearance operation and normal piston fitting.
- Low cost boost in performance — Add S&S 3½" cylinders later for 96" engine



FLYWHEEL ASSEMBLIES FOR S&S® 89" STOCK BORE STROKER KITS FOR HARLEY-DAVIDSON® EVOLUTION® ENGINES

Application	Part #
Carbureted	32-2230
Fuel Injected	32-2146

S&S® 89" STOCK BORE STROKER KITS FOR HARLEY-DAVIDSON® EVOLUTION® ENGINES SPECIFICATIONS

Displacement	Stroke	Bore	Compression Ratio*	Piston Type	Cylinder Length
89"	4½"	3½"	9.25:1	Forged	Stock

*Compression ratio with stock heads.

1990 and later installations require 1977 to 1989 pinion shaft gears. Kit 33-4148 includes cam and oil pump drive gears, spacer and nut.



THESE KITS REQUIRES SPECIAL S&S PISTONS. Order the required piston oversize from the chart below.



3½" BORE FORGED STROKER PISTON KITS FOR STOCK HEADS OR S&S PERFORMANCE REPLACEMENT HEADS

Standard	MSRP	+0.010"	+0.020"	+0.030"
106-5554	\$416.95	106-5555	106-5556	106-5793

Piston kits include set of pistons, rings, wristpins, and clips. Recommended cast piston fitment: Close: 0.0008" – 0.0013" Loose: 0.0020" – 0.0025"

3½" BORE FORGED PISTON KITS FOR S&S® SUPER STOCK® HEADS

Displacement	Stroke	Piston Deck Height	CR	Standard	+0.010"	+0.020"
89" LC	4½"	1.1875"	10:1	92-2046	92-2047	92-2048
89" HC	4½"	1.1875"	12.2:1	92-2016	–	92-2018

Piston kits include set of pistons, rings, wristpins, and clips. Recommended cast piston fitment: Close: 0.0008" – 0.0013" Loose: 0.0020" – 0.0025"

NOTES: If ordering replacement pistons for an older 89" Stroker Kit, the flywheels will require rebalancing.

S&S Super Stock cylinder heads do not have provision for the stock head temperature sensor. For this reason they are not compatible with fuel injected applications. Fuel injected stroker engines must use stock cylinder heads or S&S performance replacement heads. (See PAGE 52)

80" HOT SET UP KIT®

FITMENT

- 1984-'92 carbureted engines

FEATURES AND BENEFITS

- Installation is as easy as a stock top-end rebuild
- Flywheel rebalancing is not required
- Yields 80 cubic inches at 10.2:1 compression ratio with included S&S cylinder heads
- Includes S&S Super Stock cylinder head kit with valves and springs installed, manifold with o-rings and flanges, required hardware, top end gaskets, an S&S 561 cam, adjustable chromoly pushrods, an HL₂T kit, a Super E carb kit, and installation instructions
- Pistons of the required oversize must be ordered separately. Pistons fitted to S&S cylinders are also available



S&S® 80" HOT SET UP KIT® FOR HARLEY-DAVIDSON® EVOLUTION® ENGINES SPECIFICATIONS

Displacement	Stroke	Bore	Compression Ratio	Piston Type	Cylinder Length
80"	4¼"	3½"	10.2:1	Forged	Stock

80FLSS HOT SET UP KITS® WITH SUPER STOCK® CYLINDER HEADS FOR CARBURETED HD® EVOLUTION® BIG TWINS

Model Year	Wrinkle Black	Natural
1984-'92	90-0083	90-0081

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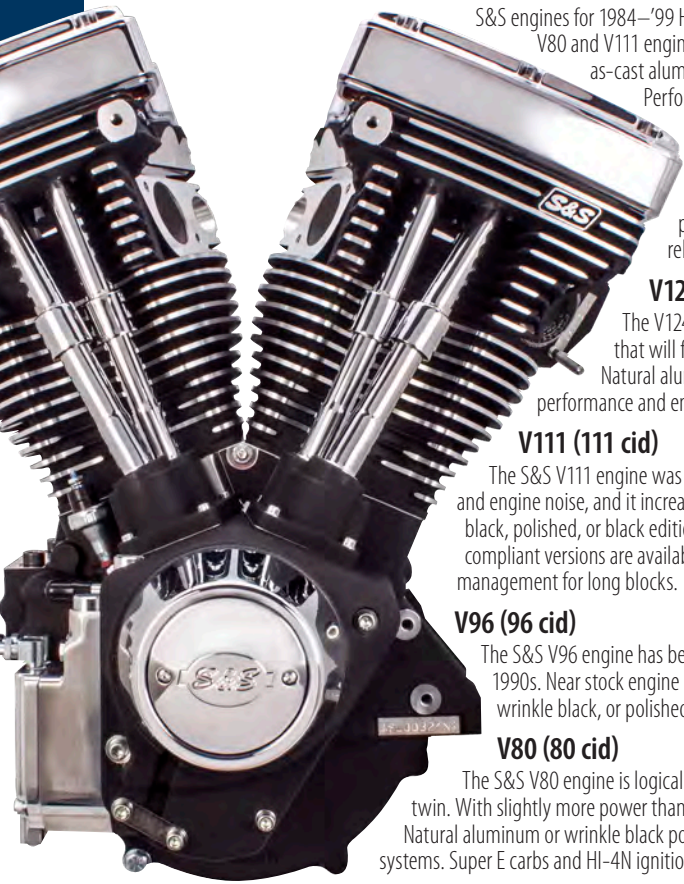
⚠ THESE KITS REQUIRES SPECIAL S&S PISTONS. Order the required piston oversize from the chart below.



92-2026 SERIES PISTONS FOR S&S® 80" HOT SET UP KITS® 10:1 COMPRESSION

Standard	+.0005"	+.010"	+.020"	+.030"	CYLINDER & PISTON KIT	
					Natural	Wrinkle Black
92-2026	92-20265	92-2027	92-2028	92-2029	91-7213	91-7713

ENGINE OVERVIEW



S&S engines for 1984–'99 Harley Davidson® big twins with carbureted Evolution® engines are available as complete engines. V80 and V111 engines are also available as long blocks, with no fuel or ignition systems. Choose from natural, as-cast aluminum finish, wrinkle black powder coat, or Black Edition finishes. In addition to the S&S line of Performance Engines, emissions compliant engines are available that meet EPA, CARB, and European Union requirements for certain models.

BLACK EDITION

S&S Cycle's new Black Edition engines combine classic wrinkle black with high gloss black powder coated covers for a subtle contrast and elegant look while still producing the power and reliability you've come to expect.

V124 (124 cid)

The V124 engine first appeared in the S&S Catalog in 2002, and being the biggest engine we make that will fit in a stock frame for this year group, has been the go-to engine for daily rider hot rods. Natural aluminum, wrinkle black powder coat, or polished finishes. Available as a complete engine only in performance and emissions compliant versions.

V111 (111 cid)

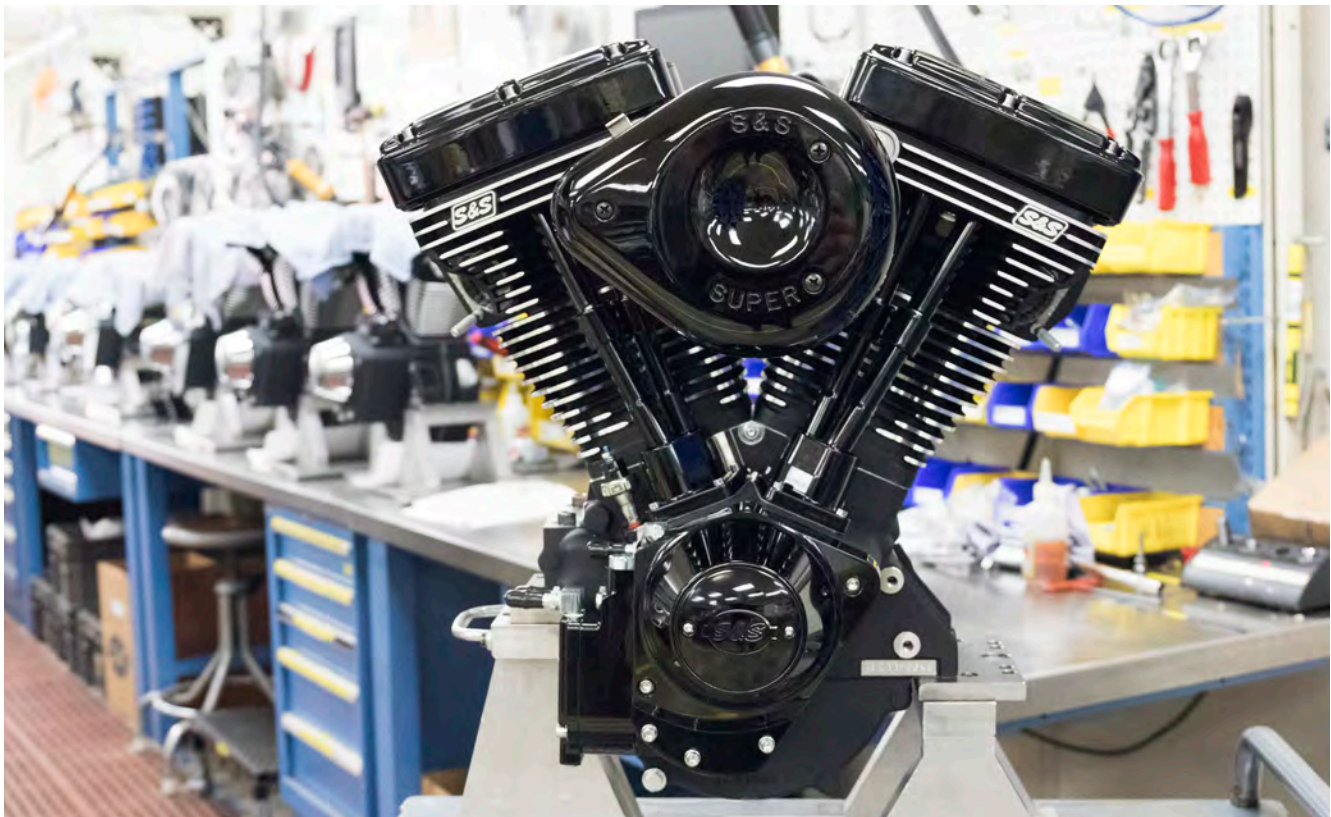
The S&S V111 engine was engineered to be the ultimate sport touring engine. The shorter stroke produces less vibration and engine noise, and it increases engine life. The 111 cid produces plenty of power. Available in natural aluminum, wrinkle black, polished, or black edition finishes. Performance versions are available as long blocks or complete engines. Emissions compliant versions are available as complete engines only. Super E carbs and HI-4N ignition modules are recommended engine management for long blocks.

V96 (96 cid)

The S&S V96 engine has been a popular choice with performance riders and builders since it was introduced in the mid-1990s. Near stock engine height makes it easy to install, and there's plenty of power to pass. Available in natural aluminum, wrinkle black, or polished finishes. Complete engines only. Performance and emissions compliant versions are available.

V80 (80 cid)

The S&S V80 engine is logical choice for riders who just want to repower their trusty Evolution® powered Harley-Davidson® big twin. With slightly more power than a stock 80" engine, the V80 offers great engine life, low vibration, and trouble free operation. Natural aluminum or wrinkle black powder coat finishes. Available as a complete engine or as a long block, without fuel or ignition systems. Super E carbs and HI-4N ignition modules are recommended engine management for long blocks.



V124 ENGINES

FITMENT

- 1984–'99 carbureted chassis
- Custom chassis designed for Harley-Davidson® Evolution® engines

FEATURES AND BENEFITS

- Long piston stroke and high performance gear driven cam result in large horsepower increase over stock engine
- 1.671" diameter crankpin
- .927" wristpin
- Piston cooling jets
- Large fin pack—heads and cylinders
- Press together crankshaft
- 3 Piece Flywheel
- HVHP oil pump
- Electric compression release—easy starting under any circumstance
- Natural, Wrinkle Black powder coat, and polished finish. Diamond cut black powder coat, fully polished, and diamond cut fully polished finishes are available, but have longer lead times
- Chrome gearcover, tappet covers, and rocker covers

CARBURETED ENGINES

- S&S Super G carburetor with slotted Slasher air cleaner cover
- Super Stock® ignition system



31-9886

S&S® V124 ENGINE SPECIFICATIONS

Displacement	Bore	Stroke	Cam	Piston Type	Compression Ratio
124"	4½"	4¾"	640	S&S forged	10.8:1

V124 ENGINES

Chassis Style	Fuel Delivery	Ignition	Warranty Period	Finish	Part #
1984–'99 Carb	S&S® Super G Carb	Super Stock®	2 Year	Black Edition	310-0925
				Natural	31-9860
				Wrinkle Black	31-9885
				Polished	31-9886

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WARNING: Cancer and Reproductive Harm

V111 ENGINES

FITMENT

- 1984–'99 carbureted chassis
- Custom chassis designed for Evolution® engines

FEATURES AND BENEFITS

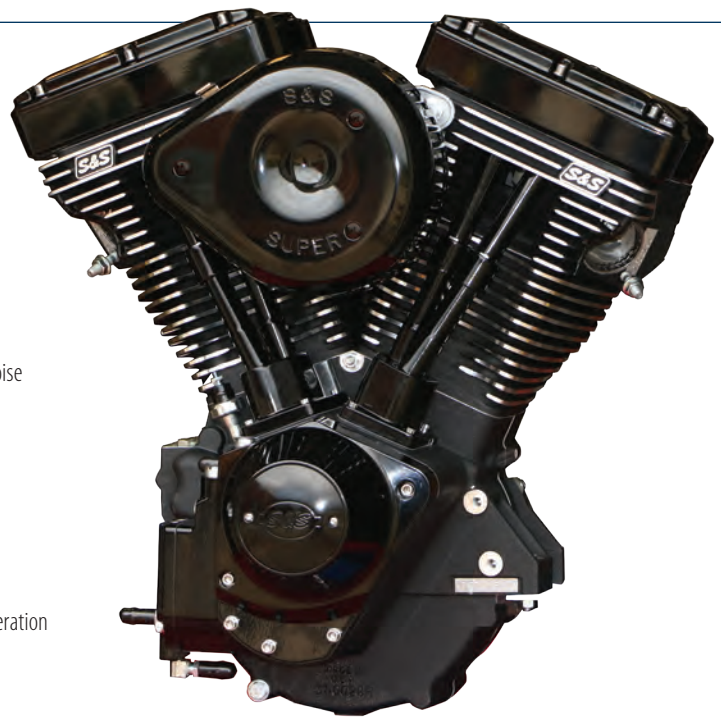
- Short stroke produces less vibration and longer engine life
- Large cooling fins - increases cooling efficiency
- HVHP (High Volume High Pressure) oil pump
- S&S 585 cam and lightweight single coil valve springs minimize valve train noise
- S&S forged rocker arms
- Shorter than stock height engine makes installation easy
- Chrome plated rocker covers, tappet guides, and gearcover

CARBURETED ENGINES (1984–'99)

- S&S Super E carburetor with Classic Teardrop air cleaner


Super Stock® ignition system

- Protects engine with a 3-step break-in rev-limiter during first 24-hours of operation
- Initially configured for electric start, however, it is kick-start capable
- Two-year warranty



S&S® V111 ENGINE SPECIFICATIONS					
Displacement	Bore	Stroke	Cam	Piston Type	Compression Ratio
111"	4 1/8"	4 1/8"	585	S&S forged	9.8:1

COMPLETE ENGINE REBUILD GASKET KITS

S&S Engine Family	Year Group	Bore Size	Part #
V-Series	1984–'99	4 1/8"	106-0964 

V111 ENGINES

Chassis Style	Fuel Delivery	Ignition	Warranty	Finish	Part #
1984–'99 Carb	S&S Super E Carburetor	Super Stock®	2 Year	Black Edition	310-0828
				Natural	106-5703
				Wrinkle Black & Chrome	106-5704
				Polished	310-0385

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 WARNING: Cancer and Reproductive Harm

V96 ENGINES

FITMENT

- 1984-'99 carbureted chassis
- Custom chassis designed for Evolution® engines

FEATURES AND BENEFITS

- Nearly stock height engine makes installation easy (+.015")
- S&S Super E carburetor with Classic Teardrop air cleaner cover
- S&S 585 cam and lightweight single coil valve springs reduce engine noise
- S&S forged rocker arms
- Chrome plated rocker covers, tappet guides, and gearcover

Super Stock® ignition

- Protects engine with a 3-step break-in rev-limiter during first 24 hours of operation
- Initially configured for electric start, however it may be switched to kick-start mode
- Two-year warranty

S&S® V96 ENGINE SPECIFICATIONS					
Displacement	Bore	Stroke	Camshaft	Piston Type	Compression Ratio
96"	3⅝"	4⅝"	585	S&S flat top forged	9.5:1


V96 ENGINES

Chassis Style	Fuel Delivery	Ignition	Warranty	Wrinkle Black
1984-'99 Carb	S&S Super E Carb	Super Stock®	2 Years	31-9956

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 WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

COMPLETE ENGINE REBUILD GASKET KITS

S&S Engine Family	Year Group	Bore Size	Part #
V-Series	1984-'99	3⅝"	106-0992 

V80 ENGINES

FITMENT

- 1984-1999 carbureted

FEATURES & BENEFITS

- Adjustable pushrods
- Standard forged rocker arms
- High performance hydraulic lifters
- .585" lift single coil valve springs
- Flat top cast pistons
- 508 cam
- Performance replacement heads
- Complete engine with an S&S Super E carb and ignition

S&S® V80 ENGINE SPECIFICATIONS					
Displacement	Bore	Stroke	Camshaft	Piston Type	Compression Ratio
80"	3½"	4¼"	508	Cast	8.4:1

V80 ENGINES

Chassis Style	Fuel Delivery	Ignition	Warranty	Natural	MSRP	Wrinkle Black
1984-1999	Super E	Super Stock	2 years	310-0237	\$5,622.95	310-0238*

*EFI Compatible

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WARNING: Cancer and Reproductive Harm

COMPLETE ENGINE REBUILD GASKET KITS

S&S Engine Family	Year Group	Bore Size	Part #
V-Series	1984-'99	3½"	310-0928



V-SERIES LONG BLOCKS

Why rebuild that old stock engine? Upgrade, and replace it with an all-new S&S® V111 or V80 engine. Get a 2-year warranty and a lot more power!

FITMENT

- 1984–'99 Harley-Davidson® big twin chassis and custom frames designed for Evolution® big twin engines.

FEATURES AND BENEFITS

- Save time — Replacement is faster than rebuilding.
- Save money — Fuel and ignition systems not included, use the carburetor, air cleaner, and aftermarket ignition you may already have.
- Specially machined cylinder heads allow use of stock length manifolds. Use your existing carb (*re-jetting is required*)
- EFI compatible — Calibration required (*must use aftermarket module or add-on tuner*).
- Premium S&S Components — S&S cylinder heads, S&S 585 valve springs, forged rocker arms
- Made in the USA!

V111

- Easy Installation — Actually shorter than a stock engine. No clearance problems.
- More Power — 111 cubic inches at 9.8:1 compression—runs great on pump gas.
- Superior Cooling — S&S big-fin cylinders with more fin area, and exclusive oil jets to cool the bottom of the pistons.
- S&S HVHP oil pump.

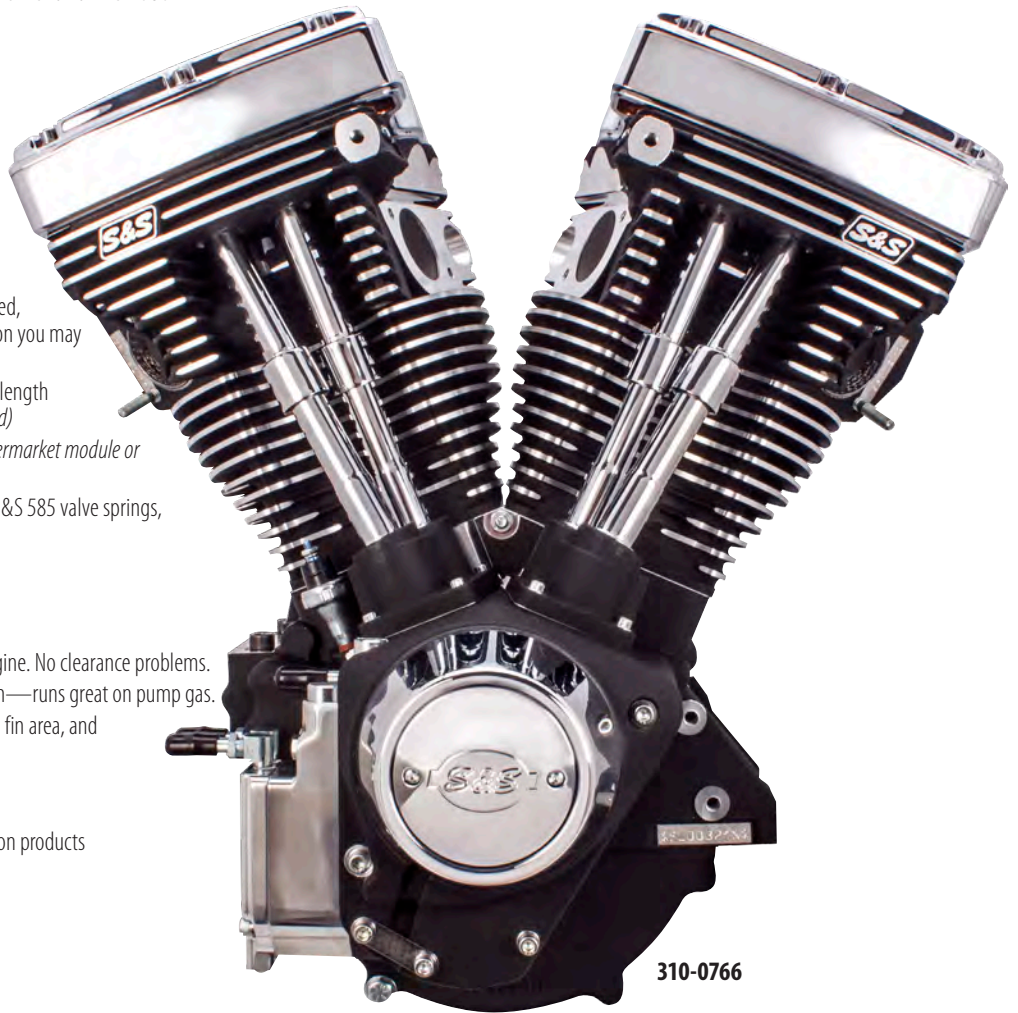
For maximum performance, the following fuel and ignition products are recommended:

CARBURETED APPLICATIONS

- S&S Super E Carb Kit—11-0419
- S&S HI-4N Ignition Module Only—550-0501
- S&S HI-4N Ignition, complete Kit—550-0502

SUGGESTED ACCESSORIES

- Stealth Air Cleaner Kits. See PAGE 16



310-0766

V-SERIES LONG BLOCK ENGINES

Displacement	Bore	Stroke	Camshaft	Piston Type	Compression Ratio	Warranty	Finish	Part #
V111	4⅞"	4⅞"	585	Forged	9.8:1	2 Year	Wrinkle Black	310-0766
							Black Edition	310-0829
V80	3½"	4¼"	508	Cast	8.4:1	2 Year	Wrinkle Black	310-0233
							Natural	310-0232

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 WARNING: Cancer and Reproductive Harm

49-STATE EPA ENGINE

Certified for "new build" bikes, S&S offers the 124 for 49-state EPA engine packages.

FITMENT

- Aftermarket frames with motor mounts for 1984-'99 big twins

FEATURES AND BENEFITS

- 49-state emissions legal
- S&S Delphi® style EFI with Classic Teardrop air cleaner cover
- Chrome gearcover, tappet covers, and rocker covers
- Includes all required certification, documentation and labels
- Two-year warranty

S&S® V-SERIES 49-STATE EPA ENGINE SPECIFICATIONS						
Engine Name	Displacement	Bore	Stroke	Camshaft	Piston Type	Compression Ratio
V124ei	124"	4 1/8"	4 3/8"	543	S&S Forged	9.0:1

V-SERIES 49-STATE EPA ENGINE

Engine Name	Chassis Style	Fuel Delivery	Warranty	Finish	Part #
V124ei	1984-'99 carb	EFI	2 years	Polished	310-0665

 WARNING: Cancer and Reproductive Harm

NOTE: These engines are not to be used in a previously certified vehicle or a custom motorcycle built from a previously certified vehicle.

S&S 49-state engine packages are only available through S&S dealers and select distributors.

Requirements for bikes built with S&S EPA certified engine packages:

Vehicles must have a maximum N/V ratio* of no greater than 43.3 for V-Series engines.

Maximum vehicle curb mass is 1058 lbs.

Exhaust system selected must create back pressure within the specified limits. Min. 3" H2O, Max. 21" H2O

*Engine rpm divided by miles per hour in top gear.



50-STATE LEGAL ENGINES

FITMENT

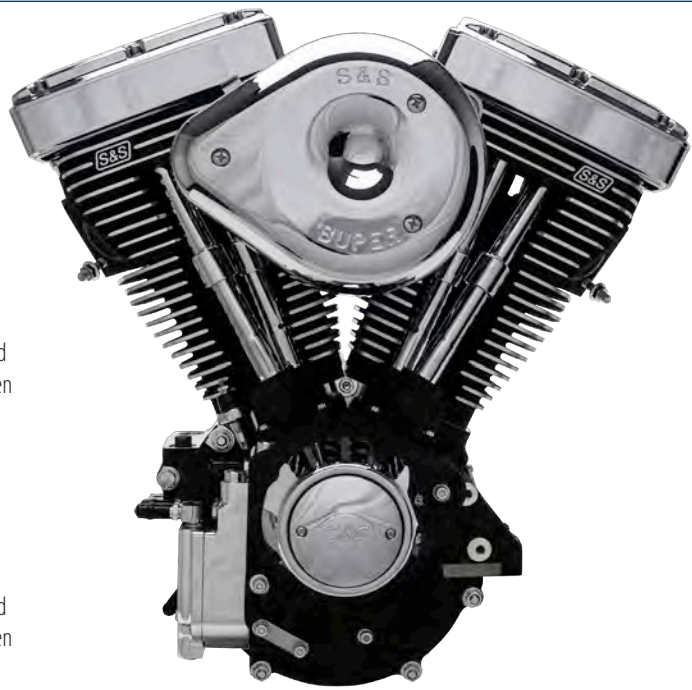
- V96R—1984–'98 carbureted, non catalyst bikes

V96R FEATURES AND BENEFITS

- Nearly stock height engine makes installation easy
- S&S Super E carburetor with Classic Teardrop air cleaner
- S&S forged roller rocker arms
- Chrome rocker covers
- No certification problems—documentation and compliance stickers included
- Exempt from emissions tampering regulations under CARB EO# D-355-5 when used in 1984-1998 carbureted, non-catalyst, big twin powered models

V80R FEATURES AND BENEFITS

- Stock height engine makes installation easy
- S&S Super E carburetor with Classic Teardrop air cleaner
- S&S forged roller rocker arms
- Chrome rocker covers
- No certification problems—documentation and compliance stickers included
- Exempt from emissions tampering regulations under CARB EO# D-355-5 when used in 1984-1998 carbureted, non-catalyst, big twin powered models



S&S® V-SERIES 50-STATE LEGAL ENGINE SPECIFICATIONS						
Engine Name	Displacement	Bore	Stroke	Camshaft	Piston Type	Compression Ratio
V96R	96"	3 $\frac{3}{8}$ "	4 $\frac{5}{8}$ "	520	S&S Forged	10.1:1
V80R	80"	3 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "	520	S&S Forged	10.1



V-SERIES 50-STATE LEGAL ENGINES

Engine Name	Chassis Style	Fuel Delivery	Ignition	Warranty Period	Finish	Part #
V96R	1984–'98 carb	Super E Carb	Super Stock®	2 years	Wrinkle Black	31-9156*
V80R	1984–'98 carb	Super E Carb	Super Stock®	2 years	Wrinkle Black	31-9150

Exempt from emissions tampering regulations under CARB EO# D-355-5 when used in 1984-1998 carbureted, non-catalyst, big twin powered models

WARNING: Cancer and Reproductive Harm

NOTES:

V96R/V80R

Gearing must be stock or have an N/V Ratio*lower than stock.

A stock non-catalyst exhaust system must be used.

The stock evaporative system must be retained and connected to the engine as shown in the manual.

S&S® replacement engines are only for use as a replacement engine in 1984–'98 Harley-Davidson motorcycles originally equipped with a carbureted, non-catalyst, big twin Evolution® engine. They may not be used in any new or previously registered custom motorcycles.

*Engine rpm divided by miles per hour in top gear.

This replacement engine is only legal when used to replace a stock 80" Evolution® engine. CARB compliance stickers must be affixed to frame.

SHORT BLOCK ASSEMBLIES

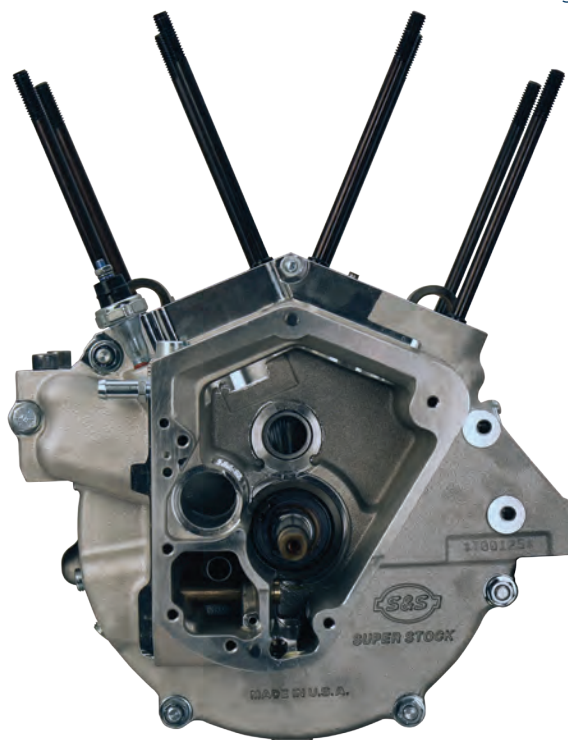
Replace your entire stock lower end with an S&S Short Block assembly! A rock solid S&S flywheel assembly, installed in a set of bullet proof S&S Super Stock® crankcases.

FITMENT

- 1984-'99 Carbureted and Fuel Injected 80" Evolution® big twin

FEATURES AND BENEFITS

- Stock 3½" bore and 4¼" stroke
- Premium quality U.S. made S&S components
- Compatible with all stock and most aftermarket parts
- Full one year parts warranty
- Includes certificate of origin for new crankcases



SHORT BLOCK ASSEMBLIES[±]

Chassis Style	Bore	Stroke	Warranty Period	Finish	Part #
1984-'91 big twins	3 ½"	4 ¼"	One year parts only	Natural	310-0780A
1992-'99 big twins				Wrinkle Black	310-0802A

1977-'89 style pinion gears, spacers, and nuts are required when installing S&S flywheel assemblies.

For installation in 1990-'99 or scratch built engines, order S&S Pinion Shaft Conversion Kit

Exempt from emissions tampering regulations under CARB EO# D-355-19

[±] WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



PINION SHAFT CONVERSION KIT

Fitment	Part #
1990-up big twins	33-4148

SUPER STOCK® ALTERNATOR STYLE CRANKCASES

FITMENT

- 1984–'99 big twins under 4" bore



FEATURES AND BENEFITS

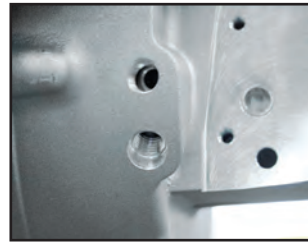
- Relocated cam chest oil pick-up increases gear case scavenging and virtually eliminates oil carry-over at sustained high speeds
- Machined to accept the stock oil filter assembly used on 1992–'99 big twins
- A ported breather passageway and a machined breather window allows the air/oil mist to flow from the flywheel cavity to the cam chest of the engine with the least possible restriction
- Crankcase venting can be achieved via two crankcase breathers, the cylinder heads, or both. We recommend using both crankcase breathers in engines larger than 95"
- Clearanced for strokes as long as 5"
- Compatible with stock 1984–'99 flywheel assemblies, primary covers and gearcovers, making them perfect for stock replacement or high performance applications
- Machined for installation of a crank position sensor. This allows the cases to be used in stock EFI applications and also allows easy installation of S&S IST® Ignition and VFI Fuel Injection. A plug kit is included for applications that do not use a crank position sensor
- Exempt from emissions tampering regulations under CARB EO# D-355-8 when used with stock bore cylinders for 3½" Bore (stock)

OPTIONS

- Available for stock, 3⅝", and 3⅜" bore applications with deck heights as much as ⅜" taller than 3½" stock

KIT CONTENTS

- Crankcase assembly
- All required hardware, fittings, and bearings



Two crankcase breather holes allows increased flexibility.



Relocated oil scavenger pick-up reduces oil carry-over by increasing oil scavenger efficiency.

NOTE: All S&S crankcases manufactured after June 1, 2008 do not have case interlock groove and ring and do not use case alignment studs. Case mating surface is flat, and cases are aligned with alignment dowels.

→ **REPLACEMENT PARTS: SEE PAGE 72**

SUPER STOCK® ALTERNATOR CRANKCASES FOR 1984–'99 BIG TWIN

Crankcase Style	Finish	3½" Bore (Stock)	3⅝" Bore	Notes
1992–'99	Natural	31-0005** 24469-83C, 24469-83A	—	1, 3, 4
	Wrinkle Black	31-0055** 24571-93, 24569-95	31-0078^{USA}	
1984–'91	Natural	31-0000** 24469-83C, 24469-83A	31-0001***	2, 3, 4
	Wrinkle Black	31-0052** 24473-85C	—	

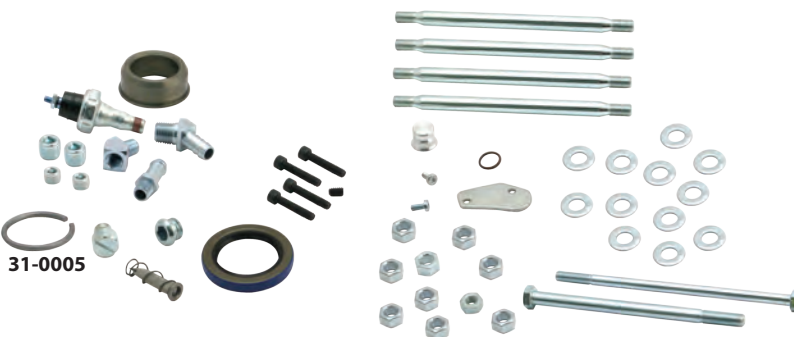
1. 1992-'99 style oil pump. 2. 1984-'91 style oil pump. 3. Machined for 1984-'99 alloy primary.

4. Machined for stock or S&S EFI crank position sensor. Stock diameter only.

**Exempt from emissions tampering regulations under CARB EO# D-355-8 when used with stock bore cylinders

***DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

WARNING: Cancer and Reproductive Harm



31-0005

SPECIAL APPLICATION CRANKCASES

FITMENT

- 1984-'99 big twins—4" bore and over
- S&S 4", 4½" bore V-Series engines

FEATURES AND BENEFITS

- Cam chest is moved outward .250" to allow crankcases to handle large cylinder bore sizes
- Relocated cam chest oil pick-up increases gear case scavenging and virtually eliminates oil carry-over at sustained high rpm
- Machined to accept the stock oil filter assembly used on 1992-'99 big twins
- A ported breather passageway and a machined breather window allows the air/oil mist to flow from the flywheel cavity to the cam chest of the engine with the least possible restriction
- Crankcase venting can be achieved via two crankcase breathers, the cylinder heads, or both! We recommend using both crankcase breathers in engines larger than 95"
- Clearanced for strokes as long as 5"
- Machined for installation of a crank position sensor. This allows the cases to be used in EFI applications and also allows easy installation of S&S IST® Ignition and VFI Fuel Injection. A plug kit is included for applications that do not use a crank position sensor

KIT CONTENTS

- Crankcase assembly
- All required hardware, fittings, and bearings

NOTE: All S&S crankcases manufactured after June 1, 2008 do not have case interlock groove and ring and do not use case alignment studs. Case mating surface is flat, and cases are aligned with alignment dowels.

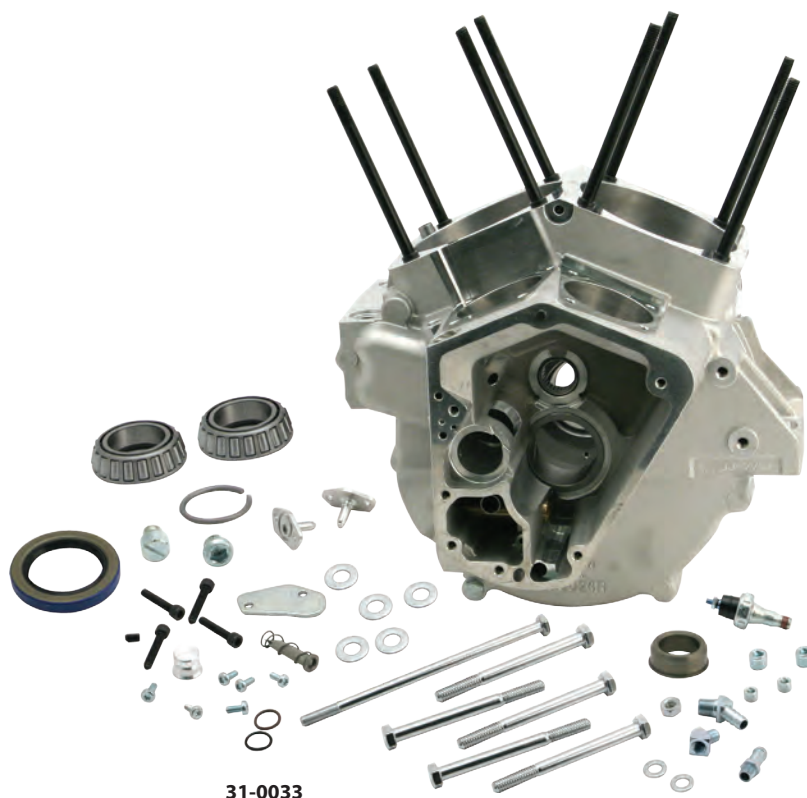
→ **REPLACEMENT PARTS: SEE PAGE 74**

SPECIAL APPLICATION ALTERNATOR CRANKCASES FOR 1984-'99 BIG TWIN±

Crankcase Style	Bore	Deck Height	Natural	Wrinkle Black	Polished
1984-'99*	4"	5.875"	31-0047 ^{USA} ₂	—	—
1984-'99*	4½"	6.000"	31-0033 ^{USA} ₃	31-0037 ^{USA} ₃	31-0039 ^{USA} ₃

*1992-'99 style oil pump, machined for 1984-'99 alloy primary, machined for stock or S&S EFI crank position sensor. Stock diameter only.

 **WARNING:** Cancer and Reproductive Harm



REPLACEMENT FLYWHEEL ASSEMBLIES

FITMENT

- 1984–'99 big twins

FEATURES AND BENEFITS

- Drive side flywheels have special keyed 6° large diameter taper that provides more contact area, increasing strength
- Standard S&S tapered crankpin and pinion shaft are used for ease of service
- Flywheels for EFI applications are machined with timing notches compatible with factory crank position sensors

KIT CONTENTS

- Assembled:
 - Flywheels
 - Crankpin
 - Connecting rods



→ TRYING TO IDENTIFY AN S&S® FLYWHEEL?
SEE FLYWHEEL I.D. CHART PAGE 224

FLYWHEELS FOR 1984–'99 CARBURETED BIG TWINS

Stroke	8½" Diameter (stock)	8¼" Diameter	MSRP
4¼"	32-2239 23906-90, 23906-93B, 23906-90A	—	—
Special Order**	32-2015**	32-2015**	Call for Pricing

**Use this special order Part # to order flywheels assembled or unassembled, or balanced or unbalanced.
Download the Special Order Form at sscycle.com/soforms

NOTES:

IMPORTANT: 1977–'89 style pinion gears, spacers, and nuts are required when installing S&S flywheel assemblies. For installation in 1990–'99 or scratch built engines, order S&S Pinion Shaft Conversion Kit 33-4148.

S&S flywheels are no longer available machined for stock Harley-Davidson® main shafts.

4¼" stroke assembly is balanced for stock HD® 80" pistons.

4½" stroke assembly is balanced for S&S stock bore and 3¾" bore stroker pistons.

Use special order Part # for flywheels balanced to other pistons or rods.

All S&S crankcases for 1984–'99 big twin engines are machined to accept a crank position sensor and can be used with these flywheels.

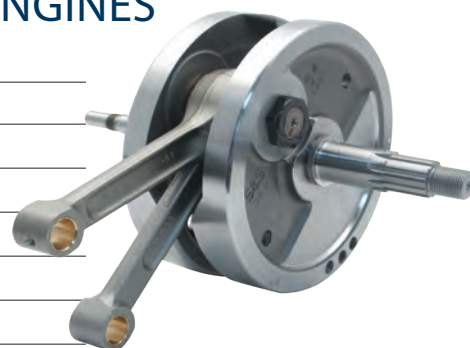
FLYWHEELS FOR 1995–'98 EFI BIG TWINS

Stroke	Part #
4¼"	32-2145  23941-95

REPLACEMENT FLYWHEELS FOR V-SERIES ENGINES

REPLACEMENT FLYWHEEL ASSEMBLIES FOR S&S V-SERIES ENGINES

Engine	Stroke	Diameter	Part #
V124*(3-piece)	4⅝"	8¼"	320-0477 ±
V117*(3-piece)	4⅜"	8¼"	320-0363 ±
V111*(3-piece)	4⅞"	8¼"	320-0420 ±
V96	4⅝"	8½"	32-2230
V96 (IST)*	4⅝"	8½"	32-2146
V80	4¼"	8½"	32-2239
1984–1999 Carbureted (non 4⅞" Bore)	Specify	Specify	32-2015** Call for Pricing



*Left side flywheel is notched for crank position sensor.

**Use this special order Part # to order flywheels assembled or unassembled, balanced or unbalanced. Download the Special Order Form at sscycle.com/soforms

±  WARNING: Cancer and Reproductive Harm

NOTE:

IMPORTANT: 1977–'89 style pinion gears, spacers, and nuts are required when installing S&S flywheel assemblies. For installation in 1990–'99 or scratch built engines, order S&S Pinion Shaft Conversion Kit 33-4148.

HIGH VOLUME HIGH PRESSURE (HVHP) BILLET OIL PUMPS

FITMENT

- 1984-'99 big twins
- S&S V-Series engines

FEATURES AND BENEFITS

- No thicker than a stock pump
- Gears with fewer, but larger teeth provide increased oil volume for both supply and return sides of the pump
- Supply gears are 9% wider than stock and standard S&S oil pumps
- 28% wider than stock return gears ensure proper crankcase scavenging, reduce drag on the flywheels, and eliminate oil carryover
- Increased scavenging capacity results in:
 - Less oil in the crankcase
 - Less oil carryover
- Equipped with a stock length oil pump drive shaft



OPTIONS

Pump Only Kits:

- Complete oil pump assembly
- Oil pump driveshaft
- Miscellaneous hose fittings and plugs
- Paper gaskets
- Mounting hardware

Pump And Gear Kits:

- For stock 1984-'89 engines or engines with S&S flywheel assemblies
- Everything in the "pump only" kits
- Oil pump drive shaft gear
- Oil pump pinion shaft gear
- Steel breather gear and shim kit



31-6208

HIGH VOLUME HIGH PRESSURE OIL PUMP KITS FOR 1984-'99 BIG TWINS

Year Group	Cover Type	Pump Only Kit	Pump w/Gear Kit*
1984-'91	Universal	31-6214	31-6307
1992-'99	Universal	31-6208	31-6302
	Standard	31-6209	31-6298

*Pinion shaft gears included in these kits fit stock 1984-'89 pinion shafts and S&S pinion shafts for 1984-'99. Will not fit stock 1990-'99 straight pinion shafts. Standard style covers have feed and return holes in the stock locations. The universal cover has a number of oil feed and return options, allowing maximum flexibility for customized applications.



The gear tooth profile and the extra gear width of the HVHP oil pump work together to maintain higher oil pressure and to scavenge additional oil from the crankcase.

→ **REPLACEMENT PARTS: SEE PAGE 81**

STANDARD BILLET OIL PUMPS **GLOSS BLACK NOW AVAILABLE!**

FITMENT

- 1984-'99 big twins

FEATURES AND BENEFITS

- Machined with an oil pressure relief bleed off valve to maintain consistent oil pressure from the time the engine is started to the time it's shut off
- Oil pressure regulation bypass route allows excess oil not used by the engine to return directly to the supply side of the pump, reducing foaming and cavitation
- No thicker than a stock pump
- Increased scavenging capacity results in:
 - Less oil in the crankcase
 - Less oil carryover
- Equipped with a stock length oil pump drive shaft

OPTIONS

Pump Only Kits

- Complete oil pump assembly
- Oil pump driveshaft
- Miscellaneous hose fittings and plugs
- Paper gaskets
- Mounting hardware

Pump And Gear Kits

- For stock 1984-'89 engines or engines with S&S flywheel assemblies.
- Everything in the "pump only" kits
- Oil pump drive shaft gear
- Oil pump pinion shaft gear
- Steel breather gear and shim kit



31-6203

OIL PUMP KITS FOR 1984-'99 BIG TWINS

Year	Cover Type	Pump Only Kit	Pump & Gear Kits
1984-'91	Universal	31-6203	*31-6295
1992-'99	Gloss Black Universal	310-0899	-
	Standard	31-6206	*31-6296
	Universal	31-6205	-

*Pinion shaft gears included in these kits fit stock 1984-'89 pinion shafts and S&S pinion shafts for 1984-'99. Will not fit stock 1990-'99 straight pinion shafts. Standard style covers have feed and return holes in the stock locations. The universal cover has a number of oil feed and return options, allowing maximum flexibility for customized applications.

→ **REPLACEMENT PARTS: SEE PAGE 80**

NOTE: Chrome Plating the Pump — It is extremely difficult to chrome plate an oil pump without getting chrome in the passageways, cavities or on the machined surfaces where the gears, check ball, and pressure valve operates. Chrome in these areas as well as on the gasket surfaces impairs the pumps performance by altering the tolerances machined into the parts. In addition, abrasive particles of chrome may break loose causing damage to the pump and the engine. Because of this, S&S does not recommend chrome plating the pump body or cover. S&S voids its warranty if these parts are chrome plated.



BILLET FILTER BRACKET


FITMENT

- 1993-'99 big twins w/stock crankcases
- S&S crankcases for 1984-'99 big twins

FEATURES AND BENEFITS

- Includes oil line fittings and has provisions to plumb an oil cooler



Description	Part #
S&S Billet Filter Bracket	 31-4105

STEEL ROTARY BREATHER GEARS

FITMENT

- 1984-'99 big twins

FEATURES AND BENEFITS

- Abrasive particles are less likely to get imbedded in a steel gear body than a plastic one
- A welded-in screen prevents particles from entering the gear cavity and damaging either the gears or oil pump
- Larger diameter holes means improved air flow and oil scavenging from the flywheel cavity
- Improved breather window timing increases flywheel cavity vacuum and crankcase oil scavenging
- Slotted scavenge hole increases breather pocket oil scavenging for less carryover

OPTIONS

- Available in standard and +0.030" for use in engines with damaged breather bores



Breather gear kits include breather gear & steel end play shim kit

BREATHER GEAR KITS FOR 1984-'99 BIG TWINS

Year	Standard Size	MSRP	+0.030"
1984-'99	33-4250	\$130.95	33-4260

BREATHER GEARS ONLY FOR 1984-'99 BIG TWINS

Year	Standard Size	MSRP	+0.030"
1984-'99	33-4241 <small>25310-82A, 25313-77B, 25311-90</small>	\$102.95	33-4242

BREATHER GEAR SPACING SHIM KIT

Description	Part #
Fits stock 1979-'82 and all S&S steel breather gears <i>Includes one of each: .100", .110", .120", .130", .140", .150", .160", .170"</i>	33-4249

BREATHER GEAR SPACING SHIMS*

Thickness	Part #
+ .100"	33-4200
+ .110"	33-4201 25320-79
+ .120"	33-4202 25322-79
+ .130"	33-4203 25325-79, 25320-82
+ .140"	33-4204 25322-82, 25327-79
+ .150"	33-4205 25325-82
+ .160"	33-4206 25327-82
+ .170"	33-4207

*These shims must be used with steel breather gears only.

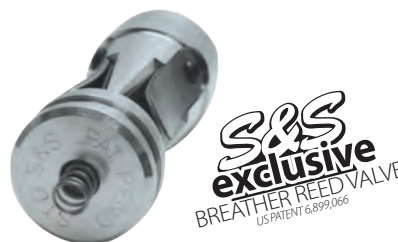
CRANKCASE BREATHER REED VALVES FOR LARGE DISPLACEMENT ENGINES

OPTIONS

- Available in standard size or +.030" for use in engines with damaged breather bores

CRANKCASE BREATHER REED VALVES FOR 1993-'99 BIG TWINS

Application	Standard Size	MSRP	+0.030"
1993-'99	31-2096	\$139.95	31-2100



NOTE: The crankcase reed valve should not be used in 1984-1992 crankcase breathing engines. It is only intended for head breathing applications.

BILLET GEARCOVERS

GLOSS BLACK NOW AVAILABLE!

FITMENT

- 1984-'92 big twins with standard ignition


KIT CONTENTS

- Billet gearcover
- Gaskets
- Mounting hardware
- Instructions



→ REPLACEMENT PARTS: SEE PAGE 68

BILLET GEARCOVERS

Application	Finish	Part #
1984-'92	Gloss Black	310-0898
1984-'92	Polished  1,2,3	31-0335
1984-'92*	Chrome Plated	106-4211±

*Gearcover has internal breather passage that is used to vent crankcase.

±  WARNING: Cancer and Reproductive Harm -

CAST GEARCOVERS

FITMENT

- 1984-'92 big twins

FEATURES

- Machined from tough 356-T6 aluminum castings—*the same material used to make S&S crankcases*
- Inner cast aluminum cover and a decorative bolt-on outer cover
- Will accept either points or electronic ignition systems

KIT CONTENTS

- Cast gearcover and gaskets
- Mounting hardware



→ REPLACEMENT PARTS: SEE PAGE 68

CAST GEARCOVERS AND IGNITION COVERS

Application	Finish	Flangeless Tall
1984-'92 big twins*	Natural	31-0203
1984-'92 big twins	Wrinkle Black	31-0299

*Gearcover has internal breather passage that is used to vent crankcase.

IGNITION COVERS

GLOSS BLACK NOW AVAILABLE!

FITMENT

- S&S engines with "cone" style gearcovers

IGNITION COVER

Description	Part #
Gloss Black	310-0897
Chrome	31-0332

±  WARNING: Cancer and Reproductive Harm

CYLINDERS WITH PISTONS KIT

- Cylinders with piston kits include fitted pistons and cylinders, head gaskets, base gaskets, and exhaust gaskets
- Cylinder kits with pistons are honed to fit the pistons included



910-0224

S&S® 4 1/8" BORE CYLINDERS WITH PISTONS KIT SPECIFICATION CHART				
Displacement	Stroke	Cylinder Length	Piston Type	Compression Ratio
111"	4 1/8"	4.764"	Forged	9.7:1
117"	4 3/8"	4.889"		10.2:1
124"	4 5/8"	5.014"		10.8:1

4 1/8" BORE CYLINDERS WITH PISTONS FOR 124", 117", & 111" KIT

Displacement	Cylinders w/Pistons (Set)				
	Natural	MSRP	Wrinkle Black	MSRP	Polished
111"	910-0219	\$1,237.95	910-0359	\$1,350.95	910-0424
117"	910-0290	\$1,237.95	910-0225	\$1,350.95	910-0228
124"	910-0229	\$1,237.95	910-0224	\$1,350.95	910-0230



S&S® 3 5/8" BORE CYLINDERS WITH PISTONS KIT SPECIFICATION CHART						
Displacement	Stroke	Cylinder Length	Stock Heads (Flat Topped Pistons)	S&S Super Stock® Heads (Domed Pistons)		
			Compression Ratio	Compression Ratio		
				Standard	Intermediate	High
88"	4 1/4"	5.375"	9:1	9.4:1	10.1:1	12.3:1
96"	4 5/8"	5.565"	9.75:1	10.1:1	10.9:1	13.2:1
103"	5"*	5.750"	10.5:1	10.9:1	11.8:1	14.2:1

*Small Diameter Flywheels

3 5/8" BORE CYLINDERS WITH PISTONS FOR 96" & 88" KIT

Displacement	Stock Heads (Flat Topped Pistons)		S&S Super Stock® Heads (Domed Pistons)						
	Cylinders w/Pistons		Cylinders w/Standard Compression Pistons			Cylinders w/Intermediate Compression Pistons			
	Natural	Wrinkle Black	Natural	Wrinkle Black	Polished		Natural	Wrinkle Black	
88"	91-7002	91-7502	91-7009	-	-	-	-	91-7052	91-7552
96"	91-7202	91-7702	91-7207	91-7707	\$1,237.95	91-7152	\$1,350.95	91-7054	-

CONTINUED
CYLINDER & PISTON KITS

S&S® 3½" BORE CYLINDERS WITH PISTONS KIT SPECIFICATION CHART					
FLAT-TOPPED PISTONS FOR STOCK OR S&S PERFORMANCE REPLACEMENT CYLINDER HEADS					
Displacement	Piston Type	Stroke	Cylinder Length	COMPRESSION RATIO	
				Stock Heads	S&S 76cc Performance Replacement Heads
80"	Cast/Flat-topped	4¼"	5.550" (Stock)	8.5:1	8.8:1
89"	Forged Flat-topped	4⅝"	5.550" (Stock)	9.25:1	9.4:1
SPECIAL DOMED PISTONS FOR S&S SUPER STOCK® CYLINDER HEADS					
Displacement	Piston Type	Stroke	Cylinder Length	COMPRESSION RATIO	
				S&S Super Stock® Heads	
80"	Forged/Super Stock® Domed	4¼"	5.550" (Stock)	10:1	
89" LC		4⅝"	5.550" (Stock)	10:1	
89" HC		4⅞"	5.550" (Stock)	12.5:1	

3½" BORE CYLINDERS WITH PISTONS KIT FOR STOCK OR S&S® PERFORMANCE REPLACEMENT HEADS

Displacement	Natural	MSRP	Wrinkle Black
80"	910-0179 <small>16510-83A</small>	\$1,012.95	910-0182 <small>16512-86A</small>
89"	91-7211	\$1,124.95	91-7711

3½" BORE CYLINDERS WITH PISTONS KIT FOR S&S® SUPER STOCK® HEADS

Displacement	Natural	MSRP	Wrinkle Black
80"	91-7213	\$1,124.95	91-7713
89" LC	—	—	91-7715

NOTES: Stock crankcases must be machined to accommodate the large spigot diameter of 3⅝" bore cylinders.

→ PISTON REPLACEMENT PARTS: SEE PAGE 44



All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.



CYLINDERS

- Cylinder sets without pistons are bored slightly under normal size and are not honed
- Include dowel pins

4 1/8" BORE CYLINDERS

Displacement		Natural	Wrinkle Black	Polished
111"	Set	910-0284	910-0358	910-0246
117"	Set	910-0267	910-0261	–
124"	Set	910-0270	910-0258	910-0273

3 5/8" BORE CYLINDERS

Displacement		Natural	Wrinkle Black
88"	Set	91-7000	–
96"	Set	91-7200^{USA}	91-7700^{USA}

**Small Diameter Flywheels Recommended Piston Fitment: Close: .0015"-.0020" Loose: .0035"-.0045"*

3 1/2" BORE CYLINDERS

Displacement		Natural	Wrinkle Black
80"	Set	91-7210^{USA}	91-7710^{USA}
89"			



NOTES: S&S 4 1/8" pistons are machined to such close tolerances that it is not necessary to measure the piston. Additionally, the low friction coating on the piston skirt makes taking measurements very difficult. Therefore, hone cylinders to nominal diameter ± 0.0005 " for correct clearance.

Stock crankcases must be machined to accommodate the large spigot diameter of 3 5/8" bore cylinders.

PISTON KITS

- Piston kits include set of pistons, rings, wristpins, and clips



4 1/8" BORE FORGED PISTON KITS FOR HOT SET UP KITS®

Displacement	Deck Height	Stroke	Standard	+ .010"	+ .020"	+ .030"
124" & 117" Stock Heads 10cc Dished	1.050"	Up To 4 5/8"	920-0046	920-0047	920-0050	920-0053
124", 117" & 111" —Stock or S&S Heads Flat Top	1.050"	Up To 4 5/8"	106-3491A	106-3872A	106-3964A	920-0094

NOTE: S&S 4 1/8" pistons are machined to such close tolerances that it is not necessary to measure the piston. Additionally, the low friction coating on the piston skirt makes taking measurements very difficult. Therefore, hone cylinders to nominal diameter $\pm 0.0005"$ for correct clearance.

4" BORE FORGED PISTON KITS

Displacement	Deck Height	Stroke	Standard	+ .010"	+ .020"	+ .030"	MSRP
Retro 100"	1.200"	4"	—	92-1421	92-1422	—	—
100"		4"	92-1400	92-1401	92-1402	92-1403	\$416.95
107"		4 1/4"	92-1400	92-1401	92-1402	92-1403	\$416.95
113"		4 1/2"	92-1410	92-1411	92-1412	92-1413	\$416.95
116"		4 5/8"	—	92-1421	92-1422	—	—

Recommended Piston Fitment: Close: 0.0020"-0.0025" Loose: 0.0037"-0.0045"

FORGED 3 5/8" BORE FLAT TOPPED PISTON KITS FOR STOCK STYLE HEADS

Displacement	Deck Height	Stroke	Standard	+ .010"	+ .020"	+ .030"	+ .040"
88"	1.200"	4 1/4"	92-1900	92-1901	92-1902	—	92-1904
93"		4 1/2"					
98"*		4 3/4"*					
96"		4 5/8"	92-1930	92-1931	92-1932	92-1933	—
103"*		5"*	—	92-1941	—	92-1943	—

*Small Diameter Flywheels Recommended Piston Fitment: Close: 0.0015"-0.0020" Loose: 0.0035"-0.0040"

3 5/8" BORE STANDARD COMPRESSION PISTON KITS FOR S&S SUPER STOCK® HEADS

Displacement	Deck Height	Stroke	Standard	+ .010"	+ .020"	+ .030"	+ .040"
88"	1.200"	4 1/4"	92-1060 USA	92-1061	92-1062	92-1063	92-1064
93"		4 1/2"					
96"		4 5/8"					

3 5/8" BORE INTERMEDIATE COMPRESSION PISTON KITS FOR S&S SUPER STOCK® HEADS

Displacement	Deck Height	Stroke	Standard	+ .010"	+ .020"	+ .030"	+ .040"
88"	1.200"	4 1/4"	92-1110	92-1111	92-1112		
93"		4 1/2"					
96"		4 5/8"					

Recommended Piston Fitment: Close: 0.0023"-0.0025" Loose: 0.0035"-0.0045"

CONTINUED PISTON KITS

3½" BORE CAST FLAT-TOPPED REPLACEMENT PISTON KITS FOR STOCK HEADS OR S&S PERFORMANCE REPLACEMENT HEADS

Displacement	Deck Height	Stroke	Standard	+0.010"	+0.020"
80"	1.3750"	4¼"	920-0015 21940-83	920-0026 21942-83	920-0027 21943-83

No replacement wristpins are available. Recommended Cast Piston Fitment: Close 0.0010"-0.0015" Loose 0.0020"-0.0025"

3½" BORE FORGED FLAT TOPPED STROKER PISTON KITS FOR STOCK OR S&S PERFORMANCE REPLACEMENT HEADS

Displacement	Deck Height	Stroke	Standard	MSRP	+0.010"	+0.020"	MSRP	+0.030"
89"	1.1875"	4⅝"	106-5554	\$416.95	106-5555	106-5556	\$416.95	106-5793

Recommended Piston Fitment: Close .0020"-.0025" Loose .0030"-.0035" May require rebalancing if replacing old 92-2040 series pistons.

3½" BORE FORGED DOMED PISTON KITS FOR S&S® SUPER STOCK® HEADS

Displacement	Deck Height	Stroke	Standard	MSRP	+0.005"	MSRP	+0.010"	+0.020"	+0.030"
80"	1.3750"	4¼"	92-2026	\$416.95	92-20265	\$416.95	92-2027	92-2028	92-2029
89" LC	1.1875"	4⅝"	92-2046	\$416.95	-	-	92-2047	92-2048	-
89" HC			92-2016	\$416.95	-	-	92-2017	92-2018	-

Recommended Piston Fitment: Close .0020"-.0025" Loose .0030"-.0035"



REPLACEMENT PARTS FOR PISTONS

PISTON RINGS, MOLY FACED

Bore	4⅛"	4"	3⅝"	3½" Cast Flat-Topped*	3½" Forged Flat-Topped	3½" Forged Domed
Deck Height	1.050"	1.200"	1.200"	1.3750"	1.1875"	1.3750"/1.1875"
Standard	940-0014 \$68.95	94-1300X \$45.95	94-1210X \$45.95	94-2216X \$45.95	94-2206X \$45.95	94-2216X \$45.95
+0.005"	-	-	-	-	-	94-22165X \$45.95
+0.010"	940-0012 \$68.95	94-1301X \$45.95	94-1211X \$45.95	94-2217X \$45.95	94-2207X \$45.95	94-2217X \$45.95
+0.020"	940-0013 \$68.95	94-1302X \$45.95	94-1212X \$45.95	94-2218X \$45.95	-	-
+0.030"	940-0017 \$180.95	94-1303X \$45.95	94-1213X \$45.95	94-2209X \$45.95	94-2219X \$45.95	-
+0.040"	-	-	94-1214X \$45.95	-	-	-
+0.060"	-	-	94-1216X \$45.95	-	-	-

*No replacement wristpins are available

WRISTPINS

Bore	Description	Part #
4⅛"	.927" x 2.825" long 	94-9277
4"	.792" x 2.825" long 	94-9256
3⅝"		
3½"		

KEEPERS

Bore	Description	Part #
4⅛"	Keeper 22097-99	each 94-9278-S
		2 pack 94-9278-2
		4 pack 106-2304
4"	Keeper 22589-83A	each 94-9254-S
2 pack 94-9254-2		
4 pack 94-9254		

All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

CAMSHAFTS

RECOMMENDED APPLICATIONS FOR S&S CAMS

OES: Original Equipment Specification (OES) A bolt-in replacement cam with stock cam timing is designed for riders with stock engines. Does not require tuning. Bolt-in stock. Equivalent to HD® L-Grind

490LR: Hydraulic Bolt-In. Designed for broad power range improvement. Good choice for heavy bikes and trailer towing. Increases low and mid range performance. Works well with stock compression ratio and stock exhaust. No valve spring change required. Basic rpm Idle–5000.

508: Bolt-in cam intended for stock engines with less than 10:1 compression ratio. Quiet valvetrain with excellent low/mid range torque for touring and 2 up riding.

510V: Bolt-in cam that works well with stock or ported heads. Improved ramp design results in low valve train noise. Meant for engines up to 96" and 10:1 compression ratio. 3000–5000 rpm.

520: A replacement part for S&S emissions certified engines, this is a short duration emissions cam with very little overlap to reduce emissions of unburned hydrocarbons. Requires high lift springs and normal clearance checks. 1000–4500 rpm (80"–96").

543: A replacement cam for newer S&S 4 1/8" bore V-series emissions certified engines for OE and custom applications. High lift, short duration and no overlap. Requires high lift springs and normal clearance checks. 1000–4000 rpm (111"–124").

561: For 80"–96" engines at 9.5:1–10.5:1 compression ratio. Provides strong midrange power. 3000–5500 rpm.

585V: A versatile cam for 80" to 96" engines with 10:1–10.5:1 compression, and larger engines with 9.5:1–10:1 compression ratios. 3500–6000 rpm.

600: An exceptional cam in any large displacement engine with 9.5:1 to 10.5:1 compression. 3500–6000 rpm.

631: For high rpm applications, an excellent choice for all street and racing engines with 11:1 and higher compression ratios. Great performance cam, but expect more "wear and tear" on valve train components. Valve spring spacing and other normal clearancing checks required. 4500–6500 rpm.

640: For large displacement motors with compression ratios of 10.5–11.5:1, or smaller motors with 11:1–12:1 compression ratio. Does not require as much compression as the 631 and provides a more linear power delivery. 3000–6000 rpm.

675: Designed for use with S&S special application cylinder heads, but can be used with other cylinder heads with appropriate valve springs. Intended for large displacement competition engines of 120 cubic inches or more, and 11:1 or greater compression. 4500–6500 rpm.



33-5124

CAMS FOR 1984–'99 BIG TWIN ENGINES

Cam Name	Part #	MSRP
OES	330-0290	\$225.95
490LR	330-0371	\$225.95
508	330-0093	\$225.95
510V	33-5124	\$225.95
520	33-5073^{USA 1,2}	\$225.95
543	330-0181	\$225.95
561	33-5076	\$225.95
585V	33-5109	\$225.95
600	33-5058	\$225.95
631	33-5080	\$225.95
640	33-5108	\$225.95
675	33-5133	\$225.95

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

NOTE: S&S can do a special order cam. Contact your S&S Customer Service Representative for more information.

S&S CAM SPECIFICATIONS FOR 1984–'99 BIG TWIN ENGINES										
Cam Name	Valve Timing Open/Close		Valve Duration		Valve Lift	Lift @ TDC		Spring Spacing Required	Tappet Type Required	
	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust			
	Open BTDC/Close ABDC	Open BBDC/Close ATDC								
OES	2.0°/34.0°	36.0°/4.0°	216.0°	220.0°	.475"	0.060"	0.060"	No	Hydraulic	
490LR	12°/34°	41°/15°	226°	236°	.490"	.146"	.157"	No	Hydraulic	
508	11°/25°	50°/5°	217°	235°	.508"	.141"	.110"	No	Hydraulic	
510V	20°/38°	52°/20°	238°	252°	.510"	.187"	.178"	No	Hydraulic	
520	0°/40°	50°/2°	220°	232°	.520"	.086"	.094"	Yes	Hydraulic	
543*	Front	-26°/52°	49°/-1°	206°	228°	.543"	.017"	.083"	Yes	Hydraulic
	Rear	-25°/44°	33°/-10°	199°	203°	.543"	.018"	.053"	Yes	Hydraulic
546	5°/55°	52°/5°	240°	237°	.546"	.126"	.106"	Yes	Hydraulic	
561	32°/40°	50°/26°	252°	256°	.560"	.252"	.210"	Yes	Hydraulic	
585V	20°/45°	60°/20°	245°	260°	.585"	.186"	.180"	Yes	Hydraulic	
600	20°/55°	60°/20°	255°	260°	.600"	.192"	.184"	Yes	Hydraulic	
631	34°/61°	66°/29°	275°	275°	.630"	.281"	.221"	Yes	Solid or Hydraulic	
640	25°/60°	65°/20°	265°	265°	.640"	.222"	.192"	Yes	Hydraulic	
675	25°/64°	70°/25°	269°	275°	.675"	.235"	.209"	Yes	Hydraulic	

*Emissions cams front and rear do not have identical timing. Negative values are due to special timing for reduced emissions.










REPLACEMENT PINION GEARS

FITMENT

- 1984–'89 big twins
- 1990–'99 engines with S&S flywheel assembly

1984–'89 BIG TWIN STYLE PINION GEAR SELECTION CHART

Color Code	Size	HD® Part #	S&S Part #	MSRP
Orange	Biggest	24040-78	33-4141 	\$99.95
White		24041-78	33-4142 	\$99.95
Yellow		24042-78	33-4143 	\$99.95
Red	Average	24043-78	33-4144 	\$99.95
Blue		24044-78	33-4145 	\$99.95
Green		24045-78	33-4146 	\$99.95
Black		24046-78	33-4147 	\$99.95



NOTES: If the stock gear is unmarked and the size is unknown or you are scratch building an engine and have no gear, we recommend that you order a gear in the middle of the size range. These sizes were used more often and should provide adequate gear clearance under most circumstances. When in doubt, use a gear from the middle to the small side of the range, because a combination of looser fitting smaller gears is less likely to cause binding and premature wear. Consult the chart for the size and appropriate Part # required. If you wish to achieve optimum cam gear to pinion gear fit, consult your factory service manual for instructions on fitting these gears before making a selection. Some sizes, particularly those on and near the ends of each range, are available on a limited basis because they are the extremes.

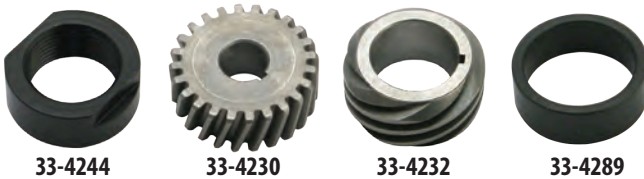
S&S® does not offer a replacement pinion shaft for 1990–'99 big twin engines that accepts a stock pinion gear, oil pump drive gear, gear spacer and pinion gear nut, because experience has shown that the design is not strong enough for performance applications. For this reason, we recommend and sell only the pre-1990 style pinion shaft for big twins. To make the change easier, S&S offers a conversion package consisting of a pinion gear, spacer, nut and oil pump drive gear for big twin engines.

PINION SHAFT GEAR KITS



PINION SHAFT GEAR KITS FOR 1984–'89 BIG TWINS

Color Code	Size	S&S Part #	MSRP
Yellow	Biggest	33-4185	\$157.95
Red	Average	33-4148	\$157.95
Blue		33-4181	\$157.95
Black	Smallest	33-4180	\$157.95

Note: All S&S Pinion Shaft Gear Kits must be used with 1973–'99 style 24 tooth oil pump drive shaft gear such as S&S part # 33-4230. Use these kits when installing an S&S flywheel assembly in a 1990–'99 engine.



INDIVIDUAL COMPONENTS

Description	S&S Part #	MSRP
Pinion Shaft Gear Spacer 	33-4289	\$7.95
Pinion Shaft Gear Nut 24023-54 	33-4244	\$21.95
Pinion Shaft Oil Pump Drive Gear* 6 teeth 26349-73, 26349-73A	33-4232	\$45.95
Oil Pump Drive Gear** 24 teeth 26345-73	33-4230	\$39.95

*Requires S&S part #33-4230 or 26345-73 drive shaft drive gear. Fits 1984–'89 stock and 1984–'99 S&S pinion shafts.

**Requires S&S part #33-4232, part #33-4237 or 26349-73, 26349-73A pinion shaft drive gear.

TAPPET GUIDES

GLOSS BLACK NOW AVAILABLE!

FITMENT

- 1984–'99 big twins
- S&S V-Series engines
- S&S Special Application crankcases with .250" offset cam chest



106-5428

BILLET TAPPET GUIDES FOR S&S V-SERIES ENGINES & S&S SA CRANKCASES

Tappet Guide	CRANKCASE STYLE							
	Stock/Super Stock®				Special Application			
	Polished	MSRP	Chrome	MSRP	Gloss Black	MSRP	Chrome	MSRP
Set	106-6459	\$450.95	106-5428±	\$450.95	330-0590	\$422.95	106-3005±	\$450.95

± WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov

CAST TAPPET GUIDES FOR S&S V-SERIES ENGINES & S&S SA CRANKCASES

Tappet Guide	Crankcase Style					
	Stock/S&S Super Stock®				Special Application	
	Natural	MSRP	Wrinkle Black	MSRP	Wrinkle Black	MSRP
Set	33-5301	\$269.95	33-5324	\$269.95	33-5325	\$269.95

NOTE: S&S® engines for 1984–'99 chassis with larger than 3¹³/₁₆" bores are typically built using special crankcases such as S&S Special Application cases which have an offset right side gear cavity for more tappet guide to cylinder clearance. S&S offers special tappet guides machined to compensate for the change in pushrod angle caused by the cam chest offset of these cases.

HIGH PERFORMANCE HYDRAULIC TAPPETS

FITMENT

- 1984–'99 big twins
- S&S V-Series engines

FEATURES AND BENEFITS

- .123" larger in diameter than the "raceless" roller axles currently used by some manufacturers
- Improved inner race-roller design allows use of more, and larger bearings to increase load-carrying surface area, further reducing stress and wear in the critical roller area
- Redesigned plunger assembly better withstands forces associated with heavy-duty valve springs and cams typically used in high-performance applications
- Improved metering device precisely controls oil delivery to top end, ensuring rapid lifter pump-up and reducing possibility of oil starvation to bottom end



33-5352

- Each lifter body and plunger assembly is selective-fit and then leak down tested to ensure correct operation

OPTIONS

- Tappets are available with the HL₂T Limited Travel Kit for improved cold starts and high rpm valve timing accuracy

KIT CONTENTS

- Four hydraulic tappets

Extra parts needed:

S&S tappets with HL₂T Kit require the use of adjustable pushrods.

Because of close tolerances, tappets in set part #33-5353 may require slightly longer bleed down time than conventional tappets. At temperatures of 65°F and above, however, bleed-down should take 20 minutes or less using 20W50 engine oil.

HIGH PERFORMANCE HYDRAULIC TAPPETS

Description	Part #	MSRP
Without HL ₂ T Kit 18523-86A	33-5352	\$327.95
With HL ₂ T Kit	33-5353	\$349.95

HYDRAULIC LIFTER LIMITED TRAVEL SPACER (HL₂T)

FITMENT

- 1984–'99 big twins
- All S&S tappets



FEATURES AND BENEFITS

- Designed to limit the range of travel of the hydraulic tappet plunger—*Easier starting*
- Low noise and positive valve train activation
- More horsepower at higher RPMs

HYDRAULIC LIFTER LIMITED TRAVEL SPACER (HL₂T)

Description	Part #	MSRP
Set of four spacers (fits tappets with .612" I.D.)	33-5338 18526-89A	\$24.95

Extra parts needed: Adjustable pushrods must be used with HL₂T kit in order to obtain proper plunger position. S&S HL₂T kit will not fit the late stock replacement tappets HD#18523-86B for 1984–'99 big twins. These tappets have a smaller bore size and a larger spring diameter than earlier versions. Part #33-5338 fits tappets with .612" I.D.



TIME-SAVER ADJUSTABLE PUSHRODS

FEATURES AND BENEFITS

- Eliminates the need to disassemble the top end and remove the rocker arms to change pushrods or camshafts
- Reduce installation time by 75% — Hence the name *Time-Saver*
- Larger 9mm diameter chrome moly tubing provides superior strength and minimizes pushrod flex
- Single adjuster end provides pushrod lengths from 9.5" to 11.5" for stock height and taller engines
- Kit includes set of four pushrods and installation instructions



TIME-SAVER ADJUSTABLE PUSHRODS

Description	Part #	MSRP
Pushrod Set	930-0052	\$192.95

QUICKEE ADJUSTABLE PUSHRODS

FITMENT

- 1984–'99 big twin

FEATURES AND BENEFITS

- Easy to install — no need to remove rocker covers
- Adjustable to work with all stock and aftermarket cams
- Works with stock pushrod covers



When a Quickee adjustable pushrod is collapsed, it can easily be installed or removed from an assembled engine.

→ REPLACEMENT PARTS: SEE PAGE 49



93-5120

QUICKEE ADJUSTABLE PUSHRODS

Application	Displacement	Part #	MSRP
1984–'99 big twin	80"–98", 113", 117", 124"	93-5120 [†]	\$192.95
	107", 111" & S&S 88"	93-5123	\$188.95

[†]Will not fit in an 88" engine which is .175" shorter. The rear intake pushrod is too long.

STANDARD ADJUSTABLE PUSHRODS

FITMENT

- 1984–'99 big twins

FEATURES AND BENEFITS

- Made out of 7/16" O.D. chromoly steel tubing for strength and durability
- Adjustable to work with all stock or aftermarket cams
- Compatible with solid and hydraulic lifters



93-5076

PUSHROD SETS FOR 1984–'99 BIG TWINS

Displacement	Cylinder Length	Part #	MSRP
100"	4.745"	93-5090	\$131.95
88", 107"	5.375" (-.175")/4.870*	93-5017	\$131.95
93", 113"	5.500" (-.050")/4.995*	93-5018	\$131.95
80", 89", 96"	5.550" (Stock)	93-5076	\$131.95
98"	5.625" (+.075")	93-5019	\$131.95
103"	5.750" (+.200")	93-5020	\$131.95

*These are S&S 4" bore engines using +.500" deck crankcases. Cylinder lengths are .500" shorter.

PUSHROD SETS FOR 1984–'99 4 1/8" BORE BIG TWINS

Displacement	Cylinder Length	Part #	MSRP
111"	4.764"	93-5017	\$131.95
117"	4.889"	93-5018	\$131.95
124"	5.014"	93-5019	\$131.95

NOTE: Crankcases used in S&S 4 1/8" bore engines have 6.000" cylinder deck height. The increased deck height effects the cylinder length. Do not use cylinder lengths in this chart to select pushrods for engines built in crankcases with stock, 5.375" deck height.

→ REPLACEMENT PARTS: SEE PAGE 49

NON-ADJUSTABLE PUSHRODS

FITMENT

- 1984–'99 Harley-Davidson® Evolution big twin engines

FEATURES AND BENEFITS

- Replaces stock pushrods perfectly
- 7/16" high strength chromoly steel tubing for increased strength
- Pushrods are marked with stock color code and valve position for easy installation








NON-ADJUSTABLE PUSHRODS

Description	Part #	MSRP
Pushrods Only	930-0041	\$76.95
Pushrods Only, V111	930-0069	\$73.95

PUSHROD COVERS AND RELATED PARTS

PUSHROD REPLACEMENT PARTS

Item Description	Part #	MSRP
S&S Pushrod Cover Kit* (includes Top and bottom covers, Cover cap, Cover spring, & Spring washers)	Stock Height	93-4039 \$166.95
	1" or more taller than stock	93-4038 \$166.95
Top Cover  1,2,3 17935-66T, 17935-79B	each	93-4016 \$15.95
Bottom Cover 17938-83	each	93-4015 \$16.95
Cover Cap  1,2,3 17945-36B	each	93-4017 \$11.95
Cover Spring  1,2,3 17947-36	each	93-4018 \$4.95
Cover Cap Washer 6762B	each	50-7131 \$4.95
Bottom Cover Washer	each	50-7051 \$4.95
Top O-ring	each	50-8039 \$4.95
Middle O-ring	each	50-8038 \$4.95
Bottom O-ring	each	50-8037 \$4.95
Quad Seal 11133A	each	50-8064-S \$5.95
Pushrod O-ring kit  (includes top, middle, and bottom o-rings for four pushrods)	each	93-4022 \$9.95
Ball End  1,2,3 Fits S&S adjustable with 5/16"-32 threads. (Manufactured after 2-1-1996)	each	93-5002 \$13.95
Adjusting Unit Locknut Fits S&S adjustable pushrods with early stock 5/32"-32 threads	each	33-5333 \$6.95
Adjusting Unit Locknut Fits S&S adjustable pushrods with 5/16"-32 threads. (Manufactured after 2-1-1996)	each	93-5003-S \$5.95

PUSHROD COVER KEEPER SETS FOR 1984-'99 BIG TWINS

Length / Finish	Application	Part #	MSRP
2.390" / Gloss Black		930-0127	\$68.95
2.400" / Chrome 17950-48		93-4070±	\$34.95
2.500"	Chrome	93-4100±	\$34.95
	Gloss Black	930-0142	\$68.95
2.600"	Chrome	93-4101±	\$34.95
	Gloss Black	930-0128	\$68.95
2.800" / Chrome 17950-86		93-4115±	\$34.95
2.900"	Chrome	93-4102±	\$34.95
	Gloss Black	930-0126	\$68.95
3.000" / Chrome	100"	93-4103±	\$34.95
3.100"	Chrome	93-4104±	\$34.95
	Gloss Black	930-0125	\$68.95
3.200" / Chrome	93", 89", 96", 117"	93-4105±	\$34.95
3.330" / Chrome 17949-40, 17950-66	98", 124"	93-4106±	\$34.95
3.500" / Chrome	103"	93-4107±	\$34.95
3.625" / Chrome		93-4108±	\$34.95
4.250"		93-4109*	\$42.95

*Custom extra long stainless steel 4.250", customer to cut to required length
 Keepers are sold in sets of four. Keeper length for stock Harley-Davidson® with 80" engines is 3.330"
 †  WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



All S&S pushrod keepers are chromed steel, except part #93-4109. Keeper part #93-4109 is intended for unusually tall engines. It is manufactured of unchromed stainless steel to prevent rust or peeling after it is trimmed to the required length.

All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.



SIDEWINDER® .650" LIFT VALVE SPRINGS

FITMENT

- 1984–'99 Evolution® with stock heads

FEATURES AND BENEFITS

- Works well with cams up to .650" lift
- Manufactured from ultra clean high silicon Kobe alloy wire then micro shot peened and nitrided
- CNC machined 9° locks
- High performance conical single wire spring
- Chromoly forged retainers

KIT CONTENTS

- Valve keepers, Top & Bottom collars, Springs, Shims

NOTE: S&S recommends roller rocker arms be used with lifts over .585"



S&S® .650" LIFT VALVE SPRINGS SPECIFICATIONS

Lift	Installed Height	Seat Force	Force @ Max Lift	Max RPM
.650"	1.860"	178 lb.	376 lb.	6500

.650" LIFT VALVE SPRING KIT

Description	Part #	MSRP
1984–'99 Evolution® with stock heads	900-0050	\$225.95

STREET PERFORMANCE .585" VALVE SPRINGS

FITMENT

- 1984–'99 Evolution® with stock heads
- All S&S Super Stock® heads

FEATURES AND BENEFITS

- Single coil reduce the risk of valve float
- Suitable for high performance applications
- Accommodates camshaft lift to 0.585"

KIT CONTENTS

- Springs, Top & Bottom Collars, Keepers, Shims

S&S® STREET PERFORMANCE .585" VALVE SPRINGS SPECIFICATIONS

Lift	Installed Height	Seat Force	Force @ Max Lift
.585"	1.850"	135 lb.	325 lb.

STREET PERFORMANCE .585" SPRING KIT

Description	Part #	MSRP
1984–'99 big twins with stock heads	900-0593	\$141.95
All S&S Super Stock® heads	900-0595	\$141.95



FORGED ROCKER ARMS

FITMENT

- 1984-up big twins

FEATURES AND BENEFITS

ROLLER ROCKER ARMS

- Extremely durable rollers reduce valve side thrusting with high lift cams
- Superior wear and fatigue resistance even in the most demanding applications
- ¾" long bushings provide 50% more bushing support area than ½" long bushings
- Available in stock 1.625:1 ratio or performance 1.725:1 ratio

STANDARD ROCKER ARMS

- ¾" long bushings provide 50% more bushing support area than ½" long bushings
- Case carburized hard surface for longer life
- Stock 1.625:1 ratio

KIT CONTENTS

- 2 front and 2 rear rocker arms



900-4065A



900-4119A

1.625:1 RATIO FORGED ROLLER ROCKER ARMS

Description	Part #	MSRP
1.625:1 Ratio Roller Rocker Arm Set 2 front & 2 Rear	900-4065A	\$584.95
Front Exhaust/Rear Intake each	900-4065FA	\$170.95
Rear Exhaust/Front Intake each	900-4065RA	\$170.95

1.725:1 RATIO FORGED ROLLER ROCKER ARMS

1.725:1 Ratio Roller Rocker Arm Set 2 front & 2 Rear	900-4098A	\$628.95
Front Exhaust/Rear Intake each	900-4098FA	\$192.95
Rear Exhaust/Front Intake each	900-4098RA	\$192.95

STANDARD FORGED ROCKER ARM KIT

1.625:1 Ratio Roller Rocker Arm Set 2 front & 2 Rear	900-4119A	\$292.95
Front Exhaust/Rear Intake each	900-4119FA	\$101.95
Rear Exhaust/Front Intake each	900-4119RA	\$101.95



90-4036



90-4104

REPLACEMENT PARTS FOR FORGED ROCKER ARMS

Description	Part #	MSRP
Rocker Arm Shafts (Set of 4)	90-4036	\$41.95
Rocker Arm Shafts (each)	90-4006	\$13.95
Roller Rocker Arm Rebuild kits (rebuilds 4 rocker arms)	90-4104	\$141.95
Roller & Standard Rocker arm bushing (¾" long)	90-4014	\$11.95

NOTES: S&S roller rocker arms are recommended for use with cams having more than 0.585" of lift.

Adjustable pushrods must be used with S&S roller rocker arms to obtain proper valve clearance.

New rocker arm shafts are recommended for maximum performance and rocker life.

The use of 1.725:1 ratio rocker arms will increase stress on cams, tappets, and pushrods. For this reason they are recommended for racing only and not for street applications.

All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.



PERFORMANCE REPLACEMENT CYLINDER HEADS

FOR 3½" AND 3⅝" BORE

FITMENT

- 1984–'99 big twins
- Stock displacement
- Stock bore strokers
- Big bore engines up to 96"



106-4570

FEATURES AND BENEFITS

- Compatible with stock or other flat topped pistons
- Heads can be decked .060" if higher compression is desired
- Port design increases flow, while maintaining velocity specifically designed for stock and small displacement engines
- Compatible with up to .585" lift cams with TDC lifts of .252" intake and .210" exhaust
- Stock diameter ports allows installation of original intake manifolds and exhaust
- Stock temperature sensor location for EFI equipped engines
- High compression is 76cc, low compression is 82cc in chamber

KIT CONTENTS

- Two complete heads with valves and springs

COMPRESSION RATIO COMPARISON CHART

Engine Size	S&S® Performance Replacement		Stock HD®
	High Compression 76cc	Low Compression 82cc	
96"	10:1	9.5:1	9.75:1
89"	9.4:1	8.9:1	9.25:1
80"	8.8:1	8.4:1	8.5:1

FLOW COMPARISON CHART

Cylinder Head Type	Valve Diameter		.600" Lift Flow @ 10"	
	Intake	Exhaust	Intake	Exhaust
Stock HD®	1.840"	1.610"	125cfm	98cfm
S&S Performance Replacement	1.900"	1.605"	142cfm	109cfm
S&S® Super Stock®	2.000"	1.605"	158cfm	122cfm

PERFORMANCE REPLACEMENT CYLINDER HEADS

Finish	Low Compression 82cc*	MSRP	High Compression 76cc	MSRP
Natural	106-3466	\$1,229.95	106-6059	\$1,229.95
Wrinkle Black	106-4570 <small>16696-92A</small>	\$1,300.95	106-6064	\$1,300.95
Polished	106-4575	\$1,706.95	—	—

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*Used on V96 engines with flat top pistons

GASKET KITS FOR S&S PERFORMANCE REPLACEMENT CYLINDER HEADS

Bore Size	Part #	MSRP
3½"	90-1905	\$45.95
3⅝"	90-1906	\$44.95

NOTE: S&S recommends that all clearances be checked with high lift cams, especially if the heads have been decked to increase compression.

→ **REPLACEMENT PARTS: SEE PAGE 82**

SUPER STOCK™ CYLINDER HEADS

FOR 3½" AND 3⅝" BORE

FITMENT

- 1984–'99 big twin with 3½" or 3⅝" bore
(not compatible with stock or flat top pistons)

FEATURES AND BENEFITS

- Machined with a stock bolt pattern
- Larger, more open combustion chamber presents less resistance to air flow around the valves
- 2.000" intake valves and 1.605" exhaust valves
- Special "cast to shape" intake ports with a special directional fin for improved air flow
- Precision CNC machined from heat treated aircraft quality aluminum castings



90-1504

KIT CONTENTS

- Complete head assembly with valves and S&S .650" lift springs

! ADDITIONAL PARTS (REQUIRED)

Super Stock® Pistons	
3½" bore	See PAGE 44
3⅝" bore	See PAGE 43
Gasket Kit	See chart

→ **REPLACEMENT PARTS: SEE PAGE 83**

ASSEMBLED S&S® SUPER STOCK™ HEAD KITS

Finish	Part #	MSRP
Natural	90-1004 <small>USA 1</small>	\$1,229.95
Wrinkle Black	90-1504 <small>USA 1</small>	\$1,300.95
Polished	90-1091 <small>USA 2</small>	\$1,706.95

GASKET KITS FOR S&S SUPER STOCK™ CYLINDER HEADS

Bore Size	Part #	MSRP
3½"	90-1905	\$45.95
3⅝"	90-1906	\$44.95

SUPER STOCK™ CYLINDER HEADS FOR 4" BORE S&S ENGINES

FITMENT

- 4" bore S&S V-Series engines

FEATURES AND BENEFITS

- Special S&S 4" bore bolt pattern
- Machined for S&S manual or electric compression releases
- 2.000" intake valves and 1.605" exhaust valves
- Special "cast-to-shape" intake ports with a special directional fin for improved air flow
- Precision CNC machined from heat treated aircraft quality aluminum castings

KIT CONTENTS

- 2 fully assembled cylinder heads with S&S valve springs (.640" or .585" lift)
- Threaded plugs to seal compression release holes



90-1015

NOTES:

Due to expanded stud pattern, these heads will not fit on stock Evolution® engines

84cc heads are stock on 100" engines

93cc heads are stock on 107" and 113" engines

Extra parts needed: Gasket Kit For S&S® 4" Bore Heads **90-1909**

→ **REPLACEMENT PARTS: SEE PAGE 84**

ASSEMBLED S&S® SUPER STOCK® HEAD KITS FOR 4" V-SERIES ENGINES

Description	Valve Springs	Finish					
		Natural	MSRP	Wrinkle Black	MSRP	Polished	MSRP
84cc	.650" lift	90-1015	\$1,423.95	-	-	-	-
93cc	.650" lift	90-1009 ^{USA} ₂	\$1,423.95	90-1509 ^{USA} ₂	\$1,499.95	90-1070	\$1,687.95
	.585" lift	90-1280	\$1,423.95	90-1281	\$1,499.95	90-1282	\$1,946.95

CYLINDER HEADS FOR 4 1/8" BORE V-SERIES ENGINES

FITMENT

- 4 1/8" bore S&S V-Series engines

FEATURES AND BENEFITS

- Redesigned cooling fins—reduces mechanical noise
- 2.00" intake - 1.605" exhaust
- Complete head with .650 springs



90-1362

NOTE: Replacement heads for existing engines with the old fin profile are available as complete front or rear head assemblies only, by special order.

→ **REPLACEMENT PARTS: SEE PAGE 83**

91cc 4 1/8" BORE S&S® REPLACEMENT CYLINDER HEADS

Finish	Part #	MSRP
Natural	90-1360 ^{USA} ₃	\$1,619.95
Wrinkle Black	90-1361 ^{USA} ₃	\$1,687.95
Polished	90-1362 ^{USA} ₃	\$2,093.95

GASKET KITS FOR S&S SUPER STOCK™ CYLINDER HEADS

Bore Size	Part #	MSRP
4 1/8"	90-1910 ^{USA} ₃	\$53.95

HEAD BOLTS WITH WASHERS

HEAD BOLT INFORMATION CHART

Length w/Washer	Washer Thickness	Head Bolt w/Washer	MSRP	Washers Only	MSRP
1.690"	.250"	93-3028	\$12.95	50-7091	\$4.95
1.840"	.150"	93-3027	\$12.95	50-0418-S	\$6.95
1.920"	.250"	93-3036	\$17.95	50-7091	\$4.95
2.070"	.150"	93-3031	\$17.95	50-0418-S	\$6.95
2.220"	.250"	93-3038	\$17.95	50-7091	\$4.95
2.370"	.150"	93-3032	\$17.95	50-0418-S	\$6.95
3.134"	.250"	93-3029	\$17.95	50-7091	\$4.95
3.284"	.150"	93-3030	\$17.95	50-0418-S	\$6.95
3.501"	.250"	93-3037*	\$17.95	50-7091	\$4.95
3.651"	.150"	93-3033*	\$17.95	50-0418-S	\$6.95

*Drilled & tapped deeper to allow shortening for custom lengths.



HEAD BOLT WASHERS

Thickness	Part #	MSRP
.150"	50-0418-S	\$6.95
.250"	50-7091	\$4.95



HEAD BOLTS FOR HARLEY-DAVIDSON® 1984-'99 BIG TWINS

Displacement	Cylinder Length	Cylinder Head Type	Short Bolt w/Washer	MSRP	Long Bolt w/Washer	MSRP	Head Bolt Kit	MSRP
S&S® 89 / HD® 80	5.550"	S&S + Late 1985-'91 HD	93-3027	\$12.95	93-3030	\$17.95	93-3010	\$89.95
		1991-99 HD	93-3036	\$17.95	93-3030	\$17.95	93-3014	\$128.95
S&SV96	5.565"	S&S + Late 1985-'91 HD	93-3027	\$12.95	93-3030	\$17.95	93-3010	\$89.95
		1991-'99 HD	93-3036	\$17.95	93-3030	\$17.95	93-3014	\$128.95
S&SV100	4.745"	S&S	93-3027	\$12.95	93-3037	\$17.95	93-3010	\$89.95
S&SV103	5.750"	S&S + Late 1985-'91 HD	93-3036	\$17.95	93-3037	\$17.95	93-3015	\$128.95
		1991-'99 HD	93-3038	\$17.95	93-3037	\$17.95	93-3016	\$128.95
S&SV107	4.870"	S&S	93-3038	\$17.95	93-3037	\$17.95	93-3016	\$128.95
S&SV113	4.995"	S&S	93-3032	\$17.95	93-3033	\$17.95	93-3013	\$128.95
S&SV111	4.763"	S&S	-	-	93-3030	\$17.95	93-3070	\$128.95
S&SV117	4.888"	S&S	-	-	93-3030	\$17.95	93-3070	\$128.95
S&SV124	5.013"	S&S	-	-	93-3033	\$17.95	93-3072	\$128.95

→ CALCULATING CUSTOM HEAD BOLT LENGTHS SEE PAGE 227



Dress up your engine with these magnetic chrome head bolt covers. Easy installation, no tools, no messy adhesives. A powerful magnet holds cover in place, yet allows easy removal. Chrome plated steel looks great on any engine, but is a must for polished engines. For S&S head bolts only.

CHROME HEAD BOLT COVERS[±]

Set of 4	50-0333	\$75.95
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± WARNING: Cancer and Reproductive Harm –
www.P65Warnings.ca.gov

BILLET AND DIE-CAST ROCKER COVERS

GLOSS BLACK NOW AVAILABLE!

FITMENT

- 1984-'99 big twins
- S&S 4 1/8" Bore

FEATURES AND BENEFITS

- OEM-style "umbrella" fittings are included with billet rocker boxes for 1993-'99 big twin engines with cylinder head venting.
- Cast rocker boxes use an exclusive one way valve, which is built into the rocker cover gasket to control oil carry over in "head breathing" engines.
- S&S billet rocker covers are available in two finishes: show quality chrome or unfinished. Unfinished is ideal for powder coating and other custom cosmetic treatments. Die-cast covers are available in chrome and gloss black finish.
- Installation on stock and most comparable sized engines can be performed without removing the engine from the frame.

KIT CONTENTS

- 2 covers
- All necessary gaskets, o-rings, and mounting hardware



DIE-CAST ROCKER COVER KITS & REPLACEMENT GASKET KIT

Application	Description	Part #	MSRP
1984-'99 big twins	Chrome Die-Cast Rocker Cover Kit ^{USA} 1,2	90-4095±	\$1,012.95
	Replacement Gasket Kit	90-4091	\$73.95
S&S 4 1/8" Bore Engines	Gloss Black Die-Cast Rocker Cover Kit	900-0937	\$731.95
	Chrome Die-Cast Rocker Cover Kit	90-4110±	\$956.95
	Replacement Gasket Kit	90-4111	\$62.95

± WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



S&S billet rocker covers

BILLET ROCKER COVER KITS & REPLACEMENT GASKET KIT

Description	Part #	MSRP
Chrome Billet Rocker Cover Kit	90-4050±	\$1,462.95
Unfinished Billet Rocker Cover Kit	90-4055	\$1,124.95
Replacement Gasket Kit	90-4049	\$79.95

± WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

➔ **REPLACEMENT PARTS: SEE PAGE 86 & 87**

NOTES: In spite of the similarities between different S&S billet and cast rocker covers, not all parts are interchangeable. See PAGE 86 & PAGE 87 for correct Part #s. The performance-oriented design of the billet rocker boxes permits valve lifts up to .710" with stock or S&S Super Stock® heads, and up to .810" with S&S Special Application heads. S&S roller rocker arms are recommended for high lift cams. Cast rocker boxes may require some minor clearancing, and it is recommended that they be ordered either polished or unfinished, so that clearancing may be done without disturbing chrome plated surfaces. S&S billet rocker covers accept valve springs up to 1.660" O.D. without modification. Cast rocker boxes may require minor clearancing. Cylinder heads must be set up correctly for high-lift cams, and it remains the builder's responsibility to confirm all clearances. Kits include front and rear cover assemblies with base and top cover, rocker shaft supports, gaskets and o-rings, and instructions.

MANIFOLDS FOR CARBURETED ENGINES

FITMENT

- 1984–'99 big twins
- S&S and other butterfly carbs
- CV carbs

FEATURES AND BENEFITS

- Fits stock or S&S heads
- Available for stock engines and engines with longer or shorter cylinders
- Other lengths are available by special order
- Provision for VOES lines, MAP sensors, and cylinder head vents in 4 1/8" bore engines



160-1628
Big twins with stock or S&S Super Stock® ignition



16-2588
Engines with S&S IST® ignition (MAP Sensor ready manifold)



16-2594
S&S 4 1/8" bore engines with Super Stock ignition



160-1736
CV style carbs

CV MANIFOLDS FOR 1984–'99 BIG TWINS

Displacement	Cylinder Length	Size Number	Part #	MSRP
80", 89", 96"	5.550"	410	160-1736	\$135.95
88"	5.375"	397	160-1733	\$135.95
93"	5.500"	406	160-1734	\$135.95
100"	*4.745"	387	160-1732	\$135.95
107"	*4.870"	397	160-1733	\$135.95
113"	*4.995"	406	160-1734	\$135.95

*Cylinder lengths reflect the use of S&S SA crankcases with +.500 deck height in S&S 4" bore engines.

→ SEE PAGE 57 FOR U-RINGS FOR CONSTANT VELOCITY CARBS

NOTE: S&S style o-rings must be used with these manifolds. S&S o-rings are slightly thinner to accommodate the larger S&S port diameter. Use of stock o-rings may damage the manifold. See PAGE 67.

MANIFOLDS FOR CARBURETED 1984–'99 EVOLUTION® AND S&S ENGINES WITH STOCK OR S&S SUPER STOCK™ IGNITION — VOES FITTING

Displacement	Cylinder Length	Size #	S&S ES, LS, Super A, B, E, Tillotson®, Bendix®, Keihin®	MSRP	Super G	MSRP
88"	5.375"	397	160-1626	\$113.95	16-2526	\$135.95
93"	5.500"	406	160-1627	\$113.95	16-2527	\$135.95
80", 89", 96"	Stock (5.550")	410	160-1628	\$113.95	16-2528	\$135.95
103"	5.750"	426	160-1632	\$135.95	16-2532	\$135.95
107"	*5.375"	397	160-1626	\$113.95	16-2526	\$135.95
111"	4.763"	398	160-1760	\$135.95	—	—
113"	*5.500"	406	160-1627	\$113.95	16-2527	\$135.95

*Cylinder lengths reflect the use of S&S SA crankcases with +.500 deck height in S&S 4" bore engines.

SPECIAL INTAKE MANIFOLDS FOR CARBURETED S&S® ENGINES FOR 1984–'99 BIG TWINS (REQUIRING MAP SENSOR MACHINING)

Displacement	Cylinder Length	Size #	Super E	MSRP	Super G	MSRP
Evolution and S&S Engines with Intelligent Spark Technology (IST®) Ignition — MAP Sensor Port						
80", 89", 96"	5.550"	410	160-1718	\$135.95	16-2588	\$135.95
107"	4.870"	397	160-1643	\$113.95	—	—
111"	4.763"	398	160-4487	\$135.95	16-2604	\$135.95
113"	4.995"	406	—	—	16-2606^{USA}	\$135.95
117"	4.888"	408	—	—	16-2603	\$170.95
124"	5.013"	417	—	—	16-2598	\$135.95
4 1/8" Bore S&S Engines with Super Stock® Ignition — Extra Vacuum Fitting						
111"	4.763"	398	160-1760	\$135.95	16-2594	\$135.95
117"	4.888"	408	—	—	16-2595	\$135.95
124"	5.013"	417	—	—	16-2596	\$135.95

REPLACEMENT PARTS FOR MANIFOLDS

Description	Part #	MSRP
Manifold Fitting VOES Rubber Cap 3/16" I.D. x 5/16" O.D. x 1/2"	50-8372	\$4.95
Manifold Vacuum Fitting	16-0136-S	\$5.95

U-RINGS FOR CONSTANT VELOCITY CARBS

Description	Part #	MSRP
U-ring, 40-42mm 27002-89	16-0242	\$34.95
U-ring, 44-48mm	16-0241	\$29.95

**16-0136-S****50-8372****16-0241****16-0242****MANIFOLDS FOR SINGLE BORE EFI ENGINES****FITMENT**

- Stock or S&S Hot Set Up Kit® equipped 1995-'98 big twins with S&S 52mm or 58mm throttle bodies, stock or S&S heads
- S&S V-Series engines

**16-5141**

NOTE: The included S&S style o-ring, part #16-0235, must be used with these manifolds. S&S o-rings are slightly thinner to accommodate the larger S&S port diameter. Stock o-rings may damage the manifold.

SINGLE BORE EFI MANIFOLDS

Displacement	Cylinder Length	Size #	Part #	MSRP
80", 89", 96"	5.550"	410	16-5141	\$214.95
V107"	4.763"	398	16-5136	\$214.95
V111"	4.763"	398	16-5136	\$214.95
V124"	5.013"	417	16-5139	\$214.95

Manifolds include the required S&S style o-ring.

MANIFOLD CONVERSION KIT**MANIFOLD CONVERSION SELECTION CHART**

Application	Cylinder Length	Size #	S&S ES, LS, Super B, Super E, Tillotson®, Bendix®, Keihin®	MSRP
1984-'89 big twin	5.550"	410	160-1658	\$225.95

**REPLACEMENT PARTS**

Description	Part #	MSRP	
Manifold	160-1628	\$113.95	
Flanges	Front 27009-86A	each 16-0232	\$49.95
		5 pack 16-0600	\$239.95
	Rear 27010-86A	each 16-0233	\$49.95
		5 pack 16-0601	\$239.95
Set (Front & Rear)	106-3516	\$89.95	
O-rings	each 16-0235	\$8.95	
	10 pack 16-0243	\$52.95	
0.350" Spacers	50-7044	\$4.95	

NOTES: S&S rigid mount manifolds are designed to improve intake tract air flow. These manifolds may change the way a stock carburetor and air cleaner assembly fit. This means that these components may require shimming and/or a slight change in mounting bracketing.

S&S manifold conversion kits for Harley-Davidson® Evolution® are designed to fit stock displacement engines.

Series #16-1600 manifolds included in Manifold Conversion Kits are machined with a 1 7/8" throat and will fit stock Keihin® butterfly carburetors, all S&S 1 3/4" and 1 7/8" carbs, and any other carburetors with the same mounting bolt pattern.

S&S style o-rings must be used with these manifolds. S&S o-rings are slightly thinner to accommodate the larger S&S port diameter. Use of stock o-rings may damage the manifold.



BLACK SUPER E & G CARBURETORS

FEATURES AND BENEFITS

- Exclusive black coating — heat and chemical resistant
- Offered in standard venturi or increased venturi diameter — specially machined for 7% more flow

BLACK CARBURETORS FOR 1985–2005 BIG TWINS

Fitment	Description	Part #	MSRP
Increased venturi diameter (7% more flow)	Super E Carb	110-0099	\$455.95
	Super G Carb	110-0100	\$483.95
Standard venturi diameter	Super E Carb	110-0133	\$472.95
	Super G Carb	110-0138	\$472.95

NOTE: These black carb kits do not include air cleaners. Air cleaner options are available starting on PAGE 16.

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SUPER E & G COMPLETE CARBURETOR KITS

FITMENT

- 1984–'99 big twins

FEATURES AND BENEFITS

- Four fuel delivery ports — Better throttle response
- O-ring sealed idle mixture screw
- Increased air flow for more power
- Adjustable accelerator pump for quick throttle response and easy starting
- Utilization of the factory dual cable system ensures safe operation
- Direct replacement and high quality fit and finish — less down time and better performance
- Variable position enrichment starting system

KIT CONTENTS

- Super E or G carburetor
- S&S intake manifold (For engines with stock length cylinders)
- Classic Teardrop air cleaner kit
- Mounting hardware
- Gaskets, seals, and hoses
- Instructions



11-0419

SUPER E & G COMPLETE CARBURETOR KITS

Fitment	Super E	MSRP	Super G	MSRP
1993–'99 big twin	11-0419	\$686.95	11-0434	\$709.95
1984–'92 big twin	11-0407	\$686.95	11-0427	\$709.95

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SUPER E & G PARTIAL KIT (NO MANIFOLD)

Fitment	Super E	MSRP	Super G	MSRP
1993–'99 big twin	11-0442	\$619.95	-	-
1984–'92 big twin	11-0440	\$619.95	-	-
1993–'99 big twin	-	-	11-0446	\$675.95

Does not include intake manifold. Partial kit designed for engines with longer/shorter than stock cylinders. Manifold is ordered separately. See PAGE 56

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

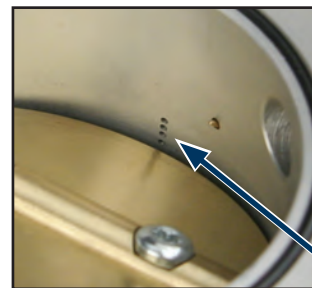
SUPER E & G CARBURETOR ONLY

Fitment	Super E	MSRP	Super G	MSRP
All Years & Models	11-0420	\$412.95	11-0421	\$450.95

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

NOTES: S&S® does not recommend polishing or chrome plating Super E & G carbs. Our repair department has seen many carbs with plugged passages due to polishing compounds, and some carbs that have been destroyed because the polishing or chrome plating had altered critical machined surfaces.

Recommended for closed circuit use only—S&S Super E & G carbs shown are not approved for use on motor vehicles operated on California public highways, or in other states where similar pollution laws may apply. The user shall determine the suitability of the product for his or her use and shall assume all risk and liability in connection therewith.



As the throttle plate opens, it exposes more of these holes to engine vacuum and delivers more fuel as rpm increases. When you run out of holes in the intermediate system, the main jet comes in and handles fuel delivery for the higher rpm.

→ **REPLACEMENT PARTS: SEE PAGE 100**

OPTION

Optional cruise control adapter kits allows riders to keep factory cruise feature.



CRUISE CONTROL ADAPTER KIT

Fitment	Part #	MSRP
1998–'06 big twin	11-2927	\$99.95

TWO CABLE THROTTLE ASSEMBLIES













The S&S two cable throttle assemblies are high quality "pull open – pull close" type throttles designed for use on any two cable carburetor installations on bikes with 1" O.D. handlebars. A special soft plastic material used to mold the grips makes them look and feel exactly like stock grips. There are four different assemblies available to make installation on most chassis easy.

TWO CABLE THROTTLE REQUIRED

S&S Super E and G carburetors require the use of a two cable, pull open–pull closed throttle assembly. Any chassis including 1980 and earlier stock models equipped with a single cable throttle mechanism requires conversion to a two cable, pull open–pull closed type. S&S offers high quality two cable throttle assemblies for this purpose. Stock big twin models from 1981 to present have a two cable throttle and should not require changing. Super E and G Carb kits for 1990 and later models come with the new longer throttle cable guide bracket which allows the use of the stock CV style throttle cables.









NOTE: The chart on this page is used only when using throttle cable bracket part #11-2339. This bracket is standard on all S&S Super E & G carburetor kits for big twins 1989 and earlier and all kits for Harley-Davidson® Sportster® models with the exception of the kit for 2004–'05 models. Carburetor kits for 1990 and later big twin models come with the longer cable bracket part #11-2338 for use with stock CV throttle cables. Super E and G carburetors ordered for big twin models 1981 and later are being shipped with the correct throttle cable bracket to fit the stock cables. Big twin carbs that are not year specific will be shipped with both cable brackets. All Sportster models 1988–'03 will still require conversion to butterfly style cables.

THROTTLE CABLE APPLICATION CHART

Application	Fastening Method	Length Total Housing	Length Vinyl Housing	Open Side	MSRP	Close Side	MSRP
FX and FL models 1985 and earlier* Big Twin models 1995 and earlier*	Threaded	36"	32"	19-0432 	\$68.95	19-0433 	\$68.95
To 1995 Harley-Davidson® Softail® (FXSTC, FXST, FLSTC, FLSTF) 1986–'94 FXR, 1993-'95 Dyna®	Threaded	39"	35"	19-0434 	\$68.95	19-0435 	\$68.95
To 1995 All FLT models	Threaded	48"	44"	19-0462 	\$68.95	19-0463 	\$68.95
To 1995 custom application	Threaded	42"	38"	19-0446	\$68.95	19-0447	\$68.95
1996–'99 Softail (FXSTS, FXSTC, FLSTC, FLSTF) 1996–'99 Dyna®	Snap-in	39"	35"	19-0438 	\$68.95	19-0439 	\$68.95
1996–'99 All FLT models	Snap-in	48"	44"	19-0464 	\$68.95	19-0465 	\$68.95
1996–'99 custom application	Snap-in	42"	38"	19-0440 	\$68.95	19-0441 	\$68.95

*1980 and earlier must be converted to dual cable throttle assembly
1998 and later required Harley-Davidson® throttle assembly #71831-96.

REPLACEMENT PARTS

Description	Part #	MSRP
S&S Universal Throttle Cable	106-3520	\$36.95
Throttle Grip Clamp Set 1985–'95	106-3519 	\$41.95
Top Throttle Grip Clamp only	19-0222 	\$18.95
Bottom Throttle Grip Clamp only	19-0220 	\$18.95
Throttle Grip Clamp Screw (Fits S&S throttle assemblies: Part #19-0448, #19-0449, #19-0482, #19-0450, #19-0229)	50-0043	\$5.95
Throttle Grip Set	106-3521 	\$66.95
Right Hand Grip only	19-0225 	\$40.95
Left Hand Grip only	19-0226 	\$28.95
Cable Adjuster (Fits S&S throttle assembly part #19-0229)	19-0223 	\$6.95
Cable Adjuster Jam Nut (Fits S&S throttle assembly part #19-0229)	19-0227	\$0.95
Handlebar Spacing Sleeve 4" x 1" O.D. — converts 7/8" handlebars to 1" O.D.	19-0235 	\$20.95



All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

JETS & CARB REBUILD KITS FOR S&S SUPER E & G CARBURETORS

For those who need to rejet their carburetor because of engine modifications, exhaust modifications, or changes in altitude, we have extra jet kits available which are designed to cover most jetting situations.

DEALER JET KITS

Description	Part #	MSRP
S&S Jet Kit (Includes 3 each of all intermediate jets and 5 each of all main jets, plus a main jet tool)	11-3102	\$373.95

 WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



11-3102

JET PACKS

Description	Part #	MSRP
Low Range Jet Pack — For jetting most stock and moderate performance engines <i>Includes one each intermediate jets (.025", .0265", .028", .0295") one each main jets (.062", .064", .066", .068", .070", .072", .074").</i>	11-7270	\$57.95
High Range Jet Pack — For jetting some stock and all performance engines <i>Includes one each intermediate jets (.0295", .031", .032", .033") and one each main jets (.072", .074", .076", .078", .080", .082", .084").</i>	11-7271	\$57.95
Master Jet Pack — For jetting all Super B, E, and G equipped engines <i>Includes one each intermediate jets (.025", .0265", .028", .0295", .031", .032", .033") and one each main jets (.062", .064", .066", .068", .070", .072", .074", .076", .078", .080", .082", .084").</i>	11-7272	\$96.95

 WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



11-7272

INTERMEDIATE JETS — SERIES #94 INDIVIDUAL SELECTION

Size	QTY	Part #	MSRP	Size	QTY	Part #	MSRP
.025	each	11-0250	\$12.95	.032	each	11-0320	\$12.95
	3 pack	11-7107	\$30.95		3 pack	11-7112	\$30.95
.0265	each	11-0265	\$12.95	.033	each	11-0330	\$12.95
	3 pack	11-7108	\$30.95		3 pack	11-7113	\$30.95
.028	each	11-0280	\$12.95	.036	each	11-0360	\$12.95
	3 pack	11-7109	\$30.95		3 pack	11-7114	\$30.95
.0295	each	11-0295	\$12.95	.040	each	11-0400	\$12.95
	3 pack	11-7110	\$30.95		3 pack	11-7115	\$30.95
.031	each	11-0310	\$12.95	Blank	each	11-0000	\$10.95
	3 pack	11-7111	\$30.95				

 WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



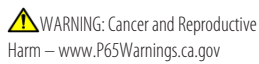
106-3517

Early Series #94 gas jets were stamped with single digit numbers. Conversions for these numbers are:

1.....025"	4.....033"
2.....028"	5.....036"
3.....031"	6.....040"

NOTE: No returns or exchanges on jets.

MAIN JETS — SERIES #72 INDIVIDUAL SIZE SELECTION

Size	QTY	Part #	MSRP	Size	QTY	Part #	MSRP
.040	each	11-4040	\$11.95	.080	each	11-4080	\$11.95
	5 pack	11-7220	\$41.95		5 pack	11-7240	\$41.95
.042	each	11-4042	\$11.95	.082	each	11-4082	\$11.95
	5 pack	11-7221	\$41.95		5 pack	11-7241	\$41.95
.044	each	11-4044	\$11.95	.084	each	11-4084	\$11.95
	5 pack	11-7222	\$41.95		5 pack	11-7242	\$41.95
.046	each	11-4046	\$11.95	.086	each	11-4086	\$11.95
	5 pack	11-7223	\$41.95		5 pack	11-7243	\$41.95
.048	each	11-4048	\$11.95	.088	each	11-4088	\$11.95
	5 pack	11-7224	\$41.95		5 pack	11-7244	\$41.95
.050	each	11-4050	\$11.95	.090	each	11-4090	\$11.95
	5 pack	11-7225	\$41.95		5 pack	11-7245	\$41.95
.052	each	11-4052	\$11.95	.092	each	11-4092	\$11.95
	5 pack	11-7226	\$41.95		5 pack	11-7246	\$41.95
.054	each	11-4054	\$11.95	.094	each	11-4094	\$11.95
	5 pack	11-7227	\$41.95		5 pack	11-7247	\$41.95
.056	each	11-4056	\$11.95	.096	each	11-4096	\$11.95
	5 pack	11-7228	\$41.95		5 pack	11-7248	\$41.95
.058	each	11-4058	\$11.95	.098	each	11-4098	\$11.95
	5 pack	11-7229	\$41.95		5 pack	11-7249	\$41.95
.060	each	11-4060	\$11.95	.100	each	11-4100	\$11.95
	5 pack	11-7230	\$41.95		5 pack	11-7250	\$41.95
.062	each	11-4062	\$11.95	.102	each	11-4102	\$11.95
	5 pack	11-7231	\$41.95		5 pack	11-7251	\$41.95
.064	each	11-4064	\$11.95	.104	each	11-4104	\$11.95
	5 pack	11-7232	\$41.95		5 pack	11-7252	\$41.95
.066	each	11-4066	\$11.95	.106	each	11-4106	\$11.95
	5 pack	11-7233	\$41.95		5 pack	11-4110	\$11.95
.068	each	11-4068	\$11.95	.110	5 pack	11-7255	\$41.95
	5 pack	11-7234	\$41.95		each	11-4115	\$11.95
.070	each	11-4070	\$11.95	.115	5 pack	11-7256	\$41.95
	5 pack	11-7235	\$41.95		each	11-4120	\$11.95
.072	each	11-4072	\$11.95	.120	5 pack	11-7257	\$41.95
	5 pack	11-7236	\$41.95				
.074	each	11-4074	\$11.95				
	5 pack	11-7237	\$41.95				
.076	each	11-4076	\$11.95				
	5 pack	11-7238	\$41.95				
.078	each	11-4078	\$11.95				
	5 pack	11-7239	\$41.95				

MAIN JET AIR BLEED KIT (ONE JET EACH SIZE)

Sizes	Part #	MSRP
.042" - .060"	106-3517	\$76.95
.084" - .120"	106-3518	\$61.95

 WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

S&S® CARBURETOR REBUILD KITS

To insure that you continue to get the utmost in performance from your S&S carburetor, we have put together a series of rebuild kits that are designed to provide the proper parts to return a worn carburetor to top shape. We have assembled different types of kits to cover the different degrees of rebuild necessary.

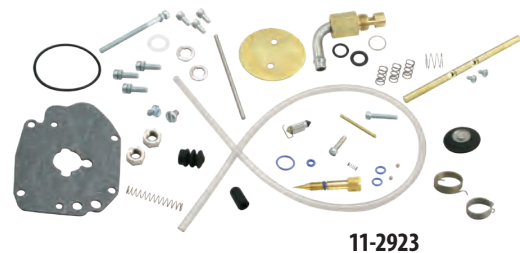
MASTER REBUILD KITS

Master rebuild kits contain a body rebuild kit, accelerator pump rebuild kit (Super E and G only), all new fasteners, springs, idle mixture screw, seat, and needle assembly. Everything needed to completely rebuild one carburetor.

MASTER REBUILD KIT

Description	Part #	MSRP
Super E	11-2923	\$96.95
Super G	11-2924	\$96.95

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BODY REBUILD KITS

Body rebuild kits for Super E and G carbs also contain throttle shaft nuts, nylon washers, accelerator pump o-ring, and accelerator pump boot. Body rebuild kits for Super E and G carbs do not contain throttle shaft bushings since these carbs have stainless steel throttle shaft bushings already installed.

BODY REBUILD KIT

Description	Part #	MSRP
Super E	11-2906	\$49.95
Super G	11-2907	\$49.95



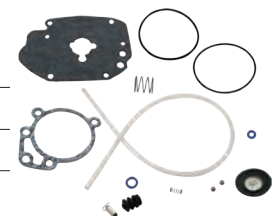
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BASIC REBUILD KIT

A gasket and seal kit for low mileage Super E & G carbs. Perfect to reassemble carbs taken apart for inspection and cleaning.

BASIC REBUILD KIT

Description	Part #	MSRP
Super E & G	110-0067	\$41.95



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ACCELERATOR PUMP REBUILD KITS

Accelerator pump rebuild kits contain diaphragm, diaphragm spring, check balls, check ball spring, pump pushrod, and required hardware and o-rings.

ACCELERATOR PUMP REBUILD KIT

Description	Part #	MSRP
Super E & G	11-2918	\$24.95



COMPRESSION RELEASES

FITMENT

- S&S cylinder heads with compression release machining

OPTIONS:

MANUAL RELEASE:

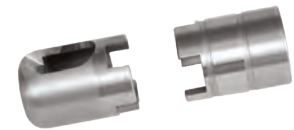
Activated by a cable similar to a choke control, this slick system can be used with any style rocker cover.

ELECTRIC RELEASE:

Solenoid operated, this system automatically opens and closes when the starter button is pressed and released. Convenient and simple, this is the best setup for big displacement high compression bikes. Requires S&S die cast rocker covers.



55-1009



53-0045



90-4916


COMPRESSION RELEASE KITS

Description	Part #	MSRP
Electric	90-4915	\$405.95

TOOLS AND ACCESSORIES

Description	Part #	MSRP
S&S Two-Piece Socket Kit: <i>Allows in-frame installation of S&S compression releases and protects wiring from damage during installation.</i>	53-0045	\$146.95
S&S Compression Release Hole Plug	90-4916	\$18.95

REPLACEMENT PARTS

Description	Part #	MSRP
Silicone Solenoid Caps	55-1009	\$6.95
Wiring Harness 	55-1010	\$125.95
Electric Compression Release Assembly	90-4914	\$170.95

NOTES: S&S rocker covers must be used with electric compression releases due to clearance requirements for the solenoids.

Rocker covers must be removed when installing S&S® compression releases. If lack of frame clearance prevents removal of rocker covers, engine must be removed from frame for compression release installation.


In most cases, S&S compression releases can be installed while the engine is in the frame with the special S&S two-piece socket kit, part #53-0045.

If cylinder heads are machined for S&S compression releases, but compression releases are not used, special plug part #90-4916 (two required) must be installed to seal the machined hole.

Stock cylinder heads cannot be machined for S&S compression releases because there is not enough material in critical areas.

HIGH OUTPUT COILS

HIGH OUTPUT COILS

S&S High Output 3.0Ω Single Fire Coil	Part #	MSRP
<i>The perfect complement for S&S IST ignition systems. This single fire coil is actually two separate coils in a single package. Coil impedance is 3Ω per coil.</i>	55-1571	\$174.95
S&S High Output 0.5Ω Single Fire Coil 	55-1576	\$150.95
<i>High output 0.5Ω single fire coil for S&S IST ignition.</i>		



55-1571



55-1576

HI-4N PERFORMANCE IGNITION

FITMENT

- 1984–1999 big twins

FEATURES AND BENEFITS

- One piece machined aluminum housing reduces vibration and improves heat dissipation and reliability
- Improved kick start algorithm designed to start as easily as points
- BCD switches with solid detent and legible marking allow easy and repeatable adjustments of mode, advance rate, and rev limit
- Single-fire and dual-fire function built into a single module
- Flexible wiring harness makes installation easier
- Initial timing marks allow precise adjustment and reinstallation
- Sensor covers integrated into housing to provide protection during installation



HI-4N PERFORMANCE IGNITION

Fitment	Part #	MSRP
Ignition only	550-0501	\$357.95
Kit Includes S&S® HI-4N Ignition, Single-Fire Coil, and 8.8mm double silicone, premium quality spark plug wires	550-0502	\$494.95

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SUPER STOCK™ IGNITIONS

FITMENT

- V-Series engines
- V80, V92, V96, V100, V107, V111, V113, V117, V124, V145

FEATURES & BENEFITS

- Electric-start mode allows the pre-ignition cranking to be set anywhere from 1 to 4 engine revolutions (only available with current modules — earlier modules cannot be updated)
- Pre-programmed ignitions are custom tailored for a specific S&S engine — no need for adjustments

- Single fire operation — requires a single fire coil for single spark plug applications
- Dual plugged applications require a pair of two tower coils or a single four tower coil
- Minimum 3.0Ω primary resistance
- Overload and short circuit protected
- VOES switches to less aggressive curve under load or hard acceleration
- 6300 rpm rev-limiter
- 24-hour break-in rev-limiter — prevents damage during break-in
- Data logging diagnostic capabilities



NOTES: S&S Super Stock ignition systems are available in complete ignition kits and as replacement modules. S&S single fire ignition coils are available separately.

Keep in mind that the curves are preset for a specific S&S engine, and that modules intended for one engine may not yield optimum results when used on another configuration.

SUPER STOCK® IGNITION MODULE AND KITS

Engine	Kit	MSRP	Module	MSRP
V80	550-0140	\$338.95	550-0139	\$237.95
V96	55-1354	\$338.95	55-1344	\$237.95
V100, V107, V113	55-1355	\$338.95	55-1345	\$237.95
V111, V117, V124	55-1356	\$338.95	55-1346	\$237.95

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NOTE — Only modules and kits with the above Part #s have the updated features.

SUPER STOCK® IGNITION KIT REPLACEMENT PARTS

Description	Part #	MSRP
Pick-up Cup and Mounting Screw	55-1247 ‡	\$17.95
Connector Kit	55-1249 USA	\$11.95
VOES Switch with Hardware	55-1248 USA	\$90.95
VOES Hose, 9"	19-0395 USA	\$5.95
VOES Manifold Fitting	16-0136-S	\$5.95
VOES Hose Tee	50-8124-S	\$5.95
Optional Parts		
S&S Single Fire Coil (3.0Ω)	55-1571	\$174.95

‡ ⚠️ WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov



INNER PRIMARY BEARING RACE

FITMENT

- All 1991-'06 big twins (except '06 Dyna®)

FEATURES AND BENEFITS

- Will not "walk" on transmission mainshaft
- Prevents costly damage to mainshaft seal, output gear & output gear bearing
- Simple to install



INNER PRIMARY BEARING RACE

Fitment	Part #	MSRP
All 1991-'06 big twins (except '06 Dyna®)	56-5089	\$67.95

→ ANY JOB IS EASY WITH THE RIGHT TOOLS: S&S INNER BEARING RACE INSTALLER, SEE PAGE 205

GATES® HIGH STRENGTH FINAL DRIVE BELTS

S&S final drive belts by Gates are available with 14mm pitch in 1½" and 1⅞" widths. See the chart below and match the width and number of teeth required for your vehicle. You can find this information in the vehicle service manual.



SECONDARY DRIVE BELTS (14MM PITCH)

Teeth	1⅞" Wide	MSRP	1½" Wide	MSRP
125	106-0357	\$259.95	—	—
126	—	—	106-0348	\$259.95
127	—	—	106-0349	\$259.95
128	106-0358	\$259.95	106-0350	\$259.95
130	106-0359	\$259.95	106-0351	\$259.95
132	106-0360	\$259.95	106-0352	\$259.95
133	106-0361	\$259.95	106-0353	\$259.95
135	106-0362	\$259.95	106-0354	\$259.95
136	—	—	106-0355	\$259.95
139	106-0363	\$259.95	106-0356	\$259.95
149	106-1338	\$259.95	106-2695	\$301.95
156	—	—	106-2827	\$259.95

ATTENTION CUSTOM BIKE MANUFACTURERS! SPECIAL ORDER BELTS FROM S&S® AND GATES®

Special belt sizes, private brand labeling, and assistance with belt drive design, are available to custom performance OEM's and aftermarket bike builders, through S&S. These products and services are available for licensed motorcycle manufacturers only, and a minimum order quantity may be required.

Drive belts with your company name imprinted on them are a perfect way to show off your brand. Any belt size currently available in the S&S catalog, as well as the special ordered sizes, can be specially branded. Minimum order quantities would apply.

Whether you're designing a completely new chassis, or simply need a replacement belt, S&S can help you find the belt you're looking for. Through the combined efforts of Gates and S&S, S&S can now provide customers with the technical assistance they need for designing new secondary belt drive systems. In addition, S&S can help you determine required tooth count for your existing chassis design, based on the pulley center-to-center distances and pulley tooth counts.

All belts have a 14mm tooth pitch, and are made of the super strong Gates Carbon X3N material. Belts are available in three standard widths of 1.125", 1.5" and 1.181" (30mm), but can be special ordered in nearly any width for a nominal charge. If you want a belt with a special tooth count, they are also available (see the special order chart for availability).

Contact your S&S Customer Support Representative for more information.

BELTS AVAILABLE BY SPECIAL ORDER (14MM PITCH)

Tooth Count	1.181" (30mm) Width*	1.25" Width*
125	●	
126	●	●
127	●	●
128	●	
130	●	
131	●	●
132	●	
133	●	
135	●	
136	●	●
137	●	●
139	●	
140	●	●
149	●	
150	●	●
151	●	●
152	●	●
156	●	

*Minimum order required: 1.181" (30mm) – 16 belts; 1.25" – 17 belts.

GASKETS

REBUILD GASKET KITS FOR S&S V-SERIES 1984-'99 ENGINES AND HOT SET UP KIT®

4 7/8"	106-0964	\$199.95
4"	106-1020	\$197.95
3 5/8"	106-0992	\$197.95
3 1/2"	310-0928	\$199.95

TOP END GASKET KITS V-SERIES 1984-'99

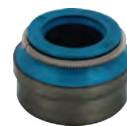
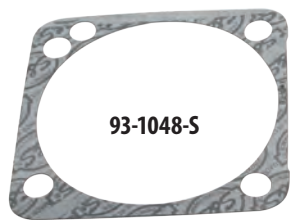
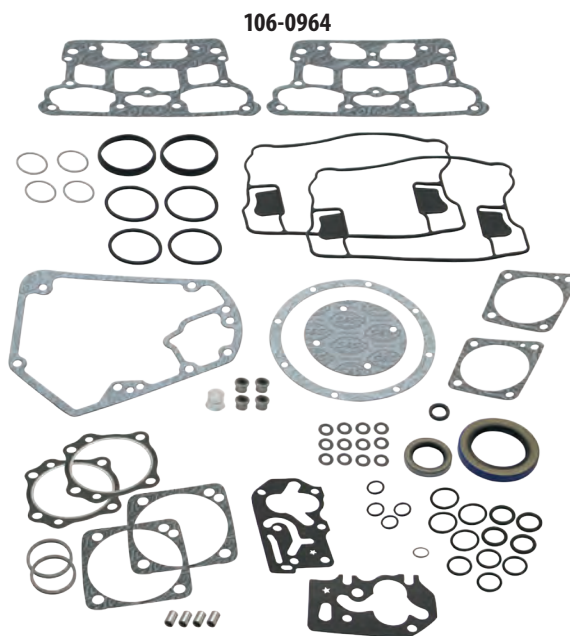
4 3/8"	90-9511	\$146.95
4 1/8"	90-9506	\$96.95
4"	90-9503	\$76.95
3 5/8"	90-9502	\$79.95
3 1/2"	900-0974	\$79.95

CYLINDER HEAD GASKET KITS V-SERIES 1984-'99

4 7/8"	.043" Micropore	90-1910	\$53.95
4"	.045" Micropore	90-1909	\$41.95
3 5/8"		90-1906	\$44.95
3 1/2"		90-1905	\$45.95
3 1/2"	.030" Layered Steel	900-0532	\$65.95

HEAD GASKETS V-SERIES 1984-'99

4 7/8"	.043" Micropore	each	93-1047-S	\$14.95
		2 pack	930-0100	\$26.95
		10 pack	93-1073	\$135.95
4"	.043" Micropore	each	93-1040-S	\$14.95
		2 pack	930-0087	\$23.95
		10 pack	93-1071	\$135.95
3 5/8"	.045" Micropore	each	93-1037-S	\$12.95
		2 pack	930-0091	\$23.95
		10 pack	93-1052	\$135.95
3 5/8"	.0625" Micropore	each	93-1016-S	\$17.95
		2 pack	930-0097	\$34.95
		10 pack	93-1053	\$170.95
3 1/2"	.045" Micropore 16770-84D, 16770-84F	each	93-1011-S	\$15.95
		2 pack	930-0098	\$32.95
		10 pack	93-1024	\$146.95
3 1/2"	.0625" Micropore 16770-84D, 16770-84F, 10773-85	each	93-1313-S	\$17.95
3 1/2"	.030" Layered Steel	each	900-0530	\$27.95



106-5029

900-0338

BASE GASKETS AND O-RINGS V-SERIES 1984-'99

4 3/8"	.018" Micropore	2 pack	93-1082	\$15.95
4 1/8"	.018" Micropore	each	93-1048-S	\$8.95
		2 pack	930-0099	\$13.95
		10 pack	93-1074	\$58.95
4"	.018" Micropore	each	93-1031-S	\$7.95
		2 pack	930-0094	\$11.95
		10 pack	93-1067	\$46.95
3 5/8"	.018" Micropore	each	93-1033-S	\$6.95
		2 pack	930-0093	\$10.95
		10 pack	93-1064	\$41.95
3 1/2"	.018" Micropore	each	93-1035-S	\$10.95
		2 pack	930-0092	\$19.95

EXHAUST GASKETS

1984-up Big Twins 65324-83B, 65324-83A	each	106-5029	\$4.95
	10 pack	93-1072	\$51.95

VALVE GUIDE SEALS

1984-'02 Big Twin and 1986-'00 Sportster® Models	each	900-0338	\$4.95
	8 pack	90-2158	\$19.95

ROCKER BOX GASKET KITS AND INDIVIDUAL GASKETS

S&S Billet Rocker Boxes

Gasket Kit	90-4049	\$79.95
O-ring, (-223), 1.625" ID x 1.875" OD, Viton	50-8044	\$4.95
Valve Cover Seal 26856-89, 26856-89A	90-4030	\$4.95
Gasket, Rocker Cover, S&S® Billet, O-ring, 1984-'99	90-4048	\$17.95
Gasket, Bottom, Rocker Cover, 1984-99 bt	each	900-0538 \$14.95
	2 pack	900-0592 \$29.95

S&S Die Cast Rocker Boxes - S&S 4 1/8" Bore Engines

Gasket Kit	90-4111	\$62.95
O-ring, (-223), 1.625" ID x 1.875" OD, Viton	50-8044	\$4.95
Gasket, Bottom, Rocker Cover, 4 1/8" 1984-up 16719-99B	each	90-4071-S \$9.95
	2 pack	90-4071 \$16.95
	10 pack	90-4099 \$79.95
Gasket, Rocker Cover, S&S® Die Cast, O-ring, 1984-up	90-4079	\$15.95

S&S Die Cast Rocker Boxes - 3 1/2", 3 5/8" and 4" Bore Engines

Gasket Kit	90-4091	\$73.95
O-ring, (-223), 1.625" ID x 1.875" OD, Viton	50-8044	\$4.95
Gasket, Bottom, Rocker Cover, 1984-99 bt	each	900-0538 \$14.95
	2 pack	900-0592 \$29.95



Gasket, Rocker Cover, S&S® Die Cast, O-ring, 1984-up	90-4079	\$15.95
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Stock Rocker Boxes

Gasket Kit, Rubber, 1984-'91 17038-90	90-4046	\$90.95
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LOWER END GASKETS AND SEALS

Gear Cover Gasket For 1970-'99 25225-93A, 25225-93B, 25225-70C, 25257-80	each	31-2107	\$6.95	
	10 pack	106-0232	\$39.95	
Camshaft Oil Seals, 1970-'99 83162-51	each	31-4022	\$5.95	
Tappet Cover Gasket	Set (includes Front & Rear) 18633-48	each	33-5302	\$7.95
		10 pack	33-5313	\$53.95
	Front 18634-48C	each	33-5302F	\$6.95
		10 pack	33-5313F	\$23.95
	Rear 18633-48B, 18633-48D	each	33-5302R	\$6.95
		10 pack	33-5313R	\$27.95

PUSHROD O-RINGS

O-ring, Kit, Pushrod Cover, 1984-'99 bt, 1986-2003 xl	93-4022	\$9.95	
Top O-ring 11293, 11157, 11101, 11190	50-8039	\$4.95	
Middle O-ring 11132A	50-8038	\$4.95	
Bottom O-ring 11145A	50-8037	\$4.95	
Oil Jet O-ring - S&S 4 1/8" Bore Engines	each	50-8270	\$4.95
	5 pack	50-8275	\$4.95

SPROCKET SHAFT SEAL

1970-up bt 12026B	each	31-4010	\$10.95
	5 pack	31-4110	\$45.95

OIL PUMP GASKETS

S&S Standard Cast and Billet Oil Pumps

1936-'91 Standard	31-6271	\$14.95
1992-'99 Standard	31-6273	\$14.95

SEE PAGE 80 FOR STANDARD OIL PUMP MASTER REBUILD KITS

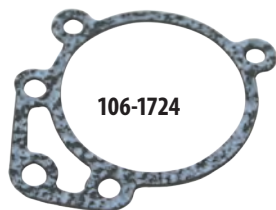
S&S High Volume High Pressure (HVHP) Oil Pumps

1984-'91 Big Twin HVHP 31-6306	31-6308	\$11.95
1992-'99 Big Twin HVHP	31-6299	\$12.95

CONTINUED GASKETS



106-6022



106-1724

**SEE PAGE 81 FOR HIGH VOLUME HIGH PRESSURE OIL PUMP
MASTER REBUILD KITS**
Oil Pump Drive Shaft Seal

S&S Standard Cast and Billet Oil Pumps 26227-58	31-6005	\$6.95
S&S High Volume High Pressure (HVHP) Oil Pumps	31-6064-S	\$6.95

FUEL SYSTEM GASKETS
Manifold Seals

S&S Manifold O-ring	<i>each</i>	16-0235	\$8.95
	<i>10 pack</i>	16-0243	\$52.95
Stock Manifold O-ring 26995-86B, 26995-86A, 26992-99	<i>each</i>	16-0236	\$7.95
	<i>10 pack</i>	16-0244	\$46.95
Cap, Rubber, Manifold, Fitting		50-8372	\$4.95

CLASSIC TEARDROP AIR CLEANER

Back Plate Gasket	<i>each</i>	106-1724	\$5.95
	<i>10 pack</i>	106-2328	\$29.95
Vent Seal Washers, Silicone Coated Steel	<i>each</i>	50-7054	\$4.95
	<i>10 pack</i>	50-7059	\$14.95

STEALTH AIR CLEANER
Back Plate gasket

Stock CV Carb & EFI Throttle Body, 1991-up xl/bt 29062-95B		106-6022	\$5.95
Super E/G	<i>each</i>	106-1724	\$5.95
	<i>10 pack</i>	106-2328	\$29.95
Muscle Air Cleaner (includes lanyards)		170-0137	\$27.95
Vent Seal Washers, Nitrile Rubber Coated, .520" x .880" x .024"	<i>each</i>	50-7055	\$4.95
	<i>10 pack</i>	50-7057	\$14.95

TUNED INDUCTION
Back Plate gasket

Gasket, Backplate - E/G/SBEFI	<i>each</i>	106-1724	\$5.95
	<i>10 pack</i>	106-2328	\$29.95
Gasket, S&S SBEFI 58mm		106-4662	\$7.95
Gasket, Stock Carb/Throttle Body 29062-95B		106-6022	\$5.95
Adaptor Plate Gasket		17-1022	\$7.95
Adaptor Plate Bracket O-ring	<i>each</i>	50-0446	\$5.95

SINGLE BORE EFI THROTTLE BODY
Back Plate gasket

52mm	<i>each</i>	106-1724	\$5.95
	<i>10 pack</i>	106-2328	\$29.95
58mm	<i>each</i>	106-4662	\$7.95
O-ring, Throttle Body to Manifold		50-7967-S	\$4.95
Air Temp Sensor Gasket		16-5009-S	\$6.95
IAC O-ring		50-8149-S	\$4.95
Fuel Injector O-ring, Top		50-8264-S	\$5.95
Fuel Injector O-ring, Bottom		50-8265-S	\$5.95
Fuel Rail Inlet O-ring 27237-95	<i>each</i>	50-8137-S	\$4.95

TRANSMISSION GASKETS

O-ring, (-114), .625" ID x .812" OD, Vitron 11270		50-8033	\$4.95
O-ring, Quad Seal, (-031), 1.734" X 1.875", Nitrile 11165		50-8045	\$8.95
Seal, Transmission Output Shaft, 2.255" x 3.388" x .25012067B		56-3033	\$13.95

PRIMARY GASKETS

Gasket, Primary Cover, 1990-'99 Softail® and Dyna®		56-4049	\$53.95
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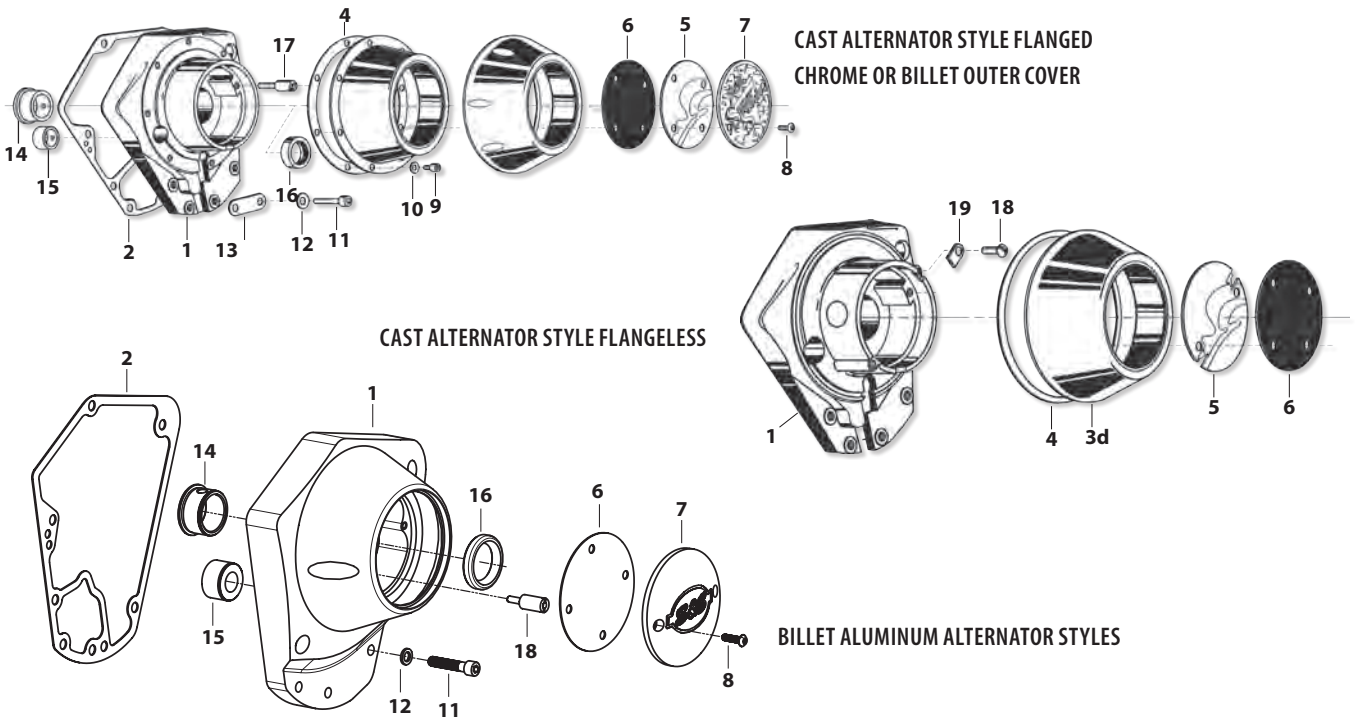


170-0137

GEARCOVER KIT REPLACEMENT PARTS

- | | |
|---|---------------------------|
| 1. Gearcover assembly | N/A |
| 2. Gasket, gearcover
25225-93A, 25225-93B, 25225-70C, 25257-80
each | 31-2107 \$6.95 |
| 10 pack | 106-0232 \$39.95 |
| 3. Outer cover for cast gearcovers - 1984-'99 BT | |
| a. Flanged type - steel, chrome | N/A |
| b. Flanged type - steel, black | N/A |
| c. Flanged type - billet | N/A |
| d. Flangeless type - chrome | 31-0238 ± \$48.95 |
| e. Flangeless type - black | N/A |
| 4. Gasket, outer cover - 1984-'99 BT | |
| Flanged type (each) | 31-0218 \$7.95 |
| Flangeless type (each) | 31-0237 \$5.95 |
| 5. Ignition cover, inner - 1984-'99 BT | |
| Flangeless type | 31-0235 \$5.95 |
| 6. Gasket, ignition cover - 1984-'99 BT 32591-80, 32591-70
each | 31-0225 \$2.95 |
| 7. Ignition cover, outer - 1984-'99 BT | |
| Die-cast (HD® #32524-83) | N/A |
| Billet, Chrome with S&S Logo | 31-0332 ± \$72.95 |
| Billet, Gloss Black with S&S Logo | 310-0897 \$62.95 |
| 8. Screw, RSH - 8-32 x 1/2" (replaces stock rivets) | |
| Stainless Steel (each) | 50-0048 \$4.95 |
| Chrome (each) | 50-0266-S ± \$5.95 |
| 9. Screw, SH | |
| 10-24 x 1/4" for steel cover (each) | N/A - |
| 10-24 x 3/8" - chrome for billet cover 4091 (each) | 50-0023 ± \$4.95 |
| 10. Washer, flat .192" x 3/16" x .035"
each | 50-7009 \$4.95 |
| 11. Screw, SH 1/4"-20 x 1/4" - 4740A, 3482A
Zinc (each) | 50-0008 \$4.95 |
| Chrome (each) 4740A | 50-0257-S ± \$5.95 |
| 12. Washer, flat
1/4" x .474" x .050" (each) | 50-7020 \$4.95 |
| 1/4" Flat washer, chrome, billet covers
each | 50-7017 ± \$4.95 |
| 12 pack | 50-7013 ± \$9.95 |
| 13. Wire harness clip 38711-93 | 31-2029 \$0.95 |
| 14. Cam bushing, gearcover
1984-'99 BT 25581-70 | 31-4019 \$13.95 |
| 15. Pinion shaft bushing, gearcover
1984-'99 BT 25582-93, 25582-73 | 31-4031 \$13.95 |
| 16. Gearcover oil seal 1984-'99 BT
(each) | 31-4022 \$5.95 |
| 17. Screw, timing mechanism 32606-82
each | 31-0224 \$7.95 |
| 2 pack | 31-0224P \$11.95 |
| 18. Screw, standard panhead 8-32 x 3/8"
each | 50-0004 \$4.95 |
| 19. Clip, outer cover (each) | 31-0233 \$6.95 |

N/A = No longer available



VALVE SPRING REPLACEMENT PARTS

.650" Lift Sidewinder® Valve Springs

(Stock, Super Stock® and Performance Replacement Cylinder Heads)

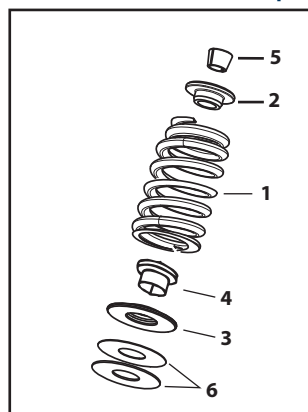
- 1. Spring, Valve .650" **106-5689** \$57.95
- 2. Collar, Top, Steel **106-5690** \$15.95
- 3. Collar, Bottom, Steel (each) **106-5691** \$11.95
- 4. Valve Seal
 - .420" Cast (each) **900-0338** \$4.95
 - .562" Powder Metal (4 pack) **900-0737** \$11.95
- 5. Valve Keeper 18229-83 (each) **90-2094-S** \$5.95
 - 8 pack **50-7166** \$23.95
- 6. Valve Spring Shim
 - .015" (each) **500-0013** \$4.95
 - .030" (each) **500-0014** \$4.95

.585" Lift Street Performance Valve Springs

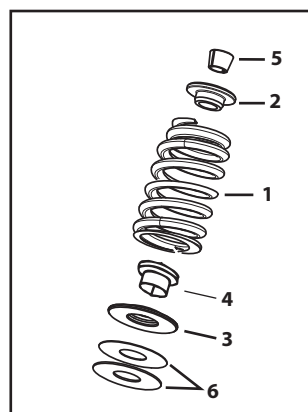
(Stock, Super Stock® and Performance Replacement Cylinder Heads)

- 1. Spring **900-0444** \$31.95
- 2. Collar, top, steel (each) **N/A**
- 3. Collar, bottom, steel **N/A**
- 4. Valve Seal
 - .420" Cast (each) **900-0338** \$4.95
 - .562" Powder Metal (4 pack) **900-0737** \$11.95
- 5. Valve Keeper 18229-83 (each) **90-2094-S** \$5.95
 - 8 pack **50-7166** \$23.95
- 6. Valve spring shim
 - .015" (each) **90-2086** \$4.95
 - 5 pack **50-7161** \$7.95
 - .030" (each) **90-2087** \$4.95
 - 5 pack **90-2198** \$9.95

.650" Lift Sidewinder® Valve Springs



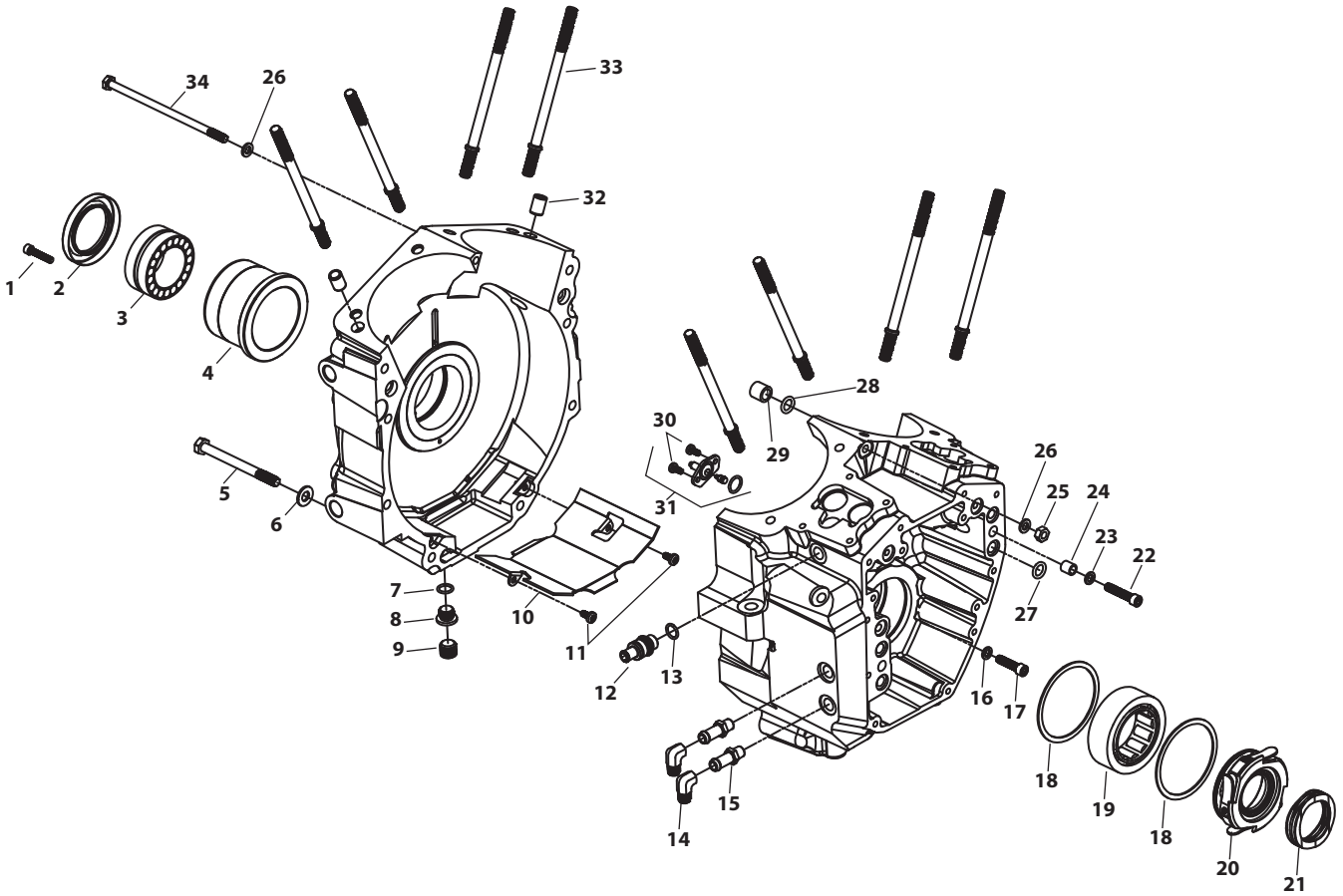
.585" Lift Street Performance Valve Springs



All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

2 CAM V-SERIES CRANKCASE REPLACEMENT PARTS FOR 1984-99 BIG TWIN ENGINES

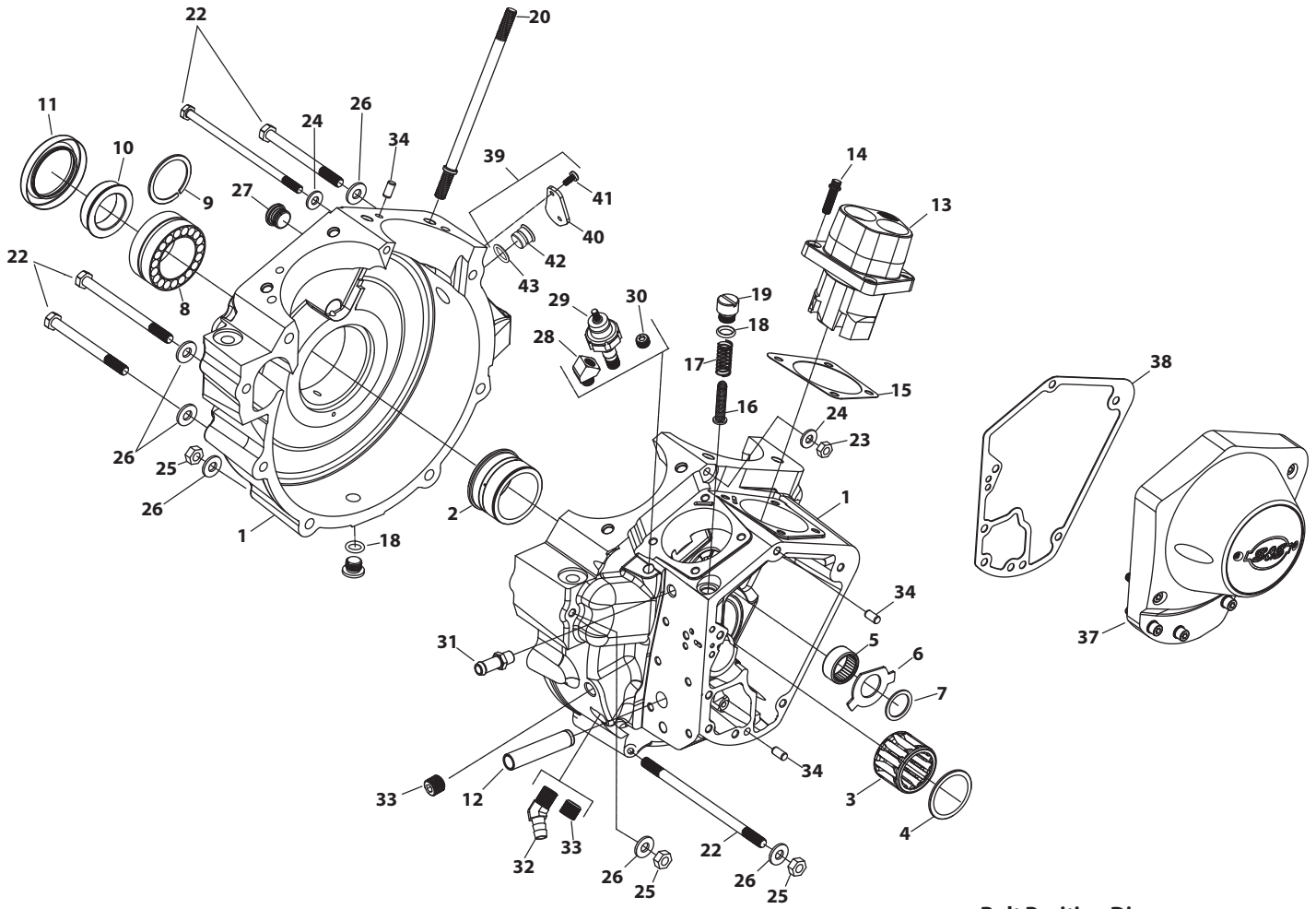
- | | | |
|---|------------------|----------|
| 1. Screw, SHCS, 10-24 x 1", Alloy Steel 2720 | 50-0044 | \$4.95 |
| 2. Seal, Left, Main Bearing, 1.750" x 2.507" x .3130", 1970-up bt
12026B | 31-4010 | \$10.95 |
| 3. Bearing, Assembly, Left, Main 9028 | 31-4013 | \$79.95 |
| 4. Insert, Left, Main Bearing | N/A | |
| 5. Screw, HHC, Gr8, 5/16-18 x 3 1/2", Zinc, Steel 3427 | 50-0117 | \$4.95 |
| 6. Washer, Flat, .344" x .688" x .065", Zinc, Steel
6320, 70907-07, 6016, 6702 | 50-7034 | \$0.95 |
| 7. O-ring, (-013), .437" ID x .565" OD, Viton® 11105, 11273 | 50-8008 | \$4.95 |
| 8. Plug, Drain, w/O-ring, Magnetic, 1/2-20, Zinc, Steel | 50-8335 | \$14.95 |
| 9. Plug, Pipe, 3/4 Taper, 1/4-18 NPTF x .460", Zinc, Steel
765 | 50-8330 | \$4.95 |
| 10. Plate, Baffle, Crankcase, 1999-up bt | 31-0119-S | \$15.95 |
| 11. Screw, PH, 10-24 x 3/8", Zinc, Steel, ASTM-A307 | 50-0050 | \$4.95 |
| 12. Fitting, Vent, 3/8", Plated, 1999-2006 bt | 50-0454 | \$15.95 |
| 13. O-ring, (-013), .437" ID x .565" OD, Viton® 11105, 11273 | 50-8008 | \$4.95 |
| 14. Fitting, Pipe, 90°, Male/Female, 1/8-27 NPTF x .500", Zinc Plated, Steel
26338-68, 26561-84A, 26561-81A, 26338-68A | 106-2682 | \$10.95 |
| 15. Fitting, Hose, Straight, 1/8-27 NPTF x .500", Zinc, Steel | 50-8115 | \$6.95 |
| 16. Washer, Flat, .260" x .425" x .060", Chrome, Steel | 50-7017± | \$4.95 |
| 17. Screw, SHCS, 1/4-20 x 1", Zinc, ASTM A574-92A 852 | 50-0084 | \$4.95 |
| 18. Retaining Ring, Internal, 2.731" x .031" x .158", Steel, SAE 1070-1090
35114-02 | 50-8160-S | \$4.95 |
| 19. Bearing, Right, Main, S&S Crankcases 1999-'06 bt, 2000-up Bal bt, 2003-up NB bt
24604-00D | 31-4085 | \$71.95 |
| 20. Valve, Assembly, Breather Reed, 2003-2010 bt | 310-0742 | \$134.95 |
| 21. Wave Spring, 2"OD X 1.6"ID X .375" | N/A | — |
| 22. Screw, SHCS, 1/4-20 x 1 1/4", Zinc 4740A, 3482A | 50-0008 | \$4.95 |
| 23. Washer, Flat, .260" x .425" x .060", Chrome, Steel | 50-7017± | \$4.95 |
| 24. Pin, Dowel, .275" x .397", Steel (4 pack) | 500-0218 | \$6.95 |
| 25. Nut, HH, 1/4-28 UNC-2B x .226", Zinc, Steel 7683 | 50-5011 | \$0.95 |
| 26. Washer, .261" x .474" x .050", Annealed, Stainless Steel | 50-7020 | \$4.95 |
| 27. O-ring, (-110), .375" ID x .562" OD, Viton® 11301
each | 50-8066-S | \$0.95 |
| 28. O-ring, (-015), .562" ID x .068" OD, Black, Viton® 26432-76A
each | 50-8034-S | \$7.95 |
| 2 pack | 50-8034 | \$12.95 |
| 29. Pin, Dowel, .557" x .500", Black, Steel 16574-99A, 16573-83, 16573-83A
. | 50-8023 | \$5.95 |
| 30. Screw, Torx Panhead, 8-32 x 3/8", Zinc, Steel 68042-99 | 50-0054-S | \$0.95 |
| 31. Jet, Kit, Piston Cooling, 4 1/8" 1984-'99 bt, 1999-up bt, (2 pack)
22307-99 | 31-2026 | \$62.95 |
| 32. Pin, Dowel, .437" x .610", Steel 16595-99A | 50-8177 | \$5.95 |
| 33. Stud, Cylinder Base, 3/8-16 UNC x 6.070", Black, Steel
. | 31-2325-S | \$9.95 |
| 34. Screw, HHC, Gr8, 1/4-28 x 5 1/2", Zinc, Steel | 50-0090 | \$4.95 |



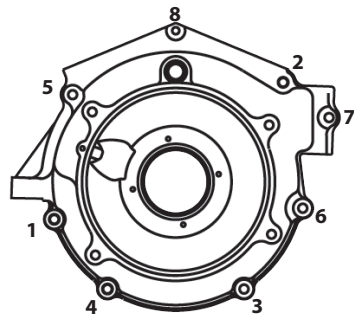
SUPER STOCK® CRANKCASE REPLACEMENT PARTS FOR BIG TWIN ENGINES OF LESS THAN 4" CYLINDER BORE

1. Crankcase assembly, half	N/A	
2. Race, right main bearing, All S&S BT		
Standard (24599-93, 24599-58A, 24599-58B)	31-4004	\$74.95
+ .030" O.S.	31-4030	\$61.95
3. Right main bearing assembly BT		
White 24626-87A	31-4005	\$44.95
Green 24628-87A	31-4016	\$42.95
Red 24641-87A	31-4017	\$45.95
Blue 24643-87A	31-4018	\$42.95
4. Retaining ring, main bearing BT		
11177A (each)	50-8057	\$2.95
5 pack	50-1004	\$11.95
5. Cam needle bearing assembly BT		
9058	31-4009	\$14.95
6. Washer, cam lock — BT		
25550-57A (each)	33-5201	\$11.95
5 pack	33-5213	\$45.95
7. Cam thrust washer — BT		
.050" 25550-36 (each)	33-5200	\$9.95
.055" 25551-36 (each)	33-5202	\$9.95
.060" 25552-36 (each)	33-5203	\$9.95
.065" 25553-36 (each)	33-5204	\$9.95
.070" 25554-36 (each)	33-5205	\$9.95
.075" (each)	33-5206	\$9.95
.080" (each)	33-5207	\$16.95
8. Left Timken® main bearing assembly 1984-'99		
S&S BT cases 9028	31-4013	\$79.95
9. Timken Main Bearing Spacers, 1984-'99 BT		
.0995" - .1005" 9124	31-4071	\$14.95
.1015" - .1025" 9125	31-4072	\$14.95
.1035" - .1045" 9126	31-4073	\$14.95
.1055" - .1065" 9127	31-4074	\$14.95
.1075" - .1085" 9128	31-4075	\$14.95
.1195" - .1205" 9134	31-4076	\$10.95
10. Spacer, drive sprocket, 1984-'99 S&S BT cases		
Standard 24002-70	31-4011	\$33.95
11. Seal, sprocket shaft oil 1936-'99 S&S BT cases		
12026B (each)	31-4010	\$10.95
5 pack	31-4110	\$45.95
12. Bushing, oil pump shaft - 24641-36	31-4008	\$34.95
13. Tappet guide — Shown for reference only (not included)		
14. Screw, 12 pt. DHH 1/4" - 20 x 7/8" 3770		
Each	50-0068	\$4.95
5-pack	50-0068P	\$6.95
15. Gasket, tappet guide — 1948-'99 BT		
Front 18634-48C (each)	33-5302F	\$6.95
10 pack front	33-5313F	\$23.95
Rear 18633-48B, 18633-48D (each)	33-5302R	\$6.95
10 pack rear	33-5313R	\$27.95
Set (each front & rear)	33-5302	\$7.95
10 pack set	33-5313	\$53.95
16. Crankcase oil screen - 1948-'99 BT 24981-70, 24981-66		
(each)	31-2010	\$5.95
5 pack	31-7008	\$26.95
17. Crankcase oil screen spring - 1948-'99 BT		
24982-66, 24982-70 (each)	31-2011-S	\$4.95
18. O-ring, drain plug and cover screw		
11105, 11273 (each)	50-8008	\$4.95
10 pack	50-8078	\$11.95
19. Cover screw - 1948-'99 S&S BT 26263-80, 26362-36		
each	31-6021	\$7.95
5 pack	31-7005	\$24.95
20. Cylinder stud		
1984-up BT 16837-85C (each)	31-2321-S	\$7.95
8 pack	31-2321	\$39.95
22. Crankcase studs and screws		
(Position 1, 2, 3, & 4) Alignment Stud,		
5/16" - 24 x 5 3/4" 24806-36, 3506	31-2003	\$17.95
(Position 5 & 6) Screw, HHCS, 5/16" - 18 x 3 1/2"	50-0117	\$4.95
(Position 7) Screw HHCS, 5/16" - 24 x 5"		
Zinc 3430	50-0119	\$4.95
Chrome (each)	50-0253-S±	\$8.95
(Position 8) Screw HHCS, 1/4" - 28 x 5 1/2" (each)		
Zinc	50-0090	\$4.95
Chrome (each)	50-0252-S±	\$8.95
23. Nut, Hex - 1/4" - 28 7683	50-5011	\$0.95
24. Washer, flat - 1/4" x 5/8" x 1/16" (each)		
Zinc (6194, 6245, 6703, 6736, 6228W, 6192)	50-7021	\$4.95
Chrome	50-7104-S±	\$4.95
25. Nut, hex - 5/16" - 24 (each)		
Zinc 7833, 7883	50-5023	\$0.95
26. Washer, flat - 5/16" x 1/16" x 1/16"		
6320, 70907-07, 6016, 6702	50-7034	\$0.95
27. Plug, timing hole 720	31-2005	\$7.95
28. Fitting, 45° 1/8" x 1/8" pipe male/female	50-8112	\$7.95
29. Oil pressure switch 26561-84		
(Includes: switch, nut, lock washer.)	31-2016	\$23.95
30. Plug, SH pipe - 1/8" - 27 (each)	50-8331A	\$4.95
10 pack	50-1015	\$12.95
31. Fitting, hose - 1/8" - 27 pipe male	50-8115	\$6.95
32. Fitting, 45° hose - 1/4" pipe male x 3/8" male hose	50-8113	\$12.95
33. Plug, SH pipe, 1/4" - 18, 1965-'69 S&S BT 765		
each	50-8330	\$4.95
34. Dowel pin, .250" diameter x 1/2" 358, 366		
(each)	50-8022	\$5.95
2 pack	50-8022-2	\$10.95
5 pack	50-8105	\$10.95
35. Screw, SHC - 10-24 x 1" (Stator) (N/S) 2720		
each	50-0044	\$4.95
36. Screw, SHS - 10-24 x 5/16" - (Stator plug clamp) (N/S)		
each	50-0045	\$4.95
37. Gearcover — Shown for reference only (not included)		
38. Gearcover gasket 1970-up S&S BT		
25225-93A, 25225-93B, 25225-70C, 25257-80	31-2107	\$6.95
39. crank position sensor hole plug kit	106-2997	\$22.95
40. Cover, crank position sensor hole	31-2056-S	\$4.95
41. Screw, Torx, 8-32 x 3/8"	50-0054-S	\$0.95
42. Crank position sensor hole plug	106-1189	\$12.95
43. O-ring (each)	50-8270	\$4.95
5 pack	50-8275	\$4.95

(N/S) = Not Shown



Bolt Position Diagram





























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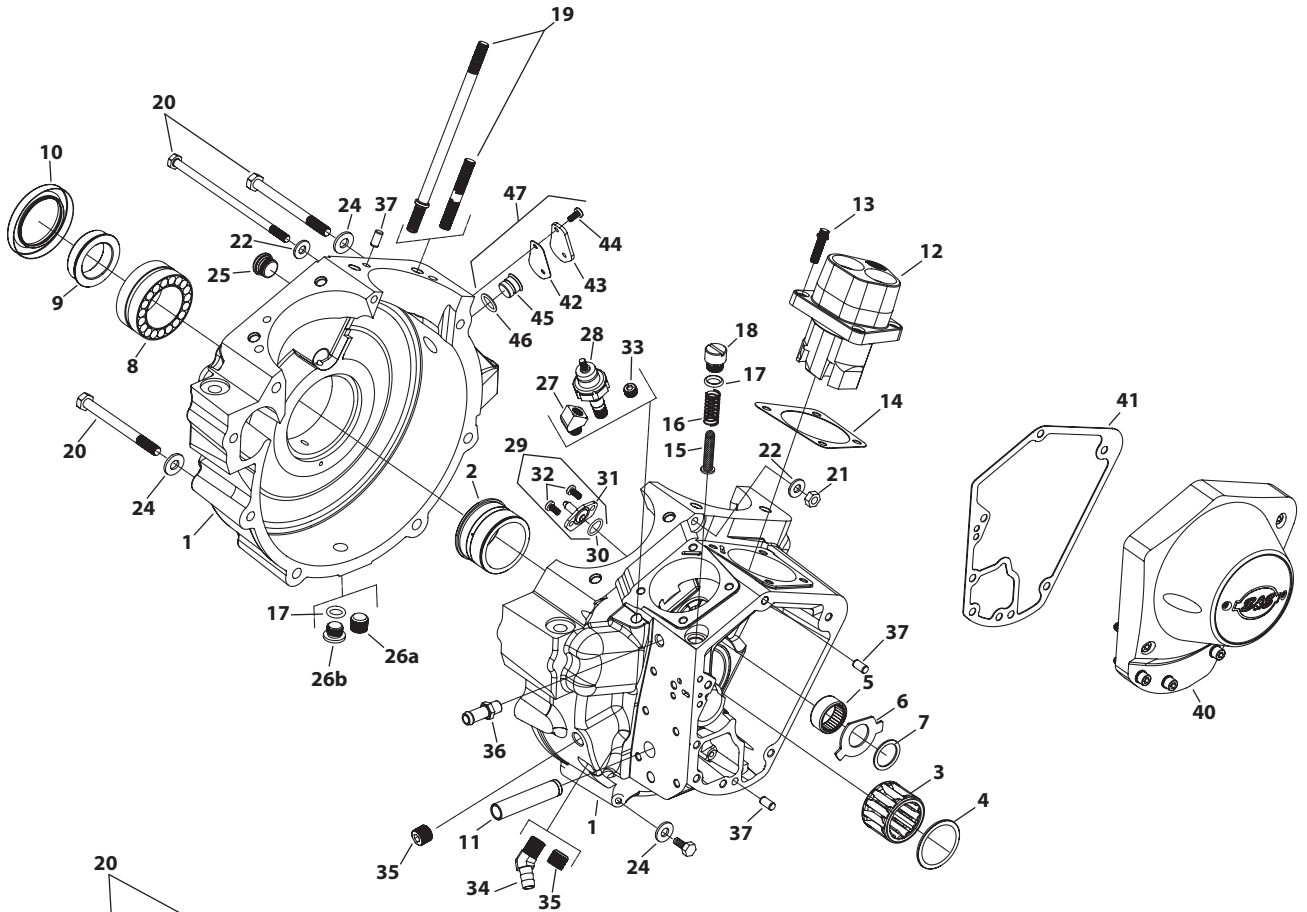


SPECIAL APPLICATION CRANKCASE REPLACEMENT PARTS

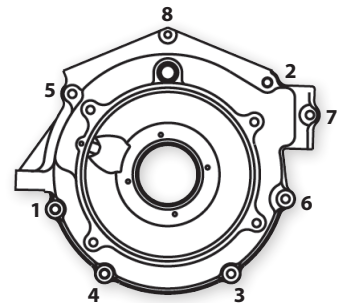
FOR BIG TWIN ENGINES WITH 4", 4 1/8" AND 4 3/8" CYLINDER BORE

1. Crankcase assembly, half **N/A**
2. Race, right main bearing, for 1936-'99 big twin
Standard #24599-93, 24599-58A, 24599-58B)  **31-4004** \$74.95
3. Right main bearing assembly BT
White 24626-87A **31-4005** \$44.95
Green 24628-87A **31-4016** \$42.95
Red 24641-87A **31-4017** \$45.95
Blue 24643-87A **31-4018** \$42.95
4. Retaining ring, main bearing BT 11177A
each **50-8057** \$2.95
5 pack **50-1004** \$11.95
5. Cam needle bearing assembly BT9058  **31-4009** \$14.95
6. Washer, cam lock - 1984-'99 BT (HD#25550-57A)
each  **33-5201** \$11.95
5 pack  **33-5213** \$45.95
7. Cam thrust washer - 1984-'99 BT
.050" 25550-36 (each)  **33-5200** \$9.95
.055" 25551-36 (each)  **33-5202** \$9.95
.060" 25552-36 (each)  **33-5203** \$9.95
.065" 25553-36 (each)  **33-5204** \$9.95
.070" 25554-36 (each)  **33-5205** \$9.95
.075" 25555-36 (each)  **33-5206** \$9.95
.080" 25556-36 (each)  **33-5207** \$16.95
8. Left Timken® main bearing assembly
1984-'99 S&S BT cases 9028  **31-4013** \$79.95
9. Spacer, drive sprocket
1984-'99 S&S BT cases 24002-70  **31-4011** \$33.95
10. Seal, sprocket shaft oil 1936-'99 S&S BT cases
120268 (each)  **31-4010** \$10.95
5 pack  **31-4110** \$45.95
11. Bushing, oil pump shaft - All S&S BT cases
Standard 24641-36  **31-4008** \$34.95
12. Tappet guide assembly (See PAGE 47)
13. Screw, 12 pt. DHH 1/4" -20 x 7/8" 3770 **50-0068** \$4.95
4 pack **50-0068P** \$6.95
14. Gasket, tappet guide - 1984-'99 BT
Front 18634-48C (each)  **33-5302F** \$6.95
10 pack front  **33-5313F** \$23.95
Rear 18633-48B, 18633-48D (each)  **33-5302R** \$6.95
10 pack rear  **33-5313R** \$27.95
Set (each front & rear) 18633-48  **33-5302** \$7.95
10 pack set  **33-5313** \$53.95
15. Crankcase oil screen - 1984-'99 BT
24981-70, 24981-66 (each) **31-2010** \$5.95
5 pack **31-7008** \$26.95
16. Crankcase oil screen spring - 1984-'99 big twin
24982-66, 24982-70 (each) **31-2011-S** \$4.95
17. Cover screw o-ring - 1984-up S&S BT 11105, 11273
each **50-8008** \$4.95
10 pack **50-8078** \$11.95
18. Cover screw - 1984-'99 S&S BT 26263-80, 26362-36
each **31-6021** \$7.95
5 pack **31-7005** \$24.95
19. Cylinder stud
1984-up BT with +.500" cases 16832-86C
each  **31-2331-S** \$8.95
8 pack  **31-2331** \$49.95

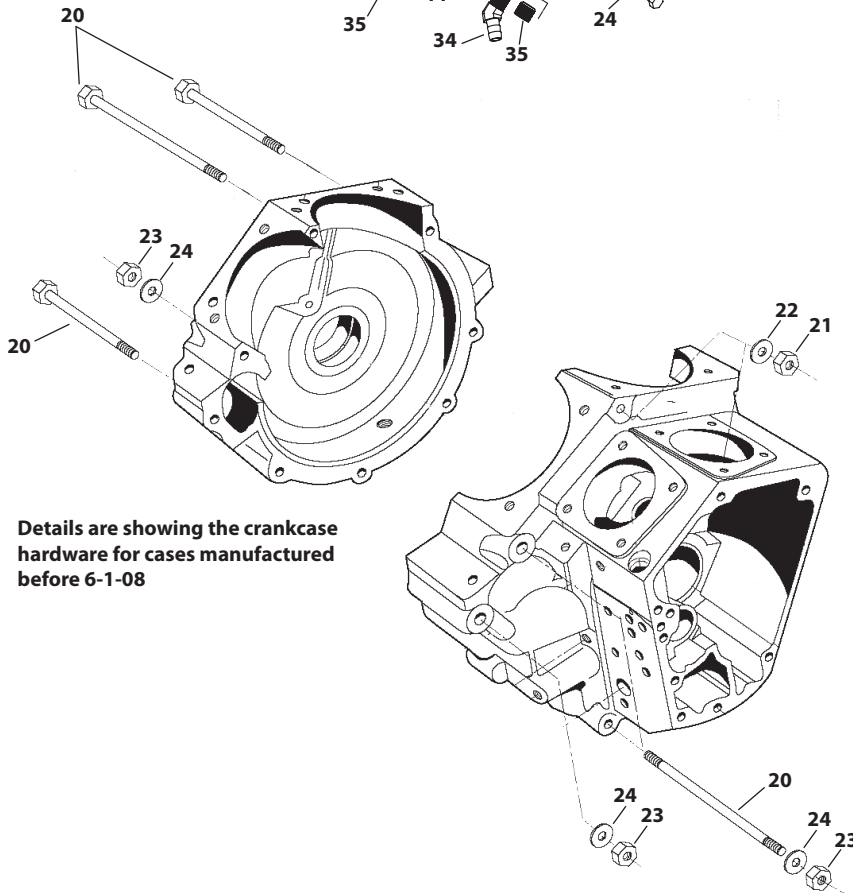
20. Crankcase Hardware
Special Application Crankcases (For Engines With 4" Cylinder Bore or Greater)
4" and 4 1/8" Bore Cases Manufactured Before 6-1-08
(Positions 1 - 4)
Alignment Stud, 5/16" -24 x 6 1/16" 24809-30 **31-2034** \$19.95
(Positions 5 & 6)
Screw, HHCS, 5/16" -18 x 3 1/2" 3427 **50-0117** \$4.95
Screw, HHCS, 5/16" -18 x 3 1/2" chrome (each) **50-0254-S±** \$7.95
(Position 7)
Screw HHCS, 5/16" -24 x 5" **50-0119** \$4.95
Zinc 3430 **50-0119** \$4.95
Chrome (each) **50-0253-S±** \$8.95
(Position 8)
Screw HHCS, 1/4" -28 x 5 1/2" (each) **50-0090** \$4.95
Screw HHCS, 1/4" -28 x 5 1/2" Chrome (each) **50-0252-S±** \$8.95
4" and 4 1/8" Bore Cases Manufactured After 6-1-08
(Positions 1-7)
1936-'69 S&S BT cases & S&S BT SA cases
Screw, HHCS, 5/16" -18 x 3 1/2" zinc 3427 **50-0117** \$4.95
Screw, HHCS, 5/16" -18 x 3 1/2", chrome (each) **50-0254-S±** \$7.95
(Position 8)
Screw HHCS, 1/4" -28 x 5 1/2" zinc (each) **50-0090** \$4.95
Screw HHCS, 1/4" -28 x 5 1/2" Chrome (each) **50-0252-S±** \$8.95
4 3/8" Bore Cases Manufactured Before 6-1-08
(Positions 1 - 4) Alignment Stud
Alignment Stud, 5/16" -24 x 6 1/16" 24809-30 **31-2034** \$19.95
(Positions 5 & 6)
Screw, HHCS, 5/16" -18 x 3 1/2" 3427 **50-0117** \$4.95
(Position 7)
Screw HHCS, 5/16" -24 x 5" **50-0119** \$4.95
Zinc 3430 **50-0119** \$4.95
Chrome (each) **50-0253-S±** \$8.95
(Position 8) All S&S BT cases Special Application
Screw, HHCS, 1/4" -28 x 6", zinc (each) **50-0020** \$10.95
4 3/8" Bore Cases Manufactured After 6-1-08
(Positions 1-7) 1936-'69 S&S BT cases & S&S BT SA cases
Screw, HHCS, 5/16" -18 x 3 1/2", zinc 3427 **50-0117** \$4.95
Screw, HHCS, 5/16" -18 x 3 1/2", chrome (each) **50-0254-S±** \$7.95
(Position 8) All S&S BT cases Special Application
Screw, HHCS, 1/4" -28 x 6", zinc (each) **50-0020** \$10.95
21. Nut, Hex - 1/4" -28 7683 **50-5011** \$0.95
22. Washer, .261" x .474" x .050"
Zinc (each) **50-7020** \$4.95
Chrome (each) **50-7105-S±** \$4.95
23. Nut, hex - 5/16" -24
Zinc 7833, 7883 **50-5023** \$0.95
(for Special Application Cases Manufactured Before 6-1-08)
24. Washer, flat - 5/16" x 1/16" x 1/16" 6320, 70907-07, 6016, 6702 **50-7034** \$0.95
25. Plug, timing hole 720  **31-2005** \$7.95
26. Drain plug - Manufactured before 5-1-2000
3/8" -18 NPT. **31-2006** \$18.95
Manufactured after 5-1-2000
1/2" -20 **50-8335** \$14.95
27. Fitting, 1/8" x 1/8" pipe male/female **50-8112** \$7.95
28. Oil pressure switch 26561-84
(Includes: 1 each switch, nut, lock washer)  **31-2016** \$23.95
29. Piston Oiler Jet Kit 22307-99 includes #30 (1), #31 (1), #32 (2)
2 pack **31-2026** \$62.95
30. O-ring, (-014), .500" ID x .625" OD
each **50-8270** \$4.95
10 pack **50-8130** \$7.95
31. Jet, Assembly, Piston Cooling 22371-99, 22307-99 (each) **31-2025B** \$33.95



BOLT POSITION DIAGRAM



Details are showing the crankcase hardware for cases manufactured before 6-1-08






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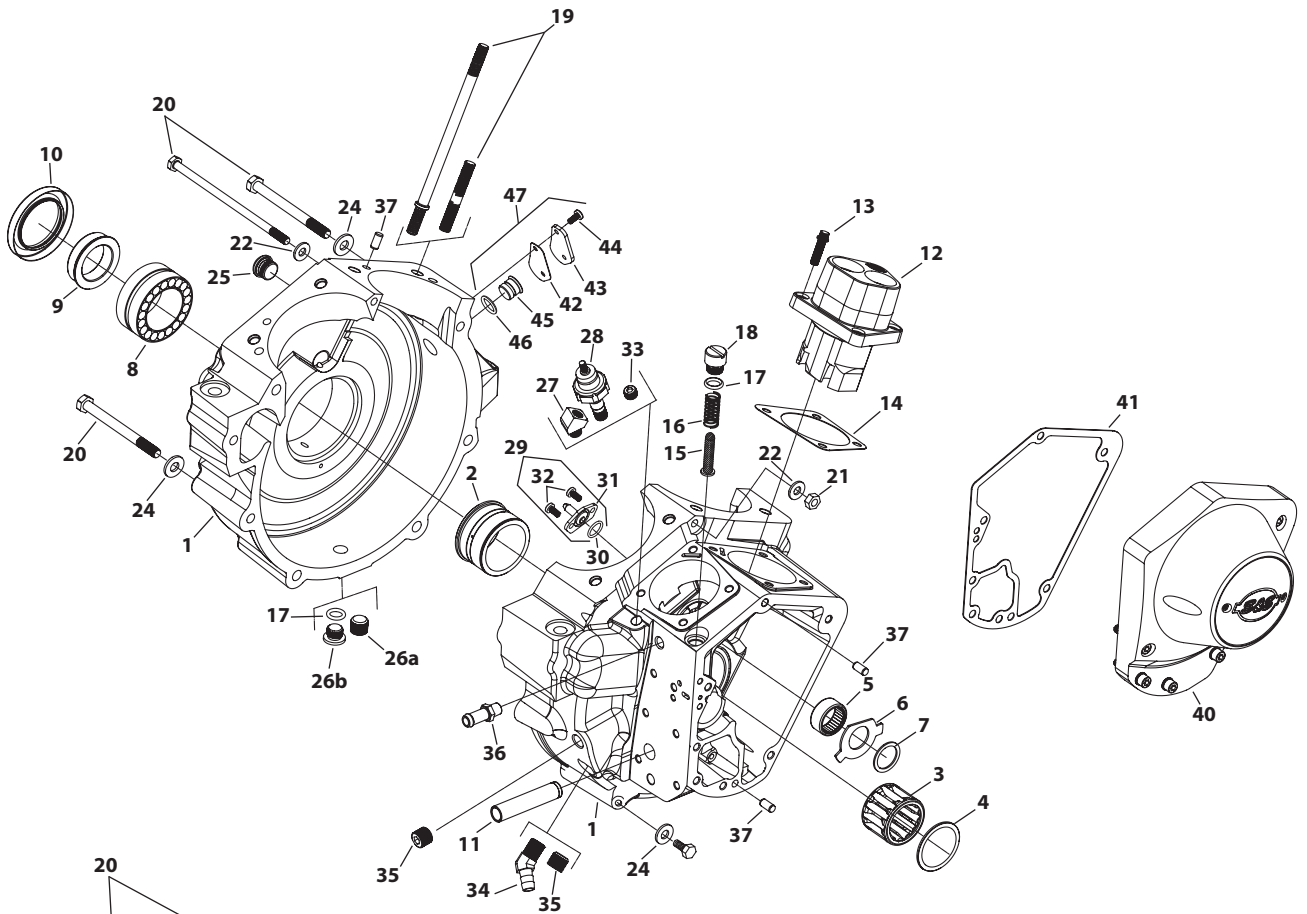
⚠️ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



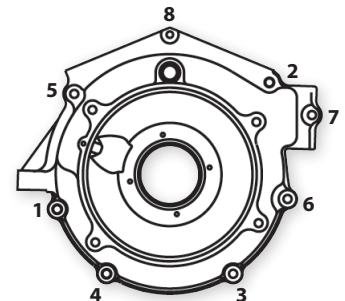
CONTINUED
SPECIAL APPLICATION CRANKCASE REPLACEMENT PARTS
FOR BIG TWIN ENGINES WITH 4", 4 $\frac{1}{8}$ " AND 4 $\frac{3}{8}$ " CYLINDER BORE

32. Screw, Torx Panhead, 8-32 x $\frac{3}{8}$ ", Zinc, Steel 68042-99
each **50-0054-S** \$0.95
33. Plug, SH pipe - $\frac{1}{8}$ "-27 45830-48 (*each*) **50-8331A** \$4.95
10 pack **50-1015** \$12.95
34. Fitting, 45° hose - $\frac{1}{4}$ " pipe male x $\frac{3}{8}$ " male hose
 **50-8113** \$12.95
35. Plug, SH pipe, $\frac{1}{4}$ "-18, 1965-69 S&S BT 765
 **50-8330** \$4.95
36. Fitting, hose - $\frac{1}{8}$ "-27 pipe male
 **50-8115** \$6.95
37. Dowel pin, .250" diameter x $\frac{1}{2}$ " (1970-up S&S BT) 358, 366
each **50-8022** \$5.95
2 pack **50-8022-2** \$10.95
5 pack **50-8105** \$10.95
38. Screw, SHC - 10-24 x 1" (Stator) (N/S) 2720
each **50-0044** \$4.95
39. Screw, SHS - 10-24 x $\frac{5}{16}$ " - (Stator plug clamp) (N/S)
each **50-0045** \$4.95
40. Gearcover (See PAGE 39)
41. Gearcover gasket 1970-up S&S BT
 25225-93A, 25225-93B, 25225-70C, 25257-80 **31-2107** \$6.95
42. Gasket, crank position sensor hole (obsolete) **N/A**
43. Cover, crank position sensor hole **31-2056-S** \$4.95
44. Screw, Torx, 8-32 x $\frac{3}{8}$ " 68042-99 (*each*) **50-0054-S** \$0.95
45. Crank position sensor hole plug **106-1189** \$12.95
46. O-ring (*each*) **50-8270** \$4.95
5 pack **50-8275** \$4.95
47. Crank position sensor hole plug kit **106-2997** \$22.95

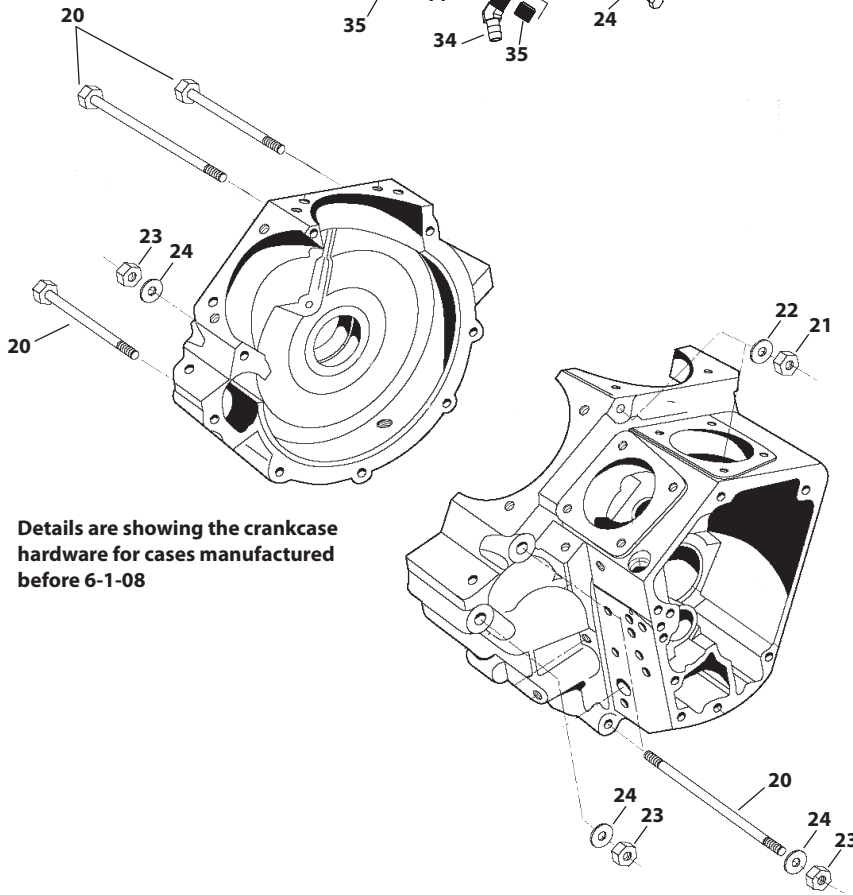
(N/S) = Not Shown
N/A = No longer available



BOLT POSITION DIAGRAM



Details are showing the crankcase hardware for cases manufactured before 6-1-08

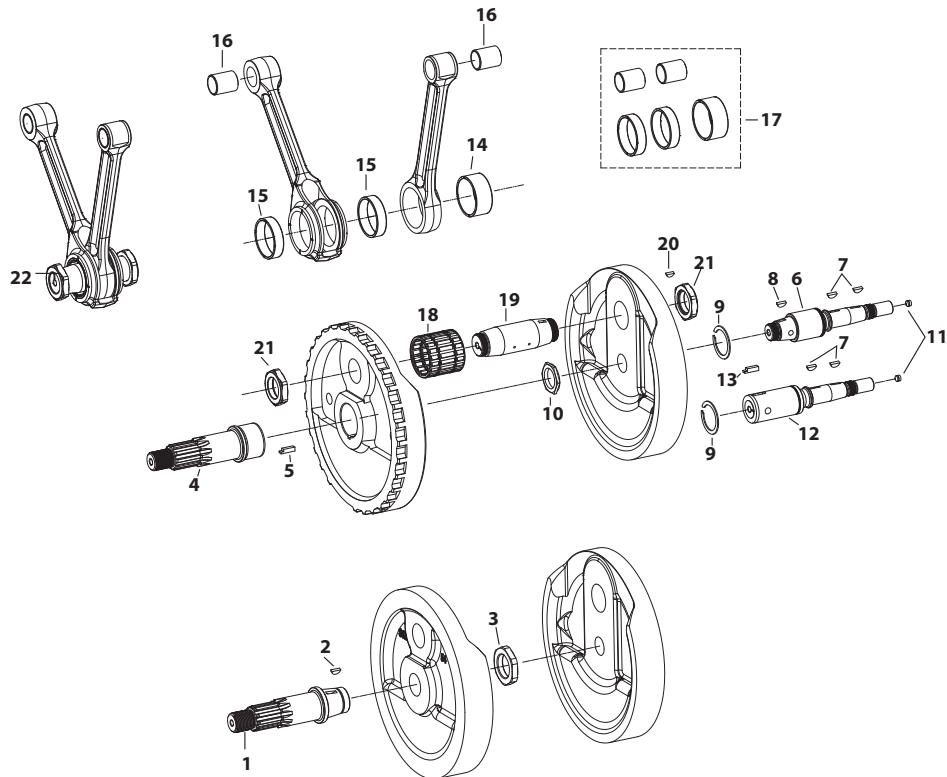


FLYWHEEL REPLACEMENT PARTS

FOR V96, V107 AND V113

- | | | |
|---|------------------|------------------|
| 1. Sprocket Shaft, 1984-1999 w/S&S SE/SL flywheels (includes #2 & 3)..... | 33-2004 | \$139.95 |
| 2. Key (each) | 50-8225-S | \$4.95 |
| 3. Sprocket Shaft Nut | 33-2033 | \$17.95 |
| 4. Sprocket Shaft, 1984-'99 w/S&S SGX/SF/SM flywheels (includes #5)..... | 320-0122 | Call for Pricing |
| 5. Key (each) | 50-8227 | \$5.95 |
| 6. Pinion Shaft (includes #7, 8, 9, 10, 11)
1984-1986 Stock Flywheels, L1981-99 S&S BL/SL/SM flywheels
Stock or S&S® Super Stock® Cases | 33-2027 | \$164.95 |
| Standard | 33-2040 | \$160.95 |
| 1984-1999 S&S BL/SL/SM flywheels S&S SA cases +.250" Standard | 33-2040 | \$160.95 |
| 7. Key, pinion & oil pump (each) | 50-8221-S | \$4.95 |
| 5 pack | 50-1008 | \$7.95 |
| 8. Pinion Shaft Key 11218 (each) | 50-8222-S | \$4.95 |
| 5 pack | 50-1009 | \$10.95 |
| 9. Bearing Retaining Ring 11177A (each) | 50-8057 | \$2.95 |
| 5 pack | 50-1004 | \$11.95 |
| 10. Pinion Shaft Nut | 33-2034 | \$14.95 |
| 11. Meter Plug
.0625" hole | 50-8316± | \$7.95 |
| .0925" hole | 50-8317± | \$5.95 |
| 12. Pinion Shaft (+.250" longer) (includes #7, 9, 13)
1984-1999 S&S SG flywheels/SA crankcases | N/A | - |
| 13. Pinion Shaft Key | 50-8234 | \$16.95 |
| 14. Front Rod Bushing, 1941-1999 all S&S flywheels 24356-36A | 34-4005 | \$23.95 |
| 15. Rear Rod Bushing 24345-36A (each) | 34-4006 | \$18.95 |
| 16. Wristpin Bushing 24334-36 | 34-4007 | \$8.95 |
| 17. Race and Bushing Set (includes #14, 15, 16) | 34-4040 | \$69.95 |
| 18. Cage and Bearing Set (std.) 24346-87A, 24385-40B | 34-4010 | \$79.95 |
| 19. Crankpin (includes #20, 21), late 1981-1999 all S&S flywheels
Standard 23961-80A | 34-2102 | \$145.95 |
| .001" OS 23974-87 | 34-2103 | \$145.95 |
| .002" OS 23975-87 | 34-2105 | \$145.95 |
| .003" OS | 34-2106 | \$145.95 |
| 20. Crankpin Key, late 1981-1999 all S&S flywheels 11218
each | 50-8222-S | \$4.95 |
| 5 pack | 50-1009 | \$10.95 |
| 21. Crankpin Nut, late 1981-1999 all S&S flywheels
23967-54A, 23969-83, 23901-81, 23981-98 | 34-2104 | \$12.95 |
| 22. Connecting Rod Assembly, 1984-'99 all big twins
(includes #14, 15, 16, 18, 19, 20, 21)
Heavy Duty 24281-80, 24281-83 | 34-7013 | \$507.95 |

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± ⚠️ WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov

NOTES: S&S rods with their beefier than stock construction are slightly heavier than stock connecting rods. Therefore, rebalancing the flywheels is recommended when S&S rods are used in stock replacement applications. We realize that rebalancing is an inconvenience, but we did not want to sacrifice rod strength. In addition, given the variations in stock and aftermarket components available to engine builders, flywheel rebalancing is a desirable step in any major engine overhaul.

We recommend and sell only the pre-1990 big twin shaft. Since the S&S pinion shafts are of the earlier design, they will not accept the late style stock pinion gear, oil pump drive gear, gear spacer and pinion gear nut—to make it easier to install S&S flywheels.

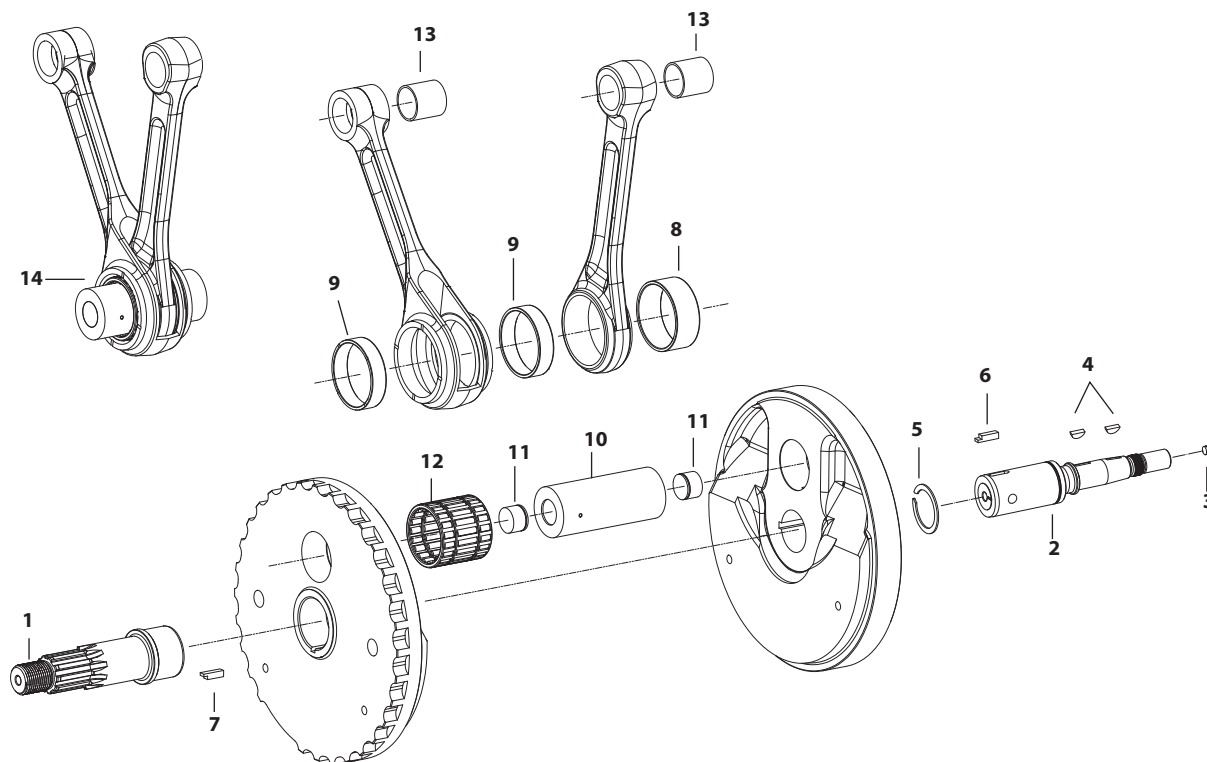
1989-'99 big twin engines: S&S offers a conversion package consisting of earlier style pinion gear, spacer, nut, and oil pump drive gear to fit the S&S pinion shaft. S&S offers pinion and oil pump drive gears to fit the S&S pinion shaft for Harley-Davidson® Sportster® models.

Crankpins must be measured prior to final honing of bearing races to ensure proper clearance. (Inquire about S&S flywheel rebuild program if adequate measurement equipment is not available.) Dimensions shown are nominal.

FLYWHEEL REPLACEMENT PARTS FOR V111, V117 AND V124

- 1. Sprocket Shaft, 1984-'99 bt (includes key) **320-0122** *Call for Pricing*
- 2. Pinion Shaft (+.250" longer) (includes #7, 9, 13)
1984-1999 S&S SG flywheels/SA crankcases **N/A** —
- 3. Meter Plug
.0625" hole **USA 50-8316±** \$7.95
.0925" hole **USA 50-8317±** \$5.95
- 4. Key, pinion & oil pump 11218 **50-8221-S** \$4.95
5 pack **50-1008** \$7.95
- 5. Bearing Retaining Ring 11177A **50-8057** \$2.95
5 pack **50-1004** \$17.95
- 6. Pinion Shaft Key **50-8234** \$16.95
- 7. Key **50-8227** \$5.95
- 8. Front Rod Race **USA 34-4008** \$30.95
- 9. Rear Rod Race **USA 34-4013** \$28.95
- 10. Crankpin (std.) **106-6239** \$149.95
- 11. Crankpin Plug (each) **106-5256** \$6.95
2 pack **50-8329-2** \$10.95
- 12. Race/Bearing Set **340-0028** \$170.95
- 13. Wristpin Bushing,
1984-'99 bt, straight bushing **USA 34-4012** \$9.95
- 14. Connecting Rod Set
1984-'99 bt, straight wristpin ends **N/A** —

NOTES: Due to different crankpin diameters, S&S® connecting rod assemblies cannot be used with stock Harley-Davidson® flywheels. S&S flywheels for S&S V111, V117 AND V124 engines are pressed together as opposed to using the traditional tapered shafts and crankpin. Assembly and truing requires special equipment.



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STANDARD OIL PUMP KIT REPLACEMENT PARTS

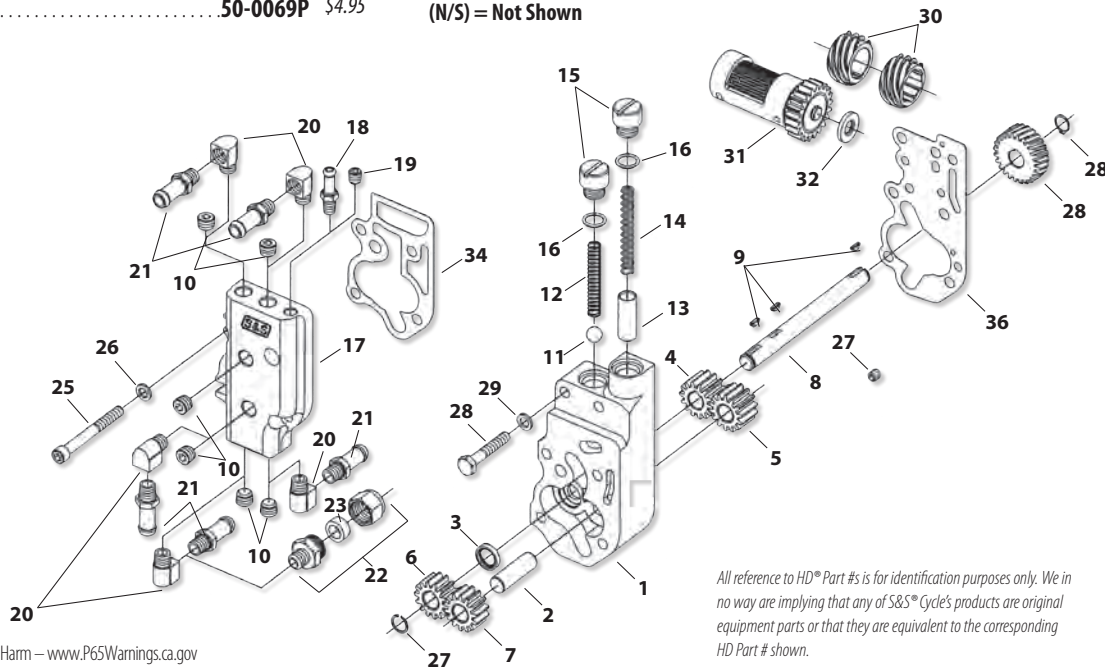
1. Pump body assembly		
Fits 1984-'91 31-6042	31-6050	\$173.95
Fits 1992-'99 31-6043	31-6051	\$173.95
2. Shaft, idler 26327-68		
	USA 31-6004	\$12.95
3. Seal, drive shaft 26227-58		
	USA 31-6005	\$6.95
4. Gear, return drive 26315-68A		
	USA 31-6013	\$23.95
5. Gear, return idler 26317-68A		
	USA 31-6014	\$23.95
6. Gear, supply drive 26328-74, 26320-36		
	USA 31-6015	\$34.95
7. Gear, supply idler 26326-62A		
	USA 31-6016	\$34.95
8. Shaft, drive 26346-70		
	USA 31-6011	\$19.95
9. Key, drive shaft 26347-15 (each)		
	50-8220-S	\$0.95
10 pack	50-8229	\$11.95
10. Plug, 1/8"-27 45830-48 (each)		
	50-8331A	\$4.95
10 pack	50-1015	\$12.95
11. Check ball valve 8866, 8873		
	USA 50-8091	\$0.95
12. Spring, check valve 26363-36, 26363-56, 26262-80 (each)		
	31-6022	\$4.95
10 pack	31-6092	\$15.95
13. Relief valve 26400-82, 26400-82B		
	31-6082	\$9.95
14. Spring, relief valve 26207-83 (each)		
	31-6018	\$4.95
10 pack	31-6084	\$15.95
15. Screw, check valve & relief valve cover 26263-80, 26362-36		
each	31-6021	\$7.95
5 pack	31-7005	\$24.95
16. O-ring 11105, 11273 (each)		
	50-8008	\$4.95
10 pack	50-8078	\$11.95
17. Pump cover assembly		
Pre-1992 (Top or bottom fittings; accepts pressure gauge)		
31-6041	31-6059	\$96.95
1992-'99 (Universal)	31-6061	\$101.95
1992-'99 (Bottom fittings or central supply fitting)	31-6062	\$101.95
18. Fitting, front chain hose		
	50-8116	\$6.95
19. Plug, pipe 1/6"-27 x 1/4" pipe		
	USA 50-8332	\$0.95
20. Elbow, supply/return		
26338-68A, 26561-81A, 26561-84A, 26338-68	106-2682	\$10.95
5 pack	50-1007	\$48.95
21. Fitting, supply/return hose		
	USA 50-8115	\$6.95
22. Return fitting, compression 63523-92, 63523-62		
	USA 50-8120	\$19.95
23. Seal, tubing, 3/8" x 1/2" O.D. x 1/4"		
	50-8271	\$12.95
24. Plug, 1/4"-20 (each)		
	50-0069	\$4.95
2 pack	50-0069P	\$4.95

25. Screws, mounting - 1984-'99		
a. 1/4"-24 x 1-1/2" (HHCS)	50-0082	\$5.95
b. 1/4"-24 x 2-1/4" (HHCS) 5430W	50-0088	\$5.95
c. 1/4"-20 x 1-1/2" (HHCS)	50-0080	\$0.95
d. 1/4"-20 x 2-1/4" (SHCS) 4717A	50-0078	\$0.95
e. 1/4"-20 x 1-1/2" (SHCS) 4718A	50-0079	\$0.95
26. Washer, 1/4" (each)		
	50-7017	\$4.95
12 pack	50-7013	\$9.95
27. Retaining ring 695-36, 26348-36 (each)		
10 Pack	50-8058	\$4.95
	50-8106	\$15.95
28. Retaining ring, external 11002 (each)		
10 Pack	50-8059	\$0.95
	50-8107	\$7.95
29. Gear, pump drive, 24T 26345-73		
30. Gear, pinion shaft pump drive - 1984-'89		
26349-73, 26349-73A	33-4232	\$45.95
31. Gear, steel breather valve		
Standard 25310-82A, 25313-77B, 25311-90.		
+ .030"	33-4241	\$102.95
	33-4242	\$102.95
32. Shim, steel breather kit - 8 pack (includes one of each thickness)		
a. +.100" thick	33-4200	\$6.95
b. +.110" thick 25320-79	33-4201	\$6.95
c. +.120" thick 25322-79	33-4202	\$6.95
d. +.130" thick 25325-79, 25320-82	33-4203	\$6.95
e. +.140" thick 25322-82, 25327-79	33-4204	\$6.95
f. +.150" thick 25325-82	33-4205	\$6.95
g. +.160" thick 25327-82	33-4206	\$6.95
h. +.170" thick	33-4207	\$6.95
33. Gasket rebuild kit (N/S) Includes key and retaining ring		
a. 1984-'91	31-6271	\$14.95
b. 1992-'99	31-6273	\$14.95
34. Master rebuild kit - (N/S)		
Includes: gasket rebuild kit, seal, retaining ring, relief valve spring, check valve spring, check valve, ball, and cover screw o-rings		
a. 1984-'91	31-6275	\$27.95
b. 1992-'99	31-6278	\$27.95
35. Drill jig, oil pump (N/S)		
	53-0013	\$59.95

Oil pump mounting hardware kit (N/S)		
1984-91 (Includes # 25a, 25b, 25c, 25d, 26)	31-6288	\$18.95
1992-99 (Includes # 25d, 25e, 26)	31-6290	\$13.95

Hardware Kit, Oilpump Cover (N/S)		
1984-91 (Includes #10,18,19,20,21,22)	31-6283±	\$57.95
1992-99 (Includes #10,20,21,22)	31-6286±	\$52.95

(N/S) = Not Shown

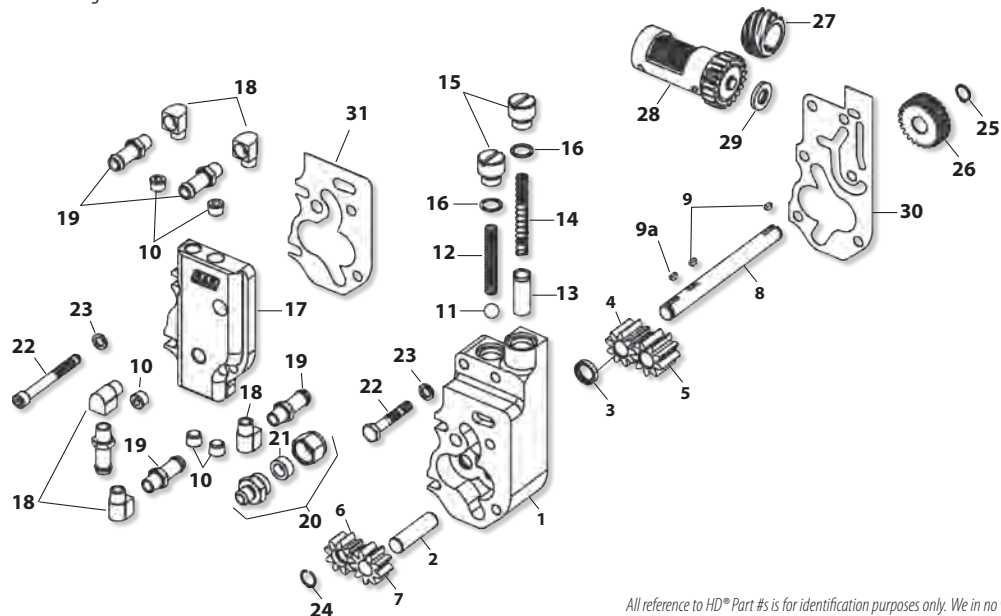


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HIGH VOLUME HIGH PRESSURE OIL PUMP REPLACEMENT PARTS








1. Pump body assembly			
Fits 1984-'91	31-6097	\$173.95	
Fits 1992-'99	31-6078	\$173.95	
2. Shaft, idler	31-6080-5	\$12.95	
3. Seal, drive shaft (each)	31-6064-5	\$6.95	
4. Gear, return drive, HVHP	31-6075	\$46.95	
5. Gear, return idler, HVHP	31-6083	\$45.95	
6. Gear, supply drive, HVHP	31-6074	\$46.95	
7. Gear, supply idler, HVHP	31-6081	\$35.95	
8. Shaft, drive 26346-70	USA 31-6011	\$19.95	
9. Key, drive shaft (each)	50-8228-5	\$5.95	
9a. Key, Woodruff, .094" x .313" x .311", Steel 26347-15			
each	50-8220-5	\$0.95	
10 pack	50-8229	\$11.95	
10. Plug, 1/8"-27 45830-48 (each)	50-8331A	\$4.95	
10 pack	50-1015	\$12.95	
11. Check ball valve (HD® #8866, 8873)			
	USA 50-8091	\$0.95	
12. Spring, check valve 26363-36, 26363-56, 26262-80			
each	31-6022	\$4.95	
10 pack	31-6092	\$15.95	
13. Relief valve 26400-82, 26400-82B	31-6082	\$9.95	
14. Spring, relief valve 26207-83 (each)	31-6018	\$4.95	
10 pack	31-6084	\$15.95	
15. Screw, check valve & relief valve cover 26263-80, 26362-36			
each	31-6021	\$7.95	
5 pack	31-7005	\$24.95	
16. O-ring 11105, 11273 (each)	50-8008	\$4.95	
10 pack	50-8078	\$11.95	
17. Pump cover assembly			
1984-'91 (Universal)	31-6098	\$101.95	
1992-'99 (Universal)	31-6079	\$101.95	
1992-'99 (Standard Style)	31-6094	\$96.95	
18. Elbow, supply/return 26338-68A, 26561-81A, 26561-84A, 26338-68			
each	106-2682	\$10.95	
5 pack	50-1007	\$48.95	
19. Fitting, supply/return hose			
	USA 50-8115	\$6.95	
20. Return fitting, compression 63523-92, 63523-62			
	USA 50-8120	\$19.95	
21. Seal, tubing 3/8" x 1/2" O.D. x 1/4"	50-8271	\$12.95	
22. Screws, mounting			
a. 1/4"-20 x 1-1/2" (SHCS) 4718A	50-0079	\$0.95	
b. 1/4"-20 x 1-1/2" (HHCS)	50-0080	\$0.95	
c. 1/4"-20 x 2-1/2" (SHCS)	50-0086	\$0.95	
23. Washer, 1/4" (each)	50-7017	\$4.95	
12 pack	50-7013	\$9.95	
24. Retaining ring 695-36, 26348-36 (each)	50-8058	\$4.95	
10 Pack	50-8106	\$15.95	
25. Retaining ring, external 11002 (each)	50-8059	\$0.95	
10 Pack	50-8107	\$7.95	
26. Gear, pump drive, 24T 26345-73	33-4230	\$39.95	
27. Gear, pinion shaft pump drive 1954-'89			
26349-73, 26349-73A	33-4232	\$45.95	
28. Gear, steel breather valve			
Standard 25310-82A, 25313-77B, 25311-90	33-4241	\$102.95	
+ .030"	33-4242	\$102.95	
29. Shim, steel breather kit			
8 pack (Includes one of each thickness)	33-4249	\$27.95	
+ .100" thick	33-4200	\$6.95	
+ .110" thick 25320-79	33-4201	\$6.95	
+ .120" thick 25322-79	33-4202	\$6.95	
+ .130" thick 25325-79, 25320-82	33-4203	\$6.95	
+ .140" thick 25322-82, 25327-79	33-4204	\$6.95	
+ .150" thick 25325-82	33-4205	\$6.95	
+ .160" thick 25327-82	33-4206	\$6.95	
+ .170" thick	33-4207	\$6.95	
30. Gasket rebuild kit			
Includes key and retaining ring (N/S)			
1984-'91 BT HVHP 31-6306	31-6308	\$11.95	
1992-'99 BT HVHP	31-6299	\$12.95	
31. Master rebuild kit (N/S)			
Includes gasket rebuild kit, seal, retaining ring, relief valve spring, check valve spring, check valve, ball, and cover screw o-rings.			
1984-'91 BT HVHP	31-6309	\$23.95	
1992-'99 BT HVHP	31-6300	\$27.95	
Hardware Kit, Oilpump Cover (N/S)			
(Includes # 10, 18, 19, 20)	31-6285±	\$54.95	
Oilpump Mounting Hardware Kit (N/S)			
(Includes # 22a, 22b, 22c, 23)	31-6301	\$9.95	






NOTE: HVHP oil pump gaskets are not interchangeable with standard S&S or stock oil pump gaskets.




(N/S) = Not Shown

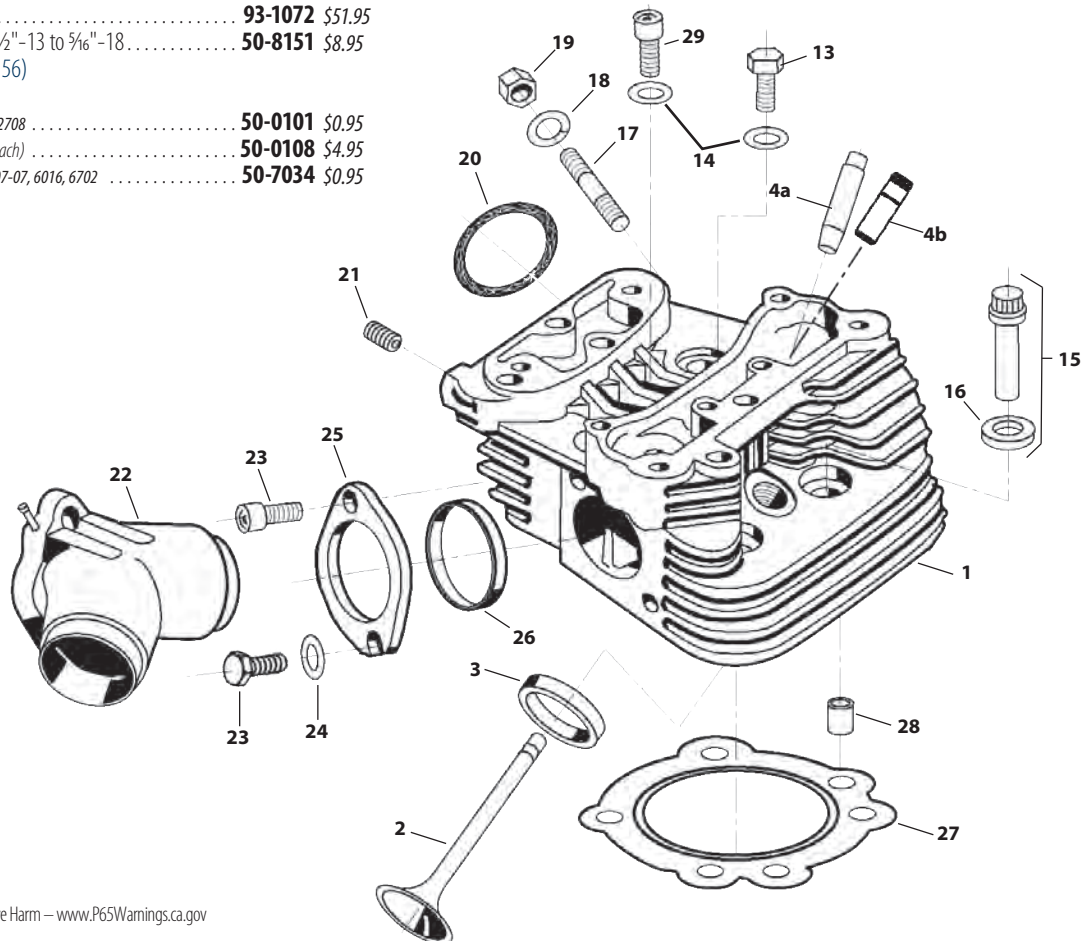
PERFORMANCE REPLACEMENT HEAD REPLACEMENT PARTS FOR 1984-99 BIG TWIN ENGINES

1. Cylinder head (See cylinder heads on PAGE 52)
2. Valve
 - Intake - 1.900" diameter..... **90-2139** \$58.95
 - Exhaust - 1.575" diameter..... **90-2026** \$62.95
3. Valve seats
 - Intake - 1.900" diameter..... **90-2138** \$34.95
 - Exhaust - 1.605" diameter..... **90-2003** \$59.95
- 4a. Valve guide - Cast - intake or exhaust
 - Standard Diameter .5625/.5620 18112-92
..... **90-2210** \$32.95
 - + .001" Diameter .5635/.5630 18130-83C.....  **90-2211** \$68.95
 - + .002" Diameter .5645/.5640 18133-83A, 18133-83D.....  **90-2212** \$90.95
 - + .003" Diameter .5655/.5650 18131-83C.....  **90-2213** \$101.95
 - + .030" Diameter .5925/.5920.....  **90-2219** \$57.95
- 4b. Valve Guide - Powder Metal - Intake/Exhaust
 - Standard..... **900-0553** \$36.95
 - + .001..... **900-0554** \$36.95
 - + .002..... **900-0555** \$36.95
 - + .003..... **900-0556** \$36.95
13. Head mount bolt - 3/8"-16 x 1 1/4" 4716W
 each.....  **50-0168** \$4.95
14. Flat washer - 3/8"
 - Zinc (each).....  **50-7051** \$4.95
 - Chrome (each)..... **50-7106-S±** \$5.95
15. Head bolt assembly - Includes head bolt washer. (See PAGE 54)
16. Head bolt washer
 - .150" (each)..... **50-0418-S** \$6.95
 - .250" (each)..... **50-7091** \$4.95
17. Exhaust port stud 16715-83 (each)..... **50-0493** \$4.95
 5 pack..... **50-1028** \$15.95
18. Lock washer - 5/16"..... **50-7032** \$0.95
19. Nut, HH - 5/16" - 24 7833, 7883..... **50-5023** \$0.95
20. Exhaust pipe gasket 65324-83B, 65324-83A (each)..... **106-5029** \$4.95
 10 pack..... **93-1072** \$51.95
21. Thread conversion insert, 1/2"-13 to 5/16"-18..... **50-8151** \$8.95
22. Intake manifold (See PAGE 56)
23. Screw, manifold mounting
 - SH 5/16"-18 x 1" 3201WA, 2708..... **50-0101** \$0.95
 - HH - 5/16"-18 x 1" 3987 (each)..... **50-0108** \$4.95
24. Washer, flat - 5/16" 6320, 70907-07, 6016, 6702..... **50-7034** \$0.95

25. Flange, manifold mounting
 - Front 27009-86A (each).....  **16-0232** \$49.95
 - 5 pack.....  **16-0600** \$239.95
 - Rear 27010-86A (each).....  **16-0233** \$49.95
 - 5 pack.....  **16-0601** \$239.95
 - Set of Two..... **106-3516** \$89.95
26. O-ring, manifold 
 - Stock manifolds 26995-86B, 26995-86A, 26992-99 (each)..... **16-0236** \$7.95
 - 10 pack..... **16-0244** \$46.95
 - S&S manifolds (each)..... **16-0235** \$8.95
 - 10 pack..... **16-0243** \$52.95
27. Head gasket, 1984-'99 big twin (No o-rings required)
 - 3 1/2" Bore
 - .045" thick 16770-84D, 16770-84F (each)..... **93-1011-S** \$15.95
 - 10 pack..... **93-1024** \$146.95
 - .0625" thick 16770-84D, 16770-84F, 10773-85 (each)..... **93-1313-S** \$17.95
 - 3 3/8" Bore
 - .045" thick (each)..... **93-1037-S** \$12.95
 - 10 pack..... **93-1052** \$135.95
 - .062" thick (each)..... **93-1016-S** \$17.95
 - 10 pack..... **93-1053** \$170.95
28. Alignment dowel 16574-99A, 16573-83, 16573-83A (each)..... **50-8023** \$5.95
 10 pack..... **50-8109** \$23.95
29. Temp Sensor Hole Plug Screw, SHCS, 3/8"-16 x 1" (each)..... **50-0161** \$0.95

TOP END REBUILD GASKET KITS FOR S&S® ENGINES FOR BIG TWINS

Engine Family	Year Group	Bore Size	Part #	MSRP
V-Series	1984-'99	3 3/8"	90-9502 	\$79.95
V-Series	1984-'99	3 1/2"	90-9507	\$90.95



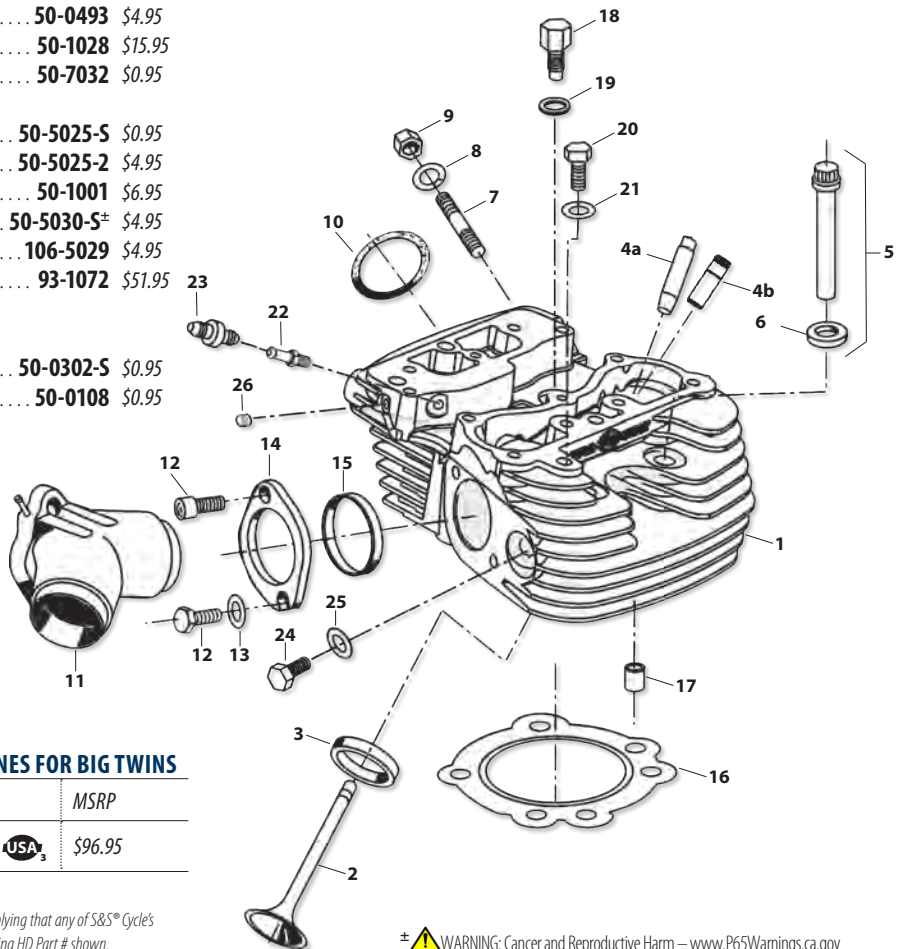
±  WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SUPER STOCK® CYLINDER HEADS REPLACEMENT PARTS

FOR S&S 4 1/8" V-SERIES

1. Cylinder head - All S&S 4 1/8" bore (See PAGE 53) -
2. Valve
Intake
2.000" diameter **90-2000** \$31.95
2.000" diameter +.085" stem length **90-2004** \$33.95
Exhaust
1.605" diameter **90-2001** \$69.95
3. Valve seat
Intake - 2.000" diameter **USA 1,2,3 90-2002** \$26.95
Exhaust - 1.605" diameter **USA 1,2,3 90-2003** \$59.95
- 4a. Valve guide -Cast - Intake/Exhaust (see valve guide diameter chart)
Standard Diameter .5625/.5620 18112-92 **USA 1,2,3 90-2210** \$32.95
+.001" Diameter .5635/.5630 18130-83C **USA 1,2,3 90-2211** \$68.95
+.002" Diameter .5645/.5640 18133-83A, 18133-83D **USA 1,2,3 90-2212** \$90.95
+.003" Diameter .5655/.5650 18131-83C **USA 1,2,3 90-2213** \$101.95
+.030" Diameter .5925/.5920 **USA 1,2,3 90-2219** \$57.95
- 4b. Valve Guide - Powder Metal - Intake/Exhaust
Standard **900-0553** \$36.95
+.001 **900-0554** \$36.95
+.002 **900-0555** \$36.95
+.003 **900-0556** \$36.95
5. Head bolt assembly (Includes head bolt washer)
111" (Includes washer .100") **93-3030** \$17.95
117" (Includes washer .250") **93-3037** \$17.95
124" (Includes washer .250") **93-3037** \$17.95
6. Head bolt washer
.150" (each) **50-0418-S** \$6.95
.250" (each) **50-7091** \$4.95
7. Exhaust port stud 16715-83 (each) **50-0493** \$4.95
5 pack **50-1028** \$15.95
8. Lock washer - 5/16" **50-7032** \$0.95
9. Nut, flanged - 5/16"-24 7593
Zinc (each) **50-5025-S** \$0.95
2 pack **50-5025-2** \$4.95
5 pack **50-1001** \$6.95
Chrome (each) **50-5030-S±** \$4.95
10. Exhaust pipe gasket (each) 65324-83B, 65324-83A **106-5029** \$4.95
10 pack **93-1072** \$51.95
11. Intake manifold (See Manifolds on PAGE 56)
12. Manifold mounting screw
SH - 5/16"-18 x 3/4" 3275 (each) **50-0302-S** \$0.95
HH - 5/16"-18 x 1" 3987 (each) **50-0108** \$0.95

13. Flat washer - 5/16" 6320, 70907-07, 6016, 6702 **50-7034** \$0.95
14. Manifold mounting flange
Front 27009-86A (each) **USA 16-0232** \$49.95
5 pack **USA 16-0600** \$239.95
Rear 27010-86A (each) **USA 16-0233** \$49.95
5 pack **USA 16-0601** \$239.95
Set of Two **106-3516** \$89.95
15. Manifold o-ring (each) **16-0235** \$8.95
10 pack **16-0243** \$52.95
16. Head gasket - All S&S SSW+ - 4 1/8" Bore, Micropore
each **93-1047-S** \$14.95
10 pack **93-1073** \$135.95
17. Alignment dowel, base and head 16595-99A (each) **50-8177** \$5.95
4 pack **50-8177-4** \$12.95
18. Plug, HH - 14mm (Use when compression releases are not installed)
each **90-4916** \$18.95
2 pack **90-4916-2** \$29.95
19. Washer, compression - 14mm - .507" x .705" x .047" ... **50-7094** \$12.95
20. Head mount bolt 3/8"-16 x 1 1/4" 4716W **50-0168** \$4.95
21. Flat washer - 3/8" **USA 1,2,3 50-7051** \$4.95
22. Vent hose fitting,
Front, 1/4"-27 pipe **USA 50-8117** \$12.95
Rear, 1/8"-27 pipe **USA 1,2,3 50-8115** \$6.95
23. Check Valve **50-8122** \$13.95
24. Screw, HHC, 5/16"-18 x 5/8" (each) **50-0106** \$4.95
25. Washer, flat, .319" x .545" x .42" (each) **50-7026** \$4.95
26. Plug, Pipe, 3/4 Taper, 1/4"-27 NPTF x .156" **50-8332** \$0.95



TOP END REBUILD GASKET KITS FOR S&S® ENGINES FOR BIG TWINS

Engine Family	Year Group	Bore Size	Part #	MSRP
V-Series	1984-'99	4 1/8"	90-9506 USA 3	\$96.95














All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

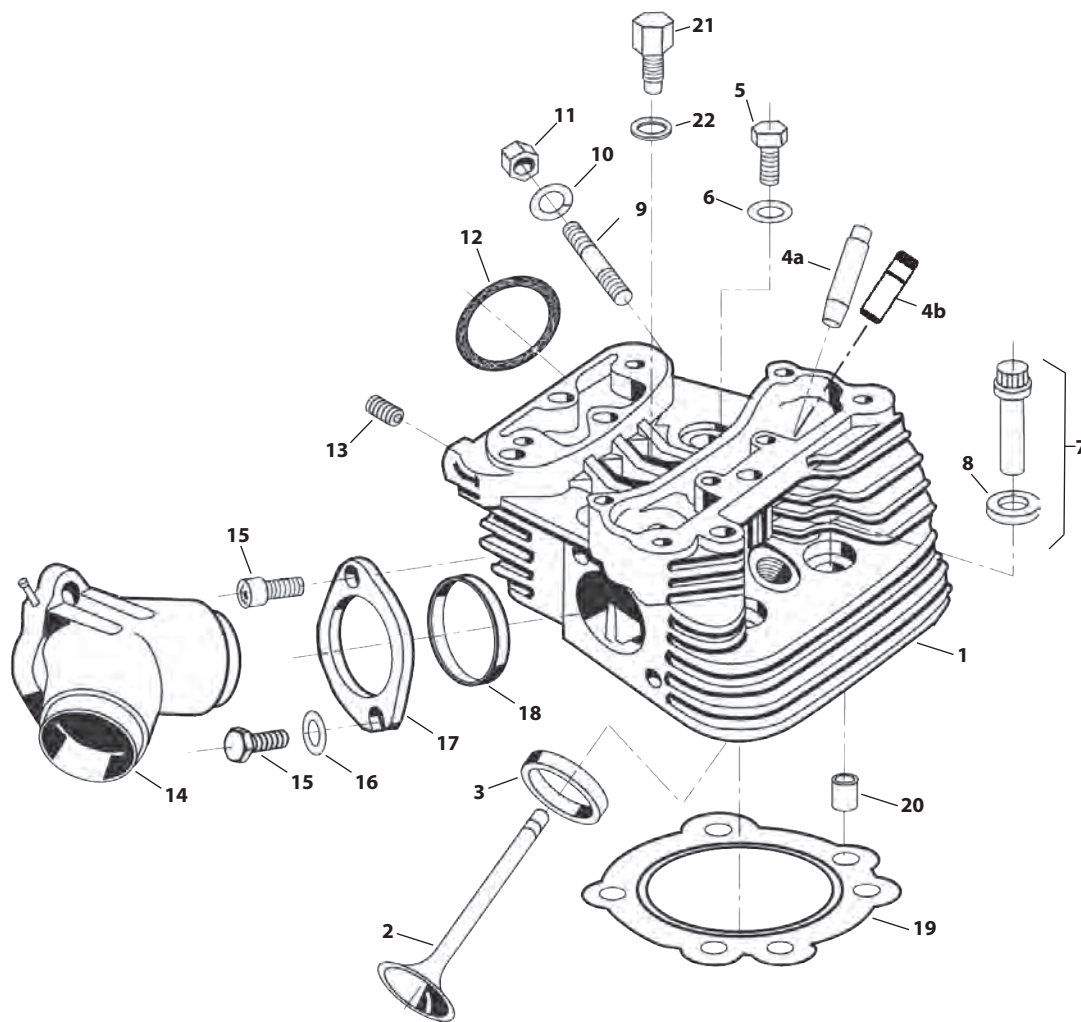
± **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov



SUPER STOCK® CYLINDER HEAD REPLACEMENT PARTS

FOR 1984-99 BIG TWIN 3⁵/₈" TO 4" BORE

- | | | |
|---|--|----------|
| 1. Cylinder head (See PAGE 52 & PAGE 53) | | |
| 2. Valves | | |
| Intake | | |
| 2.000" diameter..... | 90-2000 | \$31.95 |
| 2.000" diameter+.085" stem length..... | 90-2004 | \$33.95 |
| 2.000" diameter+.005" stem diameter..... | 90-2029 | \$68.95 |
| Exhaust | | |
| 1.605" diameter..... | 90-2001 | \$69.95 |
| 1.605" diameter+.005" stem..... | 90-2030 | \$79.95 |
| 3. Valve seats | | |
| Intake - 2.000" diameter..... |  90-2002 | \$26.95 |
| Exhaust - 1.605" diameter..... |  90-2003 | \$59.95 |
| 4a. Valve guide - intake or exhaust | | |
| Standard Diameter .5625/.5620 18112-92 |   90-2210 | \$32.95 |
| +.001" Diameter .5635/.5630 18130-83C |  90-2211 | \$68.95 |
| +.002" Diameter .5645/.5640 18133-83A, 18133-83D |  90-2212 | \$90.95 |
| +.003" Diameter .5655/.5650 18131-83C |  90-2213 | \$101.95 |
| +.030" Diameter .5925/.5920 |  90-2219 | \$57.95 |
| 4b. Valve Guide - Powder Metal - Intake/Exhaust | | |
| Standard..... | 900-0553 | \$36.95 |
| +.001..... | 900-0554 | \$36.95 |
| +.002..... | 900-0555 | \$36.95 |
| +.003..... | 900-0556 | \$36.95 |
| 5. Head mount bolt - 3/8"-16 x 1 1/4" 4716W | | |
| each..... | 50-0168 | \$4.95 |
| 6. Flat washer - 3/8" | | |
| Zinc (each)..... |  50-7051 | \$4.95 |
| Chrome (each)..... | 50-7106-S[±] | \$5.95 |
| 7. Head bolt assembly - Includes head bolt washer (See PAGE 54) | | |
| 8. Head bolt washer | | |
| .150" (each)..... | 50-0418-S | \$6.95 |
| .250" (each)..... | 50-7091 | \$4.95 |
| 9. Exhaust port stud 16715-83 (each) | 50-0493 | \$4.95 |
| 5 pack..... | 50-1028 | \$15.95 |
| 10. Lock washer - 5/16" (each)..... | 50-7032 | \$0.95 |
| 11. Nut, HH - 5/16" -24 7833, 7883 (each) | 50-5023 | \$0.95 |
| 12. Exhaust pipe gasket 65324-83B, 65324-83A (each) | 106-5029 | \$4.95 |
| 10 pack..... | 93-1072 | \$51.95 |
| 13. Thread conversion insert 1/2"-13 to 5/16"-18 | 50-8151 | \$8.95 |
| 14. Intake manifold (See PAGE 56) | | |
| 15. Screw, manifold mounting | | |
| SH - 5/16"-18 x 1" 3201WA, 2708 (each)..... | 50-0101 | \$0.95 |
| HH - 5/16"-18 x 1" 3987 (each)..... | 50-0108 | \$4.95 |
| 16. Washer, flat - 5/16" 6320, 70907-07, 6016, 6702(each) | 50-7034 | \$0.95 |
| 17. Flange, manifold mounting | | |
| Front 27009-86A (each)..... |  16-0232 | \$49.95 |
| 5 pack..... |  16-0600 | \$239.95 |
| Rear 27010-86A (each)..... |  16-0233 | \$49.95 |
| 5 pack..... |  16-0601 | \$239.95 |
| Set..... | 106-3516 | \$89.95 |
| 18. O-ring, manifold (each) | 16-0235 | \$8.95 |
| 10 pack..... | 16-0243 | \$52.95 |
| 19. Head gasket 3 1/2" Bore | | |
| .045" thick (no o-rings required) 16770-84D, 16770-84F | | |
| each..... | 93-1011-S | \$15.95 |
| 10 pack..... | 93-1024 | \$146.95 |
| .0625" thick (no o-rings required) 16770-84D, 16770-84F, 10773-85 | | |
| each..... | 93-1313-S | \$17.95 |
| 3 5/8" Bore .045" thick (no o-rings required) (each) | 93-1037-S | \$12.95 |
| 10 pack..... | 93-1052 | \$135.95 |
| .062" thick (no o-rings required) (each) | 93-1016-S | \$17.95 |
| 10 pack..... | 93-1053 | \$170.95 |
| 4" Bore | | |
| .045" thick (each)..... | 93-1040-S | \$14.95 |
| 10 pack..... | 93-1071 | \$135.95 |
| .070" diameter 26432-76A..... | 50-8034-S | \$7.95 |
| 20. Alignment dowel 16574-99A, 16573-83, 16573-83A (each) | 50-8023 | \$5.95 |
| 10 pack..... | 50-8109 | \$23.95 |
| Dowel pin - 1/4" diameter x 1/2" - 4" bore 358, 366 (each) | 50-8022 | \$5.95 |
| 2 pack..... | 50-8022-2 | \$10.95 |
| 5 pack..... | 50-8105 | \$10.95 |
| 21. Plug, HH - 14mm (each) | 90-4916 | \$18.95 |
| 2 pack..... | 90-4916-2 | \$29.95 |
| 22. Washer, compression release- 14mm | | |
| .507" x .705" x .047" (each) | 50-7094 | \$12.95 |



TOP END REBUILD GASKET KITS FOR S&S® ENGINES FOR BIG TWINS

Engine Family	Year Group	Bore Size	Part #	MSRP
V-Series	1984-'99	4"	90-9503 USA ₂	\$76.95
V-Series	1984-'99	3 7/8"	90-9502 USA ₁	\$79.95

All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

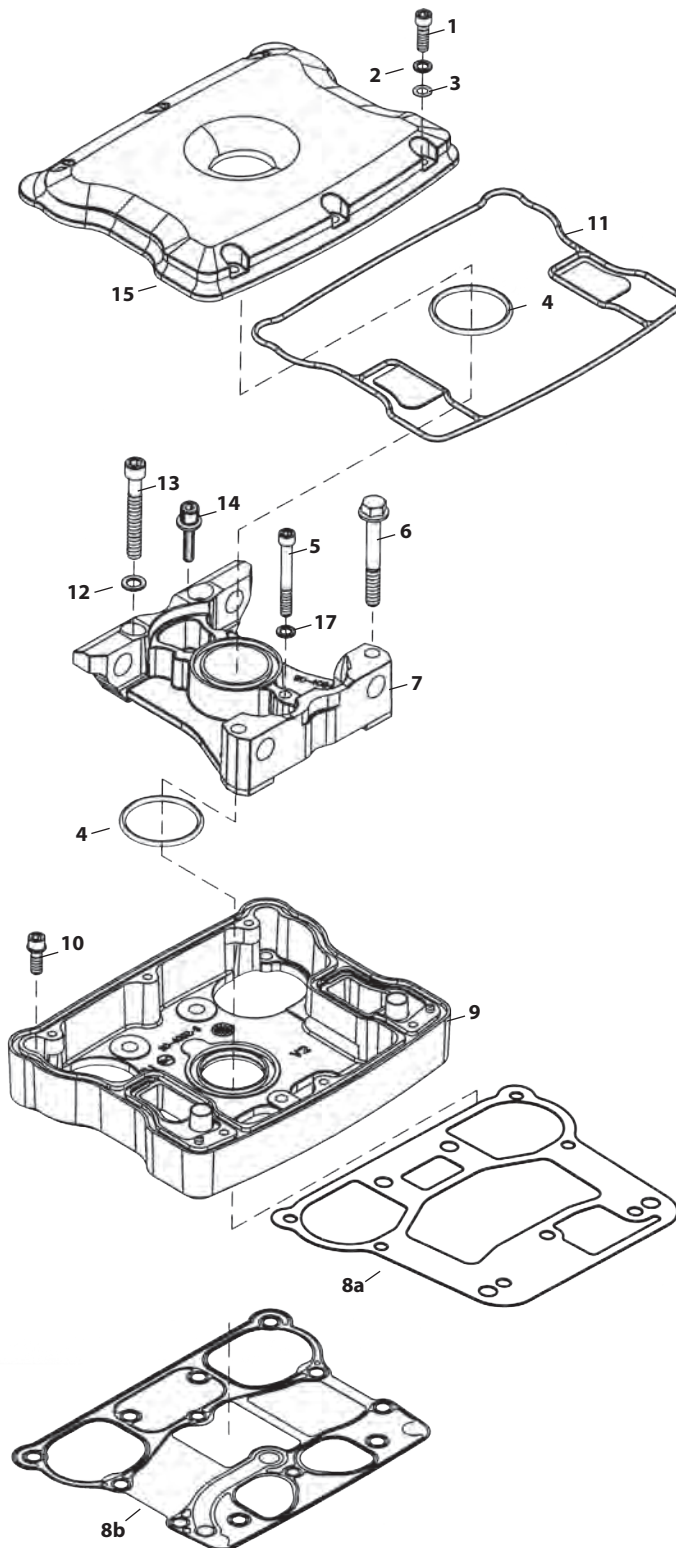


DIE-CAST ROCKER COVER REPLACEMENT PARTS

FOR 1984-'99 BIG TWINS & S&S 4 1/8" BORE ENGINES

- | | | |
|---|---------------|----------|
| 1. Screw, socket head 1/4"-20 x 3/4" 4069A (each) | 50-0067 | \$4.95 |
| 2. Washer, flat 1/4" (each) | 50-7017 | \$4.95 |
| 12 pack | 50-7013 | \$9.95 |
| 3. Washer, rubber coated 1/4" (each) | 50-7015 | \$4.95 |
| 8 pack | 50-7015-8 | \$9.95 |
| 12 pack | 50-7015-12 | \$12.95 |
| 4. Seal, o-ring (Included in gasket set see #16 below.) | 50-8044 | \$4.95 |
| 5. Screw, SH 1/4"-20 x 2" 25794-36 | 50-0013 | \$4.95 |
| 6. Screw, hex flange head 5/16"-18 x 2 1/4" 3501 | 50-0123 | \$4.95 |
| 7. Support, rocker arm | 90-4140 | \$68.95 |
| 8. Gasket, rocker housing, 1984-'99 bt | | |
| a. Gasket, Bottom, Rocker Cover, 1984-'99 bt | | |
| each | 900-0538 | \$14.95 |
| 2 pack | 900-0592 | \$29.95 |
| b. S&S 4 1/8" Bore 16719-99B (each) | USA 90-4071-S | \$9.95 |
| 2 pack | USA 90-4071 | \$16.95 |
| 10 pack | USA 90-4099 | \$79.95 |
| 9. Housing, rocker, chrome | | |
| 1984-'99 bt | 900-0790± | \$287.95 |
| S&S 4 1/8" Bore | 900-4283± | \$282.95 |
| 10. Screw, 1984-'99 bt, SHCS 1/4"-20 x 1" 4741A (each) | 50-0092-S | \$4.95 |
| 4 pack | 50-0092P | \$7.95 |
| S&S 4 1/8" Bore, SHCS 5/16"-18 x 1" | 50-0125-S | \$4.95 |
| 11. Seal, rocker cover (Included in gasket set see #16 below.) | 90-4079 | \$15.95 |
| 12. Washer, flat 5/16" (each) | USA 50-7026 | \$4.95 |
| 13. Screw, SH 5/16"-18 x 2 1/4" (each) | 50-0115-S | \$4.95 |
| 14. Screw, socket head, 1/4"-20 x 1" (S&S 4 1/8" bore only) 4741A | | |
| each | 50-0092-S | \$4.95 |
| 4 pack | 50-0092P | \$7.95 |
| 15. Cover, rocker, chrome | 900-0706± | \$180.95 |
| 16. Gasket Set (N/S) | | |
| 1984-'99 bt | 90-4091 | \$73.95 |
| S&S 4 1/8" Bore | 90-4111 | \$62.95 |
| 17. Washer, flat, .261"x.474"x.050" Annealed, Stainless Steel | | |
| each | 50-7020 | \$4.95 |

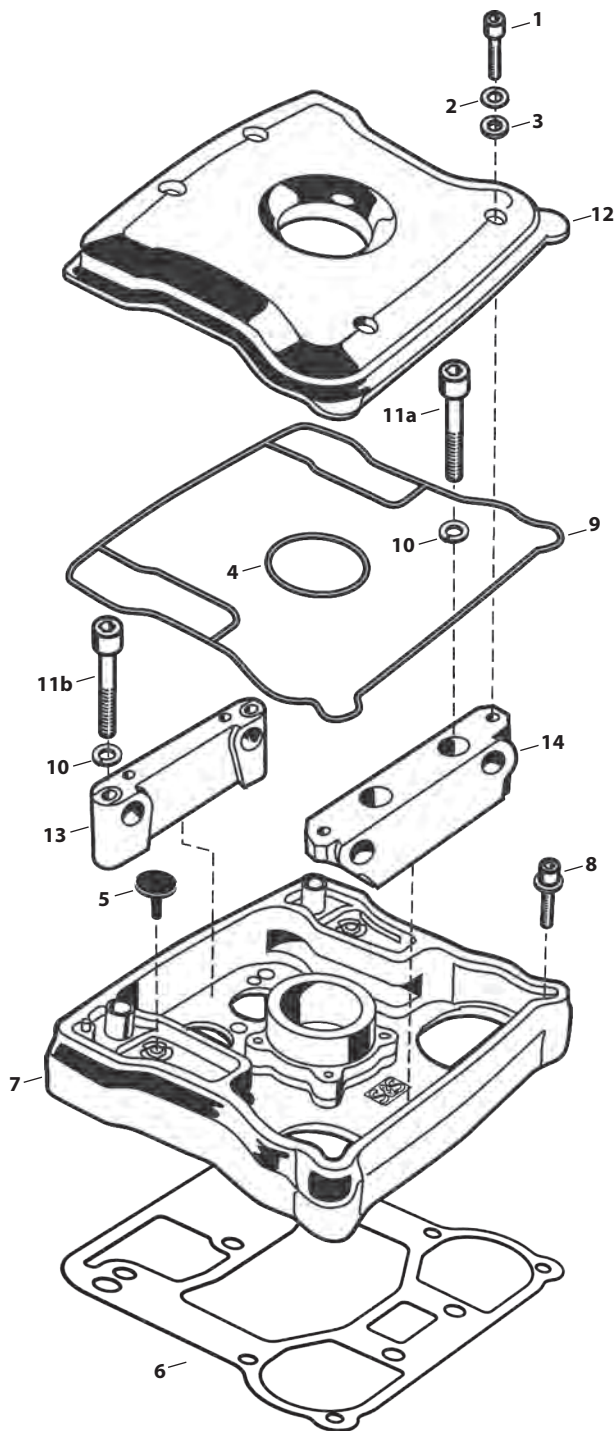
(N/S) = Not Shown



BILLET ROCKER COVER REPLACEMENT PARTS FOR 1984-'99 BIG TWIN ENGINES

- 1. Screw, SH - 1/4"-20 x 3/4" 4069A (each) **50-0067** \$4.95
- 2. Washer, flat - 1/4" (each) **50-7017** \$4.95
12 pack **50-7013** \$9.95
- 3. Washer, flat - 1/4" rubber covered (each) **50-7015** \$4.95
8 pack **50-7015-8** \$9.95
12 pack **50-7015-12** \$12.95
- 4. O-ring - 1 5/8" I.D. x 1 7/8" O.D. x 1/8" CS Viton®
(Included in gasket set - See #16 below.)
- 5. Rocker cover umbrella valve cover - 1992-'99 big twin
(Included in gasket set. See #16 below.)
26856-89, 26856-89A **90-4030** \$4.95
- 6. Gasket, Bottom, Rocker Cover, 1984-99 bt (each) **900-0538** \$14.95
2 pack **900-0592** \$29.95
- 7. Rocker cover base - billet
Chrome **90-4051±** \$439.95
Natural **90-4056** \$282.95
- 8. Screw, SH w/washer - 1/4"-20 x 1" 4741A (each) **50-0092-S** \$4.95
4 pack **50-0092P** \$7.95
- 9. Rocker cover o-ring gasket - S&S billet rocker cover
(Included in gasket set. See #16 below.)
- 10. Washer, flat - 5/16" (each) **50-7026** \$4.95
- 11. Bolt, rocker support - socket head
a. 5/16"-18 x 2-1/4" (left support)
each **50-0115-S** \$4.95
b. 5/16"-18 x 2-1/2" (right support) 876A
each **50-0118** \$4.95
- 12. Rocker cover top - billet
Chrome **90-4054±** \$252.95
- 13. Right rocker shaft support - billet **90-4053** \$113.95
- 14. Left rocker shaft support - billet **90-4052** \$113.95
- 15. Rocker cover gasket set - S&S billet rocker cover - (N/S) **90-4049** \$79.95
- 16. Rocker cover hardware kit - (N/S) **90-4050A** \$37.95

(N/S) = Not Shown

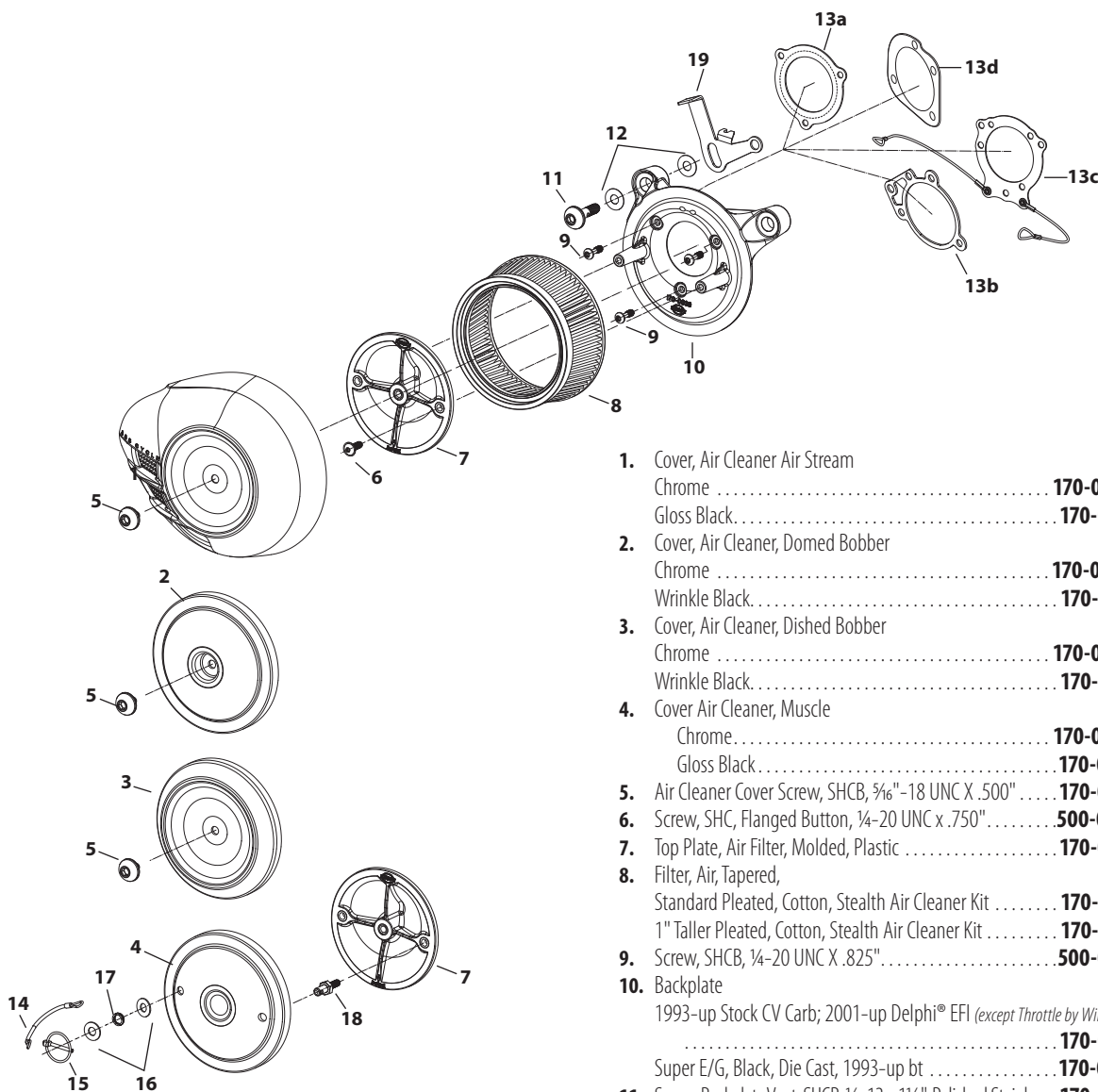


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± ⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



STEALTH AIR CLEANER KIT REPLACEMENT PARTS



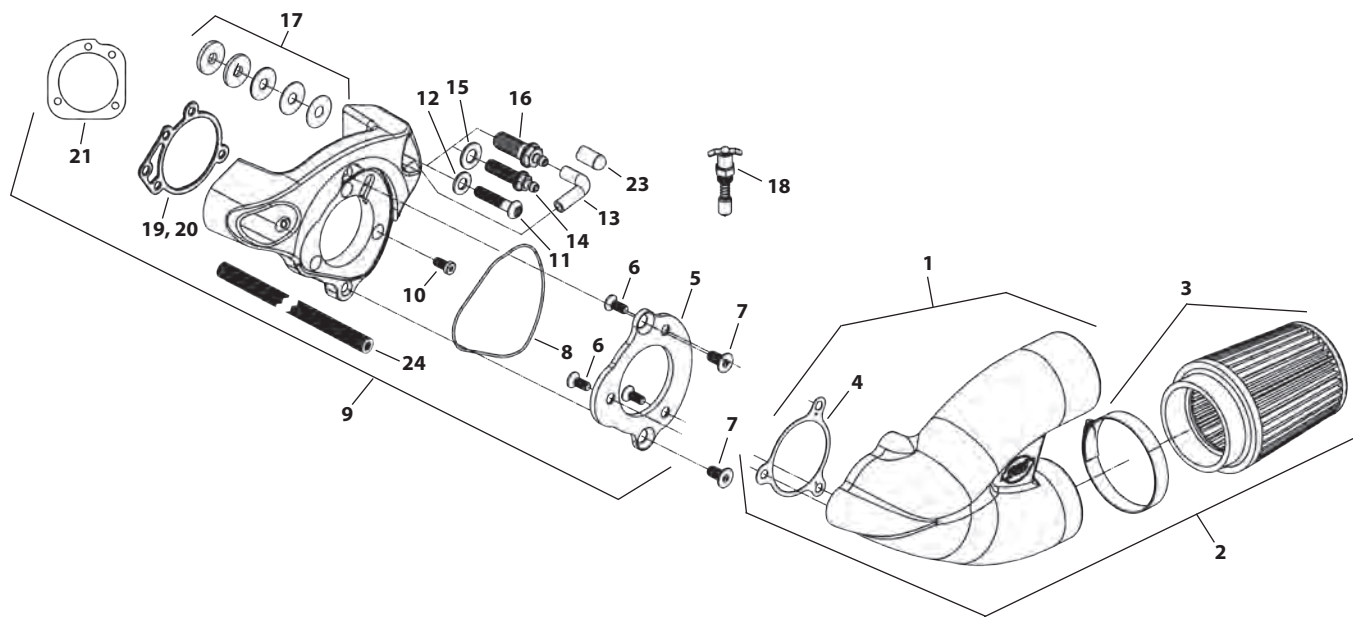
- | | |
|---|--------------------------------------|
| 1. Cover, Air Cleaner Air Stream | |
| Chrome | 170-0118[±] \$170.95 |
| Gloss Black | 170-0396 \$170.95 |
| 2. Cover, Air Cleaner, Domed Bobber | |
| Chrome | 170-0120[±] \$135.95 |
| Wrinkle Black | 170-0124 \$135.95 |
| 3. Cover, Air Cleaner, Dished Bobber | |
| Chrome | 170-0119[±] \$135.95 |
| Wrinkle Black | 170-0123 \$135.95 |
| 4. Cover Air Cleaner, Muscle | |
| Chrome | 170-0121[±] \$192.95 |
| Gloss Black | 170-0463 \$192.95 |
| 5. Air Cleaner Cover Screw, SHCB, 5/16"-18 UNC X .500" | 170-0508 \$19.95 |
| 6. Screw, SHC, Flanged Button, 1/4-20 UNC x .750" | 500-0060 \$4.95 |
| 7. Top Plate, Air Filter, Molded, Plastic | 170-0026 \$15.95 |
| 8. Filter, Air, Tapered, | |
| Standard Pleated, Cotton, Stealth Air Cleaner Kit | 170-0126 \$46.95 |
| 1" Taller Pleated, Cotton, Stealth Air Cleaner Kit | 170-0127 \$77.95 |
| 9. Screw, SHCB, 1/4-20 UNC X .825" | 500-0059 \$4.95 |
| 10. Backplate | |
| 1993-up Stock CV Carb; 2001-up Delphi® EFI (except Throttle by Wire) | 170-0021 \$52.95 |
| Super E/G, Black, Die Cast, 1993-up bt | 170-0049 \$94.95 |
| 11. Screw, Backplate Vent, SHCB, 1/2-13 x 1 1/2", Polished Stainless | 170-0507 \$26.95 |
| 12. Washer, Flat, Nitrile Rubber Coated | |
| .520" x .880" x .024" BT 1993-'99 & xl 1991-'06 (each) | 50-7055 \$4.95 |
| 10 pack | 50-7057 \$14.95 |
| .380" x .880" x .024" BT 1999-'06 (each) | 50-7054 \$4.95 |
| 10 pack | 50-7059 \$14.95 |
| 13. Gasket, Backplate | |
| a. Throttle by Wire, .0625" Thick, 2008-up bt | 160-0035 \$5.95 |
| b. Super E/G | 106-1724 \$5.95 |
| c. Stock CV Carb & EFI Throttle Body, Throttle by Wire, Lanyard style, 1991-up xl/bt | 170-0137 \$27.95 |
| d. Stock CV Carb & EFI Throttle Body, 1991-up xl/bt | |
| (except Throttle by Wire) 29062-95B | 106-6022 \$5.95 |
| 14. Lanyard, 6" Stainless Steel | 500-0095 \$10.95 |
| 15. Lynch Pin | 500-0083 \$26.95 |
| 16. Washer, Fender, Chrome Plated | 500-0094[±] \$4.95 |
| 17. Spring, Wave Washer, Stainless Steel | 500-0093 \$8.95 |
| 18. Screw, Hex, Hood-pin, 1/4-20, UNC | 500-0113 \$18.95 |
| 19. Lever, Enrch, Super E/G, Stealth, Short | 17-0327 \$10.95 |

SINGLE BORE TUNED INDUCTION SYSTEM REPLACEMENT PARTS

1. Tuned Intake Kit, 2.19" Single Bore
Chrome Plated. **106-4970**± \$229.95
2. Tuned Intake Assembly, 2.19" Single Bore. **N/A** -
3. Air Filter, with Clamp
Stainless Cap - Conical - 2 7/16" I.D. x 4"
Red (each) **17-1020** \$62.95
Blue (each) **17-1023** \$62.95
4. Gasket, Intake - Adapter Plate
2.19" Single Bore Tuned Intake **17-1022** \$7.95
5. Plate, Adapter, 2.19" Single Bore Tuned Intake
Chrome Steel. **17-1014**± \$83.95
6. FHSC 1/4-20 x 5/8" **50-0433** \$5.95
7. FHSC 5/16-18 x 5/8" **50-0432** \$7.95
8. O-ring, Adapter Plate Bracket
3 3/8" O.D. x 3 1/2" I.D. 1/16 CS, Viton® **50-0446** \$5.95
9. Bracket Kit, 2.19" Single Bore Tuned Intake
Super E/G, S&S V124 - Chromed **106-4973**± \$450.95
Super E/G, 1984-'99 BT - Chromed **106-4974**± \$450.95
Single VFI, S&S V124 - Chromed. **106-4976**± \$450.95
Single VFI, 1984-'99 BT - Chromed **106-4977**± \$450.95
Stock carb, Delphi® EFI, 1984-'99 BT - Chromed **106-4978**± \$450.95
10. Backplate Screw
Screw, SHC, w/Threadlock, 1/4-20 x 1/2" **106-2084** \$4.95
10 pack **106-2105** \$9.95
11. Screw, 5/16-18 x 1 1/4, BHC, Chrome **50-0309-5**± \$7.95

12. Flat Washer 5/16" x 1/16" #320, 70907-07, 6016, 6702 **50-7034** \$0.95
13. Hose, Breather, 1/4" I.D., 90° **19-0178A** \$8.95
14. Screw, Breather Fitting, 3/8-16 x 1 1/4" **50-0436** \$16.95
15. Washer, Flat, 3/8 x 1 3/16" x 1/16", Chrome **50-7106-5**± \$5.95
16. Screw, Breather Fitting, 1/2-13 x 1.25 **50-0435** \$13.95
17. Shim Kit
a. 5/16" I.D. 1984-'92 BT. **17-0314** \$12.95
b. 1/2" I.D. 1993-'99 BT **17-0464** \$19.95
18. Enrichment Device, S&S Super E & G carbs
(Use in place of enrichment device on air cleaner backplate) **11-2084**± \$29.95
19. Gasket, Backplate - E/G/SBEFI **106-1724** \$5.95
10 pack **106-2328** \$29.95
20. Gasket, S&S SBEFI 58mm. **106-4662** \$7.95
21. Gasket, Stock carb/Throttle Body 29062-95B. **106-6022** \$5.95
22. Hardware Kit, 1984-'99 - (N/S)
Stock Carb & S&S Single Bore EFI **17-5098** \$146.95
S&S Super E or G Carb **17-5099**± \$124.95
S&S 124 V-Series **500-0016** \$69.95
23. Canister Purge Fitting Cap (each) **50-8266-S** \$7.95
24. Breather Vent Hose **106-4982** \$10.95

(N/S) = Not Shown



ACCESSORIES

Description	Part #	MSRP
Air Filter Oil, 8 oz. Bottle	Red	106-1163 \$33.95
	Blue	106-1164 \$33.95
Nylon Air Filter Cover	each	106-0247 \$52.95
	2 pack	106-0248 \$103.95

± WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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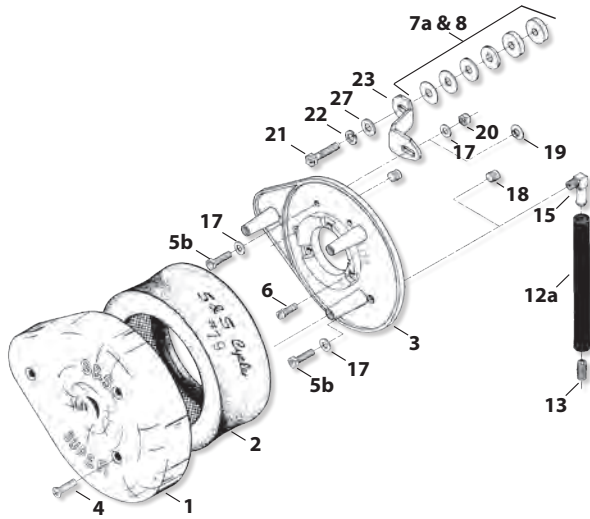


AIR CLEANER REPLACEMENT PARTS FOR STOCK FUEL SYSTEMS

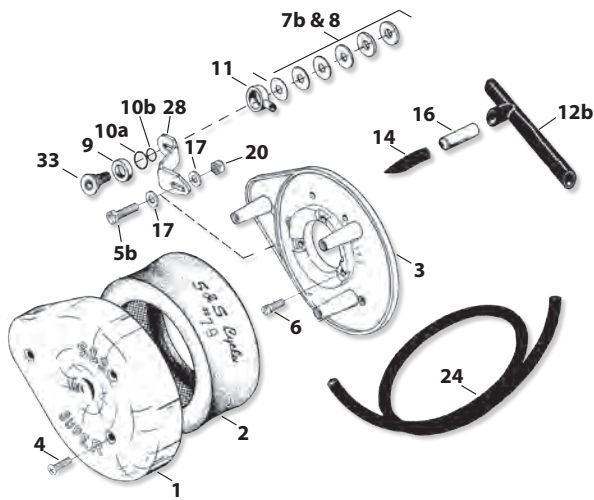
- | | | |
|--|-------------|----------|
| 1. Air cleaner cover | | |
| Chrome | 17-0078± | \$177.95 |
| Black | 17-0075 | \$144.95 |
| 2. Element | 17-0079 | \$20.95 |
| 3. Backplate | | |
| BT 1966-'89 | 106-0907 | \$112.95 |
| 4. Cover screw 1305 (each) | 50-0072 | \$4.95 |
| 3 pack | 50-1052 | \$5.95 |
| 10 pack | 50-0094 | \$10.95 |
| Black 902 (each) | 50-0310-S | \$6.95 |
| 3 pack | 50-0310 | \$12.95 |
| 5. Screw HHCS ¼"-28 x 7/8" | 50-0074 | \$0.95 |
| 6. Backplate screw | | |
| Zinc Plated (each) | 106-2084 | \$4.95 |
| 10 pack | 106-2105 | \$9.95 |
| 7. Shim kit | | |
| a. BT 1966-'89 (Includes 2 each 5/16" x .018", 5/16" x .030", 5/16" x .048", 5/16" x .105" and 4 each 5/16" x .125") | 17-0314 | \$12.95 |
| b. BT 1993-'99 (Includes 2 each 1/2" x .018", 1/2" x .030", 1/2" x .048", 1/2" x .105", and 4 each 1/2" x .125") | 17-0464 | \$19.95 |
| 8. Replacement shims | | |
| BT 1966-'89 | | |
| a. 5/16" x .018" (each) | 50-7038 | \$4.95 |
| b. 5/16" x .030" (each) | 50-7039 | \$4.95 |
| c. 5/16" x .048" (each) | USA 50-7040 | \$4.95 |
| d. 5/16" x .105" (each) | 50-7041 | \$4.95 |
| e. 5/16" x .125" (each) | 50-7042 | \$4.95 |
| BT 1993-up | | |
| f. 1/2" x .018" (each) | 50-7085 | \$4.95 |
| g. 1/2" x .030" (each) | 50-7086 | \$4.95 |
| h. 1/2" x .048" (each) | 50-7087 | \$4.95 |
| i. 1/2" x .105" (each) | 50-7089 | \$4.95 |
| j. 1/2" x .125" (each) | 50-7090 | \$6.95 |
| BT 1999-up, All 2002-up EFI BT | | |
| k. 5/8" x .025" (each) | 50-7113 | \$4.95 |
| 10 pack | 50-7110 | \$9.95 |
| l. 5/8" x .050" (each) | 50-7114 | \$4.95 |
| 10 pack | 50-7111 | \$10.95 |
| m. 5/8" x .075" (each) | 50-7115 | \$4.95 |
| 10 pack | 50-7112 | \$13.95 |
| 9. Shim, head vent - .62" I.D. x .80" O.D. x .175" | | |
| 10. O-ring | | |
| a. (-.014), .500" ID x .625" OD, Nitrile (each) | 50-8270 | \$4.95 |
| 5 pack | 50-8275 | \$4.95 |
| b. (-.012), .375" ID x .500" OD, Viton® 11110 (each) | 50-8006 | \$4.95 |
| 10 pack | 50-8077 | \$9.95 |
| 11. Breather fitting (each) | 17-0350 | \$6.95 |
| 2 pack | 17-0355 | \$9.95 |
| 12. Crankcase breather vent hose | | |
| a. BT 1984-'92 | 17-0113 | \$4.95 |
| b. BT 1993-'99 | USA 17-0339 | \$9.95 |
| 13. Vent hose connector, | | |
| BT 1984-'92 | 50-8111 | \$4.95 |
| 14. Vent hose, with angle cut | 17-0365 | \$5.95 |
| 15. 90° Elbow fitting (each) | 50-8110 | \$23.95 |
| 16. Hose fitting | 17-036C-S | \$9.95 |
| 17. Flatwasher, ¼" 6194, 6245, 6703, 6736, 6228W, 6192 each | 50-7021 | \$4.95 |
| 18. Backplate plug, 1/8" -27 NPT 45830-48 | | |
| each | 50-8331A | \$4.95 |
| 10 pack | 50-1015 | \$12.95 |
| 19. Plug, press-in clear plastic | 50-8313 | \$0.95 |
| 20. Support bracket locknut - ¼"-28 x 7/8" | | |
| each | 50-5010 | \$4.95 |
| 21. Support bracket screw - 5/16"-18 x 1 ¼" | 50-0110 | \$0.95 |
| 22. Lockwasher, 5/16" | 50-7032 | \$0.95 |
| 23. Support bracket, Air cleaner to head | | |
| BT 1984-'99 | 17-0311 | \$48.95 |
| 24. Rubber tubing - ¼" x 5/8" x 3' | N/A | - |
| 25. Wire tie (N/S) | 50-8003 | \$4.95 |
| 26. Hardware kit, air cleaner mounting (N/S) | | |
| BT 1984-'99 | N/A | - |
| 27. Washer, flat - 3/8" x 7/8" x .146" | | |
| each | 50-7053 | \$5.95 |
| 28. Carb support bracket - | | |
| BT 1999-up & EFI Softail® 2001 | N/A | - |
| 29. Shim - ¼" x ¾" x .200" | 50-7024 | \$4.95 |
| 30. Screw vent fitting | | |
| a. BT 1993-'99 | 17-0347 | \$19.95 |
| b. BT 1999-up | 17-0345 | \$23.95 |
| 31. Screw air cleaner backplate | 17-0346 | \$7.95 |
| 32. Spring clamps (N/S) | 50-8001 | \$0.95 |
| 33. Breather cap screw | 17-0338 | \$10.95 |
| 34. Breather screw seal | | |
| a. BT 1993-'99, All 2002 EFI BT - Washer .520 (each) | 50-7055 | \$4.95 |
| 10 pack | 50-7057 | \$14.95 |
| b. BT 1999-up, All 2002 EFI BT - Washer .380 (each) | 50-7054 | \$4.95 |
| 10 pack | 50-7059 | \$14.95 |

FI = fuel injected
(N/S) = Not Shown

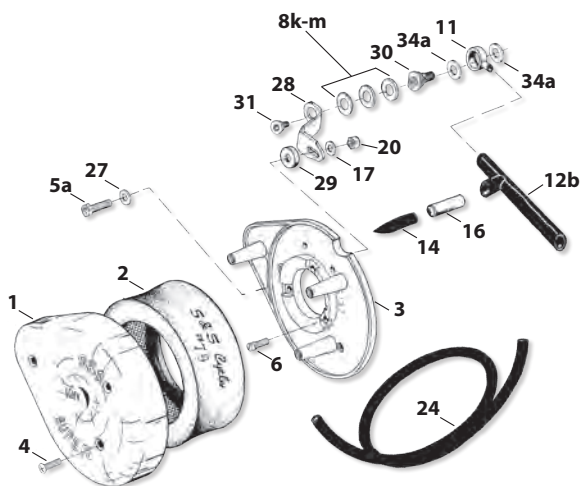
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1984-'89 BIG TWIN
(WITH BUTTERFLY CARBURETOR) 17-0108



1993-'99 BIG TWIN
(WITH CV CARBURETOR) (OBSOLETE) 17-0100

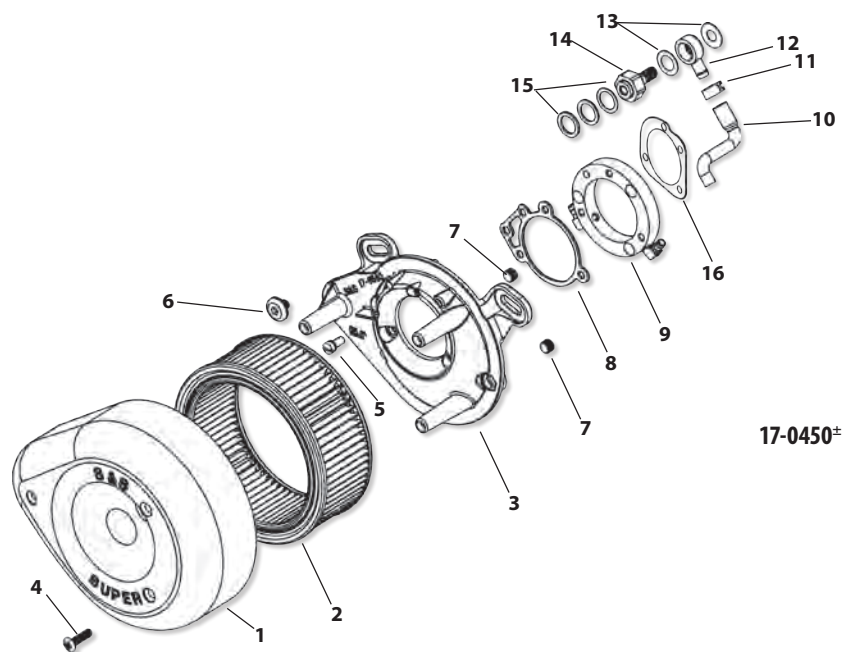


1993-'06 CARBURETED BIG TWIN MODELS,
2001 EFI SOFTAIL® MODELS, AND 2002-UP ALL EFI MODELS
(EXCEPT 2006-UP DYNA®) (OBSOLETE)
17-0117

CONTINUED AIR CLEANER REPLACEMENT PARTS FOR STOCK FUEL SYSTEMS

1993-UP (EXCEPT 2008-UP TOURING MODELS) BT STOCK CV AND DELPHI® SINGLE BORE EFI

1. Air cleaner cover			
Chrome	17-0378±	\$171.95	
Gloss Black.....	170-0384A	\$171.95	
Slasher.....	17-0004±	\$171.95	
2. Element, pleated.....	106-4722	\$26.95	
3. Backplate			
1993-2007 BT.....	106-0907	\$112.95	
4. Cover screw 1305 (each).....	50-0072	\$4.95	
3 pack.....	50-1052	\$5.95	
10 pack.....	50-0094	\$10.95	
Black 902 (each).....	50-0310-S	\$6.95	
3 pack.....	50-0310	\$12.95	
5. Backplate screw			
Zinc Plated (each).....	106-2084	\$4.95	
10 pack.....	106-2105	\$9.95	
6. Screw, air cleaner backplate.....	17-0346	\$7.95	
7. Backplate plug 1/8"-27 45830-48			
each.....	50-8331A	\$4.95	
10 pack.....	50-1015	\$12.95	
8. Gasket, backplate (each).....	106-1724	\$5.95	
10 pack.....	106-2328	\$29.95	
9. Adaptor assembly			
1993-'99 bt.....	106-0881	\$65.95	
10. Hose, vent, breather, formed, .250" x .375" x 1.825", 1993-'07 BT.....	17-0364A	\$7.95	
11. Clamp, spring, 3/16".....	50-8001	\$0.95	
12. Banjo fitting (each).....	17-0350	\$6.95	
2 pack.....	17-0355	\$9.95	
13. Washer, silicone coated steel			
1993-up BT, 1/2" (each).....	50-7055	\$4.95	
10 pack.....	50-7057	\$14.95	
1999-up BT, 1/2" (each).....	50-7054	\$4.95	
10 pack.....	50-7059	\$14.95	
14. Breather screw,			
1993-'98 BT.....	106-0845	\$24.95	
1999-up BT.....	17-0348	\$13.95	
15. Replacement shims			
5/8" x .025" (each).....	50-7113	\$4.95	
10 pack.....	50-7110	\$9.95	
5/8" x .050" (each).....	50-7114	\$4.95	
10 pack.....	50-7111	\$10.95	
5/8" x .075" (each).....	50-7115	\$4.95	
10 pack.....	50-7112	\$13.95	
16. Backplate Gasket 29062-958.....	106-6022	\$5.95	



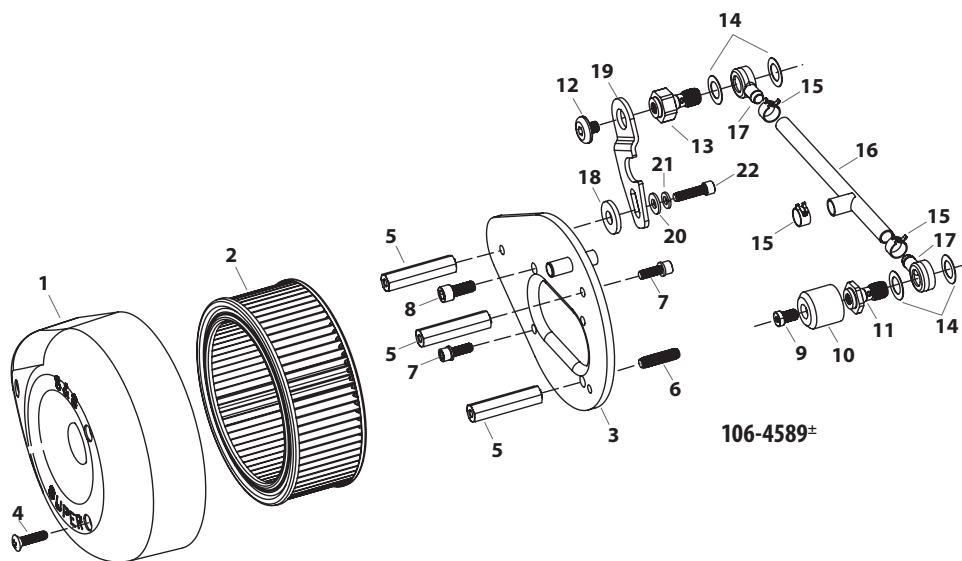
17-0450±

CONTINUED
AIR CLEANER REPLACEMENT PARTS FOR STOCK FUEL SYSTEMS

REPLACEMENT PARTS FOR S&S AIR CLEANER FOR MAGNETI MARELLI® EFI 1995-'01 BIG TWIN

1. Cover	17-0378 ±	\$171.95	
2. Filter	106-4722	\$26.95	
3. Backplate, Assembly, Air Cleaner, Stock EFI,			
4. Screw, PHIL/OH 1/4-20x1" 1305			
<i>each</i>	50-0072	\$4.95	
<i>3 pack</i>	50-1052	\$5.95	
<i>10 pack</i>	50-0094	\$10.95	
5. Spacer, 1/2" Hex, Threaded	N/A		
6. Stud, Fully Threaded, 1/4-20 x 1.25", Zinc Plated			
1995-'98	N/A		
1999-'01	N/A		
7. SHCS, 1/4-20 x 3/4" SEMS (<i>each</i>)	50-0066	\$2.95	
8. Screw, SHCS,			
1995-'98, 1/4-20 x 3/4", SEMS 4069A			
<i>each</i>	50-0067	\$4.95	
1999-'01, 5/16-18 x 3/4" 3275			
<i>each</i>	50-0302-S	\$0.95	
9. Screw, LSHC 5/16-24, x 1/2" Stainless Steel			
Front Head	106-2023	\$8.95	
10. Cover, Breather Screw, Front Head			
Chrome, Aluminum	106-2022 ±	\$34.95	
11. Screw, Backplate Vent, Front Head			
1995-'98, 1/2-13	17-0347	\$19.95	
1999-01, 5/16-18	17-0345	\$23.95	
12. Screw, Backplate, Rear Head, Socket Panhead			
5/16 - 24 x .360", Zinc, Alloy Steel	17-0346	\$7.95	
13. Screw, Breather, +.250" (Rear Head)			
1995-'98, 1/2 -13 UNC	106-0845	\$24.95	
1999-'01	17-0348	\$13.95	
14. Washer, flat, Nitrile Rubber Coated, Cold Rolled Steel			
1995-'98, .520" x .880" x .024"			
<i>each</i>	50-7055	\$4.95	
<i>10 pack</i>	50-7057	\$14.95	
1999-01, .380" x .880" x .024"			
<i>each</i>	50-7054	\$4.95	
<i>10 pack</i>	50-7059	\$14.95	
15. Clamp Spring, 5/16"	50-8001	\$0.95	
16. Hose, Vent Breather,			
Epichlorohydrin Polymer	USA 17-0339	\$9.95	
17. Banjo Fitting (<i>each</i>)	17-0350	\$6.95	
<i>2 pack</i>	17-0355	\$9.95	
18. Spacer .406" x .975" x .250" (<i>each</i>)	50-7140-S	\$15.95	
19. Bracket, Support, Air Cleaner To Head			
Nickel Plated	106-1285	\$14.95	
20. Washer, Flat, .281" x .625" x .080", Zinc, Steel			
6194, 6245, 6703, 6736, 6228W, 6192 (<i>each</i>)	50-7021	\$4.95	
21. Washer, Lock, .250" 7035, 7036	50-7019	\$0.95	
22. Screw, SHCS, 1/4-20 x 1 1/4" 4740A, 3482A (<i>each</i>)	50-0008	\$4.95	

N/A = No longer available



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± WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov



CLASSIC TEARDROP AIR CLEANER REPLACEMENT PARTS

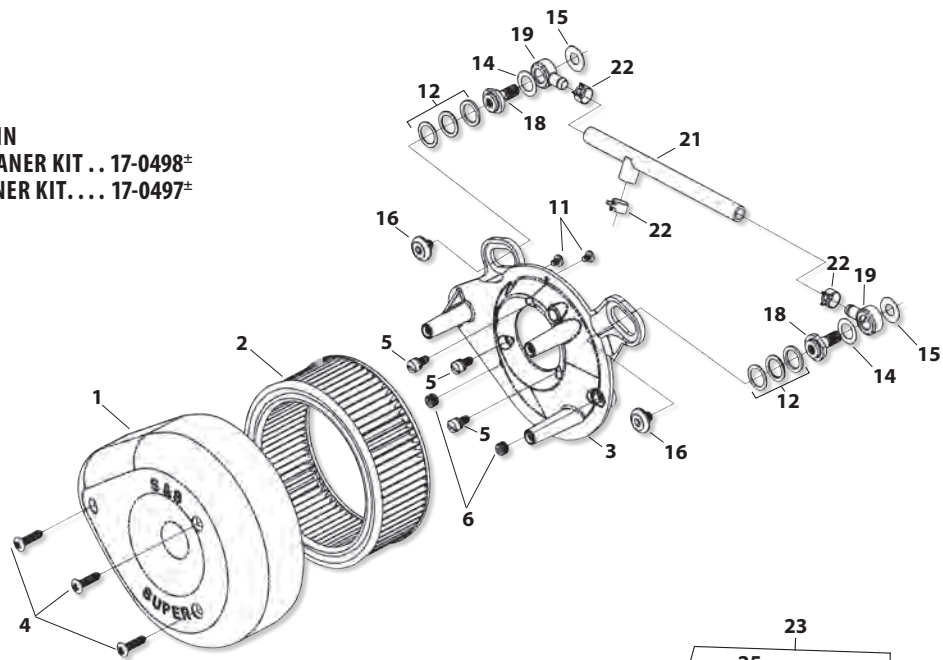
FOR S&S® SINGLE BORE EFI

1. Air Cleaner Cover			
Slasher (slotted chrome)	17-0004±	\$171.95	
Chrome	17-0378±	\$171.95	
Gloss Black (includes black screws)	170-0384A	\$171.95	
2. Element, pleated.....	106-4722	\$26.95	
3. Backplate SBFFI			
BT 1999-up	17-0120	\$87.95	
S&S 4- $\frac{1}{8}$ " bore engines	17-0380	\$113.95	
4. Screw, oval $\frac{1}{4}$ -20 x 1305 (each)	50-0072	\$4.95	
3 pack	50-1052	\$5.95	
10 pack	50-0094	\$10.95	
5. Backplate screw			
Zinc Plated (each)	106-2084	\$4.95	
10 pack	106-2105	\$9.95	
Black 902 (each)	50-0310-S	\$6.95	
3 pack	50-0310	\$12.95	
6. Pipe plug, $\frac{1}{8}$, air cleaner backplate (each)	50-8331A	\$4.95	
10 pack	50-1015	\$12.95	
7. Mounting bracket bolt, hex $\frac{5}{16}$ -18 x $1\frac{1}{4}$	50-0110	\$0.95	
8. Flat washer, $\frac{5}{16}$ " x $\frac{1}{16}$ " 6320, 70907-07, 6016, 6702	50-7034	\$0.95	
9. Shim, .850" x .325" x .400"	USA 50-7027	\$6.95	
10. Shim kit for 4 $\frac{1}{8}$ " bore	17-0314	\$12.95	
Individual shims:			
$\frac{5}{16}$ " x .018" (each)	50-7038	\$4.95	
$\frac{5}{16}$ " x .030" (each)	50-7039	\$4.95	
$\frac{5}{16}$ " x .048" (each)	USA 50-7040	\$4.95	
$\frac{5}{16}$ " x .105" (each)	50-7041	\$4.95	
$\frac{5}{16}$ " x .125" (each)	50-7042	\$4.95	
11. Screw, cable guide & air cleaner backplate			
10-24 x $\frac{1}{4}$ " (each)	50-0041	\$4.95	
10 pack	50-0062	\$6.95	
12. Shims, individual			
$\frac{5}{8}$ x $\frac{7}{8}$ x .025 (each)	50-7113	\$4.95	
10 pack	50-7110	\$9.95	
$\frac{5}{8}$ x $\frac{7}{8}$ x .050 (each)	50-7114	\$4.95	
10 pack	50-7111	\$10.95	
$\frac{5}{8}$ x $\frac{7}{8}$ x .075 (each)	50-7115	\$4.95	
10 pack	50-7112	\$13.95	
14. Silicone washer, $\frac{1}{2}$ " ID (each)	50-7055	\$4.95	
10 pack	50-7057	\$14.95	
15. Silicone washer, $\frac{3}{8}$ " ID (each)	50-7054	\$4.95	
10 pack	50-7059	\$14.95	
16. Screw, wide head, $\frac{5}{16}$ -24 x .36	17-0346	\$7.95	
17. Air cleaner hardware kit (N/S)			
BT 1999-up	17-0482	\$23.95	
S&S 4- $\frac{1}{8}$ " bore engines	17-0481	\$28.95	
18. Breather vent fitting			
BT 1993-'99	17-0347	\$19.95	
19. Breather fitting (each)	17-0350	\$6.95	
2 pack	17-0355	\$9.95	
20. Check Valve	50-8122	\$13.95	
21. Hose, Vent Breather, Epichlorohydrin Polymer	17-0339	\$9.95	
22. Clamp Spring, $\frac{9}{16}$ "	50-8001	\$0.95	
23. Breather hardware for 4 $\frac{1}{8}$ " bore	31-2104	\$46.95	
(Not included in air cleaner kit)			
24. Clamp, Spring, .660"	50-8076-S	\$0.95	
25. Hose one	50-8263-S	\$14.95	
26. Hose two	50-8262-S	\$17.95	
27. Clamp, Spring, .440"	50-8143-S	\$0.95	
28. Hose, Cut To Size, 1875" x 6", Black, Rubber	50-8142AS	\$6.95	

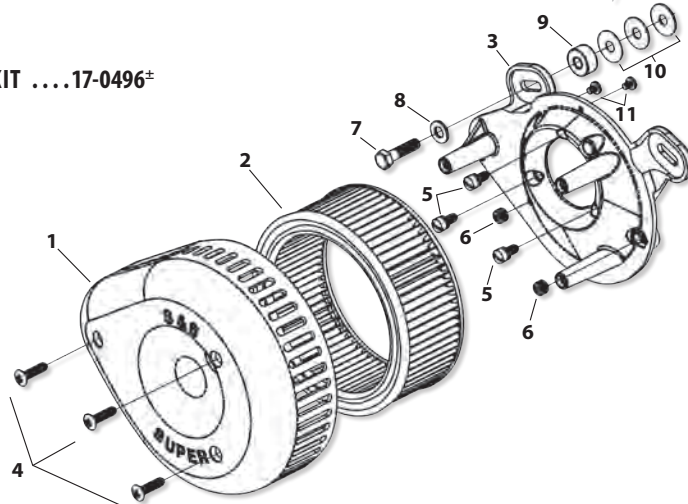
(N/S) = Not Shown

NOTE: Breather hardware not included in these air cleaner kits.

**1995½-'99 BIG TWIN
TEARDROP AIR CLEANER KIT . . . 17-0498±
SLASHER AIR CLEANER KIT 17-0497±**



**S&S 4¼" BORE ENGINES
SLASHER AIR CLEANER KIT 17-0496±**









± ⚠️ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



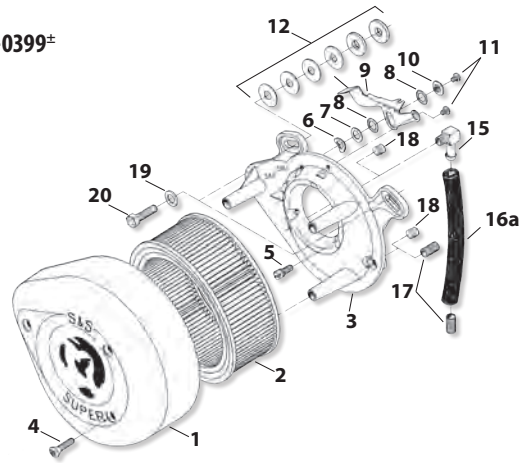
SUPER E & G AIR CLEANERS REPLACEMENT PARTS

FOR 1984-'99 BIG TWINS

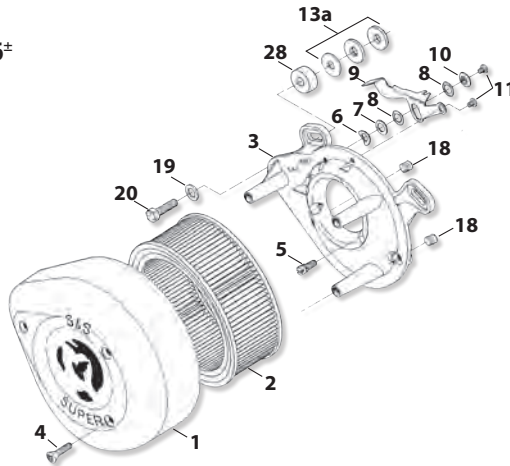
1. Air cleaner cover –			
Chrome	17-0378 ±	\$171.95	
Gloss Black.....	170-0384A	\$171.95	
Slasher.....	17-0004 ±	\$171.95	
2. Element, pleated.....		106-4722	\$26.95
3. Backplate			
BT 1993-'99.....	 17-0336	\$113.95	
BT 1984-'92, S&S 4½" bore Manufactured			
Prior to 1-1-03	17-0380	\$113.95	
4½" Bore – Manufactured			
After 1-1-03	 17-0387	\$113.95	
4. Cover screw 1305 (each).....		50-0072	\$4.95
3 pack.....	50-1052	\$5.95	
10 pack.....	50-0094	\$10.95	
Black 902.....	50-0310-S	\$6.95	
3 pack.....	50-0310	\$12.95	
TÜV style (each).....	50-0347-S	\$4.95	
5. Backplate screw, Zinc (each).....		106-2084	\$4.95
10 pack.....	106-2105	\$9.95	
6. Fast idle friction washer (each).....		50-7035	\$4.95
10 pack.....	50-7058	\$8.95	
7. Fast idle steel washer (each).....		50-7037	\$4.95
10 pack.....	50-7061	\$5.95	
8. Fast idle nylon washer (each).....		50-7036	\$4.95
10 pack.....	50-7060	\$5.95	
9. Fast idle lever.....		 17-0329	\$11.95
10. Fast idle brass washer (each).....		50-7007 ±	\$4.95
10 pack.....	50-7010 ±	\$14.95	
11. Fast idle lever screw (one required for current backplate) (each).....		50-0041	\$4.95
10 Pack.....	50-0062	\$6.95	
12. Shim kit			
BT 1984-'92	17-0314	\$12.95	
<i>(Includes two each ⅜" x .018", ⅝" x .030", ⅜" x .048", ⅝" x .105", and four each ⅝" x .125")</i>			
BT 1993-'99.....	17-0464	\$19.95	
<i>(Includes two each ½" x .018", ½" x .030", ½" x .048", ½" x .105", and four each ½" x .125")</i>			
13. Shims			
a. BT 1984-'92, S&S 4½" Bore			
⅝" x .018" (each).....	50-7038	\$4.95	
⅝" x .030" (each).....	50-7039	\$4.95	
⅝" x .048" (each).....	 50-7040	\$4.95	
⅝" x .105" (each).....	50-7041	\$4.95	
⅝" x .125" (each).....	50-7042	\$4.95	
b. BT 1993-'99			
⅝" x .025" (each).....	50-7113	\$4.95	
10 pack.....	50-7110	\$9.95	
⅝" x .050" (each).....	50-7114	\$4.95	
10 pack.....	50-7111	\$10.95	
⅝" x .075" (each).....	50-7115	\$4.95	
10 pack.....	50-7112	\$13.95	
14. Elbow fitting (each).....		50-8110	\$23.95
15. Breather fitting (each).....		17-0350	\$6.95
2 pack.....	17-0355	\$9.95	
16. Crankcase breather hose			
a. BT 1984-'92.....	17-0113	\$4.95	
b. BT 1993-'99.....	 17-0339	\$9.95	
17. Vent hose connector.....		50-8111	\$4.95
18. Backplate plug ⅜"-27 (each).....		50-8331A	\$4.95
10 pack.....	50-1015	\$12.95	
19. Flatwasher – 5/16" x ⅛" 6320, 70907-07, 6016, 6702.....		50-7034	\$0.95
20. Mounting bracket bolt – ⅝"-18 x 1¼"			
1984-'92, S&S 4½" Bore.....	50-0110	\$0.95	
21. Wire tie (N/S).....		50-8003	\$4.95
22. Hose clamp (N/S).....		50-8002	\$4.95
23. Air cleaner assembly			
<i>Includes: Chrome cover, backplate, filter element, and hardware kit.</i>			
BT 1984-'92.....	17-0399 ±	\$283.95	
BT 1993-'99.....	17-0404 ±	\$283.95	
BT 1984-'05, 4½" Bore.....	17-0416 ±	\$283.95	
24. Mounting hardware package (N/S)			
<i>Includes all parts needed to install following style air cleaners:</i>			
BT 1984-'92.....	17-0458 ±	\$52.95	
BT 1993-'99.....	17-0436 ±	\$58.95	
BT 1984-'05, 4½" Bore.....	17-0460 ±	\$28.95	
25. Screw vent fitting, BT 1993-'99.....		17-0347	\$19.95
26. Screw, air cleaner to head.....		17-0346	\$7.95
27. Washer, .520" silicone coated steel, BT 1993-'99 (each).....		50-7055	\$4.95
10 pack.....	50-7057	\$14.95	
28. Shim, .850" x .325" x .400"			
S&S 4½" Bore.....	50-7027	\$6.95	
29. Spring clamps (N/S).....		 50-8001	\$0.95
30. Thread insert ½"-13 to ⅜"-18 (N/S) (Used on 1992 big twins).....		50-8151	\$8.95
31. Breather conversion kit BT (N/S).....		17-0486	\$41.95
<i>Convert early S&S air cleaners for 1993-'99 BT with o-ring breather fittings to new style breather hardware.</i>			

(N/S)= Not Shown

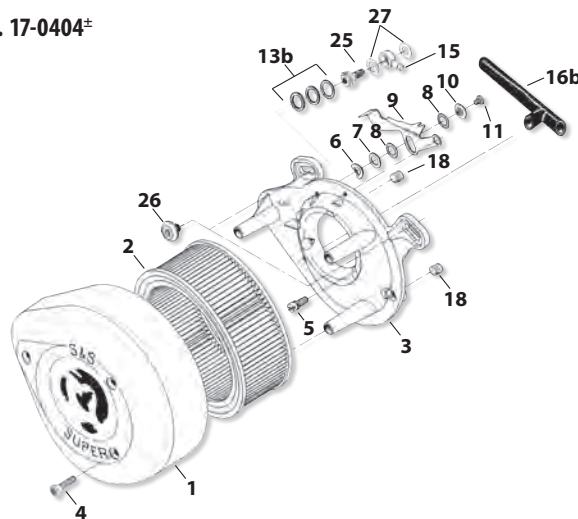
1984-'92 BIG TWIN 17-0399±



1984-'05 BIG TWIN
4 1/8" BORE 17-0416±



1993-'99 BIG TWIN 17-0404±

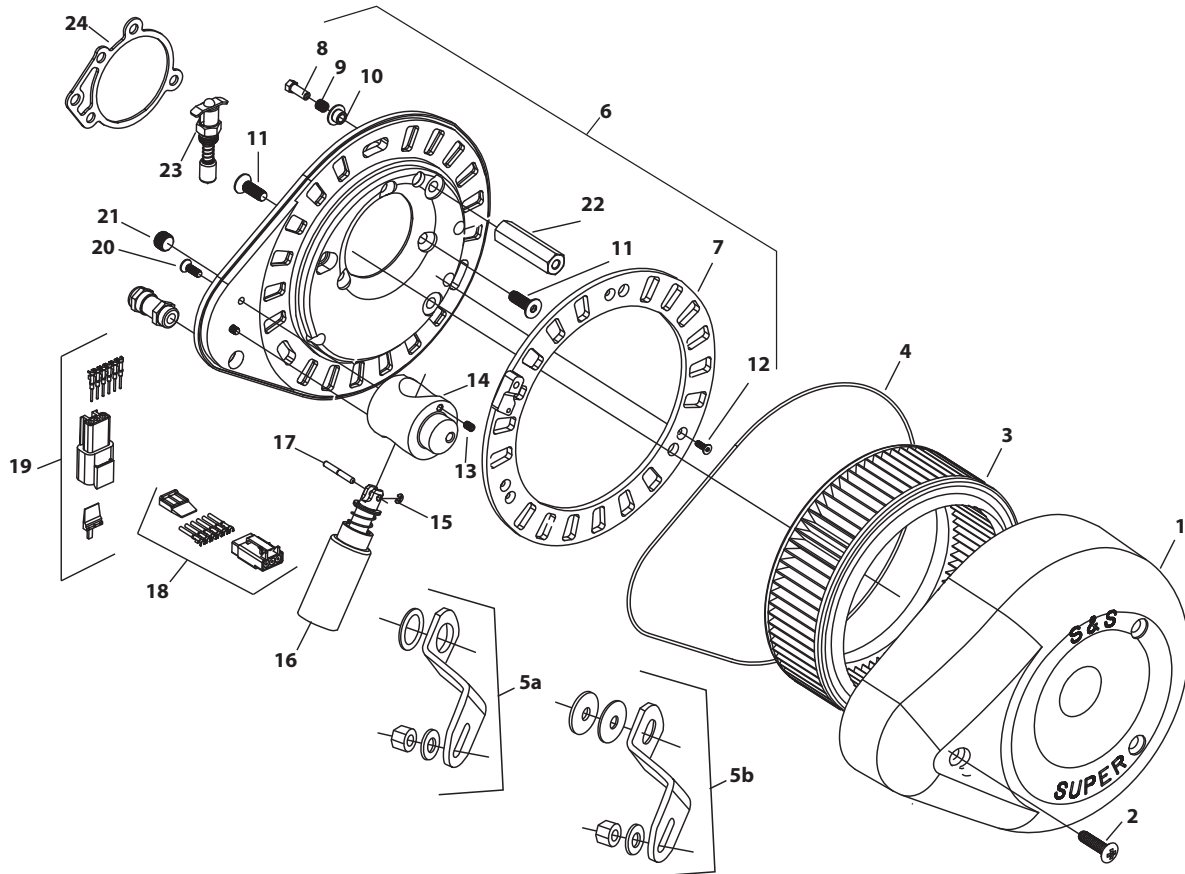


CARB EXEMPT AIR CLEANER REPLACEMENT PARTS

FOR S&S SUPER E OR G CARBS

1. Cover, air cleaner teardrop, chrome.....	17-0378[±]	\$171.95	11. Screw, FHSC, ¼-20 x ¾" zinc (each)	50-0491	\$4.95
2. Screw, phil/oval head ¼ - 20 x 1 1305 (each)	50-0072	\$4.95	12. Screw, FHSC 5-40 x ¾" stainless (each)	106-1098	\$4.95
3 pack	50-1052	\$5.95	13. Screw, SHS set cup point, 8-32 x ¼" stainless (each)	106-1648	\$4.95
10 pack	50-0094	\$10.95	14. Housing, solenoid, aluminum	N/A	-
3. Filter, air, sealed air cleaner	N/A	-	15. Retaining ring, external E-type ¾ shaft stainless	106-3391	\$4.95
4. O-ring, 7.613" x 7.753" x .070" Viton®	N/A	-	16. Solenoid assembly, pull dual coil 12v.....	N/A	-
5. Bracket Kit, head to backplate			17. Pin, dowel, grooved .094" x 1" stainless	106-3275	\$16.95
V111, V117, V124	106-5210	\$107.95	18. Connector, kit, style DTM, 3-position male	N/A	-
Includes:			19. Connector, kit, style DTM, 3-position female	N/A	-
Bracket, V111, V117, V124	17-0311	\$48.95	20. Screw, FHSC, 8-32 x ½", stainless 1601 (each)	50-0353-S	\$0.95
Washer, Flat, .281" x .625" x .080", Zinc, Steel			21. Plug, SH pipe, ⅛-27, NPT, zinc 45830-48 (each)	50-8331A	\$4.95
6194, 6245, 6703, 6736, 6228W, 6192 (each)	50-7021	\$4.95	10 pack	50-1015	\$12.95
Shim, .325" x 1" x .048", Stainless Steel	50-7040	\$4.95	22. Stand-off	N/A	-
Shim, .325" x 1" x .105", Stainless Steel	50-7041	\$4.95	23. Enrichment device	11-2084[±]	\$29.95
Nut, Lock, HH, Gr5, ¼-20	N/A	-	24. Gasket, backplate (each)	106-1724	\$5.95
6. Backplate Assembly (Backplate assembly includes #7-22)	N/A	-	10 pack	106-2328	\$29.95
7. Valve assembly, backplate, sealed air cleaner	N/A	-			
8. Pin, guide, stainless (each)	17-0086	\$12.95			
9. Spring, 5.2 lb/in .24" OD x .208" ID x .25 stainless (each)	50-0489	\$12.95			
10. Washer, flat with .18" step .192" x .500" x .030" (each)	106-5772	\$14.95			

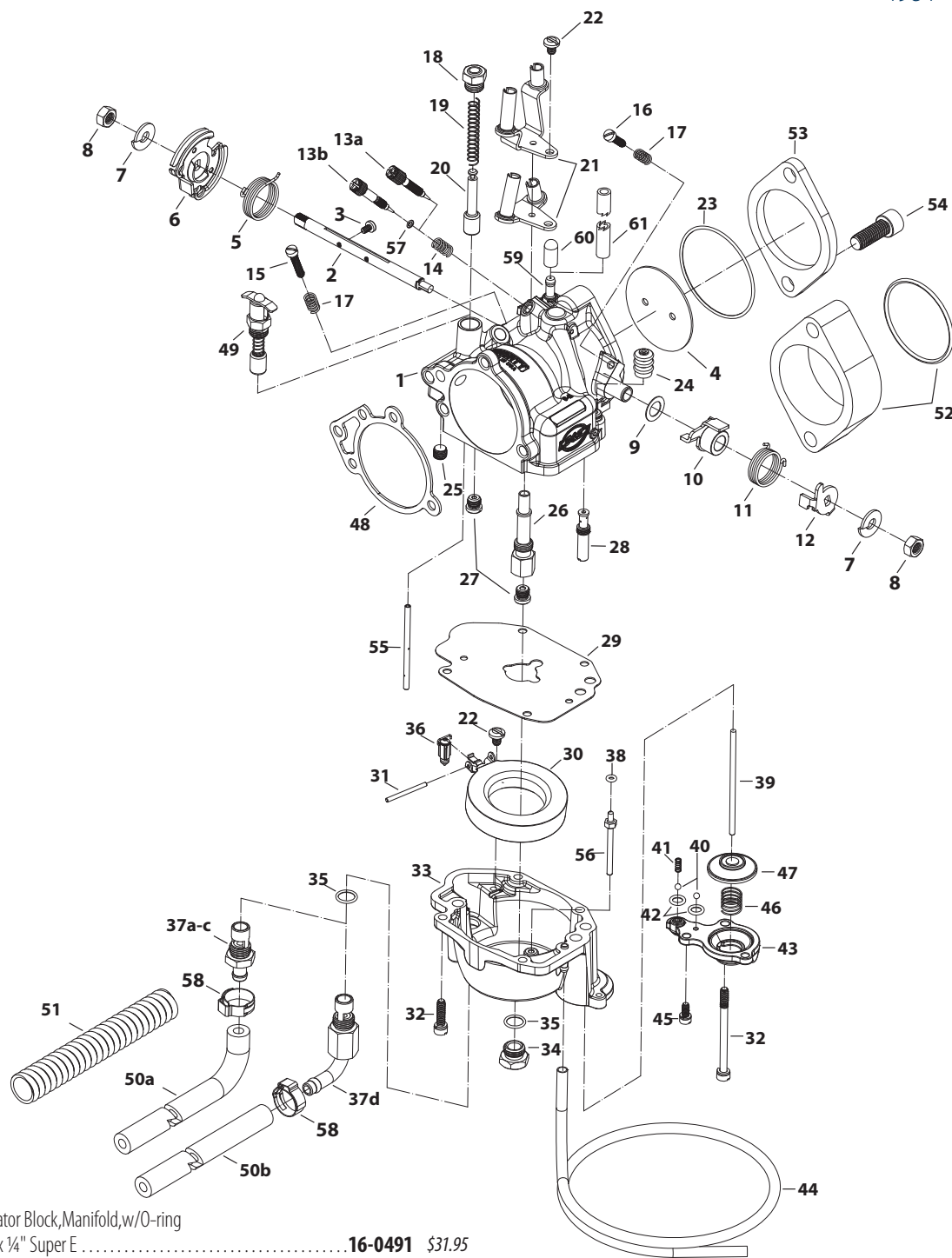
N/A = No longer available



All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

SUPER E & G CARBURETOR REPLACEMENT PARTS

1. Carb body assembly			
1 7/8" Super E	11-2381 [±]	\$269.95	
2 1/16" Super G	11-2391 [±]	\$282.95	
2. Throttle shaft			
1 7/8" Super E — Includes two plate screws	11-2383	\$27.95	
2 1/16" Super G — Includes two plate screws	11-2483	\$24.95	
3. Throttle plate screw 11-2045- (two required) (each)	50-0055-S	\$4.95	
10 pack	50-0064	\$11.95	
4. Throttle plate			
1 7/8" Super E	11-2055	\$13.95	
2 1/16" Super G	11-2355	\$18.95	
5. Throttle return spring (each)	11-2382	\$4.95	
5 Pack	11-3502	\$9.95	
6. Throttle spool	11-2385	\$19.95	
7. Throttle shaft lock washer (two required)	50-7031	\$4.95	
8. Throttle shaft nut (two required) (each)	11-2350	\$4.95	
5 pack	11-2363	\$9.95	
9. Throttle shaft nylon washer (each)	50-7050	\$4.95	
10 pack	50-7072	\$9.95	
10. Pump actuator lever	11-2376	\$11.95	
11. Actuator spring (each)	11-2375-S	\$4.95	
5 pack	11-3501	\$11.95	
12. Pump actuator arm	11-2377	\$5.95	
13. Idle mixture screw			
a. Idle mixture screw, brass (each)	11-2354 [±]	\$11.95	
5 pack	11-2378 [±]	\$45.95	
b. Idle mixture screw only			
each	110-0003	\$13.95	
Idle mixture screw w/500-0036 o-ring			
each	110-0068 [±]	\$14.95	
5 pack	110-0069 [±]	\$60.95	
14. Idle mixture screw spring (each)	11-2052	\$0.95	
10 Pack	11-2060	\$9.95	
15. Idle speed screw (each)	50-0038	\$4.95	
10 Pack	50-0150	\$10.95	
16. Pump adjustment screw (each)	50-0039	\$4.95	
10 Pack	50-0146	\$7.95	
17. Idle speed/pump adjuster spring (each)	11-2048	\$0.95	
10 Pack	11-2053	\$9.95	
18. Plunger nut (each)	11-2344 [±]	\$5.95	
5 pack	11-2372 [±]	\$15.95	
19. Plunger spring (each)	11-2340	\$4.95	
10 Pack	11-2359	\$12.95	
20. Fast idle plunger	11-2343	\$15.95	
21. Cable guide assembly with screw			
Use with butterfly style cables	11-2339P	\$30.95	
Use with constant velocity style cables	11-2338P	\$30.95	
22. Cable clamp/float pin screw (each)	50-0041	\$4.95	
10 Pack	50-0062	\$6.95	
23. O-ring			
1 7/8" Super E (each)	50-8016	\$4.95	
10 Pack	50-8094	\$12.95	
2 1/16" Super G (each)	50-8015	\$4.95	
10 Pack	50-8093	\$12.95	
24. Bellows seal (each)	11-2266	\$6.95	
5 pack	11-2279	\$20.95	
25. Bowl vent plug (each)	50-0105	\$4.95	
10 Pack	50-0151	\$8.95	
26. Main discharge tube	11-2085 [±]	\$14.95	
27. Main jet — See PAGE 60			
28. Intermediate Jets — See PAGE 60			
Series #94 fits all Super 1 7/8", 2 1/16", 2 1/4" gas carburetors.			
29. Bowl gasket (each)	11-2386	\$5.95	
10 Pack	11-2387	\$30.95	
30. Float	11-2187	\$24.95	
31. Float pin (each)	11-2369	\$4.95	
5 pack	11-2370 [±]	\$9.95	
32. Bowl screw			
10-24 x 3/4" — Three required (each)	50-0034	\$4.95	
10 Pack	50-0063	\$16.95	
10-24 x 2 3/8" — One required (each)	50-0040	\$4.95	
10 Pack	50-0061	\$11.95	
33. Carb bowl (only)	11-2388 [±]	\$84.95	
Carb bowl complete assembly	11-2388P	\$185.95	
34. Bowl plug (each)	11-2090	\$5.95	
5 pack	11-2092 [±]	\$14.95	
35. Seat o-ring* (required with part #11-2465 only when replaces 360° style fuel inlet.)			
each	50-8009	\$4.95	
10 Pack	50-8095	\$15.95	
36. Needle			
1 7/8" Super E & 2 1/16" Super G	11-2195 [±]	\$15.95	
Racing only	11-2197 [±]	\$68.95	
37. Seat — Includes O-ring #35			
(Replaces obsolete seats 11-2347 and 11-2348)			
a. 1 7/8" E & 2 1/16" G (Uses part #11-2195 [±] needle)	11-2465	\$15.95	
b. Racing only (Uses part #11-2197 [±] needle)	N/A	—	
c. Racing only — threaded fuel inlet (6AN .157" ID)			
(Uses part #11-2195 [±] needle)	11-2395	\$36.95	
d. Permeation Compliant fuel inlet seat Super E or G			
(Uses part #11-2195 [±] needle)	106-2011	\$28.95	
38. Ejector nozzle o-ring (each)	50-8011	\$4.95	
10 Pack	50-8096	\$11.95	
39. Pump pushrod (each)	11-2373	\$8.95	
5 pack	11-2393	\$28.95	
40. Check ball — (two required) (each)	50-8090	\$4.95	
10 Pack	50-8125	\$7.95	
41. Check ball spring (each)	11-2374	\$4.95	
5 pack	11-2392	\$11.95	
42. Pump cap o-ring — (two required) (each)	50-8012	\$4.95	
10 Pack	50-8100	\$13.95	
43. Pump cap assembly	11-2389	\$30.95	
44. Overflow hose per 24" 27369-76 (each)	19-0262-S	\$7.95	
5 pack	19-0263	\$29.95	
45. Pump cap screw 8-32 — (two required) (each)	50-0042	\$4.95	
10 Pack	50-0098	\$7.95	
46. Diaphragm spring (each)	11-2275	\$4.95	
10 Pack	11-2278	\$9.95	
47. Diaphragm	11-2282	\$17.95	
48. Gasket, backplate (each)	106-1724	\$5.95	
10 Pack	106-2328	\$29.95	
49. Enrichment device (Use with air horn only)	11-2084 [±]	\$29.95	
50. Fuel line"			
a. Fuel line With 90° bend*19" (Use with part #11-2465)	N/A	—	
b. Permeation Compliant straight, 311" x .563" x 17.5"			
(Use with part #106-2011, 90° seat)	190-0001	\$10.95	
51. Fuel line insulator — 12" ^{USA} 1,2,3	19-0172	\$31.95	
52. Spacer, Kit, w/O-ring			
1 7/8" x 1"	16-0057*	\$65.95	
2 1/16" x 1"	16-0357*	\$78.95	
2 1/4" x 1"	16-0157*	\$75.95	
*Use with 1" Spacer Block	16-0058	\$150.95	



- 53. Insulator Block,Manifold,w/O-ring
 - 1 7/8" x 1/4" Super E **16-0491** \$31.95
 - 1 7/8" x 3/8" Super E **16-0497** \$31.95
 - 2 1/8" x 1/4" Super G **16-0492** \$31.95
 - 2 1/8" x 3/8" Super G **16-0498** \$31.95
 - 2 1/4" x 1/4" Super D **16-0499** \$45.95
- 54. Screw
 - 1" x 3/8" -16 (each) **50-0161** \$0.95
 - 1 1/4" x 3/8" -16 (each) **50-0162** \$4.95
 - 10 Pack **50-0177** \$12.95
 - 1 3/8" x 3/8" -16 (each) **50-0163** \$5.95
 - 5 pack **50-0178** \$13.95
 - 2" x 3/8" -16 (each) **50-0164** \$5.95
 - 5 pack **50-0185** \$16.95
- 55. Tube, Fast Idle Pick-Up, Super E/G, .125" x 2.350", Brass **0381F±** \$7.95
- 56. Tube, Ejector Nozzle, Super E/G, Flared, Brass **106-6124±** \$11.95
- 57. O-ring, 3mm x 5mm x 1mm (each) **500-0036** \$4.95
- 10 Pack **500-0148** \$9.95

- 58. Clamp, 5/8" - 7/8" **50-8002** \$4.95
- 59. Hose, Fitting straight, .040" **16-0134** \$5.95
- 60. VOES Fitting Cap **50-8372** \$4.95
- 61. VOES/Oil Return Hose **19-0395** \$5.95

± WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov

*360° banjo style fuel inlet fitting used on early S&S E&G carbs is no longer available. Replace with one of the inlet/seat fittings listed under #37 on this page. We highly recommend inlet/seat #106-2011.

→ CARBURETOR REBUILD KITS PAGE 60

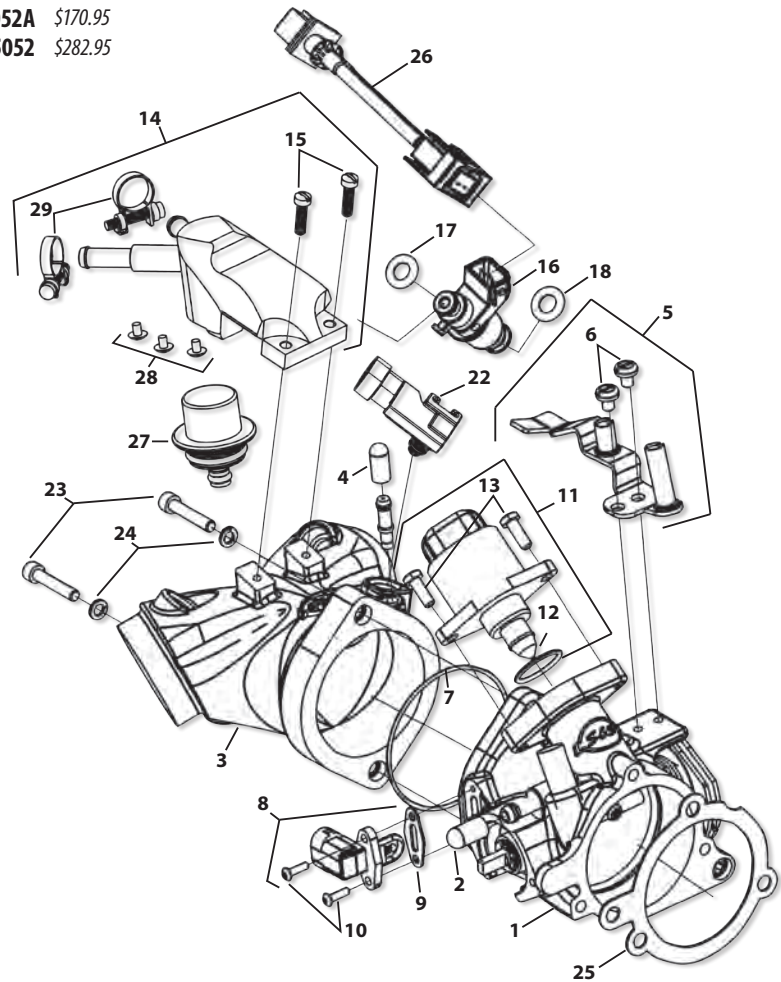


SINGLE BORE EFI THROTTLE BODY & RELATED REPLACEMENT PARTS

1. Throttle body 52mm 1995-'99.....	16-5101	\$394.95
58mm 1995-'99.....	106-3954	\$394.95
2. Cap, canister purge (each).....	50-8266-S	\$7.95
3. Manifold (See PAGE 57)		
4. Cap, rubber, manifold, fitting.....	50-8372	\$4.95
5. Throttle cable guide packet with hardware.....	55-5084	\$39.95
6. Screw, cable guide & air cleaner backplate (each).....	50-0041	\$4.95
10 Pack.....	50-0062	\$6.95
7. O-ring, throttle body to manifold.....	50-7967-S	\$4.95
8. Intake air temperature sensor packet with hardware 27270-95.....	55-5041±	\$20.95
9. Gasket, IAT.....	16-5009-S	\$6.95
10. Screw, M3, IAT.....	50-0357-S	\$0.95
11. Idle air control motor SS EFI packet with hardware - 1995-'99 27628-01, 27628-01A.....	55-5085±	\$102.95
12. O-ring, IAC.....	50-8149-S	\$4.95
13. Screw, 10-24, IAC, 1995-'99 each.....	50-0356-S	\$0.95
14. Fuel rail kit 1995-'99 (Fuel inlet tube included) (N/S).....	16-5207	\$201.95
15. Screw, rail, 1995-'99 (each).....	50-0039	\$4.95
10 Pack.....	50-0146	\$7.95
16. Fuel injector 1 pack.....	55-5052A	\$170.95
2 pack.....	55-5052	\$282.95

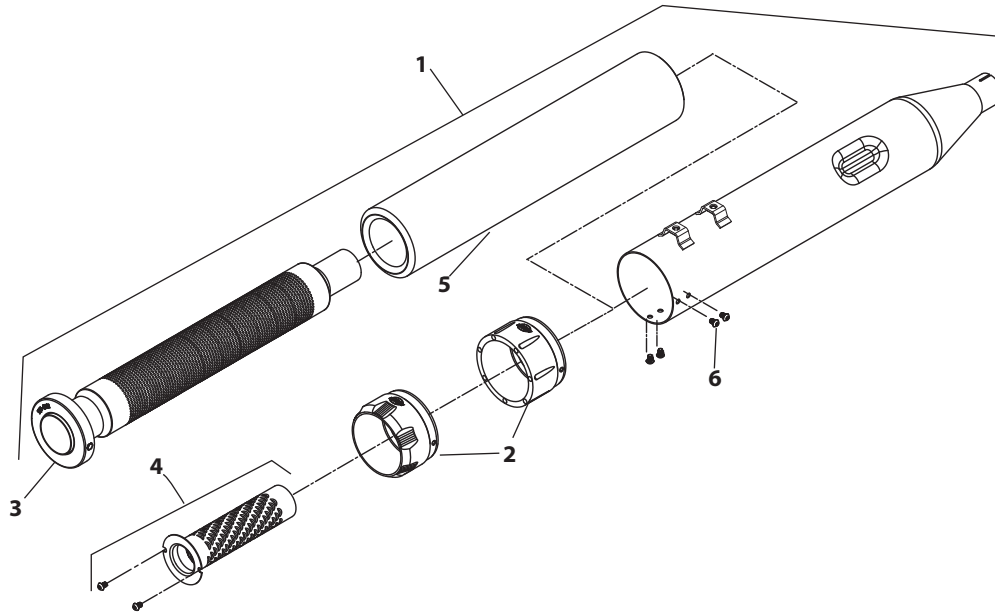
17. O-ring, injector top, black.....	50-8264-S	\$5.95
18. O-ring, injector bottom, orange.....	50-8265-S	\$5.95
20. Screw, TP sensor & fuel rail (each).....	50-0358-S	\$0.95
23. Screw, throttle body to manifold (each).....	50-0359-S	\$0.95
24. Washer, lock, .200" x .334" x .047", Stainless Steel Throttle body to manifold.....	50-7000	\$0.95
25. Gasket, backplate 52mm (each).....	106-1724	\$5.95
10 Pack.....	106-2328	\$29.95
58mm (each).....	106-4662	\$7.95
26. Harness, injector adapter kit, 1995-'99.....	55-5074	\$21.95
27. Pressure regulator, 1995-'99.....	16-5297	\$94.95
28. Screw, pressure regulator, 6-32 x 3/16", 1995-'99.....	50-0279-S	\$0.95
29. Clamps, Hose, 1/2" diameter, smooth, 1995-'99.....	50-8352	\$5.95
30. Plug, assembly, MAP sensor hole, 1995-'99 (N/S).....	50-8350	\$15.95
31. O-ring, MAP plug, 1995-'99 (N/S) (each).....	50-8133-S	\$4.95

(N/S)= Not Shown



Mk45 4.5" MUFFLER REPLACEMENT PARTS

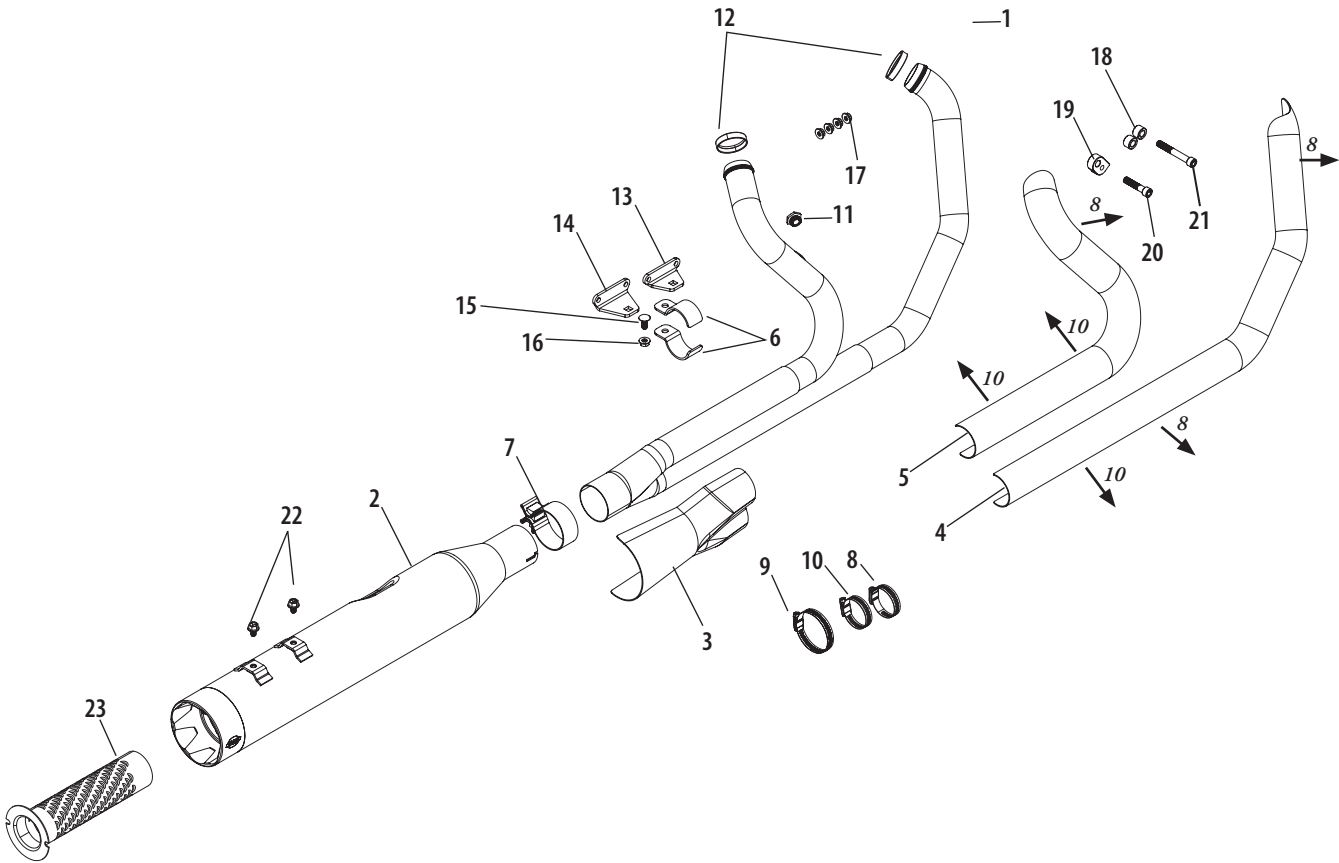
- 1. 4.5" Muffler Assembly
 - Left, Chrome **551-0020**± \$304.95
 - Right, Chrome **551-0021**± \$304.95
 - Left, Black **551-0022** \$372.95
 - Right, Black **551-0023** \$377.95
- 2. End cap
 - Thruster, Chrome **550-0634A**± \$174.95
 - Thruster, Highlighted Machined **550-0629A** \$159.95
 - Tracer, Chrome **550-0636A**± \$174.95
 - Tracer, Highlighted Machined **550-0632A** \$159.95
- 3. Main Baffle Assembly, 4.5" Muffler **551-0007** \$75.95
- 4. dB reducer **551-0026** \$25.95
- 5. Insulation, 4.5" Muffler **551-0003** \$27.95
- 6. Button Head Cap Screw, Stainless, ¼"-20X¾" **500-0441** \$0.95
- 7. Hardware Kit, Muffler Clamps And Screws (N/S) **551-1443** \$9.95



± ⚠️ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

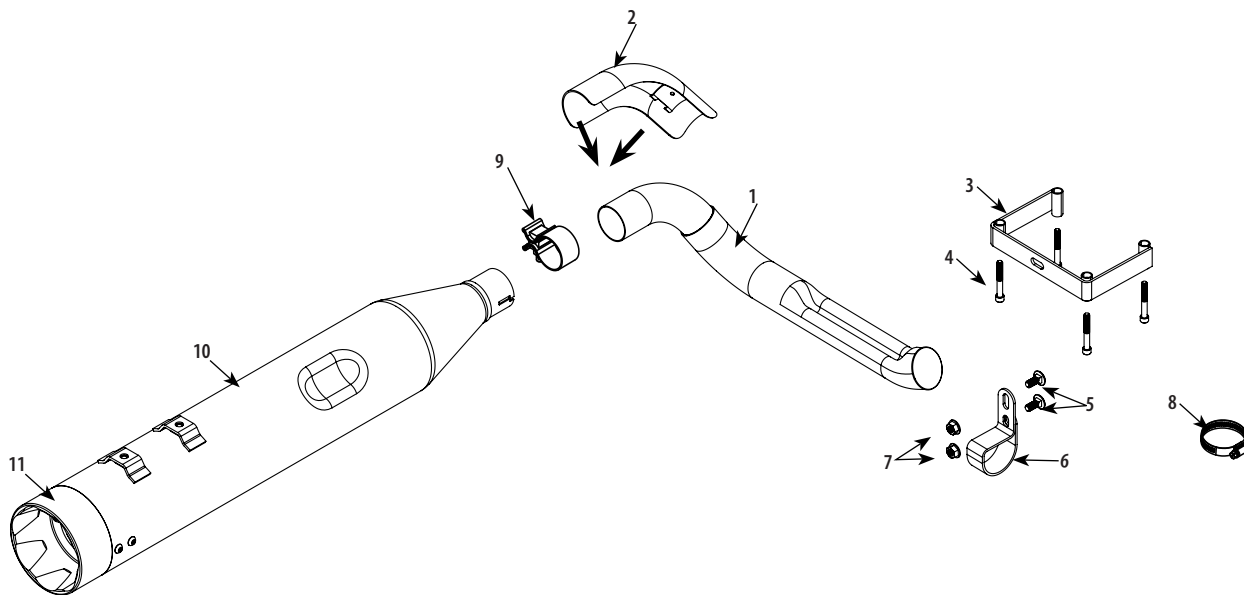
SIDEWINDER® 2:1 EXHAUST REPLACEMENT PARTS

- | | | | | | |
|--|-------------------|----------|--|------------------|---------|
| 1. Header, Assembly, 2 into 1, Sidewinder™, Weldment, 1995-'16 Touring Models | 551-0705 | \$304.95 | 12. Gasket, exhaust, tapered, stainless steel, 1984-up bt, 1986-up xl 65324-83B, 65324-83A | 106-5029 | \$4.95 |
| 2. Muffler, Street Legal | | | 13. Bracket, header mount, 2:1, powdercoated, black, 2007-'16 touring models | 551-0719 | \$15.95 |
| Chrome | 551-0529C± | \$892.95 | 14. Bracket, header mount, 2:1, powdercoated, black, 1995-'06 touring | 551-0786 | \$15.95 |
| Black | 551-0530C± | \$892.95 | 15. Bolt, carriage, 5/16-18 x 3/4" | 500-0555 | \$0.95 |
| 3. Collector, heat shield, | | | 16. Nut, HSFH, 5/16-18 unc-2b x .283", Zinc, steel | 50-5053-S | \$0.95 |
| Chrome | 551-0379± | \$116.95 | 17. Nut, HSFH, 5/16-24 unf-2b x .283", Zinc, steel 7593 | 50-5025-S | \$0.95 |
| Black | 551-0381± | \$115.95 | 18. Washer, Spacer, Floor Board | 551-0401 | \$8.95 |
| 4. Heat shield, front, 2:1, Sidewinder®, chrome, 1995-'16 touring models | | | 19. Spacer, floor board, powdercoated, black | 551-0399 | \$38.95 |
| Chrome | 551-0709± | \$215.95 | 20. Screw, shc, 3/8-16 x 1-3/4", zinc, steel | 500-0789 | \$1.95 |
| Black | 551-0715± | \$262.95 | 21. Screw, shc, 3/8-16 x 2-3/4", zinc, steel | 500-0790 | \$1.95 |
| 5. Heat shield, rear, 2:1, Sidewinder®, chrome, 1995-2016 touring models | | | 22. Screw, hh, flg, serrated, 5/16-18 x 1/2" | 500-0744 | \$0.95 |
| Chrome | 551-0712± | \$157.95 | 23. dB reducer | 551-0026 | \$25.95 |
| Black | 551-0717± | \$188.95 | | | |
| 6. Clamp, header mount, 2:1, chrome plate, mild steel, 11 gauge, M8 2017 touring | 551-0361 | \$7.95 | | | |
| 7. Clamp, muffler, band style, 2.5" | 551-0135 | \$12.95 | | | |
| 8. Clamp, hose, worm drive, SAE #20 (qty. 3) | 551-0527 | \$2.95 | | | |
| 9. Clamp, hose, worm drive, SAE #40 | 551-0402 | \$3.95 | | | |
| 10. Clamp, hose, worm drive, SAE #24 (qty. 3) | 500-0791 | \$1.95 | | | |
| 11. Adapter, oxygen sensor, 12mm to 18mm, stainless steel | 550-0375 | \$11.95 | | | |



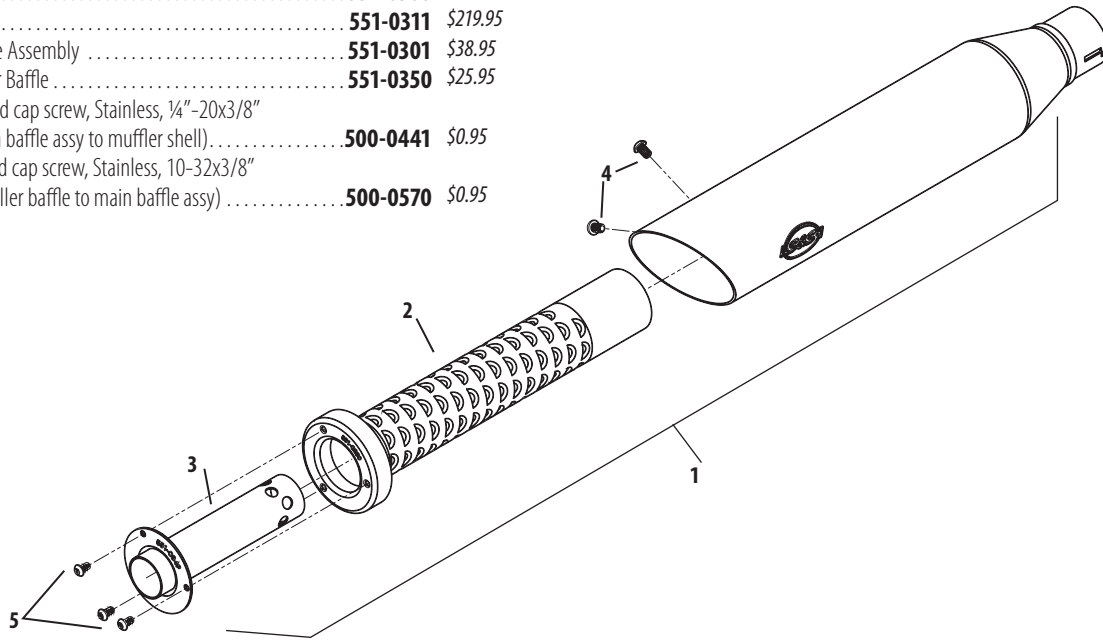
SHADOW PIPE REPLACEMENT PARTS

1. Tube, crossover, power tune dual, Weldment,
1995-2008 Touring (1 Req) **551-0996** \$64.95
2. Shield, left, power tune dual, 1995-2016 Touring (1 Req)
Chrome **551-0115** \$52.95
Black **551-0116** \$61.95
3. Bracket, Assembly, Transmission, Pan, Power Tune Dual,
1995-2008 Touring (1 Req) **551-0126** \$41.95
4. Screw, SHC, 1/4-20 x 17/8", Zinc Plated (4 Req) **500-0641** \$0.95
5. Bolt, carriage, 5/16"-18 x 3/4" **500-0555** \$0.95
6. Clamp, P-Style, Crossover, Power Tune Dual Header,
1995-2008 Touring (1 Req) **551-0120** \$10.95
7. Nut, Flanged, Serrated, 5/16"-18 (2 Req) **50-5053-S** \$0.95
8. Clamp, Hose, Worm Drive, #20 (2 Req) **551-0527** \$2.95
9. Band style clamp **551-0977** \$6.95
10. Muffler shell
Chrome **551-0992** \$314.95
Black **551-0993** \$320.95
11. End Cap **551-0994** \$146.95



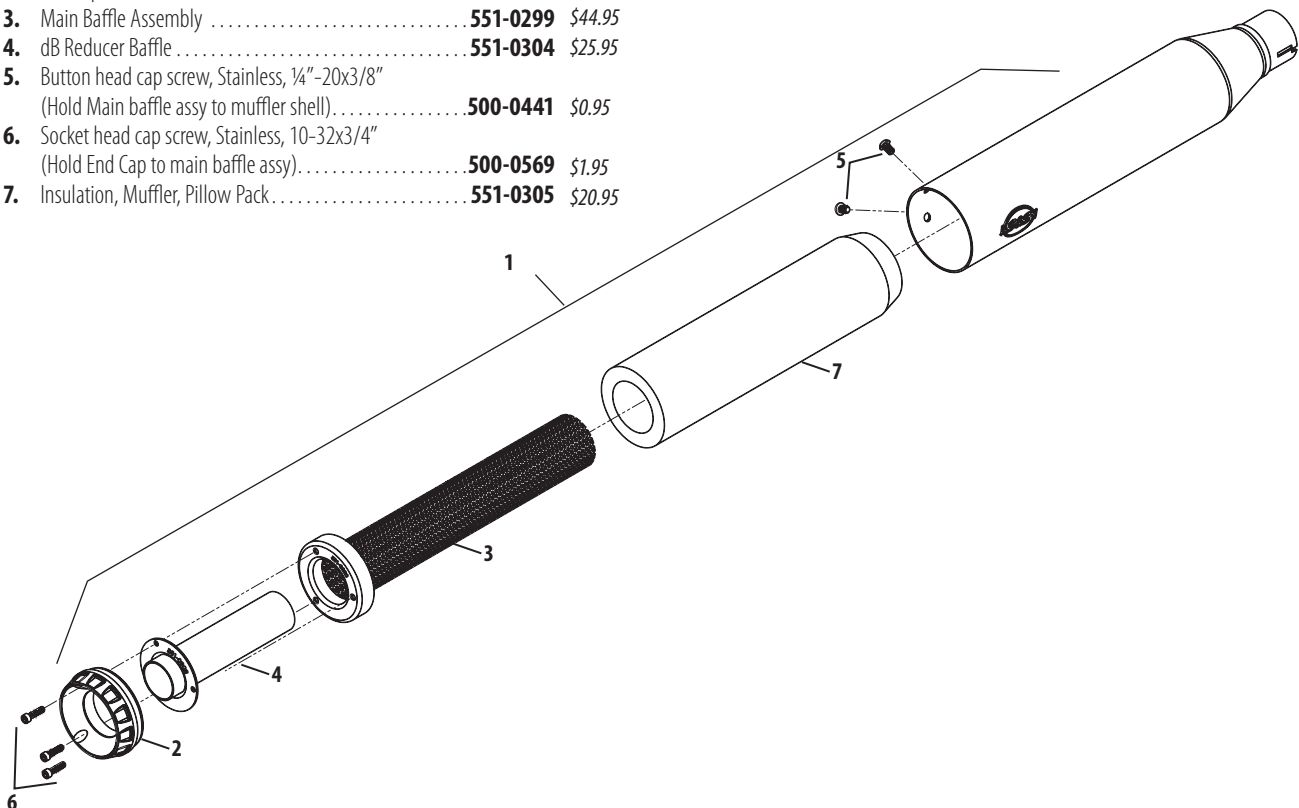
SLASH CUT REPLACEMENT PARTS FOR DYNA® MODELS

1. Slash Cut Muffler Assembly, Front or Rear
 Chrome **551-0308** \$224.95
 Black **551-0311** \$219.95
2. Main Baffle Assembly **551-0301** \$38.95
3. dB Reducer Baffle **551-0350** \$25.95
4. Button head cap screw, Stainless, 1/4"-20x3/8"
 (Hold Main baffle assy to muffler shell)..... **500-0441** \$0.95
5. Socket head cap screw, Stainless, 10-32x3/8"
 (Hold db killer baffle to main baffle assy) **500-0570** \$0.95



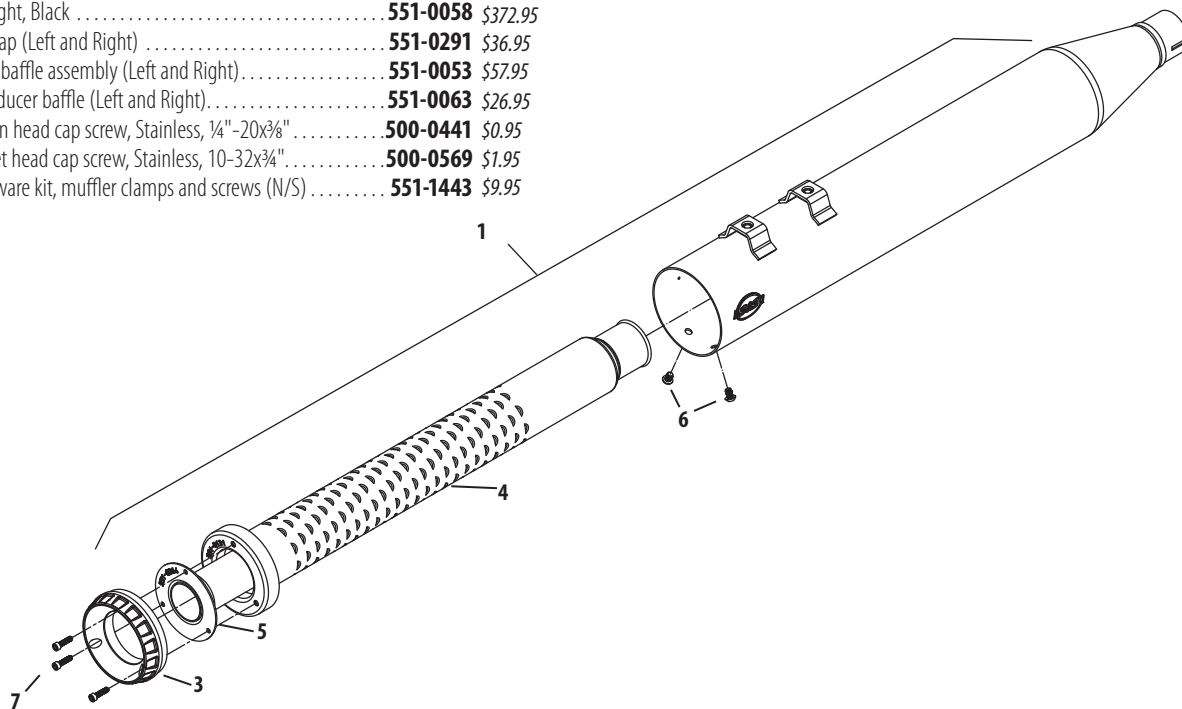
GRAND NATIONAL® REPLACEMENT PARTS FOR DYNA® MODELS

1. Muffler Assembly Front or Rear
 Grand National, Chrome..... **551-0314** \$319.95
 Grand National, Black..... **551-0317** \$319.95
2. End Cap **551-0292** \$26.95
3. Main Baffle Assembly **551-0299** \$44.95
4. dB Reducer Baffle **551-0304** \$25.95
5. Button head cap screw, Stainless, 1/4"-20x3/8"
 (Hold Main baffle assy to muffler shell)..... **500-0441** \$0.95
6. Socket head cap screw, Stainless, 10-32x3/4"
 (Hold End Cap to main baffle assy)..... **500-0569** \$1.95
7. Insulation, Muffler, Pillow Pack..... **551-0305** \$20.95



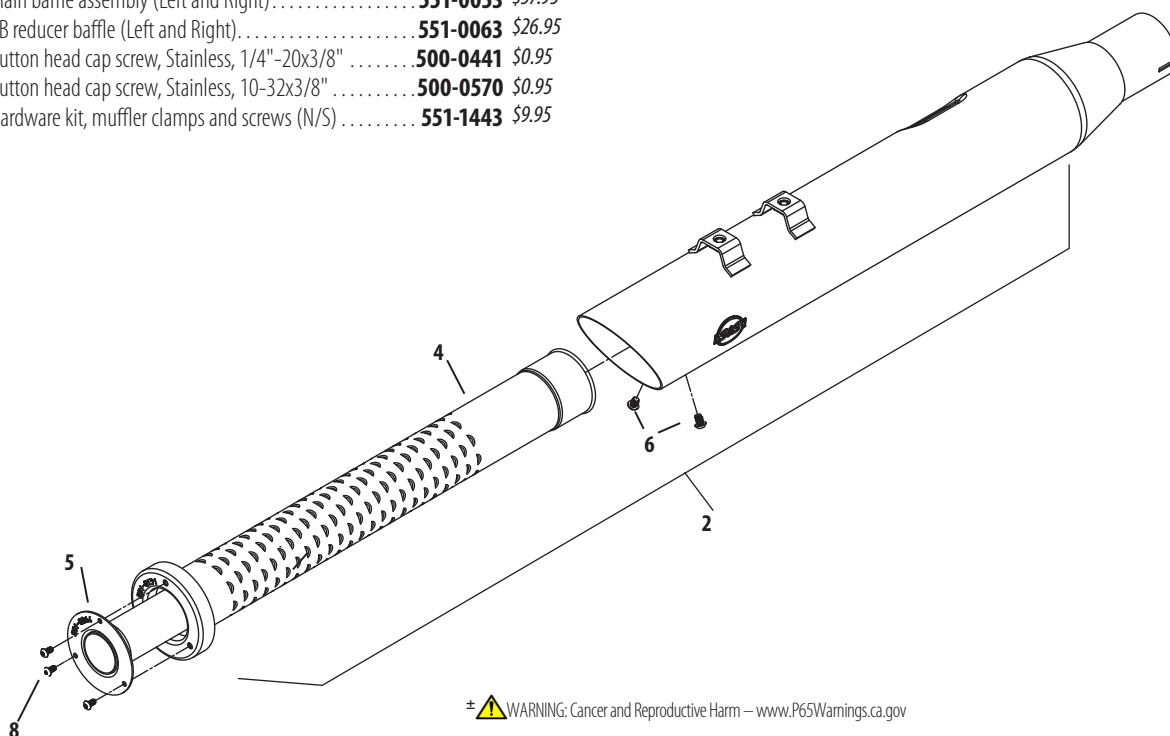
GRAND NATIONAL® 4" REPLACEMENT PARTS

- 1. 4" Muffler assembly with Grand National end cap
 - Left, Chrome..... **551-0055**± \$304.95
 - Right, Chrome..... **551-0056**± \$304.95
 - Left, Black..... **551-0057** \$367.95
 - Right, Black..... **551-0058** \$372.95
- 3. End cap (Left and Right)..... **551-0291** \$36.95
- 4. Main baffle assembly (Left and Right)..... **551-0053** \$57.95
- 5. dB reducer baffle (Left and Right)..... **551-0063** \$26.95
- 6. Button head cap screw, Stainless, ¼"-20x¾"..... **500-0441** \$0.95
- 7. Socket head cap screw, Stainless, 10-32x¾"..... **500-0569** \$1.95
- 9. Hardware kit, muffler clamps and screws (N/S)..... **551-1443** \$9.95



SLASH CUT 4" REPLACEMENT PARTS

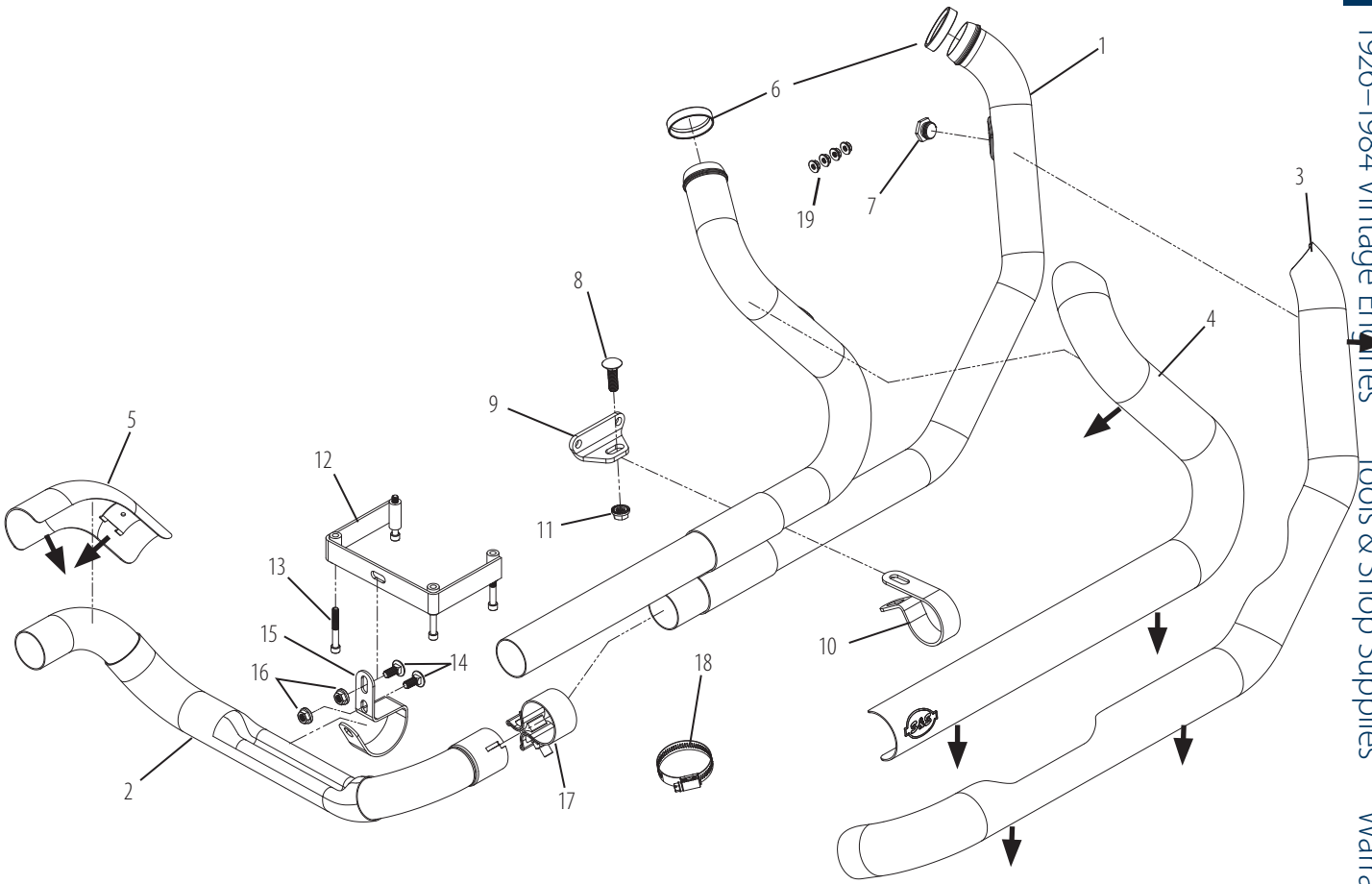
- 2. 4" Muffler assembly Slash Down
 - Left, Chrome..... **551-0059**± \$335.95
 - Right, Chrome..... **551-0060**± \$335.95
 - Left, Black..... **551-0061** \$409.95
 - Right, Black..... **551-0062** \$409.95
- 4. Main baffle assembly (Left and Right)..... **551-0053** \$57.95
- 5. dB reducer baffle (Left and Right)..... **551-0063** \$26.95
- 6. Button head cap screw, Stainless, 1/4"-20x3/8"..... **500-0441** \$0.95
- 8. Button head cap screw, Stainless, 10-32x3/8"..... **500-0570** \$0.95
- 9. Hardware kit, muffler clamps and screws (N/S)..... **551-1443** \$9.95



± ⚠️ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

POWER TUNE® DUAL HEADER REPLACEMENT PARTS

- | | | | | | |
|---|------------------|----------|--|------------------|---------|
| 1. Pipe, Header, Power Tune Dual, Weldment, 1999-2008 Touring (1 Req) | 551-0083 | \$262.95 | 10. Clamp, P-Style, Power Tune Dual, Side, 1995-2016 Touring (1 Req) | 551-0119 | \$10.95 |
| 2. Tube, Crossover, Power Tune Dual, Weldment, 1995-2008 Touring (1 Req) | 551-0077 | \$83.95 | 11. Nut, Flanged, Serrated, 3/8-16 (1 Req) | 500-0554 | \$0.95 |
| 3. Shield, Front, Power Tune Dual, 1995-2008 Touring (1 Req)
Chrome | 551-0091± | \$220.95 | 12. Bracket, Assembly, Transmission, Pan, Power Tune Dual, 1995-2008 Touring (1 Req) | 551-0126 | \$41.95 |
| Black | 551-0092 | \$272.95 | 13. Screw, SHC, 1/4-20 x 1 7/8", Zinc Plated (4 Req) | 500-0641 | \$0.95 |
| 4. Shield, Rear, Power Tune Dual, 1995-2016 Touring (1 Req)
Chrome | 551-0103± | \$188.95 | 14. Bolt, Carriage, 5/16-18 x 3/4" (2 Req) | 500-0555 | \$0.95 |
| Black | 551-0104 | \$236.95 | 15. Clamp, P-Style, Crossover, Power Tune Dual Header, 1995-2008 Touring (1 Req) | 551-0120 | \$10.95 |
| 5. Shield, Left, Power Tune Dual, 1995-2016 Touring (1 Req)
Chrome | 551-0115± | \$52.95 | 16. Nut, Flanged, Serrated, 5/16"-18 (2 Req) | 50-5053-S | \$0.95 |
| Black | 551-0116 | \$61.95 | 17. Clamp, Muffler, Band Style (1 Req) | 551-0028 | \$11.95 |
| 6. Gasket, Exhaust, Tapered, Stainless Steel, 1984-up bt, 1986-up xl 65324-83B, 65324-83A (2 Req) | 106-5029 | \$4.95 | 18. Clamp, Hose, Worm Drive, SAE #28 (8 Req) | 551-0124 | \$2.95 |
| 7. Plug, M18 x 1.5 Thread (2 Req) | 551-0122 | \$10.95 | 19. Nut, HSFH, 5/16-24 7593 | 50-5025-S | \$0.95 |
| 8. Bolt, Carriage, 3/8-16 x 1 1/4" (1 Req) | 500-0553 | \$0.95 | | | |
| 9. Bracket, Transmission, Side, Power Tune Duals, 1995-2008 Touring (1 Req) | 551-0125 | \$8.95 | | | |

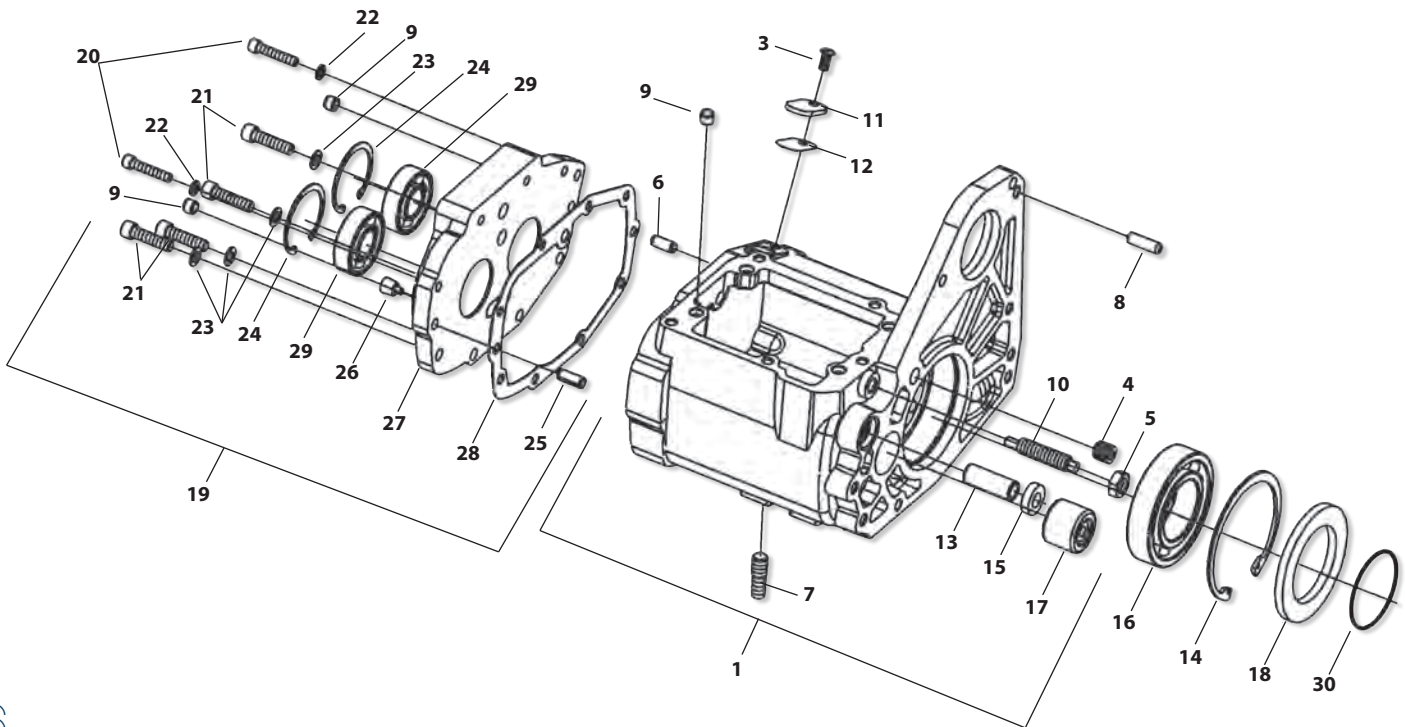


NOTE - Install #18 heat shield clamps with screw heads pointing in direction shown by arrows. ➔

TRANSMISSION CASES REPLACEMENT PARTS

FOR 1986-99 SOFTAIL® MODELS

- | | |
|--|------------------|
| 1. Transmission case assembly, 5-speed, rigid mount
1986-99 Harley-Davidson® Softail® | N/A - |
| 2. Case only | N/A - |
| 3. Screw, socket buttonhead, 1/4"-20 x 1/2" | 50-0065 \$4.95 |
| 4. Set-screw, sockethead, 1/2"-20 x 1/2"
(HD® #3784) | 50-0203 \$10.95 |
| 5. Nut, hex head, 7/16"-14 (each) | 50-5044 \$0.95 |
| 6. Pin, dowel, .308" diameter x .70" 375 | 50-8029 \$4.95 |
| 7. Stud, 3/8"-24, 7/16"-14 x 1.300" 11733A | 50-8084 \$7.95 |
| 8. Pin, dowel, 5/16" diameter x 1" 337 | 50-8171 \$4.95 |
| 9. Pin, roll, 3/8" x .300" 609 | 50-8173 \$4.95 |
| 10. Screw, shift lever adjustment
33119-798 | 56-1002 \$32.95 |
| 11. Cover, speedo sensor hole | 56-1061 \$4.95 |
| 12. Gasket, speedo sensor hole cover | N/A - |
| 13. Guide, shifter shaft, 5-speed rigid mount
1986-99 BT 33114-79 | 56-1067 \$9.95 |
| 14. Ring, internal retaining, 3.734" O.D. x .109" tru-arc
11161, 11599 | 50-8051 \$23.95 |
| 15. Seal, oil - 1984-99 BT 12045 | 56-1064 \$7.95 |
| 16. Bearing, transmission output shaft, 1984-99 BT
8996A | 56-1280 \$72.95 |
| 17. Bearing, transmission countershaft 8977 | 56-3031 \$35.95 |
| 18. Seal, oil 120678 | 56-3033 \$13.95 |
| 19. Door assembly, transmission access, 5-speed
1986-99 BT | 56-1027 \$327.95 |
| 20. Capscrew, sockethead 1/4"-20 x 1 1/4" 4740A, 3482A
each | 50-0008 \$4.95 |
| 21. Capscrew, SH 5/16"-18 x 1 1/4" 3210A | 50-0121 \$0.95 |
| 22. Washer, flat - 1/4" x 7/16" x 1/16" (each)
12 pack | 50-7017 \$4.95 |
| 23. Washer, flat - 5/16" x .545" x .042" (each) | 50-7013 \$9.95 |
| 24. Ring, internal retaining, 2.072" O.D. x .062"
Tru-Arc 35021-89 | 50-8053 \$6.95 |
| 25. Pin, roll - 5/16" x 3/4" 634 (each) | 50-8175 \$0.95 |
| 26. Plug, magnetic - 1/8" -27739A | 50-8334 \$12.95 |
| 27. Door, transmission access 35258-87C
Only 5-speed rigid mount 1986-99 BT | 56-1025 \$252.95 |
| 28. Gasket, transmission access door
35652-79B, 35653-98A | 56-1026 \$5.95 |
| 29. Bearing, transmission access door 8992A, 8998 | 56-3026 \$46.95 |
| 30. O-ring, Quad Seal 11165 | 50-8045 \$8.95 |



All reference to HD® Part #s is for identification purposes only. We in no way are implying that any of S&S® Cycle's products are original equipment parts or that they are equivalent to the corresponding HD Part # shown.

1926-'84 VINTAGE MODELS



PERFORMANCE KITS

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UNIVERSAL STEALTH AIR CLEANER KIT

FOR 1936-'92 BIG TWINS AND 1957-'90 SPORTSTER® MODELS

FITMENT

- 1936-'92 bt case breathing engines equipped with a Super E or G carb
- 1957-'03 Sportster® models case breathing engines equipped with a Super E or G carb

FEATURES AND BENEFITS

- Increased performance
- Perfect addition with a performance exhaust system
- Filter element can be cleaned and reuse

KIT CONTENTS

- Backplate
- Air Filter
- All necessary mounting hardware
- Complete instructions



UNIVERSAL STEALTH AIR CLEANER KIT

Model	Part #	MSRP
1936-'92 big twins, 1957-'90 Sportster® models	170-0176	<i>\$180.95</i>

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

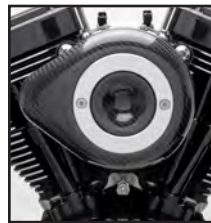
STEALTH AIR CLEANER KIT COVERS



Stealth Tribute



Teardrop



Carbon Fiber



Mini in Gloss Black



Tri-Spoke



Torker



Air 1



Airstream in Chrome

STEALTH COVERS

Tribute		Teardrop		Teardrop—Slasher		Carbon Fiber	Mini	
Chrome	Gloss Black	Chrome	Gloss Black	Chrome	Gloss Black	Black	Chrome	Gloss Black
170-0592	170-0593	170-0530	170-0531	170-0532	170-0533	170-0501	170-0367	170-0366
<i>\$180.95</i>	<i>\$180.95</i>	<i>\$180.95</i>	<i>\$180.95</i>	<i>\$191.95</i>	<i>\$191.95</i>	<i>\$314.95</i>	<i>\$180.95</i>	<i>\$180.95</i>

Tri-Spoke	Torker	Air 1	Airstream		Displacement		
Gloss Black w/Highlights	Gloss Black w/Highlights	Gloss Black w/Highlights	Chrome	Gloss Black	111	124	143
170-0210	170-0206	170-0214	170-0118	170-0396	170-0319	170-0321	170-0323
<i>\$170.95</i>	<i>\$170.95</i>	<i>\$170.95</i>	<i>\$170.95</i>	<i>\$170.95</i>	<i>\$184.95</i>	<i>\$184.95</i>	<i>\$184.95</i>

CLASSIC TEARDROP AIR CLEANER KITS FOR S&S AND STOCK CARBURETORS

FITMENT

- 1966-'84 big twins
- 1966-'85 Harley-Davidson® Ironhead Sportster®

FEATURES AND BENEFITS

- Increased air flow adds 2-5 horsepower (more with performance exhaust and cams)
- Easy installation
- S&S chrome teardrop air cleaner looks great

KIT CONTENTS

- Chrome teardrop cover
- Backplate
- Filter
- Mounting hardware
- Instructions



CLASSIC TEARDROP AIR CLEANER KITS‡

Model Year and Engine Style	Super E & G	
Big Twin Models		<i>MSRP</i>
1966-'84 w/5 gl. tanks	17-0440	\$293.95
1966-'84	17-0400	\$293.95
Harley-Davidson® Ironhead Sportster® Models		
1966-'85	17-0400	\$293.95

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‡ ⚠️ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

➔ REPLACEMENT PARTS: SEE PAGE 198

CLASSIC TEARDROP AIR CLEANER COVERS

Style	Finish	Part #	MSRP
Mini	Chrome	170-0367‡	\$180.95
	Gloss Black	170-0366	\$180.95
Classic Teardrop	Chrome	17-0378‡	\$171.95
	Gloss Black	170-0384A	\$171.95
Slasher Teardrop	Chrome	17-0004‡	\$171.95
	Gloss Black	170-0419	\$170.95
Nostalgic Teardrop	Polished	17-0071	\$197.95

‡ ⚠️ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov



170-0367‡



170-0366



17-0378‡



170-0384A



17-0004‡



17-0071

PERFORMANCE KIT OVERVIEW FOR VINTAGE HARLEY-DAVIDSON® MODELS

SIDEWINDER® BIG BORE KITS FOR 1966-'84 BIG TWINS

Sidewinder big bore/stroker kits are available in displacements from 88" to 103". The 3 $\frac{5}{8}$ " bore cylinders are coupled with strokes from 4 $\frac{1}{4}$ " to 5" to yield the various displacements (See page 114). The most popular and highly recommended Sidewinder Kit is the 93" (3 $\frac{5}{8}$ " bore X 4 $\frac{1}{2}$ " stroke). This is also available as a Hot Set Up Kit which includes everything you need to achieve the potential of the increased displacement (See page 117).

RETRO CONVERSION KIT FOR 1966-'84 BIG TWINS

Give your shovel the nostalgic look of a panhead, gain performance, and upgrade to modern 1984-'99 style hydraulic valve train with one simple to install kit. (See page 116)

TOP END REPLACEMENT KITS FOR 1966-'84 BIG TWINS

Restore that tired iron with a bolt-on Top End Replacement kit. Kit includes cylinders, pistons, cylinder heads and all gaskets and hardware. Available for 74" and 80" engines. (See page 118)

SIDEWINDER® BIG BORE KITS FOR 1966-'84 BIG TWIN ENGINES

FITMENT

- 1966-'84 big twins

FEATURES AND BENEFITS

- Increase displacement and power
- High strength cast iron cylinders with increased cooling fin area
- Stock like appearance—durable black powder coat finish
- Easy installation
- Long engine life, good dependability



S&S® SIDEWINDER® BIG BORE KIT SPECIFICATIONS FOR 1966-'84 BIG TWINS

Displacement	Bore	Stroke	Compression Ratio	Cylinder Length	Recommended Cam (Stock Valve Train*)	Recommended Cam (S&S Valve Train**)	Recommended Carb
88"	3 $\frac{5}{8}$ "	4 $\frac{1}{4}$ "	7.5:1	5.330"	S&S 514	S&S 585	Super E
93"	3 $\frac{5}{8}$ "	4 $\frac{1}{2}$ "	8.5:1	5.405"	S&S 514	S&S 585	Super E
93" HC	3 $\frac{5}{8}$ "	4 $\frac{1}{2}$ "	9.1:1	5.363"	S&S 560S	S&S 600	Super E
96"	3 $\frac{5}{8}$ "	4 $\frac{5}{8}$ "	9.1:1	5.440"	S&S 560S	S&S 600	Super E
98"	3 $\frac{5}{8}$ "	4 $\frac{3}{4}$ "	8.9:1	5.530"	S&S 560S	S&S 600	Super E
103"	3 $\frac{5}{8}$ "	5"	9.7:1	5.630"	S&S 560S	S&S 600	Super E or G

*1966-'84 style cams for valve train with stock style tappets

**1984-'99 style cams for S&S valve train conversion kit with 1984-'99 style tappets

COMPLETE S&S® SIDEWINDER® KITS FOR SHOVELHEAD ENGINES

Displacement	93"	MSRP	93" HC	MSRP	96"	MSRP	103"	MSRP
1970-'84	91-9126	\$2,699.95	91-9130	\$2,699.95	91-9134	\$2,699.95	91-9140	\$2,924.95

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT
 These kits require manifolds, see page 160.

84", 86", OR 88" STOCK BORE STROKER KIT

FEATURES AND BENEFITS

- Increased displacement and power
- Economical—re-use most stock engine components
- Easy installation—like a stock engine rebuild
- Stock appearance

OPTIONS

- Displacement 84", 86", or 88"
- Cylinder Bore 3⁷/₁₆" or 3¹/₂"

Optional parts available—cam, prefit cylinder and piston kits, cylinder heads, S&S retro conversion kit (*pan style heads and upgraded valve train*), and S&S valve train upgrade kit



S&S® STOCK BORE STROKER KIT SPECIFICATIONS 1936-'84 BIG TWINS							
Displacement	Bore	Stroke	Compression Ratio		Recommended Cam (Stock Valve Train)	Recommended Cam (S&S® Valve Train)	Recommended Carb
			HC	LC			
84"	3 ⁷ / ₁₆ "	4 ¹ / ₂ "	8.4:1	7.3	S&S 450S	S&S 513	Super E
86"	3 ⁷ / ₁₆ "	4 ⁵ / ₈ "	9.4:1	8.1	S&S 514	S&S 585	Super E
88"	3 ⁷ / ₁₆ "	4 ³ / ₄ "	10.8:1	9.1	S&S 565S	S&S 640	Super E

STOCK BORE STROKER KITS FOR KNUCKLEHEAD, PANHEAD, & SHOVELHEAD ENGINES

Displacement	84"	MSRP	86"	MSRP	88"	MSRP
1936-'53	32-2219	\$1,399.95	-	-	-	-
1958-'64†	32-2220	\$1,399.95	-	-	-	-
1965-'69	32-2221	\$1,399.95	-	-	-	-
1970-'84	32-2222	\$1,399.95	32-2108	\$1,399.95	-	-
Custom Flywheels	32-2015	Call for Pricing	32-2015	Call for Pricing	32-2015	Call for Pricing

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†S&S does not offer a pinion shaft for 1954-'57 engines.

! THESE KITS REQUIRE SPECIAL S&S PISTONS. SEE CHART.

FORGED STOCK BORE STROKER PISTONS

Oversize	Standard	MSRP	Low Compression	MSRP
Standard (3 ⁷ / ₁₆ "	106-5527	\$416.95	920-0073	\$529.95
+ .010"	106-5528	\$416.95	920-0075	\$529.95
+ .020"	106-5529	\$416.95	920-0077	\$529.95
+ .030"	106-5530	\$416.95	920-0079	\$529.95
+ .040"	106-5777	\$416.95	920-0081	\$529.95
+ .050"	106-5778	\$416.95	920-0083	\$529.95
+ .060"	106-5779	\$416.95	920-0085	\$529.95
+ .070"	106-5780	\$416.95	920-0087	\$529.95
+ .080"	106-5781	\$416.95	920-0089	\$529.95
+ .090"	106-5782	\$416.95	920-0091	\$529.95



ines

1984-1999 Evolution

1926-1984 Vintage Engines

Tools & Shop Supplies

Warranty & Company Policy

Appendix



RETRO CONVERSION KIT FOR 1966-'84 BIG TWINS

FITMENT

- 1966-'84 big twins
- 1954-'65 big twins with shovel cylinders

FEATURES AND BENEFITS

- Gives a shovel engine the retro look of a pan
- S&S heads improve performance with increased air flow
- Quiet, dependable valve train with hydraulic tappets

OPTIONS

- Stock or 3 $\frac{3}{8}$ " bore
- Dual spark plugs available on 3 $\frac{3}{8}$ " bore heads
- Internal or external oil returns



RETRO CONVERSION KITS FOR 1954-1984 BIG TWINS

Application	Bore	Option	Part #	MSRP
1966-'84 bt S&S SH-Series	Stock	Single Plug	106-1070	\$2,924.95
	3 $\frac{3}{8}$ "	Single Plug	106-1071	\$2,924.95
		Dual Plugs	106-1078	\$3,036.95

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These kits have internal oil drains.

LATE STYLE CAM RECOMMENDATIONS FOR SHOVELHEAD ENGINES WITH RETRO CONVERSION KIT

Application	RPM Range	Compression Ratio	If You Used...	Then Use...	Generator Style	Alternator Style
74" - Stock 84" low compression	Low-Mid	8.5 and below	S&S 450 or Andrews® J or A	S&S 513	106-6028	106-6027
74" and 80"-Modified	Mid-High	8.5 - 9.5	S&S 514 or Andrews #3 or B	S&S 585	33-5131	33-5109
84" - 93"	Low-Mid	8.0 - 9.0	S&S 514	S&S 585	33-5131	33-5109
93" HC - 103"	Mid-High	9.0 - 10.0	S&S 495 or 560S	S&S 600	33-5132	33-5058
High Compression	High	Over 10.0	S&S® 495 or 565S	S&S® 640	-	33-5108

NOTES:

The S&S Retro Conversion Kit requires that a 1984-'99 style cam be used to ensure correct valve timing due to the roller size on the late style tappets use in the kit. 1970-'77 stock engines will also require a 1978-'87 style pinion gear to mate with the late style cam gear. 1966-'69 engines or other engines with generator style crankcases will require a special generator style cam with 1984-'99 style lobes. See chart for recommendation. 1979-'84 o-ring style pushrod covers are required; S&S part #93-4040 or equivalent.

→ REPLACEMENT PARTS: SEE PAGE 186

TOP END REPLACEMENT KITS

FOR 1966-'84 BIG TWIN ENGINES

FITMENT

- 1966-'84 big twin engines

FEATURES AND BENEFITS

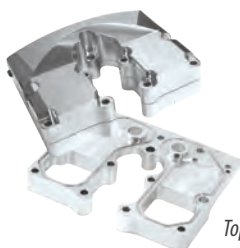
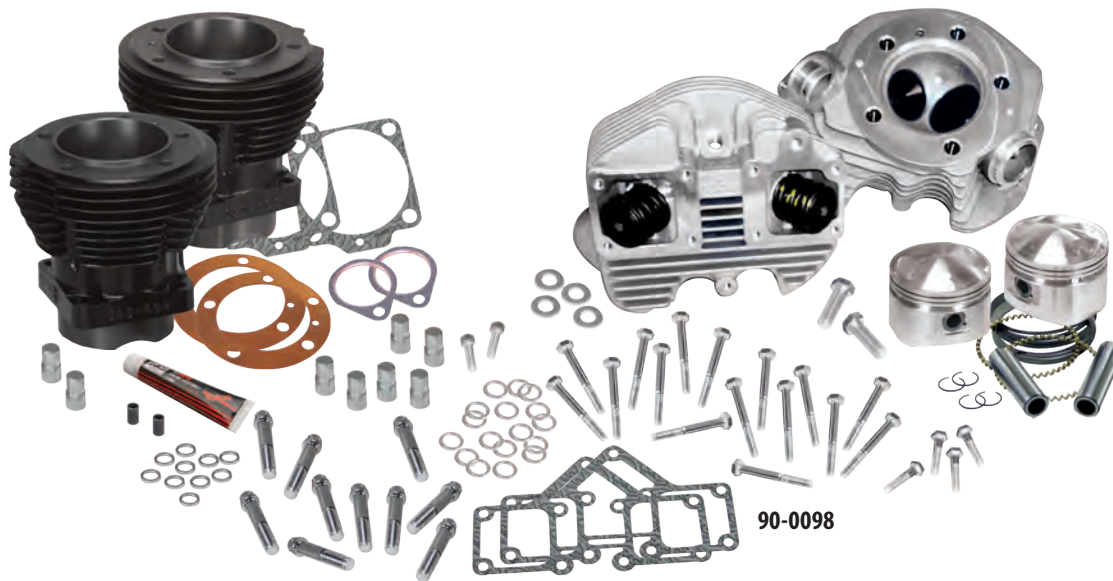
- Provide everything you need to replace the top end of a 74" or 80" shovelhead engine.
- S&S top end kits for shovelheads include a set of S&S Super Stock® cylinder heads, a pair of S&S® stock bore cylinders (3³/₁₆" for 74" and 3¹/₂" for 80"), S&S 8:1 compression forged pistons, complete with rings and wristpins, manifold clamps, manifold seals, all required hardware, and gaskets.
- 74" top end kits include S&S 106-5495 series 3³/₁₆" stroke pistons and o-ring style cylinder heads.
- Top end kits for 80" engines include the S&S 106-5511 series 4¹/₄" stroke pistons and rubber band style cylinder heads. Pistons are pre-fit to the cylinders

TOP END REPLACEMENT KITS FOR STOCK DISPLACEMENT SHOVELHEAD ENGINES

Displacement	Model Year	Stroke	Compression	High Temp Gloss Finish	
				Part #	MSRP
74"	1966-'78	3 ³ / ₁₆ "	8:1	90-0097	\$2,699.95
80"	1979-'84	4 ¹ / ₄ "	8:1	90-0098	\$2,699.95

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NOTES: 74" engines have a stroke of 3³/₁₆", and 80" shovelhead engines have a 4¹/₄" stroke, but the cylinder length for both engines is the same. The 74" piston is taller than the 80" piston; piston deck heights of the two pistons are designed for the same piston to head clearance in both engines. While it is possible to install an 80" top end on a 74" engine, this will result in very low compression and poor performance. A 74" top end will bolt to an 80" crankcase, but, the pistons will contact the cylinder head due to the combination of the taller 74" pistons and the longer stroke of the 80" flywheels. Therefore, it is important to correctly identify the stroke of the engine before ordering a top end kit.



Top it off with S&S billet rocker boxes. See page 158

ENGINE OVERVIEW

S&S offers performance engines in a variety of displacements for 1936–'84 Harley-Davidson® OHV big twins, that provide a vintage vibe and modern muscle. These engines have a deceptively stock appearance, but feature larger displacement and updated internal components for improved performance and reliability. Engineering grade cast iron cylinders are protected with a durable powder coat finish.

1966–'84 BIG TWINS

SH93 (93 CID)

An excellent upgrade option to replace a worn out Harley-Davidson® shovelhead engine, or to power a retro custom. The SH93 provides a significant increase in power over stock 74" or 80" engines, and since it runs well on pump gas, it's a great daily driver. Available with generator, alternator, or alt/gen crankcases.

SH93H (93 CID HIGH COMPRESSION)

The SH93H is a higher compression version of the SH93. It features dual plugged cylinder heads to control knock, and a more aggressive cam to take advantage of the higher compression. Alternator style crankcases only. Complete with S&S Super E Carb and ignition.

SH103 (103 CID)

The SH103 is the largest engine S&S offers for 1970–'84 chassis. This engine will require frame clearancing when installed in a stock chassis. Available with alternator style crankcases only. Complete with S&S Super E Carb and ignition.

1948–'65 BIG TWINS

P74 (74 CID)

The P74 engine is preferred by some riders as a replacement engine for bikes with stock drive train that may not be able to take the power of a larger engine. Timken® sprocket shaft bearing makes this engine more reliable. Available with generator style crankcases only. Complete with S&S Super E Carb and ignition.

P93 (93 CID)

An excellent upgrade option to replace a worn out Harley-Davidson® panhead engine, or to power a retro custom. The P93 provides a significant increase in power over stock 74" engines, and since it runs well on pump gas, it's a great daily driver. Available with generator, alternator, or alt/gen crankcases.

P93H (93 CID HIGH COMPRESSION)

The P93H is a higher compression version of the P93. It features dual plugged cylinder heads to control knock, and a more aggressive cam to take advantage of the higher compression. Alternator/generator style crankcases only. Complete with S&S Super E Carb and ignition.

P103 (103 CID)

The P103 is the largest engine S&S offers for 1970–'84 chassis. This engine will require frame clearancing when installed in a stock chassis. Available with alternator style crankcases only. Complete with S&S Super E Carb and ignition. Complete with S&S Super E Carb and ignition.

1936–'47 OHV BIG TWINS

KN74 (74 CID)

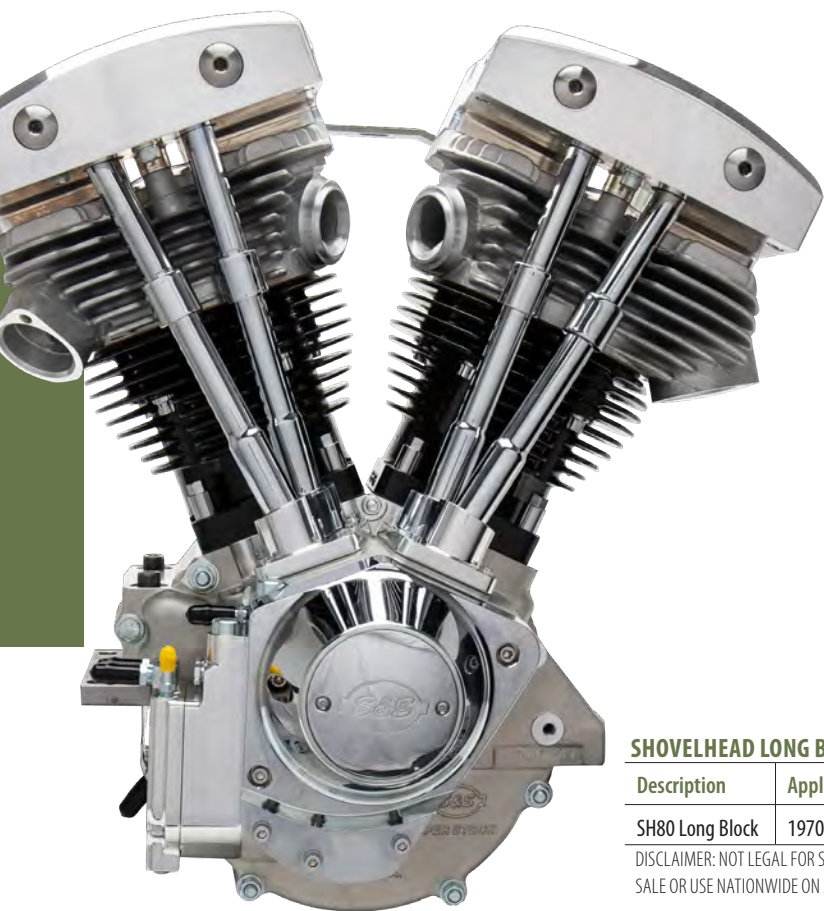
The KN74 is a stock displacement engine favored by riders replacing an engine in a chassis with stock drive train that may not handle the increased power of a larger engine. Timken® sprocket shaft bearing makes this engine more reliable. Available with generator style crankcases only. Complete with S&S Super E Carb and ignition.

KN93 (93 CID)

An excellent upgrade option to replace a worn out Harley-Davidson® knucklehead engine, or to power a retro custom. The KN93 provides a significant increase in power over stock 74" or 61" engines, and since it runs well on pump gas, it's a great daily driver. Available with generator, alternator, or alt/gen crankcases.

SH-LONG BLOCK

1970-'99 STOCK CHASSIS WITH ALTERNATOR STYLE PRIMARY



FEATURES & BENEFITS

- Natural crankcases and black powder coated cylinders
- S&S hydraulic valve train and roller rockers
- Sold without ignition, carb, manifold and air cleaner—Save money by using what you have
- Stock spec H-grind cam
- Billet gearcover
- 3½" Bore
- 4¼" Stroke
- 2 year warranty

SHOVELHEAD LONG BLOCK

Description	Application	Part #	MSPR
SH80 Long Block	1970-'99 stock chassis with alternator style primary	310-0975	\$6,972.95

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SH-SERIES ENGINES FOR 1970-'99 CHASSIS

FITMENT

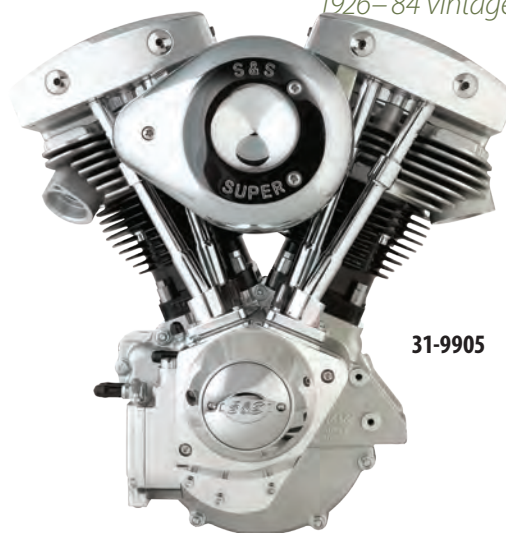
- 1970-'99 stock chassis with alternator style primary
- 1970-'99 alternator/generator and alternator custom versions custom bikes with 1970-'99 alternator style primary

FEATURES AND BENEFITS

- Natural crankcases and black powder coated cylinders
- S&S hydraulic valve train and roller rocker arms
- S&S Super Stock™ single fire ignition system
- 1966-'69 models have correct length sprocket shaft for stock primary and transmission
- Alternator and alternator/generator models have correct sprocket length sprocket shaft for 1970-up primary and transmission
- Alternator/generator engines include oil filter mounting bracket for generator location
- Two-year warranty

OPTIONS

- Alternator/generator, or alternator crankcases



31-9905

SH-SERIES ENGINE SPECIFICATIONS

Engine	Displacement	Bore	Stroke	Carb	Cam	Piston	CR
SH93	93"	35/8"	4½"	Super E	585	Forged	8.5:1

NOTE: S&S® SH93H engine contains 1984-'99 style S&S cam and tappets.

*SH103 will not fit stock chassis—not for everyone!

COMPLETE CARBURETED SH-SERIES ENGINES

Engine	Application	Style	Warranty	Billet Gearcover	MSRP	Cast Gearcover	MSRP
SH93	1970-'99 Chassis	Alternator	2 Years	31-9905	\$7,946.95	—	—
	Custom	Alternator/Generator		—	—	31-9917	\$9,081.95

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⚠ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

BILLET FILTER MOUNT

FITMENT

- 1936-'69 big twins with Alt/Gen Crankcase

FEATURES AND BENEFITS

- Accepts stock oil pressure sending switch
- Machined for easy routing of an oil cooler
- Seals off cam chest, providing a convenient place to spin on an oil filter



BILLET FILTER MOUNT | **106-3134** | \$192.95

⚠ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

P-SERIES ENGINES

FOR 1948-'99 CHASSIS

FITMENT

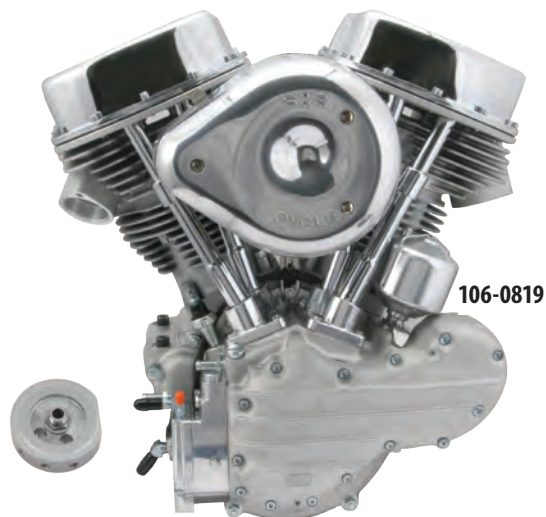
- Several versions are available:
- 1948-'64 stock chassis with tin primary—4 rib gearcover and domed timer cover
- 1965 stock chassis electric start with alloy primary—flat side gearcover and flat timer cover (*will fit 1966-'69 chassis*)
- 1970-'99 Alternator/generator

FEATURES AND BENEFITS

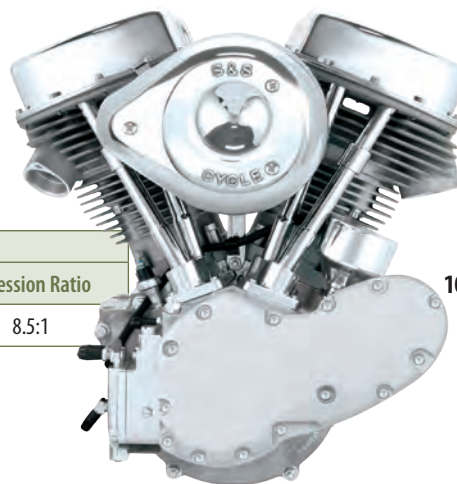
- Vintage vibe—*Modern muscle*
- Natural crankcases and stock-looking silver powder coated cylinders
- S&S hydraulic valve train with roller rocker arms
- S&S billet timer and S&S Super Stock single fire ignition system
- 1948-'64 and 1965 models have correct length sprocket shaft for stock primary and transmission
- Alternator/generator models have correct sprocket length sprocket shaft for 1970-up primary and transmission
- Alternator/generator engines include oil filter mount for generator location
- 1966-'84 exhaust systems
- 1966-'84 intake ports with o-ring inlets
- Two-year warranty

OPTIONS

- 93" displacements
- Stock style generator or alternator/generator crankcases



106-0819



106-0820

P-SERIES ENGINE SPECIFICATIONS

Engine	Displacement	Bore	Stroke	Carb	Camshaft	Piston Type	Compression Ratio
P93	93"	3 3/8"	4 1/2"	Super E	S&S 585	S&S Forged	8.5:1

COMPLETE CARBURETED P-SERIES ENGINES

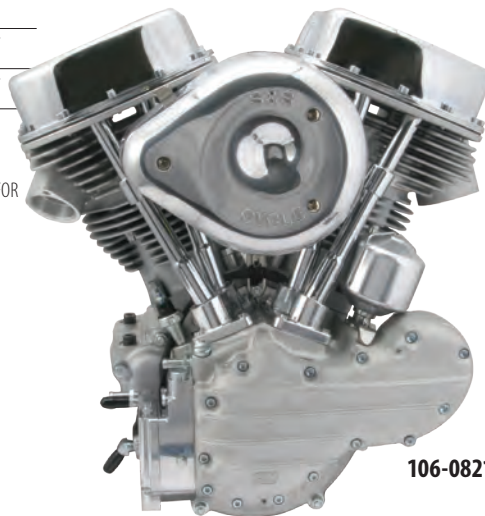
Engine	Application	Style	Warranty	Part #	MSRP
P93	1948-'64 Chassis	Generator	2 Years	106-0819	\$9,081.95
	1965-'69 Chassis	Generator		106-0820	\$9,081.95
	Custom 1970-'99	Alternator/Generator		106-0821	\$9,081.95

Alternator and alternator/generator engines require transmission with 1970-up length main shaft and custom exhaust.

1955-'64 style engines may be installed in 1948-'54 chassis if 1955-'64 inner primary tin cover is used.

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⚠️ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov



106-0821

KN-SERIES ENGINES FOR 1936-'99 CHASSIS

FITMENT

- KN93
- 1936-'47 stock chassis—will fit in 1948-'65 chassis with front motor mount spacer (*included*)
- 1970-'99 Alternator/generator and alternator custom versions, custom bikes with 1970-'99 alternator style primary

FEATURES AND BENEFITS

- Natural crankcases and black powder coated cylinders and heads
- S&S Super E
- S&S valve train—solid lifters
- S&S Super Stock™ single fire ignition system and polished billet timer
- 1936-'47 models have correct length sprocket shaft for stock primary and transmission
- Alternator/generator models have correct sprocket length sprocket shaft for 1970-up primary and transmission
- Alternator/generator engines include oil filter mount for generator location
- One-year warranty

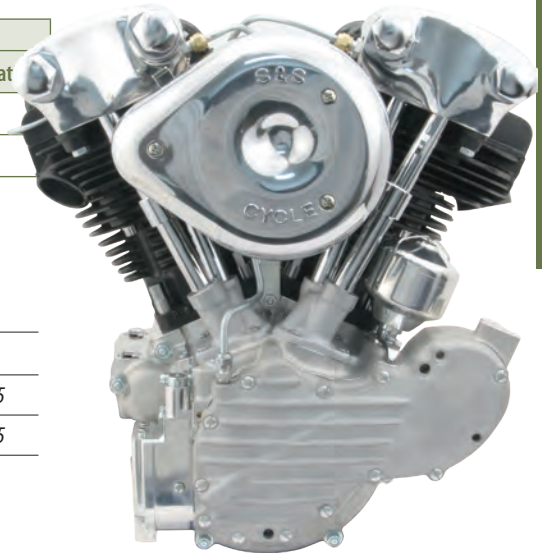
KN-SERIES ENGINE SPECIFICATIONS							
Engine	Displacement	Bore	Stroke	Carb	Camshaft	Piston Type	Compression Rat
KN93	93"	3 $\frac{3}{8}$ "	4 $\frac{1}{2}$ "	Super E	S&S® 420	S&S Forged	8.2:1
KN-Kone	93"	3 $\frac{3}{8}$ "	4 $\frac{1}{2}$ "	Super E	S&S® 420	S&S Forged	8.2:1

KN-SERIES ENGINES

Description	Application	Style	Warranty	Part #	MSRP
KN93	1936-'47 stock chassis	Generator	1 year	106-2161	\$12,599.95
KN93	1970-'99 customs	Alternator/Generator		310-0827	\$12,599.95

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 WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov



NOTES: Alternator/generator cases have 1948-'99 style front motor mount. Will not fit stock knuckle frames.

Generator style engines have stock motor mounts for 1936-'47 style frames, but can be used in 1948-'99 style frames with front motor mount spacer, part #31-2017 (*included*). Alternator/generator cases require a transmission with 1970-up length mainshaft, and custom exhaust pipes must be fabricated.

Engines for 1936-'64 chassis with tin primary must use a 1954-'64 style inner primary cover.

S&S Super Stock generator style crankcases are available for stock 3 $\frac{3}{8}$ " or 3 $\frac{5}{8}$ " bore, but can be special ordered for bore sizes up to 3 $\frac{13}{16}$ " and deck heights as much as $\frac{3}{16}$ " taller than stock.

1936-'54 must use the 1955-'64 style inner steel primary cover.

Since all S&S generator style crankcases use 1958 and later style main bearings, stock flywheel assemblies 1957 and earlier cannot be used in S&S crankcases. Flywheel assemblies must have 1958 and later pinion shaft with 1.250" diameter bearing, and a 1954 and later style sprocket shaft designed for a Timken® main bearing.

Generator style cases for 1936-'47 knucklehead engines are machined to supply oil to the heads from a boss located near the rear tappet guide or from a stock or S&S gearcover. Provision for oil scavenging from the heads in these crankcases is the same as stock, with passageways that connect the tappet guides to the crankcase breather gear.

Crankcases for 1948-'69 engines are machined with a provision to separate the oil supply to the top and bottom ends if an S&S oil pump is used. This feature lets you choose the 1972 and earlier stock "side oiling" system or the 1973 and later split oil system. The stock cast iron oil pump can be used for the "original look" and stock oiling system. If an S&S billet oil pump, part #31-6200[±] is used, the oiling system can be set-up as stock or updated to a split system.

1963-'65 panhead engines, with outside oil supply lines to the cylinder heads, must use the oil supply port located behind the rear tappet guide or the oil fitting toward the rear of the S&S gearcover. S&S generator style crankcases do not have the stock style "outside oiler" oil supply boss, so special oil supply lines will need to be fabricated.

SUPER STOCK® GENERATOR STYLE CRANKCASES

FOR 1936-'69 BIG TWIN ENGINES

FITMENT

- 1936-'47 knucklehead engines with tin primary
- 1948-'64 panhead engines with tin primary
- 1965-'69 panhead & generator shovelhead with alloy primary

FEATURES AND BENEFITS

- Pre-clearanced for strokes up to and including 5"
- Motor mounts on crankcases for knucklehead engines are machined to fit stock 1936-'47 frames. An adapter plate is included for 1948 and later style frames
- All cases are designed for late style generator (two brush type) with 5/16" mounting bolts to eliminate early generator cradle/mounting strap bosses for simplicity and economics
- Timken® sprocket shaft main bearing, in all years, instead of stock straight roller bearings—resulting in better flywheel assembly stability, placement, and longer engine life

KIT CONTENTS

- Crankcase assembly
- All required bearings and hardware for installation
- Assembly instructions



31-0010

→ REPLACEMENT PARTS: SEE PAGE 176

SUPER STOCK® GENERATOR CRANKCASES FOR 1936-'99 BIG TWIN

STOCK BORE

Crankcase Style	Part #	MSRP	Notes
1965-'69 Panhead or Shovelhead	31-0010 24519-65	\$1,949.95	1,4,6
1948-'64 Panhead	31-0008 24519-63, 24519-58, 24519-55	\$1,949.95	1,2,5,9
P-Series Replacement 1965	31-0008 24519-63, 24519-58, 24519-55	\$1,949.95	1,6,9

3 5/8" BORE

Crankcase Style	Part #	MSRP	Notes
1984-'99 big twin—Alternator/Generator	31-0022	\$1,799.95	7
KN Replacement Generator/Generator	106-4369 ¹	\$1,949.95	1,3,5,8

Note: All S&S crankcases use Timken® style sprocket shaft bearings and 1958 & later pinion bearings. These cases will not accept stock 1957 & earlier flywheel assemblies.

1. 1936-'69 style oil pump.

2. Machined for 1948-'62 panhead cylinder base oil feed.

3. Motor mounts are machined for stock 1936-'47 frames, adapter plate for 1948 & later style frames is included.

4. Includes primary scavenge port machining.

5. Machined for 1955-'64 tin primary.

6. Machined for 1965-'69 alloy primary.

7. Machined for 1970-up alloy primary.

8. Uses stock 1/4-24 hardware.

9. Will not accept stock 1957 & earlier flywheel assemblies.

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⚠️ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

NOTES: Engines for 1936-'64 chassis with tin primary must use a 1955-'64 style inner primary cover.

Since all S&S generator style crankcases use 1958 and later style main bearings, stock flywheel assemblies 1957 and earlier cannot be used in S&S crankcases. Flywheel assemblies must have 1958 and later pinion shaft with 1.250" diameter bearing, and a 1954 and later style sprocket shaft designed for a Timken® main bearing.

Generator style cases for 1936-'47 knucklehead engines are machined to supply oil to the heads from a boss located near the rear tappet guide or from a stock or S&S gearcover. Provision for oil scavenging from the heads in these crankcases is the same as stock, with passageways that connect the tappet guides to the crankcase breather gear.

Crankcases for 1948-'69 engines are machined with a provision to separate the oil supply to the top and bottom ends if an S&S oil pump is used. This feature lets you choose the 1972 and earlier stock "side oiling" system or the 1973 and later split oil system. The stock cast iron oil pump can be used for the "original look" and stock oiling system. If an S&S billet oil pump, part #31-6200 is used, the oiling system can be set-up as stock or updated to a split system.

1963-'65 panhead engines, with outside oil supply lines to the cylinder heads, must use the oil supply port located behind the rear tappet guide or the oil fitting toward the rear of the S&S gearcover. S&S generator style crankcases do not have the stock style "outside oiler" oil supply boss, so special oil supply lines will need to be fabricated.

SUPER STOCK® ALTERNATOR STYLE CRANKCASES

FOR 1970-'84 BIG TWIN ENGINES

FITMENT

- 1970-'84 big twins

FEATURES AND BENEFITS

- Available for stock, 3 $\frac{3}{8}$ " and 3 $\frac{1}{2}$ " bore applications
- Compatible with stock 1970-up flywheel assemblies, primary covers and gearcovers
- Clearanced for 38 amp alternator stators
- Pre-clearanced for strokes up to and including 5"
- Complete with bearings and installation hardware

KIT CONTENTS

- Crankcase assembly
- All required bearings and hardware for installation
- Assembly instructions



CARB
compliant
EO #D-355-8

SUPER STOCK® ALTERNATOR CRANKCASES FOR 1970-'84 BIG TWIN

Crankcase Style	Finish	Stock Bore	MSRP	3 $\frac{3}{8}$ " Bore	MSRP
1970-'84	Natural	31-0003[†]	\$1,449.95	31-0004	\$1,449.95

NOTES: 1981-'84 style oil pump. Includes primary scavenge port machining. Machined for 1970 & later alloy primary.

[†]Exempt from emissions tampering regulations under CARB EO# D-355-8 when used with stock bore cylinders

⚠ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

➔ REPLACEMENT PARTS: SEE PAGE 174

FLYWHEELS

FOR 1937-'73 45" FLATHEAD ENGINES

FITMENT

- 1937-'52 W/WR models
- 1952-'53 KR & all K models (excluding KH)
- 1932-'73 G models

FEATURES AND BENEFITS

- 3 $\frac{1}{2}$ " stroke
- Complete S&S connecting rod set—includes special crankpin, rods, bearings and cages
- Compatible with stock 45" KR rods or rods for 1957-'84 Sportster® models, when used with the special crankpin

⚠ WILL NOT FIT KH MODELS



FLYWHEELS FOR 1937-'73 45" FLATHEAD ENGINES

Description	Part #	MSRP
S&S Replacement Flywheels for 45" Flathead 23925-37	32-3013	\$874.95

*Special Order: Download the Special Order Form at sscycle.com/soforms

TRYING TO IDENTIFY A SET OF S&S FLYWHEELS? SEE FLYWHEEL I. D. CHART ON PAGE 224

FLYWHEELS

FOR 1936-'84 BIG TWIN ENGINES

FITMENT

- 1936-'84 OHV big twins
- 1930-'48 flathead (*side valve*)
- KN, P, and SH-Series engines

FEATURES AND BENEFITS

- CNC machined from heat-treated, closed die, steel forging
- Stronger than cast iron or late style steel flywheels
- Available in a wide variety of styles and strokes
- Available balanced or unbalanced
- Unassembled balanced flywheels are balanced by the static method
- Assembled flywheels are dynamic balanced after assembly using our American-Hofmann® dynamic balancing machine (*unless otherwise specified*)
- 1930-'53 styles fit stock or S&S sprocket shafts
- 1954-'84 styles available for S&S sprocket shafts only

OPTIONS FOR SPECIAL ORDER

- Model year group
- Stroke
- Diameter
- Assembly and balancing
- Additional components—pinion shaft, sprocket shaft and connecting rods



FLYWHEELS FOR 1936-'84 BIG TWIN

Special Order	32-2015*	Call for Pricing
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*Special Order: Download the Special Order Form at sscycle.com/soforms

FLYWHEELS

FOR 1957-'85 HARLEY-DAVIDSON® IRONHEAD SPORTSTER®

FITMENT

- 1957-'85 Ironhead Sportster® models
- Fits OHV 900cc and 1000cc engines

FEATURES AND BENEFITS

- CNC machined from heat-treated, closed die, steel forging
- Stronger than cast iron or late style steel flywheels
- Available in a wide variety of styles and strokes
- Available balanced or unbalanced
- Unassembled balanced flywheels are balanced by the static method
- Assembled flywheels are dynamic balanced after assembly using our American-Hofmann® dynamic balancing machine (*unless otherwise specified*)

OPTIONS FOR SPECIAL ORDER

- Model year group
- Stroke
- Diameter
- Assembly and balancing
- Additional components—pinion shaft, sprocket shaft, connecting rods
- Available for S&S sprocket shafts only



FLYWHEELS FOR HARLEY-DAVIDSON® SPORTSTER® MODELS

Stroke, 7 7/8" Diameter (Stock)	Part #	MSRP
Special Order	32-3014*	Call for Pricing

*Special Order: Download the Special Order Form at sscycle.com/soforms

TRYING TO IDENTIFY A SET OF S&S FLYWHEELS?
SEE FLYWHEEL I. D. CHART ON PAGE 224

ANY JOB IS EASY WITH THE RIGHT TOOLS
S&S FLYWHEEL BALANCING KIT, SEE PAGE 204

REPLACEMENT FLYWHEELS FOR S&S® VINTAGE ENGINES

FITMENT

- KN-Series Engines
- P-Series Engines
- SH-Series Engines

FEATURES AND BENEFITS

- Exact same parts used in S&S production engines



32-2226

REPLACEMENT FLYWHEEL ASSEMBLIES FOR KN-SERIES ENGINES 1936-'47

Engine	Stroke	Diameter	Part #	MSRP
KN74	3 ³ / ₃₂ "	8 ¹ / ₂ "	320-0014	\$1,449.95
KN93 Alt/Gen	4 ¹ / ₂ "	8 ¹ / ₂ "	106-4658	\$1,379.95

WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

REPLACEMENT FLYWHEEL ASSEMBLIES FOR P-SERIES ENGINES 1954-'64

Engine	Stroke	Diameter	Part #	MSRP
P74	3 ³ / ₃₂ "	8 ¹ / ₂ "	320-0013	\$1,449.95
P93, P93H - 1965 Generator	4 ¹ / ₂ "	8 ¹ / ₂ "	32-2224	\$1,399.95
P93, P93H - Alternator/Generator	4 ¹ / ₂ "	8 ¹ / ₂ "	32-2226	\$1,399.95
P103 - Alternator/Generator	5"	8 ¹ / ₄ "	32-2990	\$1,399.95



32-2235

REPLACEMENT FLYWHEEL ASSEMBLIES FOR SH-SERIES ENGINES 1966-'84

Engine	Stroke	Diameter	Part #	MSRP
SH80 - Alternator	4 ¹ / ₄ "	8 ¹ / ₂ "	32-2235	\$1,399.95
SH93, SH93H - Generator	4 ¹ / ₂ "	8 ¹ / ₂ "	32-2224	\$1,399.95
SH93, SH93H - Alternator/Generator	4 ¹ / ₂ "	8 ¹ / ₂ "	32-2226	\$1,399.95
SH103	5"	8 ¹ / ₄ "	32-2990	\$1,399.95

TRYING TO IDENTIFY A SET OF S&S FLYWHEELS? SEE FLYWHEEL I. D. CHART ON PAGE 224

SPROCKET SHAFT ASSEMBLIES FOR BIG TWIN ENGINES



33-2004



33-2003



33-2002



33-2001

TAPERED SPROCKET SHAFT ASSEMBLIES

1970-'99 Big Twin		MSRP
Fits S&S® SE or SL flywheels only	33-2004	\$139.95
1965-'69 Big Twin		
Fits S&S SE or SL flywheels only	33-2003	\$164.95
1955-'64 Big Twin		
Fits S&S SE or SL flywheels only	33-2002	\$29.95
1930-'54 Big Twin—Including UL SVBT		
Fits S&S E or Stock flywheels (includes motor sprocket nut) 24001-30	33-2001	\$164.95

REPLACEMENT PARTS FOR TAPERED SPROCKET SHAFT ASSEMBLIES

Sprocket Shaft Nut		MSRP
1930-'54	33-2031	\$13.95
1955-'84	33-2033	\$17.95
Sprocket Shaft Key		
1930-'54	50-8224	\$9.95
1955-'84	50-8225-S	\$4.95
Motor Sprocket Nut		
1930-'54 (fits S&S® sprocket shafts only)	33-2032	\$39.95

SPROCKET SHAFT ASSEMBLIES FOR HARLEY-DAVIDSON® SPORTSTER® MODELS



33-2301



33-2302

SPROCKET SHAFT ASSEMBLIES

1977-'85 Sportster® Models		MSRP
Fits S&S D, SB, SBD, SC, SCD, SCDR, and SCR flywheels only	33-2302	\$189.95
1957-'76 Sportster Models		
Fits S&S SB flywheels only	33-2301	\$174.95

REPLACEMENT PARTS FOR SPROCKET SHAFT ASSEMBLIES

Sprocket Shaft Nut		MSRP
Fits all S&S sprocket shafts for Sportster® models	33-2331	\$9.95
Sprocket Shaft Key		
Key, .188" x .469", Steel	50-8224	\$9.95

PINION SHAFT ASSEMBLIES FOR BIG TWIN ENGINES



33-2024



33-2027



33-2021

PINION SHAFT ASSEMBLIES

Late 1981-'99 Big Twin—Tapered Pinion Shaft		MSRP
Stock length for S&S or stock big twin crankcases. Fits S&S BL, SL, SM or stock flywheels.		
Standard (1.250") Bearing Diameter	33-2027	\$164.95
1958—Early '81 Big Twin—Tapered Pinion Shaft		
Fits S&S L, AL, SE, or stock flywheels 24006-54A, 24006-73	33-2024	\$164.95
1939-'53 Big Twin—Splined Pinion Shaft		
Fits S&S E or stock flywheels	33-2021	\$164.95

REPLACEMENT PARTS FOR PINION SHAFT ASSEMBLIES

Pinion Shaft Nut		MSRP
1939-'81	33-2031	\$13.95
1981 & 1984	33-2033	\$14.95
Pinion Shaft Key		
1930-'81	50-8224	\$9.95
1981 & 1984	50-8225-S	\$4.95
Metering Plug		
No Hole	50-8314 ±	\$4.95
.0625" Hole	50-8316 ±	\$7.95
.0925" Hole	50-8317 ±	\$5.95
Pinion & Oil Pump Drive Key		
1958-'81 & 1984	50-8221-S	\$4.95

± WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

PINION SHAFT ASSEMBLIES FOR HARLEY-DAVIDSON® SPORTSTER® MODELS



33-2321

PINION SHAFT ASSEMBLIES

1957-'76 Sportster Models		MSRP
Fits S&S B, SB, or stock flywheels.		
Standard 24005-57	33-2321	\$239.95

REPLACEMENT PARTS PINION SHAFT ASSEMBLIES

Pinion Shaft Key		MSRP
1957-'81	50-8224	\$9.95
1981-'85 11218	50-8222-S	\$4.95
Metering Plug		
1977-'85	50-8316	\$7.95

BILLET OIL PUMPS

FOR 1936-'84 OHV BIG TWINS

FITMENT

- Pumps are available for stock 1936-'84 big twin engines
- Custom engines using S&S crankcases

FEATURES AND BENEFITS

- Same width oil supply and return gears as the stock Harley-Davidson® aluminum pump
- S&S pinion and oil pump drive shaft drive gears increase potential oil volume delivery by 25% over stock on 1972 and earlier engines
- S&S pumps for 1936-'67 engines used with the S&S oil pump drive gears deliver 33% more oil than the original cast iron pump
- Machined with an oil pressure relief bleed off passageway—*relieves pressure build up on top of the valve to maintain consistent oil pressure*
- Oil pressure regulation bypass routes excess oil directly to the supply side of the pump—*reduces the amount of oil returned to the tank, less foaming and cavitation*
- The standard pump cover allows total flexibility for oil system configuration with a number of oil feed and return options

OPTIONS

- Pump only kits
- Pump with gears—*includes drive gears and breather gear*

KIT CONTENTS

- Complete oil pump assembly
- Mounting hardware, fittings and gaskets
- Instructions
- Pump with gear kits also include:
 - Pinion shaft pump drive gear
 - Oil pump drive shaft gear
 - Breather gear



OIL PUMP KITS FOR 1936-'84 BIG TWIN ENGINES[±]

Year/Crankcase	Without Gears & Shims	MSRP	With Drive Gear, Breather Gear, & Shim Kit	MSRP
KN-Series** (Silver Powder Coated)	106-4688	\$536.95	—	—
1936-'47	31-6200[§]	\$387.95	—	—
1948-'53	31-6200	\$387.95	31-6292[§]	\$562.95
1954-'69	31-6200	\$387.95	31-6293[§]	\$562.95
1970-'77	—	—	31-6294[§]	\$562.95
1978-'84	31-6203[§]	\$394.95	31-6295[§]	\$562.95

*Requires 1973-'77 breather gear. **Uses a 28 lb pop-off spring to lower oil pressure at high RPM.

§Universal cover with top and bottom oil feeds.

± WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

OIL PUMP COVER ONLY FOR 1936-'91 BIG TWINS

Description	Part #	MSRP
Universal	31-6059 <small>31-6041</small>	\$96.95

➔ REPLACEMENT PARTS: SEE PAGE 180

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

CAMSHAFTS

FOR 1936-'47 OHV BIG TWINS

FITMENT

- 1936-'47 OHV big twins
- S&S® KN-Series engines

FEATURES AND BENEFITS

- Quality construction—Made in-house by S&S Cycle in Viola, Wisc.
- Higher lift and increased valve timing for better performance

APPLICATIONS

KN346 Cam: This is a service part cam for 74" knuckle engines. The KN346 cam is ground to stock specifications.

KN420 Cam: This "high-lift" cam for modified knuckle engines features .420" valve lift and increased duration for larger engines up to 93" and compression ratio of up to 8.5:1. Special high-lift valve springs are required.



CAMS FOR 1936-'47 OHV BIG TWINS & KN-SERIES ENGINES

Cam Name	Part #	MSRP
KN420	106-2409	\$224.95
KN346	106-3676 25522-36	\$224.95

CAM SPECIFICATIONS FOR 1936-'47 OHV BIG TWINS AND KN-SERIES ENGINES

Cam Name	Cam Timing (Open/Close)		Cam Duration		Lobe Centerline		Max Valve Lift		Valve Lift @ TDC	
	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
KN420	31°/55°	60°/30°	266°	270°	102°	110°	.420"	.420"	.167"	.152"
KN346*	10°/51°	40°/12°	241°	232°	110.5°	104°	.346"	.346"	.085"	.100"

*Ground to stock specifications.

NOTE: S&S can do a special order cam, please contact your S&S customer service representative for more information

CAMSHAFTS

FOR 1948-'84 BIG TWINS WITH STOCK VALVE TRAIN

FITMENT

- 1948-'69 engines with generator style crankcases
- 1970-'84 engines with alternator style crankcases
- Early SH-Series engines with stock style valve train

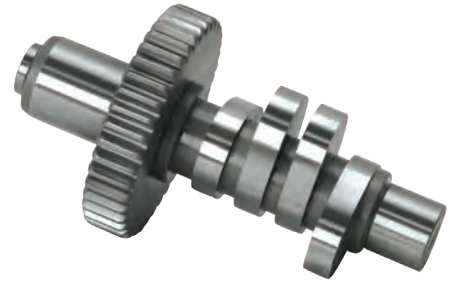
APPLICATIONS

S&S H-Grind: Service part for panhead and shovelhead engines. This grind is a dead-on reproduction of the stock cams used in 1948–1984 big twins. Perfect for repair and restoration of 74" and 80" engines. Available for generator engines with inner cam bushings or inner cam bearings, and for early and late alternator engines with different cam gear pitch diameters. Note that the front and rear cylinders have unique timing specs.

450S Cam: A bolt-in hydraulic cam for 74" and 80" shovelhead engines 1966–'79 and 1983–'84. (Can be used in 1981–'82 models if cylinder heads are updated to late style valve guides.) The 450S can also be used as a low end torque cam in modified shovelhead engines up to 88" with compression ratios of up to 8.5:1. Although designed for use with hydraulic tappets, the S&S 450S can be used with solid lifters. Use with solids will result in more valve train noise, slightly higher cylinder pressure, and slightly more torque. 1500–4500 rpm.

514 Cam: For 84" to 93" strokers with no greater than 9:1 CR—best gains occur in the mid range from 2500 to 5000 rpm where most riding is done. Relatively quiet and easier on the valve train than most other cams with lifts as high. Solid lifters or after-market hydraulic tappets are recommended, valve spring spacing and other normal clearancing checks required. 2500–5000 rpm.

560S Cam: For 88" to 103" engines between 9:1 to 10:1 CR—Excellent power across the rpm range. Not recommended for stock displacement or lower compression engines. Requires high lift valve springs and normal clearance checks. Solid lifters only. 3500–6000 rpm.



CAMSHAFTS FOR 1948-'84 BIG TWIN ENGINES

Cam Name	Model Year	Part #	MSRP
Service Part H-Grind	1948-'57	330-0164	\$224.95
	1958-'69	330-0170	\$224.95
	1970-'77	330-0165	\$224.95
	1978-'84	330-0166	\$224.95
S&S 450S	1948-'69	33-5062	\$224.95
	1970-'77	33-5063	\$224.95
	1978-'84	33-5064	\$224.95
S&S 514	1948-'69	33-5050	\$224.95
	1970-'77	33-5051	\$224.95
	1978-'84	33-5052	\$224.95
S&S 560S	1948-'69	33-5059	\$224.95
	1970-'77	33-5060	\$224.95
	1978-'84	33-5061	\$224.95

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT

NOTE: S&S can do a special order cam, please contact your S&S customer service representative for more information

CAM SPECIFICATIONS FOR 1948-'84 BIG TWIN ENGINES

Cam Name	Application	Model Year	Valve Timing ¹		Valve Duration		Valve Lift ²	Lift @ TDC ³		Spring Spacing Required	Tappet ⁴ Type Required
			Open/Close		Intake	Exhaust		Intake	Exhaust		
			Intake	Exhaust							
Service Part H-Grind	Service part replacement cam for pan and shovel engines	1948-'84	0°/40° F	53°/12° F	220° F	245° F	.389" F	.076" F	.131" F	No Bolt-In	Hydraulic
			20°/33° R	53°/12° R	233° R	245° R	.391" R	.076" R	.131" R		
S&S 450S	Engines up to 88" with up to 8.5:1 CR Good low and mid range torque	1948-'84	18°/38°	40°/18°	236°	238°	.475" Pan	.158" Pan	.152" Pan	No Bolt-In	Hydraulic or Solid
							.453" Shovel	.151" Shovel	.145" Shovel		
S&S 514	80" to 96" engines with 8:1 to 9:1 CR Good mid range	1948-'84	23°/43°	43°/23°	246°	246°	.540" Pan	.177" Pan	.177" Pan	Yes	Solid
							.514" Shovel	.169" Shovel	.169" Shovel		
S&S 560S	88" to 103" engines with 9:1 to 10.1:1 CR Strong power	1948-'84	20°/55°	60°/20°	255°	260°	.587" Pan	.176" Pan	.176" Pan	Yes	Solid
							.560" Shovel	.168" Shovel	.164" Shovel		

¹Timing designation is function of zero lash @ .053" off base circle.

²Pan and shovel lifts are determined by rocker arm ratio. Pan ratio is nominally 1.5":1 and shovel ratio is nominally 1.4:1. S&S rocker arms for shovels have 1.5:1 rocker arm ratio, so lift will be the same as pan lift.

³TDC lifts are measured at the valve and are for reference only. Overlap valve lifts must be checked on assembled motor.

⁴Cams specified for solid tappets may be used with modern high performance hydraulic tappets for shovelhead engines. Stock hydraulic tappets are not recommended. 1980-'81 engines require conversion to late style valve guides

CAMSHAFTS

FOR 1954-'84 BIG TWINS WITH S&S® VALVE TRAIN CONVERSION KIT

FITMENT

- 1954-'65 engines with S&S Head Update kit
- 1966-'84 engines with Hydraulic Conversion kit
- P-Series and SH-Series engines
- Custom generator style engines with 1984-'99 style top end

FEATURES AND BENEFITS

- Quality construction—Made in-house by S&S Cycle in Viola, Wisc.
- Higher lift and increased valve timing for better performance
- Quiet, dependable hydraulic valve train when used with S&S Hydraulic Conversion kits



33-5131



106-6028

CAM SPECIFICATIONS FOR 1954-'84 BIG TWIN ENGINES REQUIRING 1984-'99 STYLE CAMS

Cam	Application	Valve Timing ¹ Open/Close		Valve Duration		Valve Lift	Lift @ TDC ²		Spring Spacing Required	Tappet Type Required
		Intake	Exhaust	Intake	Exhaust		Intake	Exhaust		
		Open BTDC/Close ABDC	Open BBDC/Close ATDC							
S&S 513	74" - 84" Stock or low compression	18°/38°	40°/18°	236°	238°	.472"	.163"	.187"	No	Hydraulic
S&S 585	74" - 80" engines 8.5:1 - 9.5:1 CR 84" - 93" engines up to 8:1 - 9:1 CR	20°/45°	60°/20°	245°	260°	.540"	.172"	.166"	Yes	Hydraulic
S&S 600	93" - 103" engines 9:1 - 10:1 CR	20°/55°	60°/20°	255°	260°	.554"	.177"	.170"	Yes	Hydraulic
S&S 631	High rpm cam for 93" - 103" engines 11:1+ CR	34°/61°	66°/29°	275°	275°	.581"	.359"	.204"	Yes	Solid or Hydraulic
S&S 640	93" - up engines 10:1 or greater compression	25°/60°	65°/20°	265°	265°	.590"	.205"	.192"	Yes	Hydraulic

¹Timing designation is function of zero lash @ .053" off base circle.
²Lifts at TDC are measured at the valve and are for reference only. Overlap valve lifts must be checked on assembled motor.
Lifts based on 1.5:1 Rocker Ratio

CAMSHAFTS FOR 1954-'84 BIG TWIN ENGINES REQUIRING 1984-'99 STYLE CAMS

Cam	Application	Generator Part #	MSRP	Alternator Part #	MSRP	Tappet Type Required
S&S 513	74" - 84" Stock or low compression	106-6028	\$224.95	106-6027	\$224.95	Hydraulic
S&S 585	74" - 80" engines 8.5:1 - 9.5:1 CR 84" - 93" engines up to 8:1 - 9:1 CR	33-5131	\$225.95	33-5109	\$225.95	Hydraulic
S&S 600	93" - 103" engines 9:1 - 10:1 CR	33-5132	\$225.95	33-5058	\$225.95	Hydraulic

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LATE STYLE CAM RECOMMENDATIONS FOR PANHEAD AND SHOVELHEAD ENGINES

Application	RPM range	Compression Ratio	If you used . . .	Then Use	Generator	Alternator
74"—Stock 84" low compression	Low - Mid 1500—4500 rpm	8.5 and below	S&S® 450 or Andrews® J or A	S&S® 513	106-6028	106-6027
74" and 80"—Modified	Mid - High 3500—6000 rpm	8.5—9.5	S&S® 514 or Andrews #3 or B	S&S® 585	33-5131	33-5109
84"—93"	Low - Mid 2500—5500 rpm	8.0—9.0	S&S® 514	S&S® 585	33-5131	33-5109
93" HC—103"	Mid - High 3500—6000 rpm	9.0—10.0	S&S® 495 or 560S	S&S® 600	33-5132	33-5058
High Compression	High 3500—6500 rpm	Over 10.0	S&S® 495 or 565S	S&S® 640	—	33-5108

NOTES: In order to achieve stated timing specifications, these cams must be used in engines with 1984-'99 style tappets.

These cams should not be ordered as replacement parts for early S&S SH-Series engines, or for any shovelhead engine equipped with stock valve train.

For replacement parts for these engines, select stock style cams and tappets.

S&S can do a special order cam, please contact your S&S customer service representative for more information

PINION SHAFT GEAR KITS

FITMENT

- 1939–1989

FEATURES AND BENEFITS

- Contain all the components that need to be installed on the pinion shaft for the specified year group.
- Kits for 1939–'53 and 1954–'77 can be used in 1972 and earlier engines to speed up the oil pump by 25% for more potential oil volume, since S&S oil pump drive gears are of the 1973 and later 6-tooth design.

1939–'53 S&S® BIG TWIN STYLE PINION SHAFT GEAR KITS

Size	Color Code	Part #	MSRP
Biggest	Black	106-3218	\$329.95

EARLY 1954–'77 S&S® BIG TWIN STYLE PINION SHAFT GEAR KITS



Size	Color Code	Part #	MSRP
Smallest	White	106-3214	\$169.95
	Brown	106-3215	\$169.95
	Yellow	106-3216	\$169.95

LATE 1977–'89* S&S® BIG TWIN STYLE PINION SHAFT GEAR KITS

Size	Color Code	Part #	MSRP
Biggest	Yellow	33-4185	\$157.95
Average	Red	33-4148	\$157.95
	Blue	33-4181	\$157.95
Smallest	Black	33-4180	\$157.95

*Use this kit when installing an S&S® flywheel assembly in a 1990–'99 Engine

INDIVIDUAL COMPONENTS

Description	Part #	MSRP
Pinion Shaft Gear Spacer Fits 1954–'89 big twin engine. 	33-4289	\$7.95
Pinion Shaft Gear Nut ²⁶³⁴⁹⁻⁵⁴ Fits 1954–'89 big twin engine. 	33-4244	\$21.95
S&S Upgrade Pinion Shaft Oil Pump Drive Gear 1939–'53 Big Twin–6-Tooth. Requires S&S part #33-4230 or ²⁶³⁴⁵⁻⁷³ drive shaft drive gear. Fits 1939–'53 stock and S&S pinion shafts.	33-4237	\$170.95
Pinion Shaft Oil Pump Drive Gear ^{26349-73, 26349-73A} 1973–'89–6-Tooth. May be used in 1954–'72 engines, but requires S&S part #33-4230 or ²⁶³⁴⁵⁻⁷³ oil pump shaft drive gear. Fits 1954–'89 stock and 1958–'99 S&S pinion shafts.	33-4232	\$45.95
Oil Pump Drive Gear 24-Tooth Requires S&S part #33-4232, part #33-4237, or ²⁶³⁴⁹⁻⁵⁴ pinion shaft drive gear. Fits 1973–'99 big twin engine. ^{26349-73, 26349-73A}	33-4230	\$39.95



106-3215



33-4148



33-4289

33-4244



33-4237

33-4232

33-4230

NOTE: All S&S Pinion Shaft Gear Kits must be used with 1973–'99 style 24-tooth oil pump drive shaft gear such as S&S part #33-4230.

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

REPLACEMENT PINION GEARS

High quality S&S pinion gears are carefully machined, heat treated and then finish ground.

Three distinct year groups, in up to eight different color coded sizes for optimum gear lash, are available for big twin engines. S&S color codes match Harley-Davidson® color codes so that replacement is easy. Just pick the appropriate color S&S gear that matches the color on the damaged stock gear (see notes).

NOTES: If the stock gear is unmarked and the size is unknown or you are scratch building an engine and have no gear, we recommend that you order a gear in the middle of the size range. These sizes were used more often and should provide adequate gear clearance under most circumstances. When in doubt, use a gear from the middle to the small side of the range, because a combination of looser fitting smaller gears is less likely to cause binding and premature wear. Consult the chart for the size and appropriate part number required. If you wish to achieve optimum cam gear to pinion gear fit, consult your factory service manual for instructions on fitting these gears before making a selection. Some sizes, particularly those on and near the ends of each range, are available on a limited basis because they are the extremes.



BIG TWIN STYLE PINION GEAR SELECTION CHART

1939-'53		
Size / Color Code	Part #	MSRP
Biggest / Black	33-4102	\$224.95
1954-'77		
Size / Color Code	Part #	
Biggest / Orange	33-4121	\$124.95
Biggest / Black	33-4122	\$124.95
Biggest / Red	33-4123	\$124.95
Average / Blue	33-4124	\$124.95
Average / Green	33-4125	\$124.95
Smallest / White	33-4126	\$124.95
Smallest / Brown	33-4127	\$124.95
Smallest / Yellow	33-4128	\$124.95
1977-'89*		
Size / Color Code	Part #	
Biggest / Orange	33-4141	\$99.95
Biggest / White	33-4142	\$99.95
Biggest / Yellow	33-4143	\$99.95
Average / Red	33-4144	\$99.95
Average / Blue	33-4145	\$99.95
Smallest / Green	33-4146	\$99.95
Smallest / Black	33-4147	\$99.95

Note: All S&S Pinion Shaft Gear Kits must be used with 1973-'99 style 24-tooth oil pump drive shaft gear such as S&S part #33-4230.

*Use this kit when installing an S&S flywheel assembly in a 1990-'99 engine.

STEEL ROTARY BREATHER GEARS

FOR 1936-'84 BIG TWIN

FITMENT

- 1936-'84 OHV big twins

FEATURES

- All steel construction—superior dimensional stability, abrasion
- Welded-in screen
- Higher flow than stock
- Elongated breather pocket scavange hole for increased suction

OPTIONS

- Standard diameter for replacement or new builds
- +.030" diameter for damaged engines
- Breather gear only kits
- Breather gear and shim kits



33-4250

BREATHER GEAR KITS FOR 1936-'99 BIG TWIN

Year of Camshaft	Standard Size	MSRP	+.030" Oversize	MSRP
1936–Early '47	106-6010	\$142.95	106-6013	\$142.95
1948–Early '77	33-4253	\$142.95	33-4263	\$142.95
Late 1977–'99	33-4250	\$130.95	33-4260	\$130.95



106-5070

BREATHER GEARS ONLY FOR 1936-'99 BIG TWIN

Year of Camshaft	Standard Size	MSRP	+.030" Oversize	MSRP
1936–Early '47	106-5070 25300-36	\$117.95	106-6012	\$117.95
1948–Early '77	33-4246 25313-73	\$117.95	33-4247	\$117.95
Late 1977–'99	33-4241 25310-82A, 25313-77B, 25311-90	\$102.95	33-4242	\$102.95



33-4249

BREATHER GEAR SPACING SHIM KIT

Description	Part #	MSRP
Fits stock 1979–'82 and all S&S® steel breather gears. Includes one of each thickness: .100", .110", .120", .130", .140", .150", .160", .170"	33-4249	\$27.95

GENERATOR STYLE GEARCOVERS

FOR 1936-'69 OHV BIG TWINS

FITMENT

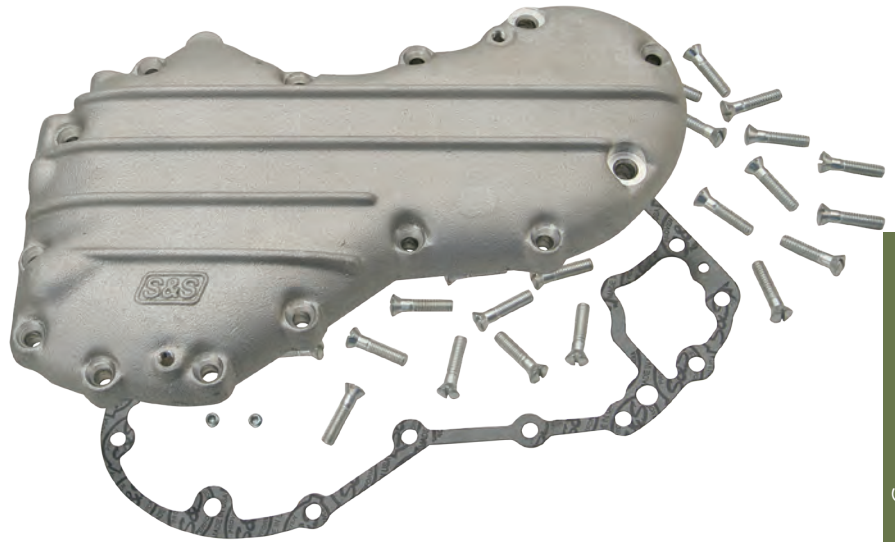
- 1936-'62 OHV big twins
- Available for stock and S&S crankcases

FEATURES AND BENEFITS

- Cast gearcovers—stock appearance
- Bushings installed and sized—ready to install

KIT CONTENTS

- Gearcover assembly
- Gasket and hardware
- Instructions



FOR STOCK CRANKCASES—CAST GENERATOR GEARCOVERS

Application	Hardware Type	Pinion Bushing I.D.	Distinguishing Characteristics	Part #	MSRP
1940-early'48 OHV	¼"-24	11/16"	8 Ribs, w/tapped hole for top end oiling, ¼" gen mount holes*	106-3198 25216-48	\$324.95
Late 1948-'53 OHV	¼"-24	11/16"	8 Ribs, w/o tapped hole top for end oiling, ¼" gen mount holes*	106-3499	\$329.95
1954-'62 OHV	¼"-24 and ¼"-20	5/16"	4 Ribs w/o stock outside oiler passage, 5/16" gen mount holes	31-0240 25216-58	\$336.95

*Generator mounting holes must be drilled to 3/16" for use with 1958-later generators. Cast generator gearcovers come with countersunk hardware

FOR S&S® CRANKCASES—CAST GENERATOR GEARCOVERS

Application	Hardware Type	Pinion Bushing I.D.	Distinguishing Characteristics	Part #	MSRP
1940-'47 OHV	¼"-24 and ¼"-20	5/16"	8 Ribs, w/tapped hole for top end oiling, 5/16" gen mount holes	106-3482	\$329.95
1954-'64 OHV	¼"-24 and ¼"-20	5/16"	4 Ribs w/o stock outside oiler passage, 5/16" gen mount holes*	31-0240 25216-58	\$336.95
1965-'69 OHV	¼"-24 and ¼"-20	5/16"	Smooth w/o outside oiler passage, 5/16" gen mount holes w/12 o'clock boss	106-1627	\$327.95

Cast generator gearcovers come with countersunk hardware.

*A tapped hole on top of the cover can be used to supply oil to the top end—similar to 1936-48 OHV big twins.

➔ **REPLACEMENT PARTS: SEE PAGE 183**

NOTE: S&S does not offer a direct replacement cover for 1963-'64 engines with outside oilers.

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.



BILLET GEARCOVERS

FOR 1973-'92 BIG TWINS

FITMENT

- 1973-'92 engines
- S&S alternator style SH-Series engines

FEATURES AND BENEFITS

- Machined from billet aluminum
- Available gloss black, polished, chrome plated
- Compatible with points or electronic ignition systems


KIT CONTENTS

- Billet gearcover, billet ignition cover, all gaskets and hardware, installation instructions



31-0335

BILLET GEARCOVERS FOR 1973-'92 BIG TWINS

Finish	Part #	MSRP
Gloss Black	310-0898	\$524.95
Polished  1,2,3	31-0335	\$529.95
Chrome	106-4211±	\$529.95

±  WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

CAST GEARCOVERS

FOR 1973-'84 BIG TWINS

FITMENT

- 1973-'84 engines

FEATURES AND BENEFITS

- Flangeless
- Flanged with a chromed billet aluminum cover
- Machined from tough 356-T6 aluminum castings—the same material used to make S&S crankcases
- Inner cast aluminum cover and a decorative bolt-on outer cover
- Both versions will accept either points or electronic ignition systems

KIT CONTENTS

- Cast gearcover, Gaskets, Mounting Hardware



31-0203

CAST GEARCOVERS FOR 1973-84 BIG TWINS

Description	Part #	MSRP
Natural—Flangeless Tall	31-0203	\$259.95
Wrinkle Black—Flangeless Tall	31-0299	\$292.95

IGNITION COVERS

GLOSS BLACK NOW AVAILABLE!

IGNITION COVER

Description	Part #	MSRP
Gloss Black	310-0897	\$62.95
Chrome	31-0332	\$72.95

±  WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

CIRCUIT BREAKER DRIVE GEARS

GENERATOR CRANKCASE GEAR KIT FOR 1936-69 BIG TWIN ENGINES & CUSTOM ALT/GEN ENGINES

Description	Part #	MSRP
Standard Clockwise Rotation.	33-4226	\$619.95
Reverse Counterclockwise Rotation.	33-4227	\$619.95

**33-4226**

CIRCUIT BREAKER DRIVE GEAR ASSEMBLIES FOR 1936-69 BIG TWIN ENGINES

Description	Part #	MSRP
Standard/Clockwise Rotation. 25850-36A	33-4215	\$338.95
Counterclockwise/Reverse Rotation. Requires S&S #33-4208 circuit breaker gear.	33-4209[±]	\$338.95

Shims not included

± WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

**33-4217**

CIRCUIT BREAKER GEARS FOR 1936-69 BIG TWIN ENGINES

Description	Part #	MSRP
Standard Clockwise Rotation 32531-36	33-4217	\$135.95
Reverse Counterclockwise Rotation Requires S&S #33-4209 [±] circuit breaker gear assembly	33-4208	\$135.95
Roll Pin 7/64" Diameter 255	50-8025	\$4.95
Roll Pin 1/8" Diameter	50-8030	\$4.95

CIRCUIT BREAKER DRIVE GEAR SHAFT

Description	Part #	MSRP
Fits 1936-'69 big twin engines. 25856-36	31-2037	\$39.95

**31-2039**

IDLER GEAR SHAFT

Description	Part #	MSRP
Fits 1936-'69 big twin engines 25791-36	31-2039	\$15.95

BUSHING

Description	Part #	MSRP
Fits all S&S® circuit breaker drive and idler gears for 1936-'69 big twin engines	33-4214	\$21.95

**33-4214****33-4221**

IDLER GEAR ASSEMBLY

Description	Part #	MSRP
Fits 1936-'69 big twin engines. (Shims not included.) 25775-36	33-4216	\$214.95

CIRCUIT BREAKER DRIVE/IDLER GEAR SHIMS

Fits 1936-'69 big twin engines		
Description	Part #	MSRP
.050" Thick	33-4221	\$10.95
.054" Thick	33-4222	\$10.95
.058" Thick	33-4223	\$13.95
.062" Thick	33-4224	\$13.95
.066" Thick	33-4225	\$13.95

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CYLINDERS WITH PISTONS KIT

FOR 1966-'84 BIG TWINS AND P-SERIES ENGINES

FITMENT

- 1966-'84 shovel engines
- S&S® Vintage SH-Series and P-Series engines
- Cylinders will not fit OEM panhead engines

FEATURES AND BENEFITS

- High strength engineering-grade grey cast iron
- Excellent wear resistance
- Durable powder coat finish
- P-Series are silver powder coated

OPTIONS

- 3⁷/₁₆", 3³/₈", and 3¹/₂" bore
- Black or silver powder coat finish
- Available in sets or single front or rear cylinders
- Available fit with your choice of S&S pistons



CYLINDERS WITH PISTONS KIT

Displacement	Stroke	Bore	Cylinder Length	Compression Ratio	Part #	MSRP
74" LC	3 ³ / ₃₂ "	3 ⁷ / ₁₆ "	5.330"	8.0:1	91-9013	\$1,406.95
74" HC	3 ³ / ₃₂ "	3 ⁷ / ₁₆ "	5.330"	9.0:1	91-9012	\$1,406.95
80" LC	4 ¹ / ₄ "	3 ¹ / ₂ "	5.330"	8.0:1	91-9024	\$1,350.95
80" HC	4 ¹ / ₄ "	3 ¹ / ₂ "	5.330"	9.0:1	91-9023	\$1,350.95

*Cylinders with pistons include cylinders, piston kit, head bolts, base nuts, and head & base gaskets. All piston kits include rings, wristpins, and clips. Recommended Piston Fit: Close: .0035" to .004"
Loose: .0045" to .0055"*

STOCK BORE STROKER CYLINDERS WITH PISTONS KIT

Displacement	Stroke	Bore	Cylinder Length	Compression Ratio	Part #	MSRP
84"	4 ¹ / ₂ "	3 ⁷ / ₁₆ "	5.330"	8.4:1	91-9017	\$1,406.95
86"	4 ⁵ / ₈ "	3 ⁷ / ₁₆ "	5.330"	9.4:1	91-9017	\$1,406.95
88"	4 ³ / ₄ "	3 ⁷ / ₁₆ "	5.330"	10.8:1	91-9017	\$1,406.95

*Cylinders with pistons include cylinders, piston kit, head bolts, base nuts, and head & base gaskets. All piston kits include rings, wristpins, and clips. Recommended Piston Fit: Close: .0035" to .004"
Loose: .0045" to .0055"*

3⁵/₈" BORE STROKER CYLINDERS WITH PISTONS KIT

Displacement	Stroke	Bore	Cylinder Length	Compression Ratio	Part #	MSRP
88"	4 ¹ / ₄ "	3 ⁵ / ₈ "	5.330"	7.5:1	91-9001	\$1,406.95
93" LC	4 ¹ / ₂ "	3 ⁵ / ₈ "	5.405"	8.5:1	91-9101	\$1,406.95
93" HC	4 ¹ / ₂ "	3 ⁵ / ₈ "	5.363"	9.1:1	91-9031	\$1,519.95
96"	4 ⁵ / ₈ "	3 ⁵ / ₈ "	5.440"	9.0:1	91-9401	\$1,406.95
98"*	4 ³ / ₄ "	3 ⁵ / ₈ "	5.530"	8.9:1	91-9201	\$1,406.95
103"*	5"	3 ⁵ / ₈ "	5.630"	9.7:1	91-9302	\$1,519.95

*Cylinders with pistons include cylinders, piston kit, head bolts, base nuts, and head & base gaskets. All piston kits include rings, wristpins, and clips. Recommended Piston Fit: Close: .0035" to .004"
Loose: .0045" to .0055". *Small Diameter Flywheels*

NOTES: Cylinders for P-Series engines will not fit stock pan cylinder heads. They are machined with a stock shovel head bolt pattern. Cylinders for P-Series engines do not have an internal oil feed passage for top end oiling. Not compatible with stock pan cases or heads.

CYLINDERS WITH PISTONS KIT FOR 1936-47 OHV BIG TWINS

FITMENT

- 1936-47, 74", and 93" knuckle engines
- S&S® Vintage KN-Series engines

FEATURES AND BENEFITS

- High strength engineering-grade grey cast iron
- Excellent wear resistance
- Durable powder coat finish—high temp gloss black



3-7/16" & 3-5/8" BORE CYLINDERS WITH PISTONS KIT FOR 1936-47 OHV ENGINES

Piston Series	Displacement	Stroke	Bore	Cylinder Length	Compression Ratio	Part #	MSRP
74 LC Forged	74"	3 3/32"	3 7/16"	5.530"	8:1	106-4519	\$1,406.95
3 5/8" Forged	93"	4 1/2"	3 5/8"	5.625"	8.2:1	106-2402	\$1,519.95

Cylinders with pistons include cylinders, piston kit, and head & base gaskets. All piston kits include rings, wristpins, and clips. Recommended Piston Fit: Close: .0035" to .004" Loose: .0045" to .0055"

NOTES: S&S® cylinder heads for 1940-47 OHV big twins are machined for 7/16-20 head bolts and are not compatible with stock 7/16-16 head bolts. If using S&S heads with 3 7/16" bore cylinders, stock style hex head bolts for 1948-65 big twins, part #106-4523 may be used. S&S 3 5/8" bore cylinders require the use of S&S 1966-84 style 12 point head bolts part #93-3024, due to clearance issues.

Stock 1930-78 hex style base nut kit is available in cadmium plate, part #106-4522, for 3 7/16" bore cylinders only. Stainless raised hex base nuts, part #93-3063-S, are required for 3 5/8" bore cylinders.

CYLINDERS

3 7/16", 3 1/2", & 3 5/8" BORE CYLINDERS FOR 1966-84 BIG TWIN—GLOSS BACK

Displacement	Bore	Cylinder Sets	MSRP
74", 84", 86", 88" Stock Bore Stokers	3 7/16"	91-9011	\$1,124.95
80", 84"	3 1/2"	91-9021	\$1,124.95
88"	3 5/8"	91-9000	\$1,124.95
93"		91-9100	\$1,124.95
93"HC		91-9030	\$1,124.95
96"		91-9400	\$1,124.95
98" SD†		91-9200	\$1,124.95
103" SD†		91-9300	\$1,124.95

*†Small Diameter Flywheels **Some early S&S 93" and 96" Sidewinder® Kits were sold with 5.530" length cylinders. Use 91-9200 for replacement cylinders. Individual cylinders and cylinder sets without pistons are bored slightly under nominal size and are not honed. Individual cylinder assemblies and cylinder kits with pistons are honed to fit the pistons included.*

3 7/16" & 3 5/8" BORE CYLINDERS FOR 1936-47 OHV ENGINES—HIGH TEMP GLOSS BLACK

Displacement	Bore	Cylinder Sets	MSRP
74"	3 7/16"	106-4512 16492-41, 16483-41	\$1,237.95
93"	3 5/8"	106-4655	\$1,237.95

Cylinder set include cylinders, head gaskets, and base gaskets.



FORGED PISTON KITS

FOR 74" AND 80" 1936-'84 OHV ENGINES

FITMENT

- 74" pistons fit 1936-'78, 74" OHV engines
- 80" pistons fit 1979-'84, 80" big twin engines and may be used in mild stroker engines with 4¼" stroke flywheels

FEATURES AND BENEFITS

- Forged pistons for superior strength
- Modern alloys and piston skirt profiles for low noise and long engine life
- Dome volume
 - 74 LC = 46cc
 - 74 HC = 57cc
 - 80 LC = 41cc
 - 80 HC = 53cc
- Piston kits include set of pistons, wristpins, and clips

OPTIONS

- 74"—8:1 or 9:1 compression
- 80"—8:1 or 9:1 compression

S&S will fit these pistons to your existing cylinders (*when purchasing new cylinders, pistons can be fit to them as an option*)



S&S® STOCK BORE FORGED PISTON SPECIFICATIONS				
Displacement	Bore	Stroke	Compression Ratio	Piston Deck Height
74"	3 ⁷ / ₁₆ "	3 ³ / ₃₂ "	8:1 and 9:1	1.436"
80"	3 ¹ / ₂ "	4 ¹ / ₄ "	8:1 and 9:1	1.270"

Recommended Piston Fit Close: .003" - .0035" Loose: .004" - .005"

FORGED 74" PISTONS

Oversize	Deck Height	8:1 Compression	MSRP	9:1 Compression	MSRP
Standard (3 ⁷ / ₁₆ ")	1.436"	106-5495 22101-41, 22101-48	\$416.95	106-5503	\$416.95
+.010"	1.436"	106-5496 22103-48, 22103-41	\$416.95	106-5504	\$416.95
+.020"	1.436"	106-5497 22104-48, 22104-41	\$416.95	106-5505	\$416.95
+.030"	1.436"	106-5498 22105-48, 22105-41	\$416.95	106-5506	\$416.95
+.040"	1.436"	106-5773 22106-48, 22106-41	\$416.95	106-5775	\$416.95

REPLACEMENT RINGS FOR 74"

Oversize	Part #	MSRP
Standard (3 ⁷ / ₁₆ ")	94-2200X 22325-55B, 22355-53, 22355-48, 22355-41	\$45.95
+.010"	94-2201X 22327-55B, 22357-48, 22357-41	\$45.95
+.020"	94-2202X 22328-55B, 22358-53, 22358-48, 22358-41	\$45.95
+.030"	94-2203X 22329-55B, 22359-48, 22359-41	\$45.95
+.040"	94-2204X 22330-55B, 22360-48, 22360-41	\$45.95

FORGED 80" PISTONS

Oversize	Deck Height	8:1 Compression	MSRP	9:1 Compression	MSRP
Standard (3 ¹ / ₂ ")	1.270"	106-5511	\$416.95	106-5519	\$416.95
+.010"	1.270"	106-5512	\$416.95	106-5520	\$416.95
+.020"	1.270"	106-5513	\$416.95	106-5521	\$416.95
+.030"	1.270"	106-5514	\$416.95	106-5522	\$416.95

REPLACEMENT RINGS FOR 80"

Oversize	Part #	MSRP
Standard (3 ¹ / ₂ ")	94-2206X 22334-78A, 22334-78B, 21920-83	\$45.95
+.010"	94-2207X 22335-78A, 22335-78B, 21922-83	\$45.95
+.020"	94-2208X 22336-78B, 21923-83	\$45.95
+.030"	94-2209X 22337-78B, 21924-83	\$45.95

REPLACEMENT WRISTPINS AND KEEPERS

Description	Part #	MSRP
Wristpin .791" diameter	106-6123	\$27.95
Wristpin keeper, c-clip	<i>each</i> 94-9254-S	\$0.95
	<i>4 pack</i> 94-9254	\$5.95

NOTES: Since many older motorcycles have been modified, be sure to confirm that your engine is still stock before ordering replacement pistons.

Using 80" pistons with 74" (3³/₃₂" stroke) flywheels will result in very low compression and poor performance. Using 74" pistons with 80" (4¹/₄" stroke) flywheels will result in contact between piston and cylinder head, and potential engine damage.

FORGED STOCK BORE STROKER PISTONS

FOR 1936-'84 OHV ENGINES

FITMENT

- 84", 86", and 88" stroker engines for 1936-'84 OHV engines

FEATURES AND BENEFITS

- Forged pistons for superior strength
- Modern alloys and piston skirt profiles for low noise and long engine life
- Dome volume 50cc
- Piston kits include set of pistons, rings, wristpins, and clips

S&S will fit these pistons to your existing cylinders (when purchasing new cylinders, pistons can be fit to them as an option)



106-5527

S&S FORGED STOCK BORE STROKER PISTON SPECIFICATIONS					
Displacement	Bore	Stroke	Compression Ratio		Piston Deck Height
			Standard	LC	
84"	3 $\frac{7}{16}$ "	4 $\frac{1}{2}$ "	8.1:1	7.3:1	1.100
86"	3 $\frac{7}{16}$ "	4 $\frac{5}{8}$ "	9.4:1	8.1:1	
88"	3 $\frac{7}{16}$ "	4 $\frac{3}{4}$ "	10.8:1	9.1:1	

Recommended Piston Fit Close: .003" — .0035" Loose: .004" — .005"

FORGED STOCK BORE STROKER PISTONS

Oversize	Standard	MSRP	Low Compression	MSRP
Standard (3 $\frac{7}{16}$ "	106-5527	\$416.95	920-0073	\$529.95
+.010"	106-5528	\$416.95	920-0075	\$529.95
+.020"	106-5529	\$416.95	920-0077	\$529.95
+.030"	106-5530	\$416.95	920-0079	\$529.95
+.040"	106-5777	\$416.95	920-0081	\$529.95
+.050"	106-5778	\$416.95	920-0083	\$529.95
+.060"	106-5779	\$416.95	920-0085	\$529.95
+.070"	106-5780	\$416.95	920-0087	\$529.95
+.080"	106-5781	\$416.95	920-0089	\$529.95
+.090"	106-5782	\$416.95	920-0091	\$529.95

NOTE: When ordering pistons for a shovel engine, please keep in mind that these pistons are sized by 3 $\frac{7}{16}$ " standard bore for a 74" engine. If using 80" cylinders standard bore is 3 $\frac{1}{2}$ " or 3 $\frac{7}{16}$ " +.060".

REPLACEMENT RINGS FOR FORGED STOCK BORE STROKER PISTONS

Oversize	Part #	MSRP
Standard (3 $\frac{7}{16}$ "	94-2200X 22325-55B, 22355-53, 22355-48, 22355-41	\$45.95
+.010"	94-2201X 22327-55B, 22357-48, 22357-41	\$45.95
+.020"	94-2202X 22328-55B, 22358-53, 22358-48, 22358-41	\$45.95
+.030"	94-2203X 22329-55B, 22359-48, 22359-41	\$45.95
+.040"	94-2204X 22330-55B, 22360-48, 22360-41	\$45.95
+.050"	94-2205X	\$45.95
+.060"	94-2206X 22334-78A, 22334-78B, 21920-83	\$45.95
+.070"	94-2207X 22335-78A, 22335-78B, 21922-83	\$45.95
+.080"	94-2208X 22336-78B, 21923-83	\$45.95
+.090"	94-2209X 22337-78B, 21924-83	\$45.95

REPLACEMENT WRISTPINS AND KEEPERS

Description	Part #	MSRP
Wristpin .791" diameter	106-6123	\$27.95
Wristpin keeper, c-clip	each 94-9254-S	\$0.95
	4 pack 94-9254	\$5.95

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FORGED 3-5/8" BORE PISTONS FOR 1936-'84 OHV ENGINES

FITMENT

- 88", 93", 96", 98" and 103" engines for 1936-'84 OHV big twins

FEATURES AND BENEFITS

- Forged pistons for superior strength
- Modern alloys and piston skirt profiles for low noise and long engine life
- Dome volume 30cc
- Piston kits include set of pistons, rings, wristpins, and clips

OPTIONS

- Available in 3/8" Standard, +.010", .020", .030", and .060" oversizes

S&S will fit these pistons to your existing cylinders (when purchasing new cylinders, pistons can be fit to them as an option)



S&S® 3/8" BORE FORGED PISTON APPLICATION CHART						
Displacement	Wristpin Deck Height	Stroke	Flywheel Diameter	Compression Ratio	Cylinder Length	
					SH-Series & P-Series Engines	KN-Series Engines
88"	1.260"	4 1/4"	8 1/2"	7.5:1	5.330"	—
93"	1.260"	4 1/2"	8 1/2"	8.5:1	5.405"	5.625"
93" HC	1.260"	4 1/2"	8 1/2"	9.1:1	5.363"	—
96"	1.260"	4 5/8"	8 1/2"	9.1:1	5.440"	—
98"	1.260"	4 3/4"	8 1/2"	8.9:1	5.530"	—
103"	1.260"	5"	8 1/4"	9.7:1	5.630"	—

FORGED 3/8" BORE PISTON SETS FOR 1936-'84 OHV BIG TWINS

Oversize	Wristpin Deck Height	Part #	MSRP
Standard (3/8")	1.260"	106-5535	\$364.95
+.010"	1.260"	106-5536	\$364.95
+.020"	1.260"	106-5537	\$364.95
+.030"	1.260"	106-5538	\$364.95
+.060"	1.260"	106-5789	\$364.95

Recommended Piston Fit Close: .003" - .0035" Loose: .004" - .005"

NOTE: Compression ratios will change when replacing existing pistons in S&S engines with this series of forged pistons. If higher compression is desired, we suggest shortening cylinders, or decking heads to achieve the desired compression ratio. A change of .060" will produce approximately 1 point of change in the compression ratio.

REPLACEMENT RINGS FOR FORGED 3/8" BORE PISTONS

Oversize	Part #	MSRP
Standard (3/8")	94-1220X	\$45.95
+.010"	94-1221X	\$45.95
+.020"	94-1222X	\$45.95
+.030"	94-1223X	\$45.95
+.060"	94-1226X	\$45.95

REPLACEMENT WRISTPINS AND KEEPERS

Description	Part #	MSRP
Wristpin .791" diameter	106-6123	\$27.95
Wristpin keeper, c-clip	each	94-9254-S \$0.95
	4 pack	94-9254 \$5.95

REPLACEMENT PISTON RINGS FOR UL CYLINDERS

3/16" - REPLACEMENT RINGS FOR CAST PISTON KITS

Oversize	Part #	MSRP
+.010"	940-0007	\$45.95
+.020"	940-0008	\$45.95



SUPER STOCK™ CYLINDER HEADS

FOR 1966-'84 BIG TWIN ENGINES

FITMENT

- 1966-'84 big twins
- SH-Series engines

FEATURES AND BENEFITS

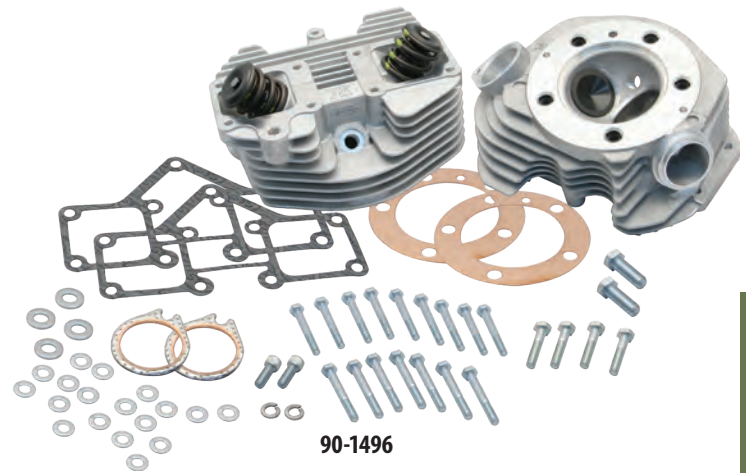
- Stock appearance and improved performance
- S&S .590" lift valve springs
- Fits stock intake manifolds and exhaust pipes
- Rocker cover fastened with 5/16"-18 hex-head cap screws

OPTIONS

- Stock bore or 35/8" bore
- O-ring or rubber band style manifold
- Natural aluminum or wrinkle black powder coat finish
- Dual spark plugs and/or external oil return lines by special order

KIT CONTENTS

- Front and rear assembled cylinder heads complete with valves and .590" springs
- Head, rocker and exhaust gaskets
- Mounting hardware and instructions



90-1496

→ REPLACEMENT PARTS: SEE PAGE 188

CYLINDER HEAD KITS FOR 1966-'84 BIG TWIN ENGINES

Engine Year and Type	Bore	Aluminum Finish	MSRP	Wrinkle Black	MSRP
1966-'78 (O-ring)	Stock	90-1496	\$1,558.95	90-1596	\$1,687.95
	35/8"	90-1497	\$1,558.95	90-1597	\$1,687.95
	35/8" Dual Plug	90-1491	\$1,706.95	—	—
1979-'84 (Band)	Stock	90-1498	\$1,558.95	90-1598	\$1,687.95
	35/8"	90-1499	\$1,558.95	—	—
	35/8" Dual Plug	90-1488	\$1,706.95	—	—
Special Order*	Specify	90-1490*	Call for Pricing	90-1490*	Call for Pricing

*Use this special order part number to order assembled or unassembled cylinder heads with spring options, and special finish. Front or rear heads available by special order. Download the Special Order Form at sscycle.com/soforms
 DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. Not legal for sale or use on any EPA pollution controlled motor vehicle.

REPLACEMENT CYLINDER HEADS FOR P-SERIES ENGINES & RETRO CONVERSION KITS

FITMENT

- P-Series engines
- 1966–'84 big twins
- Valve train update kit—available through Special Order

FEATURES AND BENEFITS

- S&S .590" lift valve springs
- Late style valve chamber eliminates oil pooling
- Cooling channel between combustion chamber and rocker arms

OPTIONS

- Stock bore or 3 $\frac{3}{8}$ " bore
- Dual spark plug available for 3 $\frac{3}{8}$ " bore and special order
- Stock pan bolt pattern available through special order

KIT CONTENTS

- Front and rear cylinder head complete with valves and springs
- Head, pan, and exhaust gaskets



106-0414

→ REPLACEMENT PARTS: SEE PAGE 186

NOTE: These are not service part cylinder heads for panhead engines. They will not fit on stock panhead cylinders.

REPLACEMENT CYLINDER HEADS FOR S&S® P-SERIES ENGINES AND RETRO CONVERSION KITS

Description	Complete Kit (with Valves and Springs)	MSRP
Stock Bore	106-0414	\$1,558.95
3 $\frac{3}{8}$ " Bore	106-0417	\$1,558.95
3 $\frac{3}{8}$ " Bore Dual Plug	106-0420	\$1,706.95

CYLINDER HEADS FOR 1940–'47 OHV BIG TWIN ENGINES

FITMENT

- KN-Series engines
- 1940–'47 OHV big twins
- 1936–'39 with a manifold upgrade

FEATURES AND BENEFITS

- Made of engineering-grade grey iron—better heat dissipation, less sound transfer
- Durable stock-look black powder coat finish
- Counter bore for 61" cylinder fire ring
- Set up for o-ring manifold or late style port plumber fittings
- 1.940" intake and 1.750" exhaust valve
- Valve springs allow cams with up to .480" lift
- Compatible with stock or S&S valve cover "tins"

OPTIONS

- Fully assembled or unassembled
- Fully assembled with valves, rocker arms, tins and housings complete
- Guides installed for use with S&S® Vintage tins (valves ground)
- Guides not installed for use with stock tins (valves not ground)
- 14mm or 18mm spark plug hole



→ REPLACEMENT PARTS: SEE PAGE 188


CYLINDER HEADS

Description	Part #	MSRP
Fully assembled heads	106-4929*	Call for Pricing

NOTE: Stock 1948–'65 head bolts can be used in stock bore applications and are available on [page 147](#), big bore applications must use the S&S 12 point head bolt also found on [page 147](#).

HEAD BOLT KITS FOR 1948-'84 BIG TWIN ENGINES

HEAD BOLT KITS FOR 1948-'84 BIG TWIN ENGINES

Description	Part #	MSRP
1948-'84 Panhead & Shovelhead & 3½" Bore KN-Series Head Bolt Kit 6469HW 7/16"-20 x 2¾" 12 pt stainless steel bolt #93-3025 washers.	93-3024	\$96.95
Stock Bore KN-Series & Stock Panhead 16814-48 Head Bolt Kit 7/16"-20 x 2¾" Hex cad plated bolt #106-4523 washers.	106-4523	\$90.95
Oil Bypass Plug (Included with all S&S® stock bore shovelhead style cylinders) 	each	93-1032-S \$7.95
	2 pack	93-1032 \$24.95

**106-4523****93-3024**

Shown: 1 bolt and washer. Kit includes 10 of each.

CYLINDER HEAD & MOTOR MOUNTS

CYLINDER HEAD AND MOTOR MOUNTS

Description	Part #	MSRP
Complete Kit for 1948-'84 Big Twin—Fits panhead and shovelhead engines with cylinders up to 5.750" long 16852-67A, 16853-48	93-4057	\$51.95
Screw, HHC, 7/16"-20 x 1-¼" 4726	50-0176	\$4.95
Nut, Lock, HH, 7/16"-20, Steel/Nylon 7825	50-5045	\$0.95
Washer, Flat, .469" x .922" x .125", Zinc, Steel 6495HW	50-7064	\$4.95

**93-4057**

CYLINDER BASE NUTS & STUDS

CYLINDER BASE NUTS AND STUDS

Fitment	Description	Part #	MSRP
Cylinder Base Studs 1930-'84 Big Twin	Stock length base stud—Fits 61", 74", and 80" OHV and SV models 2.030" overall length 16831-30, 16837-30	each	31-2328-S \$7.95
		8 pack	31-2328 \$39.95
	Extra long base stud—5/16" longer than late stock studs 2.390" overall length 16837-78	each	31-2324-S \$32.95
<i>NOTE: This leaves approximately 1.400" above the base gasket surface with 1" of crankcase thread engagement</i>			
Base Nuts 1930-'78 Big Twin (stock bore only)	Base Nut Kit—Cadmium plated, includes lock washers	8 pack	106-4522 \$21.95
<i>NOTE: This leaves approximately 1.400" above the base gasket surfaces with 1.125" of crankcase thread engagement</i>			
Base Nuts 1966-'84 Big Twin	Stainless 7/16" hex allows the use of box end wrench to tighten base nuts on S&S Sidewinder® cylinders for shovelhead engines. Requires .375"–.400" stud engagement—stud height may need to be adjusted	each	93-3063-S \$8.50
		8 pack	93-3063 \$61.95

**31-2328-S****31-2324-S****93-3063-S**


Showing 1 nut & washer. Kit includes 8 of each

106-4522

HYDRAULIC VALVE TRAIN CONVERSION KIT FOR SHOVELHEAD ENGINES

FITMENT

- 1966–'84 big twins
- 1953–'65 engines using shovel cylinders and P-Series heads or engines using P-Series valve train update kits



FEATURES AND BENEFITS

- Quiet, dependable hydraulic valve train
- Through the pushrod or external oiling options
- Easy pushrod installation and removal
- Wide selection of late style cams to choose from

OPTIONS

- Kit for use with S&S roller rocker arms for oiling through pushrods
- Kit for use with stock style rocker arms for oiling through external oil line

KIT CONTENTS

- Polished billet tappet guides
- Four 1984–'99 style tappets w/HL₂T kit
- Set of Quickee Adjustable pushrods
- Pushrod cover keepers
- Required hardware and gaskets




33-5452

HYDRAULIC VALVE TRAIN CONVERSION KIT FOR SHOVELHEAD ENGINES

Description	Part #	MSRP
For use with S&S roller rocker arms.	33-5451	\$980.95
For use with stock shovelhead style rocker arms	33-5452	\$980.95

REPLACEMENT PARTS

Description	Part #	MSRP
Quickee Adjustable Pushrods for 74"–103" Shovels	For S&S Rocker Arms <i>(oil through pushrods)</i>	93-5123 \$188.95
	For Stock Rocker Arms <i>(oil through external oil lines)</i>	93-5134 \$188.95
Billet Tappet Guides— Polished	Set	33-5450 ± \$457.95
	Front	33-5450F ± \$276.95
	Rear	33-5450R ± \$276.95
Tappets 	Without HL ₂ T Kit <i>(Set of four)</i> 18523-86A	33-5352 \$327.95
	With HL ₂ T Kit <i>(Set of four)</i>	33-5353 \$349.95

±  WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

NOTES: 1984–'99 cams must be used with this kit to ensure correct valve timing. These cams are not included with the kit. Refer to **page 132** for S&S camshaft recommendations to be used with this kit. If sourcing cams from another manufacturer, note that timing specifications will be unchanged, but the actual lift will be about 9% lower than specified due to the difference in rocker arm ratio.

S&S billet tappet guides for shovelhead engines are similar in design to S&S tappet guides for 1984–'99 big twin engines. For that reason, they are not a direct replacement for stock parts, but must be used in conjunction with S&S tappets and cams for 1984–'99 big twin engines. Tappet bore geometry is corrected to compensate for the difference in pushrod angles between the engine types in order to maintain specified valve event timing. When selecting a cam, keep in mind that timing specifications will be the same as shown for 1984–'99 engines, but there will be about a 9% reduction in valve lift due to the lower shovelhead rocker arm ratio.

TAPPET ASSEMBLIES

FITMENT

- 1953-'84 bt

FEATURES AND BENEFITS

- Precision machined tappets complete with premium hydraulic units
- Save money by reusing worn stock tappet guides with +.003" oversize



HYDRAULIC TAPPET ASSEMBLIES—4 PACK

Standard	330-0380	\$503.95
+.003" Oversized	330-0381	\$562.95

HYDRAULIC TAPPET COMPONENTS

FITMENT

- 1953-'84 bt

FEATURES AND BENEFITS

- Same quality components used in S&S tappet assemblies
- Compatible with stock tappets



330-0377



330-0384

HYDRAULIC TAPPET COMPONENTS

Tappet Body—Standard	each	330-0384	\$72.95
Tappet Body - +.003"	each	330-0385	\$82.95
Hydraulic Insert	each	330-0379	\$93.95
Tappet Rollers*	4 pack	330-0377	\$138.95

*Fits 1929-'56 Side Valve bt, 1936-'84 OHV big twins, and 1957-'85 Ironhead Sportster® models

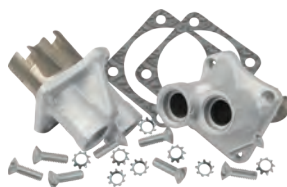
TAPPET GUIDES FOR KNUCKLEHEAD ENGINES

FITMENT

- 1936-'47 knucklehead and S&S® KN-Engines

FEATURES AND BENEFITS

- Cast iron
- Mounting hardware and gaskets included



106-2410

TAPPET GUIDES FOR KNUCKLEHEADS 1936-47 KNUCKLEHEAD AND S&S® KN ENGINES

Description	Part #	MSRP
Tappet, Set, Standard	106-2410	\$562.95
Front only 18600-36	106-2665	\$394.95
Rear only 18610-36	106-2666	\$394.95

TAPPETS FOR KNUCKLEHEAD ENGINES

FITMENT

- 1936-'47 knucklehead and S&S® KN-Engines

FEATURES AND BENEFITS

- Includes lifter body wrench flat
- Includes adjusting screw and nut

TAPPETS FOR KNUCKLEHEADS

Description		Standard	MSRP	+.005"	MSRP
Tappet Set	4 pack	106-1819	\$345.95	106-1820	\$394.95
Tappet Assembly	Intake	106-1815 18491-36	\$86.95	106-1816	\$97.95
	Exhaust	106-1817 18493-36	\$86.95	106-1818	\$97.95



106-1819

QUICKEE ADJUSTABLE PUSHRODS

FEATURES AND BENEFITS

- Can be installed or removed from an assembled engine

QUICKEE ADJUSTABLE PUSHRODS

Application	Displacement	Part #	MSRP
1966-'84 bt*(S&S Rocker Arms)	74"-103"	93-5123	\$188.95
1966-'84 bt*(Stock Rocker Arms)	74"-103"	93-5134	\$188.95

*S&S tappet guide, S&S 1984-'99 style tappets



93-5123



WATCH THE S&S PUSHROD INSTALLATION VIDEO AT WWW.SSCYCLE.COM/VIDEOS

NOTES: S&S Quickee Adjustable pushrods are designed for use with 1984-up hydraulic tappets. They are not compatible with stock or aftermarket hydraulic tappets for shovelhead engines or most solid style tappets.

See **page 148** for more information on S&S hydraulic valve train conversion kits, and see **page 156** for more info on S&S roller rocker arms.

PUSHROD KITS

FOR 1966-'84 BIG TWIN ENGINES

FEATURES AND BENEFITS

- 7/16" Chromoly steel tubing for maximum strength
- Reduced pushrod flex for precise valve control at high rpm
- Solid lifter conversion kits replace troublesome hydraulic tappets

NOTE: If using S&S tappet guides for shovelhead engines, see S&S Quickee Adjustable pushrods.



93-5067

ADJUSTABLE PUSHROD KITS FOR 1966-'84 BIG TWIN WITH SOLID LIFTER ADAPTERS

INCLUDES ADAPTERS FOR CONVERTING 1953-'84 STYLE HYDRAULIC LIFTERS TO NON-ADJUSTABLE SOLIDS.

Cylinder Length	5.330" (Stock)	MSRP	5.405" (+ 1/16")	MSRP	5.530" (+ 3/16")	MSRP	5.630" (+ 5/16")	MSRP
	Part #	93-5067	\$146.95	93-5014	\$146.95	93-5015	\$146.95	93-5016



NON-ADJUSTABLE PUSHROD KITS FOR 1966-'84 BIG TWIN WITH ADJUSTABLE LIFTER ADAPTERS

INCLUDES ADAPTERS FOR CONVERTING 1953-'84 STYLE HYDRAULIC LIFTERS TO ADJUSTABLE SOLIDS. ADJUSTER SCREW IN THE LIFTER ADAPTERS.

Cylinder Length	5.330" (Stock)	MSRP
Part #	93-5068	\$146.95

PUSHROD KIT ONLY—FOR SOLID LIFTERS WITH 1948-'52 SOLID ADJUSTABLE LIFTERS

- Fits 1966-'84, 74", & 80" Shovelhead Engines
- Includes four non-adjustable steel pushrods. (Pushrods are identical to those used in kit part #93-5068.)
- Recommended for all shovelhead and shovelhead top/panhead bottom engines with 1948-'52 style lifters

NON-ADJUSTABLE PUSHROD KITS FOR 1966-'84 BIG TWIN

PUSHRODS FOR USE WITH 1948-'52 STOCK STYLE SOLID ADJUSTABLE LIFTERS.

Cylinder Length	5.330" (Stock)	MSRP
Part #	93-5069	\$90.95



SERVICE PART PUSHROD KIT WITH HYDRAULIC LIFTERS

- Fits 1966-'84, 74", & 80" Shovelhead Engines
- Includes four adjustable steel pushrods. Stock adjusting screws (not included) must be used in these pushrods.

ADJUSTABLE PUSHROD KITS FOR 1966-'84 BIG TWIN

FOR HYDRAULIC LIFTERS. SERVICE PARTS FOR 1966-'84.

Cylinder Length	5.330" (Stock)	MSRP
Part #	93-5070 17904-66	\$146.95



All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

PUSHROD KITS FOR 1948-'65 BIG TWIN ENGINES

- Converts valve train to solid lifter operation
- Includes all parts needed for conversion



PUSHROD KITS FOR 1948-'65 BIG TWIN NON-ADJUSTABLE PUSHRODS WITH ADJUSTABLE LIFTER ADAPTERS INCLUDES ADAPTERS FOR CONVERTING 1953-'84 STYLE HYDRAULIC LIFTERS TO ADJUSTABLE SOLIDS.

Cylinder Length		Part #	MSRP
5.205"	(Stock 61")	93-5081	\$146.95
5.330"	(Stock 74")	93-5058	\$146.95
5.405"	(+ 1/16")	93-5082	\$146.95
5.530"	(+ 3/16")	93-5084	\$146.95

SOLID LIFTER PUSHROD KIT—FOR 1948-'52, 61" & 74" PANHEAD ENGINES

- Converts stock 1948-'52 valve train to solid lifter operation.
- Requires stock 1948-'52 style adjustable lifters.
- Pushrods are identical to those used in kit part #93-5058. See above.



NON-ADJUSTABLE PUSHROD KITS FOR 1948-'52 BIG TWIN PUSHRODS ONLY SOLID LIFTER CONVERSION PUSHRODS FOR 1948-'52 STOCK ADJUSTABLE LIFTERS. SET OF FOUR

Cylinder Length		Part #	MSRP
5.330"	(Stock 74")	93-5059 17905-538	\$90.95

SERVICE PART PUSHROD KIT—FOR 1953-'65 PANHEAD ENGINES WITH HYDRAULIC LIFTERS

- Includes four adjustable pushrods

! MUST USE ORIGINAL ADJUSTING SCREW (NOT SUPPLIED)



ADJUSTABLE PUSHROD KITS FOR 1953-'65 BIG TWIN STOCK REPLACEMENT PUSHROD KITS ADJUSTABLE PUSHROD KITS FOR HYDRAULIC LIFTERS.

Cylinder Length		Part #	MSRP
5.330"	(Stock 74")	93-5091	\$146.95

PUSHROD KITS FOR 1936-'47 BIG TWIN ENGINES

- Solid Lifter Pushrod Kit
- Fits 1936-'47, 61", 74" & 93" Knucklehead Engine
- Requires stock-style adjustable tappets
- Includes four aluminum non-adjustable pushrods
- The increase expansion of aluminum provides a quieter valve train



PUSHROD KITS FOR 1936-'47 BIG TWIN NON-ADJUSTABLE PUSHRODS KITS SOLID LIFTER PUSHRODS FOR 1948-'52 STOCK ADJUSTABLE LIFTERS

Cylinder Length		Part #	MSRP
5.530" (Stock 74")		930-0008 17905-36	\$172.95
5.625" (KN93")		930-0009	\$192.95

TIME-SAVER ADJUSTABLE PUSHRODS

FEATURES AND BENEFITS

- Eliminates the need to disassemble the top end and remove the rocker arms to change pushrods or camshafts
- Reduce installation time by 75%—Hence the name Time Saver
- Larger 9mm diameter chrome moly tubing provides superior strength and minimizes pushrod flex
- Single adjuster end provides pushrod lengths from 9.5" to 11.5" for stock height and taller engines
- Kit includes set of four pushrods and installation instructions
- Not compatible with stock shovelhead hydraulic tappets, but will work with tappets having 3/8" diameter cup

TIME-SAVER ADJUSTABLE PUSHRODS

Description	Part #	MSRP
Pushrod Set	930-0052 	\$192.95



ADJUSTABLE CHROMOLY STEEL PUSHRODS

- Adjustable chromoly steel pushrods for 1966–'84 big twins
- Compatible with S&S or original equipment hydraulic tappets
- Set of four pushrods

ADJUSTABLE CHROMOLY STEEL PUSHRODS

Description	Part #	MSRP
Pushrod Set	930-0051	\$124.95



SOLID LIFTER CONVERSION KIT FOR 1953–'84 PANHEAD AND SHOVELHEAD ENGINES

- Hardened steel adapters, in place of stock hydraulic units in 1953–'84 lifters
- Use with stock adjustable pushrods

SOLID LIFTER CONVERSION KIT

Description	Part #	MSRP
Kit includes four adapters	33-5348	\$34.95
each	33-5336	\$10.95



PUSHROD COVERS & RELATED REPLACEMENT PARTS

S&S pushrod cover kits include all of the parts required for four pushrods, except keepers. Keepers are not included because of different length requirements of some engines, but are available separately. Pushrod covers and pushrod keepers are available for 1936-up big twin engines and 1986-'90 Harley-Davidson® Sportster® models. Consult the chart below for the pushrod keepers you require. Sold in kits of four assemblies; enough for one engine.







PUSHROD COVER KITS

Includes top and bottom covers, cover cap, cover spring, and spring washer for four pushrods.

Description	Part #	MSRP
1979-'84 big twin engines (o-ring style bottom cover)	93-4040	\$166.95
KN-Series & 1936-'47 OHV big twin engines 17939-36	106-3949	\$180.95

NOTE: Keepers and o-ring kits are available but must be purchased separately.

PUSHROD COVER PARTS

Description	Part #	MSRP
Top Cover 1966-up big twin 17935-66T, 17935-79B   1,2,3	93-4016	\$15.95
Top Cover KN-Series & 1936-'47 OHV big twin 17935-36	106-3850	\$21.95
Bottom Cover 1979-'84 big twin	93-4029-S	\$21.95
Bottom Cover KN-Series & 1936-'47 OHV big twin 17983-40	106-3851	\$33.95
Cover Cap 1936-up big twin, 1957-'90 Sportster® 17945-36B   1,2,3	93-4017	\$11.95
Cover Spring 1936-up big twin, 1957-'90 Sportster® 17947-36   1,2,3	93-4018	\$4.95
Cover Cap Washer 6762B	50-7131	\$4.95
Bottom Cover Washer 6737	50-7150	\$0.95
Pushrod O-ring Kit (For o-ring style bottom cover) <i>Includes parts for four pushrods: top, middle, bottom o-rings.</i>	93-4041	\$12.95
Top O-ring 11293, 11157, 11101, 11190	50-8039	\$4.95
Middle O-ring 11132A	50-8038	\$4.95
Bottom O-ring 11145A	50-8037	\$4.95
Quad Seal 11133A	50-8064-S	\$5.95
O-ring Square 17955-36	106-3849	\$4.95



KEEPER LENGTHS FOR STOCK HARLEY-DAVIDSON® ENGINES	
74" & 80" shovelhead	3.330"
74" panhead	2.375"
74" knucklehead	3.312"
Ironhead Sportster®	2.375"
Shovelheads—with S&S tappet guides	2.900" (Subtract .430" from stock length)



PUSHROD COVER KEEPER SETS

FOR 1936–'99 BIG TWINS AND HARLEY-DAVIDSON® SPORTSTER® MODELS

Length / Finish	Description	Part #	MSRP
2.390" / Gloss Black		930-0127	\$68.95
2.400" / Chrome		93-4070 ± 17950-48	\$34.95
2.500"	Chrome	93-4100 ±	\$34.95
	Gloss Black		
2.600"	Chrome	93-4101 ±	\$34.95
	Gloss Black		
2.800" / Chrome		93-4115 ± 17950-86	\$34.95
2.900"	Chrome	93-4102 ±	\$34.95
	Gloss Black		
3.000" / Chrome		93-4103 ±	\$34.95
3.100"	Chrome	93-4104 ±	\$34.95
	Gloss Black		
3.200" / Chrome		93-4105 ±	\$34.95
3.330" / Chrome	74", KN74, 80", 84", 86", 88", 93", KN93	93-4106 ± 17949-40, 17950-66	\$34.95
3.500" / Chrome	96", 98"	93-4107 ±	\$34.95
3.625" / Chrome	103"	93-4108 ±	\$34.95
4.250"	Custom. Extra long stainless steel 4.250". Customer to cut to required length.	93-4109	\$42.95

Notes: Keepers are sold in sets of four. All S&S pushrod keepers are chromed steel, except part #93-4109. Keeper part #93-4109 is intended for unusually tall engines. It is manufactured of unchromed stainless steel to prevent rust or peeling after it is trimmed to the required length.

± WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

REPLACEMENT PARTS FOR MANY OF THE COMPONENTS SUPPLIED IN S&S PUSHROD KITS ARE AVAILABLE SEPARATELY. IN SOME CASES THEY MAY BE USED AS DIRECT REPLACEMENTS FOR STOCK ITEMS.

PUSHROD RELATED REPLACEMENT PARTS

Description	Part #	MSRP
Adjusting Unit Screw—1936–'52 Style Fits stock 1936–'52 lifter with early stock 9/32"-32 threads. 18555-36	33-5332	\$9.95
Adjusting Unit Sleeve	33-5331	\$9.95
Ball End for S&S Adjustable Pushrods Fits S&S adjustable with 5/16"-32 threads. (Manufactured after 2-1-1996)	93-5002	\$13.95
Solid Lifter Adapter for S&S Adjustable Pushrod Converts stock 1953–'84 hydraulic lifter to non-adjustable solid lifter. For use with S&S adjustable pushrods in shovelhead engines (same as unit supplied in kit #93-5067)	33-5335	\$6.97
Adjusting Unit Locknut Fits S&S adjustable pushrods with early stock 9/32"-32 threads	33-5333	\$6.95
Fits S&S adjustable pushrods with 5/16"-32 threads. (Manufactured after 2-1-1996)	93-5003-S	\$5.95

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

HIGH-PERFORMANCE VALVE SPRING KITS

FOR 1948-'84 BIG TWIN ENGINES

.550" LIFT DOUBLE VALVE SPRING KIT

For 1948-'84 big twins with up to .550" lift.

- Includes 4 inner springs, 4 outer springs, 4 aluminum top collars and late 1981-'85 bottom covers
- Use with stock-style bottom collar, valve guides, valves with stock $\frac{3}{8}$ " stem, and stock keepers
- Compatible with thin-stem valves if thicker keepers (*that maintain correct valve stem-top collar engagement*) are used
- Late single bottom collars are available for use in S&S cylinder heads for shovels and stock late 1981-'85 heads



S&S® .550" VALVE SPRINGS SPECIFICATIONS—1948-'84 BIG TWIN			
Lift	Installed Height	Seat Force	Force @ Max Lift
.550"	1.500"	150 lb.	343 lb.

.550 LIFT VALVE SPRING KIT FOR 1948-'84 PANHEAD AND SHOVELHEAD ENGINES

Description	Part #	MSRP
For 1948-'84 Panhead and Shovelhead Engines	90-2053	\$202.95
Bottom Collar—Late 1981-'84 18222-81 (each)	90-2038	\$17.95

NOTE: Panhead engines usually require clearancing between rocker cover and top collar.

.590" LIFT TRIPLE VALVE SPRING KIT

For 1981-'84 big twins and S&S SH and P Series heads with up to .590" lift.

- Includes 4 steel top collars, 4 bottom collars, 4 each outer, middle, and inner springs, shims, and 8 keepers
- Use with stock valve guides, stock valves with $\frac{3}{8}$ " stem, and stock keepers
- Compatible with thin-stem valves if thicker keepers (*that maintain correct valve stem-top collar engagement*) are used

S&S® .590" VALVE SPRINGS SPECIFICATIONS—1981-'84 BIG TWIN			
Lift	Installed Height	Seat Force	Force @ Max Lift
.590"	1.480"	157 lb.	356 lb.

.590 LIFT VALVE SPRING KIT FOR—1981-'84 BIG TWIN

Description	Part #	MSRP
For Late 1981-'84 and All S&S Cylinder Heads	90-2063	\$202.95



NOTE: .590" spring kit is year-group specific because of different bottom collars supplied with early and late kits. S&S heads require late 1981-'84 style kit, part #90-2063. When ordering replacement valve springs for S&S cylinder heads for shovelhead engines, order the 1981-'84 style part #90-2063.

VALVE SPRING KIT

FOR 1936–'47 BIG TWINS

- Fits S&S KN-Series engines and stock 1936–'47 knucklehead engines
- Accommodates cams with valve lifts up to .480"
- Kit consists of inner and outer springs for four valves, spring collars, shims, and valve keepers.

S&S® .480" VALVE SPRINGS SPECIFICATIONS—1936–'47 BIG TWIN			
Lift	Installed Height	Seat Force	Force @ Max Lift
.480"	1.315"	160 lb.	310 lb.



900-0535



106-3637

.480" VALVE SPRINGS FOR 1936–'47 BIG TWINS

Description	Part #	MSRP
S&S Valve Spring Kit for 1936–'47 OHV bt	106-6398	\$338.95

CAST IRON VALVE GUIDES FOR 1936–'47 OHV

Description	Part #	MSRP
Standard	106-3637 18185-40, 18181-36	\$21.95
+.002"	106-3948 18187-40, 18184-36	\$31.95
+.004"	106-3638	\$31.95
+.008"	106-3639	\$31.95

REPLACEMENT PARTS FOR .480" VALVE SPRINGS

Description	Part #	MSRP
Springs, valve, dual, .480"	each	106-4362 \$68.95
	4 pack	900-0535 \$212.95
Top collar, valve spring	106-3828	\$15.95
Keepers, valve spring, top collar	each	90-2037-S \$5.95
	8 pack	50-7165 \$31.95
Bottom collar, valve spring	106-3827	\$16.95
Shim, valve spring .015"	106-4549	\$5.95
Bottom collar spacer	106-5094	\$15.95

NOTE: These springs will not fit over stock guides. Stock guides must be turned down or S&S® Vintage guides must be used.

ROLLER ROCKER ARMS

FOR 1966–'84 BIG TWIN ENGINES

FITMENT

- 1966–'84 big twins
- P-Series engines
- SH-Series engines

FEATURES AND BENEFITS

- 8620 steel heat treated forgings for maximum strength
- .750" rocker arm bushing for 50% more load bearing area than stock .500" bushings
- Roller tip reduces valve tip wear and side thrusting
- 1.5:1 rocker ratio
- Oil passage allows top end oiling through pushrods
- Compatible with stock or S&S billet rocker boxes



900-4320A

ROCKER ARMS FOR SHOVELHEAD ENGINES

Description	Part #	MSRP
Set (includes two each front and rear rocker arms)	900-4320A	\$585.95
Front exhaust or rear intake 17375-66A	900-4320FA	\$180.95
Rear exhaust or front intake 17360-66A	900-4320RA	\$180.95

REBUILD KIT S&S® ROLLER ROCKER ARMS

Rebuilds four rocker arms	90-4321	\$140.95
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ROCKER ARMS AND SHAFTS FOR 1936-'47 OHV BIG TWINS

FITMENT

- 1936-'47 OHV big twins
- Compatible with S&S® or stock tins
- Rocker arms are not compatible with stock rocker shafts

FEATURES AND BENEFITS

- High quality CNC machined
- 1:1 stock knuckle rocker arm ratio
- Improved oil control

KIT CONTENTS

- Four rocker arms FE, FI, RI, and RE, Four rocker shafts, Washers and spacers



ROCKER ARMS AND SHAFTS FOR 1936-'47 OHV BIG TWINS

Description		Part #	MSRP
Rocker Arms and Shaft Set (includes hardware)	4 pack	106-2412	\$1,182.95
Front Intake (includes shaft and spacers)	each	106-2862	\$349.95
Front Exhaust (includes shaft and spacers)	each	106-2863	\$371.95
Rear Intake (includes shaft and spacers)	each	106-2864	\$349.95
Rear Exhaust (includes shaft and spacers)	each	106-2865	\$371.95
Rocker Shaft Set (includes spacers and hardware)	4 pack	106-2413	\$398.95
Nut and Washer Kit, Rocker Shaft Left Side 7831	4 pack	106-3632	\$8.95
Nut and O-Ring, Rocker Box, KN-Series 17447-36	each	106-4355	\$29.95

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

VALVE SPRING COVERS (TINS) FOR KN-SERIES ENGINES

FITMENT

- KN-Series engines

FEATURES AND BENEFITS

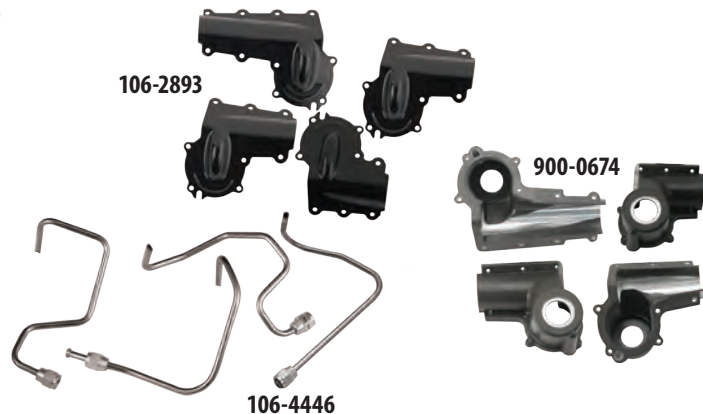
- Improved design for better oil scavenging and less leaking
- Die-cast lower covers can be removed without pressing out valve guides
- Improved oil return lines are easy to replace and service
- Relatively stock appearance

OPTIONS

- Chrome, silver powder coat and gloss black powder coat finishes

KIT CONTENTS

- Lower cover kit contains set of four lower covers and gaskets
- Top cover kits contain four top covers and gaskets
- Oil return lines must be purchased separately



VINTAGE VALVE SPRING COVER KITS

Description		Part#	MSRP
Lower Cover Kit	Black anodized	900-0674	\$899.95
Top Cover Kit	Gloss black	106-2893	\$225.95

⚠ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

OIL LINE RETURN 1936-'47 OHV BT (TINS ONLY)

CNC bent stainless steel for a perfect fit and long life

Description	Part #	MSRP
Kit of 4	106-4446	\$165.95
Front Intake	106-4447	\$49.95
Front Exhaust	106-4448	\$44.95
Rear Intake	106-4449	\$49.95
Rear Exhaust	106-4450	\$44.95
Seal, Oil Return Line, 28" OD x .18" ID x 1", Rubber Hose	106-4456	\$11.95
Rocker arm cover gasket kit	900-0493	\$192.95



NOTE: IMPORTANT: Requires the use of valve springs 106-6398 and Valve guides 106-3637 or corresponding oversizes. Stock rocker arms and shafts will require modifications to be used.

ROCKER ARM HOUSINGS

FOR 1936-'47 OHV ENGINES

FITMENT

- Faithful reproductions of the stock "knuckles" for 1936-'47 OHV big twins.

FEATURES AND BENEFITS

- Excellent for stock replacement and restoration.
- Does not include hardware and fittings.



900-0618

ROCKER ARM HOUSINGS FOR 1936-'47 OHV ENGINES

Description		Part #	MSRP
Polished	Set	900-0617	\$619.95
	Front	900-0618	\$338.95
	Rear	900-0619	\$338.95
Natural	Set	900-0622	\$439.95
	Front	900-0623	\$242.95
	Rear	900-0624	\$242.95



OIL FEED LINE

Description	Part #	MSRP
74" & 93"	106-4670	\$90.95

POLISHED BILLET ROCKER COVERS

FOR 1966-'84 BIG TWIN ENGINES

FITMENT

- 1966-'84 shovelhead engines with stock or S&S cylinder heads
- SH-Series engines

FEATURES AND BENEFITS

- CNC machined from 6061-T6511 aluminum billet and polished to a show finish
- Two piece design for easy installation
- Some frames allow installation with engine in the frame
- Works with stock or S&S roller rocker arms
- Clearanced for valve lifts of up to .590" with S&S roller rocker arms
- Fastened to the heads with 5/16" bolts
- Simple and inexpensive straight rocker shafts

KIT CONTENTS

- Front and rear rocker box assemblies
- Rocker shafts
- Gaskets, seals and mounting hardware
- Installation instructions



90-4305

POLISHED BILLET ROCKER COVERS FOR 1966-'84 BIG TWIN ENGINES

Description	Part #	MSRP
Billet Rocker Cover Set for Shovelhead Engines	90-4305	\$1,124.95
Replacement Rocker Arm Shaft Set	90-4351	\$104.95

→ REPLACEMENT PARTS: SEE PAGE 190

CHROME PAN COVERS

FOR 1948-'65 BIG TWINS

CHROME PAN COVER

Description	Part #	MSRP
Set 17500-48A	106-0919±	\$267.95
Replacement Parts		
D-ring Set 17507-51	106-0920	\$149.95
Screw, SHCS 10-24 x 3/4" 2674, 2675	106-0913	\$5.95
Rocker arm cover gasket 1948-'65 bt 117541-48	each	900-0329 \$19.95
	2 pack	900-0339 \$34.95

± ⚠️ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov



106-0919±

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INTAKE MANIFOLD O-RINGS AND CLAMPS

FITMENT

- Panhead, shovelhead, and Harley-Davidson® Ironhead Sportster® models

FEATURES AND BENEFITS

- Replace your flimsy and troublesome stock clamps
- ¾" wide and constructed of .020" thick stainless steel and use a curved 10-24 threaded "T"-bolt with plated steel aircraft hex locknut
- Sold individually—Two are required for each engine
- S&S intake manifold o-rings and rubberbands are made of special materials that resist destruction from the additives in today's fuel



16-0230

16-0231

1955-'78 BIG TWIN, 1957-'78 IRONHEAD SPORTSTER® MODELS, AND S&S KN, P, & SH SERIES ENGINES WITH O-RING STYLE CYLINDER HEADS

Description	Part #	MSRP
O-ring 27060-55	50-8046	\$7.95
10 Pack 27060-55	50-8132	\$45.95
Clamp for O-ring Style 27063-57	16-0230	\$24.95

1979-'84 BIG TWIN, 1979-'85 IRONHEAD SPORTSTER® MODELS WITH RUBBERBAND STYLE CYLINDER HEADS

Description	Part #	MSRP
Rubberband 27062-78	16-0238	\$6.95
10 pack 27062-78	16-0245	\$38.95
Clamp for Band Style 27063-80, 27063-78	16-0231	\$17.95

ELECTRONIC TIMERS

- Fits S&S and stock generator style cases and allows the use of S&S Super Stock™ or other late style electronic ignition systems. (Ignition sold separately).
- Requires reverse timing gears for use in generator style engines.
- The domed billet timer has a period correct look for 1964 and earlier engines.



55-1269



106-4622 ±

ELECTRONIC TIMERS

Description	Part #	MSRP
Billet generator style electronic timer	55-1269	\$664.95
Domed	106-4622±	\$664.95

± WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

MANIFOLDS

FOR STOCK ENGINES, P-SERIES, SH-SERIES & KN-SERIES ENGINES

- Manifolds for 1955–'65 panhead engines with "o-ring" style cylinder heads are available in 1 7/8" bore only.
- 1936–'54 knuckle and pan cylinder heads with "plumber" style intake mounting nipples must be converted to accept a 1955 to 1965 o-ring manifold.



16-1103

O-RING STYLE MANIFOLD FOR 1955–'65 BIG TWIN

Cylinder Length	Manifold Length (Between Ports)	S&S ES, LS, A, Super B, E–Tillotson®, Bendix®, Keihin®	MSRP
Stock—5.330"	2.975"	16-1100	\$102.95
5.392"—+ 1/16"	3.025"	16-1101	\$225.95
5.455"—+ 1/8"	3.075"	16-1102	\$135.95
5.517"—+ 3/16"	3.125"	16-1103	\$225.95



16-1200

O-RING STYLE MANIFOLDS FOR 1966–'77 BIG TWINS

Stock or S&S Engine Displacement	Cylinder Length	Size	S&S ES, LS, Super A, B, E, Tillotson®, Bendix®, Keihin®	MSRP	Super G	MSRP
74", 80", 84", 88"	Stock 5.330"	220	16-1200 27021-71A	\$102.95	16-2200	\$102.95
93" HC	5.363"	222	16-1201	\$102.95	16-2201	\$102.95
93"	5.405"	225	16-1223	\$102.95	16-2223	\$102.95
96"	5.440"	228	16-1202	\$102.95	—	—
98"	5.530"	235	16-1204	\$102.95	16-2204	\$102.95
103"	5.630"	242	16-1206	\$102.95	16-2206	\$102.95



16-2200

O-RING STYLE VOES MANIFOLD FOR KN-SERIES ENGINES

Engine Type	Cylinder Length	S&S ES, LS, A, Super B, E–Tillotson®, Bendix®, Keihin®	MSRP
KN93	5.625"	106-4530	\$170.95
KN74	5.530"	160-0008	\$102.95

Equipped with a VOES fitting for use with the S&S Super Stock Ignition system. Heads must be set up with o-ring adaptor inserts part #106-4654 (2 required).



106-4530

O-RING STYLE MANIFOLDS WITH VOES FOR SH-SERIES AND P-SERIES ENGINES

Stock or S&S Engine Displacement	Cylinder Length	Size	S&S ES, LS, Super A, B, E, Tillotson®, Bendix®, Keihin®	MSRP	Super G	MSRP
SH80	Stock—5.330"	220	16-1230	\$113.95	—	—
SH93H, P93H	5.363"	222	16-1231	\$132.95	—	—
SH93, P93	5.405"	225	16-1233	\$132.95	—	—
SH103, P103	5.630"	242	—	—	16-2236	\$113.95

O-RING STYLE MANIFOLDS FOR 1957–'78 HARLEY-DAVIDSON® IRONHEAD SPORTSTER® MODELS

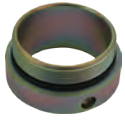
Engine Displacement	Cylinder Length	Size	S&S ES, LS, Super A, B, E, Tillotson®, Bendix®, Keihin®	MSRP	Super G	MSRP
900cc, 1000cc	Stock 5.330"	220	16-1200 27021-71A	\$102.95	16-2200	\$102.95

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.



16-1230

MANIFOLDS CON'T



106-4654

ADAPTOR

Description	Part #	MSRP
Converts stock "plumber" style heads to o-ring <i>(sold each, two required)</i>	106-4654	\$46.95



16-1300

RUBBERBAND STYLE MANIFOLDS FOR 1978-'84 BIG TWINS

Stock or S&S Engine Displacement	Cylinder Length	Size	S&S ES, LS, Super A,B, E, Tillotson®, Bendix®, Keihin®	MSRP	Super G	MSRP
74", 80", 84", 88"	Stock 5.330"	220	16-1300 <small>27021-78</small>	\$102.95	16-2300	\$113.95
93" HC	5.363"	222	16-1301	\$102.95	16-2301	\$113.95
93"	5.405"	225	16-1323	\$102.95	16-2323	\$113.95
96"	5.440"	228	16-1302	\$102.95	16-2302	\$113.95
98"	5.530"	235	16-1304	\$102.95	16-2304	\$113.95
103"	5.630"	242	16-1306	\$102.95	16-2306	\$113.95



16-1400

RUBBER BAND STYLE MANIFOLDS WITH VOES FITTING FOR 1983-'85 HD® IRONHEAD SPORTSTER® MODELS

Engine Displacement	Cylinder Length	Size	S&S ES, LS, Super A,B, E, Tillotson®, Bendix®, Keihin®	MSRP
900cc, 1000cc	Stock 5.330"	220	16-1400	\$102.95



16-2300

RUBBER BAND STYLE MANIFOLDS WITHOUT VOES FITTING FOR 1979-'82 HD® IRONHEAD SPORTSTER® MODELS

Engine Displacement	Cylinder Length	Size	S&S ES, LS, Super A,B, E, Tillotson®, Bendix®, Keihin®	MSRP	Super G	MSRP
900cc, 1000cc	Stock 5.330"	220	16-1300 <small>27021-78</small>	\$102.95	16-2300	\$102.95

NOSTALGIC AIR CLEANER COVERS

FITMENT

- Super E carbs
- Teardrop air cleaner kits for stock carbs



NOSTALGIC AIR CLEANER COVER

Description	Part #	MSRP
Polished, Super E & G	17-0071	\$197.95

NOTE: Super B and Super E & G air cleaner covers are not interchangeable. They each have a unique bolt pattern.

AIR HORN COVER

FITMENT

- S&S short air horns

FEATURES AND BENEFITS

- Sand casted just like the originals
- Really hard to tell them apart from the real deal



AIR HORN COVER

Description	Part #	MSRP
For S&S short air horns	17-0026	\$121.95

AIR HORNS & AIR HORN CONVERSION KITS

SHORT AIR HORNS (2½")

- Fits S&S 1¾", 1⅞" L Series carbs and S&S 1⅞" Super A & B carbs
- Any stock carburetor with an identical air cleaner/air horn mounting pattern. These include Tillotson®, Bendix® or butterfly type Keihin®
- Available for S&S Super E & G carburetors

LONG AIR HORNS (4")

- Available for S&S Super E, G, & D carbs

KIT CONTENTS

Air Horn Kit:

- Air Horn
- Three mounting screws

Air Horn Conversion Kit:

- Air horn
- Three mounting screws
- Carb support bracket (bracket connects the center crankcase bolt to the bottom manifold carburetor mounting bolt)
- Two longer bottom carb to manifold mounting bolts
- Super E & G air horn conversion kit includes an enrichment device



Installed Air Horn
(carb not included)

AIR HORN SELECTION CHART

Description	Length	Super A & B	MSRP	Super E & G	MSRP	Super D	MSRP
Air Horn	2½"	17-0043	\$146.95	17-0484 ±	\$160.95	—	—
Conversion Kits	4"	—	—	17-0485 ±	\$160.95	—	—
Air Horn Only	2½"	17-0042	\$113.95	17-0331	\$103.95	—	—
	4"	—	—	17-0333	\$103.95	17-0141	\$157.95

± WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

NOTES: S&S recommends that air horns be used in racing applications only, as they do not provide the filtration required to protect the engine on a day-to-day basis. Any installation of an air horn on an S&S carb in place of an air cleaner requires an S&S carb support bracket, part #16-0471, to securely fasten the carb to the engine. This bracket is included in the air horn conversion kits.

S&S recommends that the bowl vent plug at the bottom of carb body be removed when air horn is installed, as air horn may obstruct bowl vent in air cleaner mounting surface of the carb body.

SUPER E & G SHORTY CARBURETOR KITS

FITMENT

- 1936-'84 big twins
- 1957-'85 Harley-Davidson® Ironhead Sportster® (except models with vertical magneto)

FEATURES AND BENEFITS

- Four fuel delivery ports—*Better throttle response*
- O-ring sealed idle mixture screw
- Increased air flow for more power
- Super E 1 $\frac{7}{8}$ " (47.6mm) bore—for engines up to 100" displacement
- Super G 2 $\frac{1}{16}$ " (52.4mm) bore—for engines 100" or greater displacement
- Adjustable enrichment starting system—*does not restrict air flow like a conventional choke*
- Adjustable accelerator pump
- S&S chrome Classic Teardrop air cleaner
- Two cable throttles required—*see notes*

OPTIONS

- Complete kits for engines requiring stock length manifolds
- Partial kits for engine requiring non-stock length manifolds (order manifold separately)
- Carb only kits for replacement and custom applications



KIT CONTENTS

- Super E or G carburetor assembly
- Manifold for stock height engine
- Manifold seals and clamps
- S&S chrome Classic Teardrop air cleaner kit
- All gaskets, hoses, and required hardware for installation
- Complete installation and tuning instructions

→ REPLACEMENT PARTS: SEE PAGE 192

SUPER E AND G CARBURETOR KITS

Models	Super E Complete Kit <i>Manifold Included</i>		Super E Partial Kit <i>Manifold & Mounting Hardware Not Included</i>				Super G Complete Kit <i>Manifold Included</i>	
	Standard Tanks	MSRP	Standard Tanks	MSRP	5 Gallon Tanks [§]	MSRP	Standard Tanks	MSRP
Big Twin Models								
1979-'84	11-0411	\$686.95	11-0412	\$607.95	11-0418	\$607.95	11-0431	\$709.95
1966-'78	11-0402	\$686.95	11-0412	\$607.95	11-0418	\$607.95	11-0422	\$709.95
1955-'65*	11-0401	\$686.95	11-0412	\$607.95	—	—	—	—
Harley-Davidson® Ironhead Sportster® Models								
1979-'85 [‡]	11-0406	\$686.95	—	—	—	—	—	—
1957-'78 [‡]	11-0404	\$686.95	—	—	—	—	—	—
Carb Only								
All Years	11-0420	\$412.95	—	—	—	—	11-0421	\$450.95

*Outside oil lines that feed heads on knucklehead and 1963-'65 panhead engines must be refabricated or use a 1" spacer block for additional clearance.

[‡]Does not fit engines equipped with vertical magneto.

[§]Shovelhead engines equipped with .075" longer than stock cylinders in chassis with five gallon gas tanks require additional air cleaner cover to gas tank clearance. Kits in this column include an air cleaner cover clearanced to fit these engines.

NOTE: 1979-'80 engines may be equipped with either o-ring or band style heads. Check before ordering.

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT.

⚠ WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

NOTES: Stock motorcycles 1980 or earlier must be updated to a two cable pull open/pull closed throttle control system. A single cable pull open system cannot pull the throttle closed in case the throttle should accidentally stick in the open position. S&S offers high quality throttle cable kits in several lengths for this purpose. A press-on sleeve is also available to increase the diameter of the throttle grip area of 1972 and earlier handle bars to 1", allowing installation of modern throttle assemblies. See [page 167](#) for throttle cables and press-on sleeves.

S&S "Shorty" carburetors will not fit Harley-Davidson® Ironhead Sportster® models with vertical magnetos due to clearance problems between the magneto and the carburetor. Shovelhead engines with five gallon gas tanks and cylinders that are taller than stock require a special notched air cleaner cover to clear the gas tank. Since these taller engines also require a special length manifold, select a carb with a notched air cleaner cover without a manifold from the chart and refer to the manifolds starting on [page 160](#) to select the correct length manifold.

S&S does not recommend polishing or chrome plating Super E & G carburetors. Our repair department has seen many carbs with passages plugged with polishing compounds and some carbs that had been destroyed because the polishing or chrome plating had altered critical machined surfaces.

Recommended for closed circuit use only—S&S Super E & G carbs shown are not approved for use on motor vehicles operated on California public highways, or in other states where similar pollution laws may apply. The user shall determine the suitability of the product for his or her use and shall assume all risk and liability in connection therewith.

BLACK SUPER E & G CARBURETORS

FEATURES AND BENEFITS

- Exclusive black coating—heat and chemical resistant
- Increased venturi diameter!—specially machined for 7% more flow—See flow chart

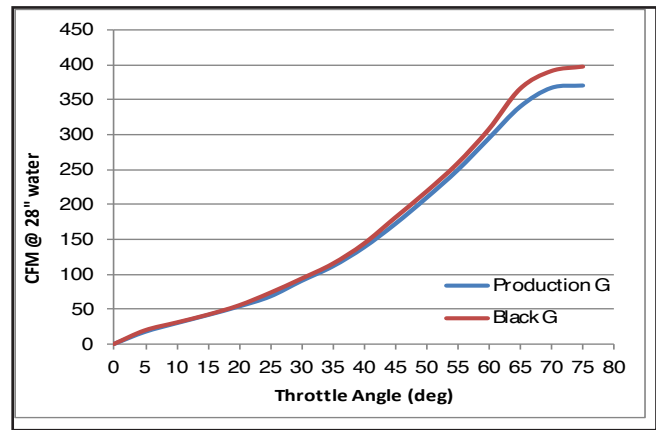
BLACK CARBURETORS

Description		Part #	MSRP
Increased venturi diameter <i>(7% more flow)</i>	Super E Carb	110-0099	\$455.95
	Super G Carb	110-0100	\$483.95
Standard venturi diameter	Super E Carb	110-0133	\$472.95
	Super G Carb	110-0138	\$472.95

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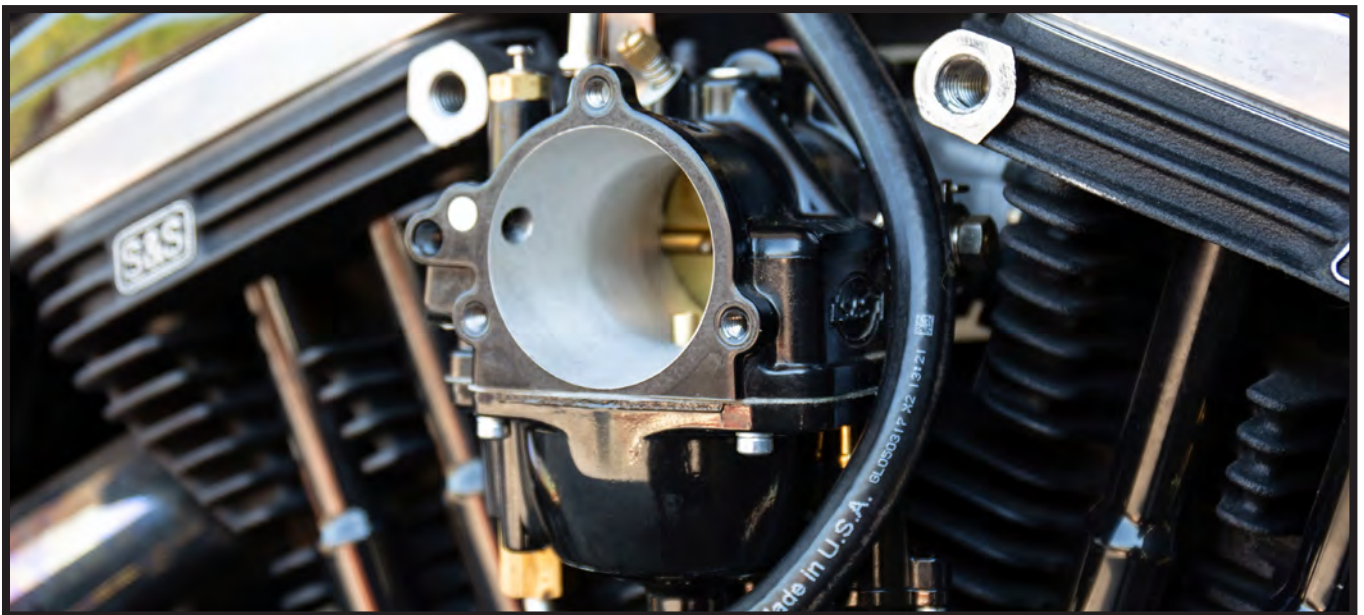


110-0099



Flow at WOT (wide open throttle) for the Black G carb increases 7% vs. the base S&S G carb

NOTE: These black carb kits do not include air cleaners. Air cleaner options are available starting on [page 112](#).



JETS & CARB REBUILD KITS FOR S&S SUPER E & G CARBURETORS

For those who need to rejet their carburetor because of engine modifications, exhaust modifications, or changes in altitude, we have extra jet kits available which are designed to cover most jetting situations.

DEALER JET KITS

Description	Part #
S&S Jet Kit (Includes 3 each of all intermediate jets and 5 each of all main jets, plus a main jet tool)	11-3102

WARNING: Cancer and Reproductive Harm



11-3102±

JET PACKS

Description	Part #
Low Range Jet Pack —For jetting most stock and moderate performance engines	
Includes one each intermediate jets (.025", .0265", .028", .0295") and one each main jets (.062", .064", .066", .068", .070", .072", .074")	11-7270
High Range Jet Pack —For jetting some stock and all performance engines	
Includes one each intermediate jets (.0295", .031", .032", .033") and one each main jets (.072", .074", .076", .078", .080", .082", .084")	11-7271
Master Jet Pack —For jetting all Super B, E, and G equipped engines	
Includes one each intermediate jets (.025", .0265", .028", .0295", .031", .032", .033") and one each main jets (.062", .064", .066", .068", .070", .072", .074", .076", .078", .080", .082", .084")	11-7272

WARNING: Cancer and Reproductive Harm—



11-7272±

INTERMEDIATE JETS—SERIES #94 INDIVIDUAL SELECTION

Size	QTY	Part #	MSRP	Size	QTY	Part #	MSRP
.025	each	11-0250	\$12.95	.032	each	11-0320	\$12.95
	3 pack	11-7107	\$30.95		3 pack	11-7112	\$30.95
.0265	each	11-0265	\$12.95	.033	each	11-0330	\$12.95
	3 pack	11-7108	\$30.95		3 pack	11-7113	\$30.95
.028	each	11-0280	\$12.95	.036	each	11-0360	\$12.95
	3 pack	11-7109	\$30.95		3 pack	11-7114	\$30.95
.0295	each	11-0295	\$12.95	.040	each	11-0400	\$12.95
	3 pack	11-7110	\$30.95		3 pack	11-7115	\$30.95
.031	each	11-0310	\$12.95	Blank	each	11-0000	\$10.95
	3 pack	11-7111	\$30.95				

WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov



106-3517±

NOTE: No returns or exchanges on jets.

Early Series #94 gas jets were stamped with single digit numbers. Conversions for these numbers are:

- | | | | |
|--------|-------|--------|-------|
| 1..... | .025" | 4..... | .033" |
| 2..... | .028" | 5..... | .036" |
| 3..... | .031" | 6..... | .040" |

MAIN JETS—SERIES #72 INDIVIDUAL SIZE SELECTION

Size	QTY	Part #	Size	QTY	Part #
.040	each	11-4040	.080	each	11-4080
	5 pack	11-7220		5 pack	11-7240
.042	each	11-4042	.082	each	11-4082
	5 pack	11-7221		5 pack	11-7241
.044	each	11-4044	.084	each	11-4084
	5 pack	11-7222		5 pack	11-7242
.046	each	11-4046	.086	each	11-4086
	5 pack	11-7223		5 pack	11-7243
.048	each	11-4048	.088	each	11-4088
	5 pack	11-7224		5 pack	11-7244
.050	each	11-4050	.090	each	11-4090
	5 pack	11-7225		5 pack	11-7245
.052	each	11-4052	.092	each	11-4092
	5 pack	11-7226		5 pack	11-7246
.054	each	11-4054	.094	each	11-4094
	5 pack	11-7227		5 pack	11-7247
.056	each	11-4056	.096	each	11-4096
	5 pack	11-7228		5 pack	11-7248
.058	each	11-4058	.098	each	11-4098
	5 pack	11-7229		5 pack	11-7249
.060	each	11-4060	.100	each	11-4100
	5 pack	11-7230		5 pack	11-7250
.062	each	11-4062	.102	each	11-4102
	5 pack	11-7231		5 pack	11-7251
.064	each	11-4064	.104	each	11-4104
	5 pack	11-7232		5 pack	11-7252
.066	each	11-4066	.106	each	11-4106
	5 pack	11-7233			
.068	each	11-4068	.110	each	11-4110
	5 pack	11-7234			
.070	each	11-4070	.115	5 pack	11-7255
	5 pack	11-7235		each	11-4115
.072	each	11-4072	.120	5 pack	11-7256
	5 pack	11-7236		each	11-4120
.074	each	11-4074	.120	5 pack	11-7257
	5 pack	11-7237			
.076	each	11-4076			
	5 pack	11-7238			
.078	each	11-4078			
	5 pack	11-7239			

WARNING: Cancer and Reproductive Harm

MAIN JET AIR BLEED KIT (ONE JET EACH SIZE)

Sizes	Part #
.042" - .060"	106-3517
.084" - .120"	106-3518

WARNING: Cancer and Reproductive Harm—www.P65Warnings.ca.gov

S&S® CARBURETOR REBUILD KITS

To insure that you continue to get the utmost in performance from your S&S carburetor, we have put together a series of rebuild kits that are designed to provide the proper parts to return a worn carburetor to top shape. We have assembled different types of kits to cover the different degrees of rebuild necessary.

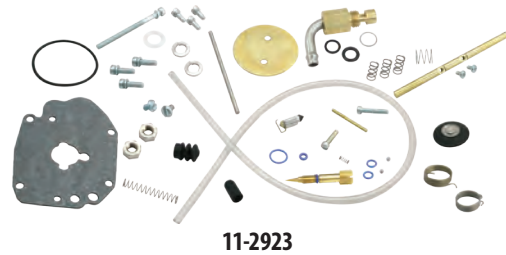
MASTER REBUILD KITS

Master rebuild kits contain a body rebuild kit, accelerator pump rebuild kit (Super E and G only), all new fasteners, springs, idle mixture screw, seat, and needle assembly. Everything needed to completely rebuild one carburetor.

MASTER REBUILD KIT

Description	Part #
Super E	11-2923
Super G	11-2924

WARNING: Cancer and Reproductive Harm



11-2923

BODY REBUILD KITS

Body rebuild kits for Super E and G carbs also contain throttle shaft nuts, nylon washers, accelerator pump o-ring, and accelerator pump boot. Body rebuild kits for Super E and G carbs do not contain throttle shaft bushings since these carbs have stainless steel throttle shaft bushings already installed.

BODY REBUILD KIT

Description	Part #
Super E	11-2906
Super G	11-2907



11-2907

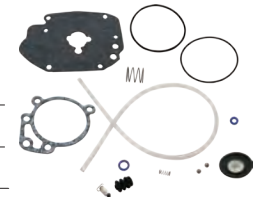
WARNING: Cancer and Reproductive Harm

BASIC REBUILD KIT

A gasket and seal kit for low mileage Super E & G carbs. Perfect to reassemble carbs taken apart for inspection and cleaning.

BASIC REBUILD KIT

Description	Part #	MSRP
Super E & G	110-0067	\$41.95



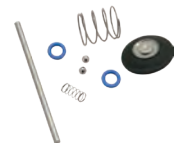
WARNING: Cancer and Reproductive Harm

ACCELERATOR PUMP REBUILD KITS

Accelerator pump rebuild kits contain diaphragm, diaphragm spring, check balls, check ball spring, pump pushrod, and required hardware and o-rings.

ACCELERATOR PUMP REBUILD KIT

Description	Part #
Super E & G	11-2918



THROTTLE CABLE ASSEMBLIES

EARLY STOCK STYLE TWO-CABLE THROTTLE ASSEMBLIES

- Designed to update 1981 and earlier chassis with 1" diameter handlebars for S&S Super E and G carbs or any other butterfly type carburetors with 1981-up stock style throttle linkage
- Cables are not interchangeable since they are specifically designed for the opening or closing side of throttle
- Kit contains throttle grips and both. Select kit with cable length desired. Cable measurement is from throttle grip to end of cable housing, barrel fittings are molded in place.



19-0448

EARLY STOCK STYLE TWO-CABLE THROTTLE

Description	Part #
Throttle Assembly with 36" Cables	19-0450
Throttle Assembly with 39" Cables	19-0448
Throttle Assembly with 42" Cables	19-0482
Throttle Assembly with 48" Cables	19-0449

S&S® THROTTLE CABLE APPLICATION CHART

Application	Length Total Housing	Length Vinyl Housing	Open Side	Close Side
FX & FL models 1985 and earlier* big twins 1995 and earlier*	36"	32"	19-0432	19-0433
To 1995 Harley-Davidson® Softail® (FXSTC, FXST, FLSTC, FLSTF) 1986-'94 FXR, 1993-'95 Dyna®	39"	35"	19-0434	19-0435
To 1995 All FLT models	48"	44"	19-0462	19-0463
To 1995 custom application	42"	38"	19-0446	19-0447

*1980 and earlier must be converted to dual cable throttle assembly

UNIVERSAL THROTTLE ASSEMBLY

- Used with early style S&S carburetors including Early Style, L Series, Super B, Super D, and Two-Throat
- Can also be used with any other carburetor which uses a screw clamp style throttle arm
- Threads on both cables are the same size so cables are interchangeable. One end of each cable has a molded ball end, and the other end is plain. Cable can be cut to length required. Fits 1" diameter handlebars.



19-0229

UNIVERSAL THROTTLE ASSEMBLY

Description	Part #
Universal 48" Throttle Assembly	19-0229
Universal Replacement Throttle Cable	19-0224

REPLACEMENT PARTS

Description	Part #
S&S Universal Throttle Clamp	106-3520
Throttle Grip Clamp Set 1985-'95	106-3519
Top Throttle Grip Clamp only	19-0222
Bottom Throttle Grip Clamp only	19-0220
Throttle Grip Clamp Screw (Fits S&S throttle assemblies: Part #19-0448, #19-0449, #19-0482, #19-0450, and #19-0229)	50-0043
Throttle Grip Set	106-3521
Right Hand Grip only	19-0225
Left Hand Grip only	19-0226
Cable Adjuster Fits S&S throttle assembly part #19-0229	19-0223
Cable Adjuster Jam Nut Fits S&S throttle assembly part #19-0229	19-0227
Handlebar Spacing Sleeve 4" x 1" O.D. - converts 3/8" handlebars to 1" O.D.	19-0235

HI-4N PERFORMANCE IGNITION

FITMENT

- 1970–1984 big twins
- 1971–1985 Ironhead Sportster® Models

FEATURES AND BENEFITS

- One piece machined aluminum housing reduces vibration and improves heat dissipation and reliability
- Improved kick start algorithm designed to start as easily as points
- BCD switches with solid detent and legible marking allow easy and repeatable adjustments of mode, advance rate, and rev limit
- Single-fire and dual-fire function built into a single module
- Flexible wiring harness makes installation easier
- Initial timing marks allow precise adjustment and reinstallation
- Sensor covers integrated into housing to provide protection during installation



HI-4N PERFORMANCE IGNITION

Fitment	Part #
Ignition only	550-0501
Kit Includes S&S® HI-4N Ignition, Single-Fire Coil, and 8.5mm double silicone, premium quality spark plug wires	550-0502

SUPER STOCK™ IGNITIONS

FITMENT

- S&S® SH-Series
- S&S KN-Series
- S&S P-Series

FEATURES & BENEFITS




- Electric-start mode allows the pre-ignition cranking to be set anywhere from 1 to 4 engine revolutions (*only available with current modules—earlier modules cannot be updated*)
- Pre-programmed ignitions are custom tailored for a specific S&S engine—no need for adjustments
- Single fire operation—requires a single fire coil for single spark plug applications
- Dual plugged applications require a pair of two tower coils or a single four tower coil
- Minimum 3.00 primary resistance
- Overload and short circuit protected
- VOES switches to less aggressive curve under load or hard acceleration
- 6300 rpm rev-limiter
- 24-hour break-in rev-limiter—prevents damage during break-in
- Data logging diagnostic capabilities



SUPER STOCK® IGNITION MODULE AND KITS

Engine	Kit Part #	Module Part #
SH80	55-1350	55-1340
SH93/P93	55-1351	55-1341
SH93H/P93H/P74	55-1352	55-1342
SH103	—	55-1343
KN93/KN74	106-3201	106-3200

SUPER STOCK® IGNITION KIT REPLACEMENT PARTS

Description	Part #
Pick-up Cup and Mounting Screw	55-1247±
Connector Kit 	55-1249
VOES Switch with Hardware 	55-1248
VOES Hose, 9' 	each 19-0395
	5 pack 19-0398
VOES Manifold Fitting	16-0136-S
VOES Hose Tee	50-8124-S
Optional Parts	
S&S Single Fire Coil (3.00)	55-1571

±  WARNING: Cancer and Reproductive Harm

NOTES: S&S Super Stock ignition systems are available in complete ignition kits and as replacement modules. S&S single fire ignition coils are available separately. Keep in mind that the curves are preset for a specific S&S engine, and that modules intended for one engine may not yield optimum results when used on another configuration.

Generator style engines require reverse timer gears and a special timer, designed to accept an electronic ignition. S&S offers two beautiful billet timers for this application.

5-SPEED TRANSMISSION CASE

FOR 1965-'85 4-SPEED BIG TWINS

FITMENT

- 1965-'85 big twin 4-speed chassis

FEATURES AND BENEFITS

- Update 4-speed bikes to 5-speed transmission
- CNC machined from 356-T6 aluminum castings
- Accepts most OEM and aftermarket parts designed for 1985-'99 big twin 5-speed transmissions
- CNC-machined billet trap door with bearings and required hardware
- Special battery box/starter brackets
- Shift linkage required for 4-speed FX and FL models
- Footpeg adapter kit required for FX

KIT CONTENTS

- Transmission case assembly
- Required hardware
- Instructions



4 TO 5-SPEED TRANSMISSION CASE KIT

Description	Part #	MSRP
Basic Case Assembly Kit	56-1051	\$849.95

→ REPLACEMENT PARTS: SEE PAGE 202

NOTES: The S&S 4 to 5-speed transmission case is not compatible with the factory Harley-Davidson® primary belt drive used on 1980-'83 FXSB Sturgis models.

For applications that utilize an existing 4-speed driveline, a 1980 to early '84, 5-speed style chain-drive mainshaft and 1980 to early '84 style main drive gear must be used. These parts are compatible with the tapered I.D. clutch hub used on 4-speed big twins.

4 and 5-speed transmissions utilize the same 1:1 final drive ratio. As a result, the 5-speed gear set will not alter engine RPM at highway speeds. The additional gear narrows the gap between lower gears for improved acceleration and better performance in traffic.

This transmission case will fit earlier big twin frames. However, the engine sprocket shaft must be of the type used in 1970-later big twin style engines. The transmission case itself is compatible with HD® secondary (rear) belt drive if the correct mainshaft, main drive gear, inner primary cover, starter shaft, starter housing, and related parts are used. However, the builder may encounter other obstacles when converting a motorcycle with chain final drive to belt final drive.

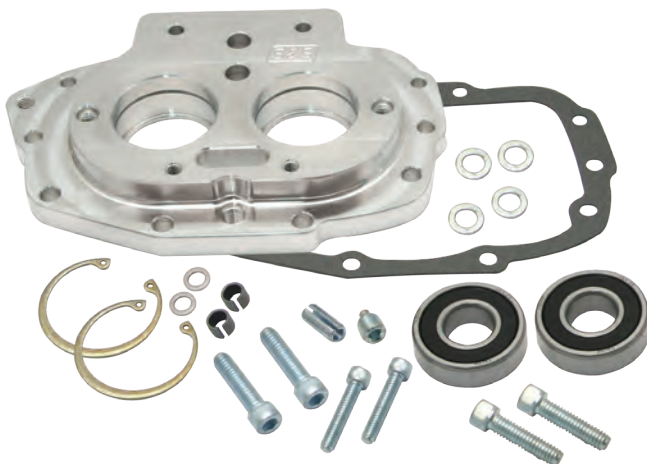
The purchaser's countershaft and shift fork shaft will require shortening.

A low contact-style countershaft gear must be used in this transmission case to match the 1980-'84 main drive gear required. Harley-Davidson® replaced low-contact gears with high-contact gears on 1994 international big twin models and 1995 U.S. models. Low and high contact gears may not be mixed.


S&S trap doors are of the 1987-'99 style. S&S recommends using this style trap door and end cover with the "ball and ramp" clutch actuator. The strength of the earlier, lever-type actuator is marginal for heavy clutch springs sometimes required in high-performance applications.

Most 4-speed big twin style engines utilize transmission-driven mechanical speedometers. This transmission case has no provision for speedometer drive, and must be used with a wheel-driven speedometer and speedometer drive. The existing wheel may require modification to accept the speedometer drive unit.

The clutch-actuator end of the 4-speed clutch cable is not compatible with the five-speed type clutch actuator. Options are to replace the existing clutch lever with an 1987-'99 style lever or purchase a custom cable with the correct ends from Barnett Tool and Engineering in Ventura, California. (Phone: 805-642-9435)



BILLET TRAP DOOR ASSEMBLY

Description	Part #
Billet Trap Door Assembly	56-1027 

→ REPLACEMENT PARTS: SEE PAGE 202

RETRO KICK STARTER COVER KIT

FITMENT

- 1940–'86 big twin
(year group authenticity is listed in the product descriptions below)

FEATURES AND BENEFITS

- Authentic detailing in cover casting
- Updates and improvements eliminate cracking problems of original covers
- Utilizes your stock hardware and filler plug, gasket included
- Heavy duty kicker boss with single bushing



106-6479-J7



106-6479-G6



106-6479-00

TRANSMISSION COVER KITS

Description	Part #
1948–'50 Big Twins J7 Date Code 33277-36, 33277-36A	106-6479-J7
1940–'47 Big Twins The G6 cover duplicates the external shape for 1940–'47. The G6 cover has a stamped in part number just as the original. The G6 date code stands for June of 1946. G6 Date Code 33277-36, 33277-36A	106-6479-G6
1940–'86 Big Twins The 00 cover has no part number or date code. It was created with the custom application in mind where authenticity isn't a must, or polishing or other finishes are desired. 33277-36, 33277-36A	106-6479-00

REPLACEMENT PARTS

Description	Part #	
Bushing	Lower, Clutch Arm 33290-38	106-6473
	Upper, Clutch Arm 33291-36	106-6474
Kicker Shaft	106-6475	
Gasket 33295-36	560-0012	
Oil Seal/Seal, 1" OD x .75" Shaft x .125"	106-6476	

GASKETS

REBUILD GASKET KITS FOR S&S® ENGINES & HOT SET UP KIT®

Description	Bore	Part #
SH-Series 1966-'84	3½"	106-0407
P-Series/SH-Series 1948-'84	3¾"	106-0408
KN-Series 1936-'47	3¾"	106-2414

TOP END GASKET KITS

Description	Bore	Part #
P Series/SH-Series 1966-'84	3¾"	90-9501
P Series/SH-Series 1966-'84	3½"	90-9500

CYLINDER HEAD GASKET KITS

Description	Bore	Part #
P Series/SH-Series 1966-'84	3¾"	90-1918
P Series/SH-Series 1966-'84	3½"	90-1917

HEAD GASKETS FOR S&S® P-SERIES AND SH-SERIES 1948-'84 (SHOVELHEAD BOLT PATTERN)

Description	Thickness	Bore	Part #
Copper	.032"	3¾"	each 93-1042
			10 pack 93-1062
Copper 16770-66B	.032"	3⅞" & 3½"	each 93-1041
			10 pack 93-1061

HEAD GASKETS FOR S&S® SW FOR PAN/KNUCKLE (PANHEAD HEAD BOLT PATTERN)

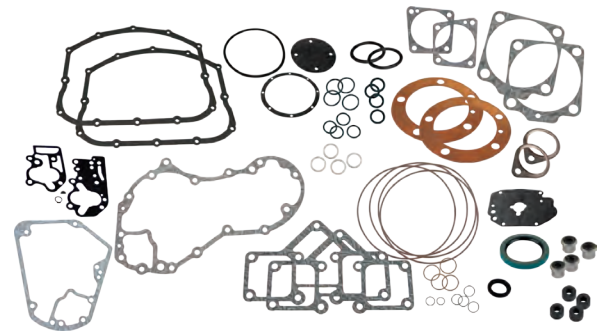
Description	Thickness	Bore	Part #
Composite	.032"	3¾"	each 93-1019

HEAD GASKETS FOR KN-SERIES 1936-'47

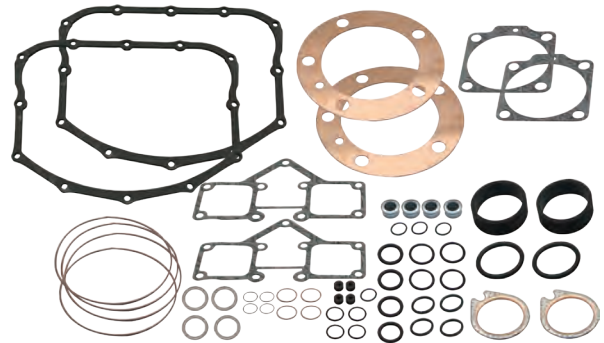
Description	Thickness	Bore	Part #
Copper	.032"	3¾"	each 106-2681
			2 pack 106-2432
Copper	.032"	3⅞"	2 pack 106-2689

HEAD GASKETS FOR FH-SERIES AND UL 1938-'48

Description	Thickness	Bore	Part #
Copper 16769-36	.020"	3⅞"	2 pack 106-2669



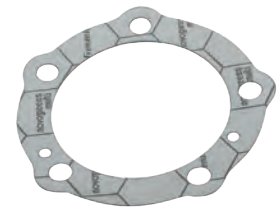
106-0408



90-9501



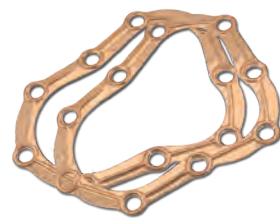
93-1042



93-1019



106-2681



106-2669

NOTES: While many of the gaskets in these kits will work for stock applications, some gaskets in the kits are specifically designed for S&S parts used in S&S engines.

Alternator style lower end kits include outer gaskets for both S&S flanged and flangeless gear covers. Not all gaskets will be used.

Oil pump gaskets provided in lower end gasket kits fit the standard pumps provided with S&S engines. If the crankcase of an engine was special ordered to accept a different type of oil pump, these gaskets may not fit.

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

BASE GASKETS FOR SH-SERIES 1966-'84

Description	Thickness	Bore	Part #	
Micropore	.018"	3 $\frac{5}{8}$ "	each	93-1022-S
			10 pack	93-1069
Micropore 16776-63	.018"	3 $\frac{1}{2}$ "	each	93-1023-S
			10 pack	93-1070

BASE GASKETS FOR P-SERIES 1948-'65

Description	Thickness	Bore	Part #	
Micropore	.018"	3 $\frac{5}{8}$ "	each	93-1022-S
			10 pack	93-1069

BASE GASKET FOR S&S PAN/KNUCKLE SW 1936-'65

Description	Thickness	Bore	Part #	
Composite 16776-63	.018"	3 $\frac{5}{8}$ "	each	93-1023-S
			10 pack	93-1070
Composite	.018"	3 $\frac{5}{8}$ "	each	93-1022-S
			10 pack	93-1069

BASE GASKETS FOR KN-SERIES 1936-'47

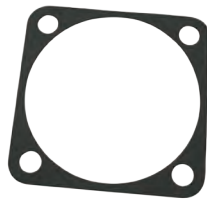
Description	Thickness	Bore	Part #	
Composite	.020"	3 $\frac{5}{8}$ "	each	106-2690
Composite 16774-21	.020"	3 $\frac{9}{16}$ " & 3 $\frac{7}{16}$ "	each	106-2692

EXHAUST GASKETS

S&S SH-Series, P-Series, and 1966-'84 bt	each	93-1004-S
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93-1022-S



106-2690



900-0329



90-4040

VALVE GUIDE SEALS

Fits S&S Heads for 1966-'84 bt and 1981-'84 stock cylinder heads	4 pack	900-1005
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ROCKER BOX GASKET KITS AND INDIVIDUAL GASKETS

Gasket Kit S&S Billet Rocker boxes 1966-84 bt		90-4311
O-ring,(-160),5.250" ID x 5.437" OD,Viton®	each	50-7961-S
O-ring,(-019),.812" ID x .937" OD,Viton®	each	50-7962-S
O-ring,.551" ID x .627" OD,Viton®	each	50-7963-S
O-ring,.374" ID x .473" OD,Viton®	each	50-7965-S
Gasket,Rocker Cover,1966-'84 bt 17540-69, 17540-69A	each	90-4040
	10 pack	90-4064
Stock Rocker Boxes 1966-'84 bt 17540-69, 17540-69A	each	90-4040
	10 pack	90-4064
Rocker Arm Cover Gasket 1948-'65 bt 117541-48	each	900-0329
	Set	900-0339
Rocker Arm Cover Gasket Kit 1936-'47 bt		900-0493
Gasket,Bottom,Valve Spring Covers,(Tins), Vulcanized Fiber,1936-'47 OHV bt		900-0668
Gasket,Set,Valve Spring Covers,KN-Series,(Tins)		106-3166
Seal,Oil,Rocker Arm,1936-'47 OHV bt,KN-Series 17475-38		106-3636
O-ring,Square,.1875" 17955-36		106-3849
O-ring,(-017),.676" ID x .816" OD,Black,Viton®		50-0466
O-ring,(-015),.562" ID x .068" OD,Black,Viton® 26432-76A	each	50-8034-S
	2 pack	50-8034
O-ring,(-326),1.625" ID x 2" OD,Black,Viton® 27060-55	each	50-8046
	10 pack	50-8132

LOWER END GASKETS AND SEALS

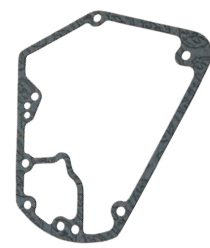
1970-'99 Big Twin Engine 25225-93A, 25225-93B, 25225-70C, 25257-80	each	31-2107
	10 pack	106-0232
1936-'69 Big Twin Engine w/S&S Cases 25225-36A		31-2030
1936-'69 Big Twin Engine w/Stock Cases 25225-36C		106-2072

CAMSHAFT OIL SEALS FOR 1970-'99 BIG TWIN MODELS

Seal,Gearcover Cam,1" x 1.441" x .250" 83162-51	each	31-4022
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106-3166



31-2107

TAPPET GUIDE GASKETS

1948-'99 bt engines—Set (Includes Front & Rear) 18633-48	each	33-5302
	10 pack	33-5313
Front 18634-48C	each	33-5302F
	10 pack	33-5313F
Rear 18633-48B, 18633-48D	each	33-5302R
	10 pack	33-5313R
1936-'47 OHV bt engines—Set (Includes Front & Rear) 18632-36		106-2563

PUSHROD O-RINGS

Pushrod O-Ring Kit 1979-'84 big twin		93-4041
Top O-Ring 11293, 11157, 11101, 11190	each	50-8039
Middle O-Ring 11132A	each	50-8038
Bottom O-Ring 11145A	each	50-8037
Quad Seal 11133A		50-8064-S
Washer, Bottom Pushrod Tube	each	50-7050
	10 pack	50-7072

SPROCKET SHAFT SEAL

1936-'99 big twin 12026B	each	31-4010
	5 pack	31-4110

OIL PUMP GASKET KITS STANDARD S&S BILLET OIL PUMP 1936-'91

Gasket Rebuild Kit	31-6271
Master Rebuild Kit	31-6275
Oil Pump Drive Shaft Seal 26227-58	31-6005

FUEL SYSTEM GASKETS

Manifold Seals		
Rubberband—1979-'84 bt and 1979-'85 xl 27062-78	each	16-0238
	10 pack	16-0245
O-ring—1955-'78 bt and 1957-'78 xl 27060-55	each	50-8046
	10 pack	50-8132
Cap, rubber, manifold, fitting		50-8372

CLASSIC TEARDROP AIR CLEANER GASKETS

Backplate gasket Super E	each	106-1724
	10 pack	106-2328
Backplate gasket Super B	each	17-0196
	5 pack	17-0197

STEALTH AIR CLEANER GASKETS

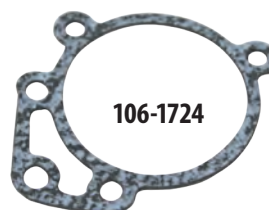
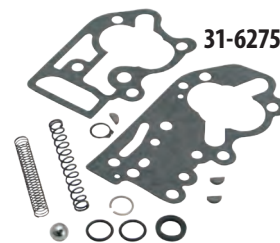
Super E/G	each	106-1724
	10 pack	106-2328
Muscle Air Cleaner (includes lanyards)		170-0137

CARBURETOR GASKETS

Bowl Gasket	Super E & G	each	11-2386
		10 pack	11-2387
	Super B & D	each	11-2086
		10 pack	11-2091
	L Series	each	11-2070
	Pump cap o-ring - (two required)	each	50-8012
10 pack		50-8100	
Idle Mixture Needle o-ring	each	500-0036	
	10 pack	500-0148	
Bellows seal Bellows Seal, Accelerator Pump	each	11-2266	
	5 pack	11-2279	
Accelerator pump diaphragm	each	11-2282	
Manifold to Carb/ Throttle Body O-Rings	Super E	each	50-8016
		10 pack	50-8094
	Super G	each	50-8015
		10 pack	50-8093
	Super B	each	50-8013
	L Series 1¼" or 17/8"	each	50-8013
Seat and Bowl Plug O-Ring	each	50-8009	
	10 pack	50-8095	

TRANSMISSION GASKETS

Seal, quad, 1¼" I.D. x 17/8" O.D. x 1/16" Buna 11165	50-8045
Seal, inner primary - 4-speed BT	56-5101
Seal, oil shifter shaft - 1984-'99 BT 12045	56-1064
Seal, oil 12067B	56-3033
Gasket, transmission access door 35652-79B, 35653-98A	56-1026

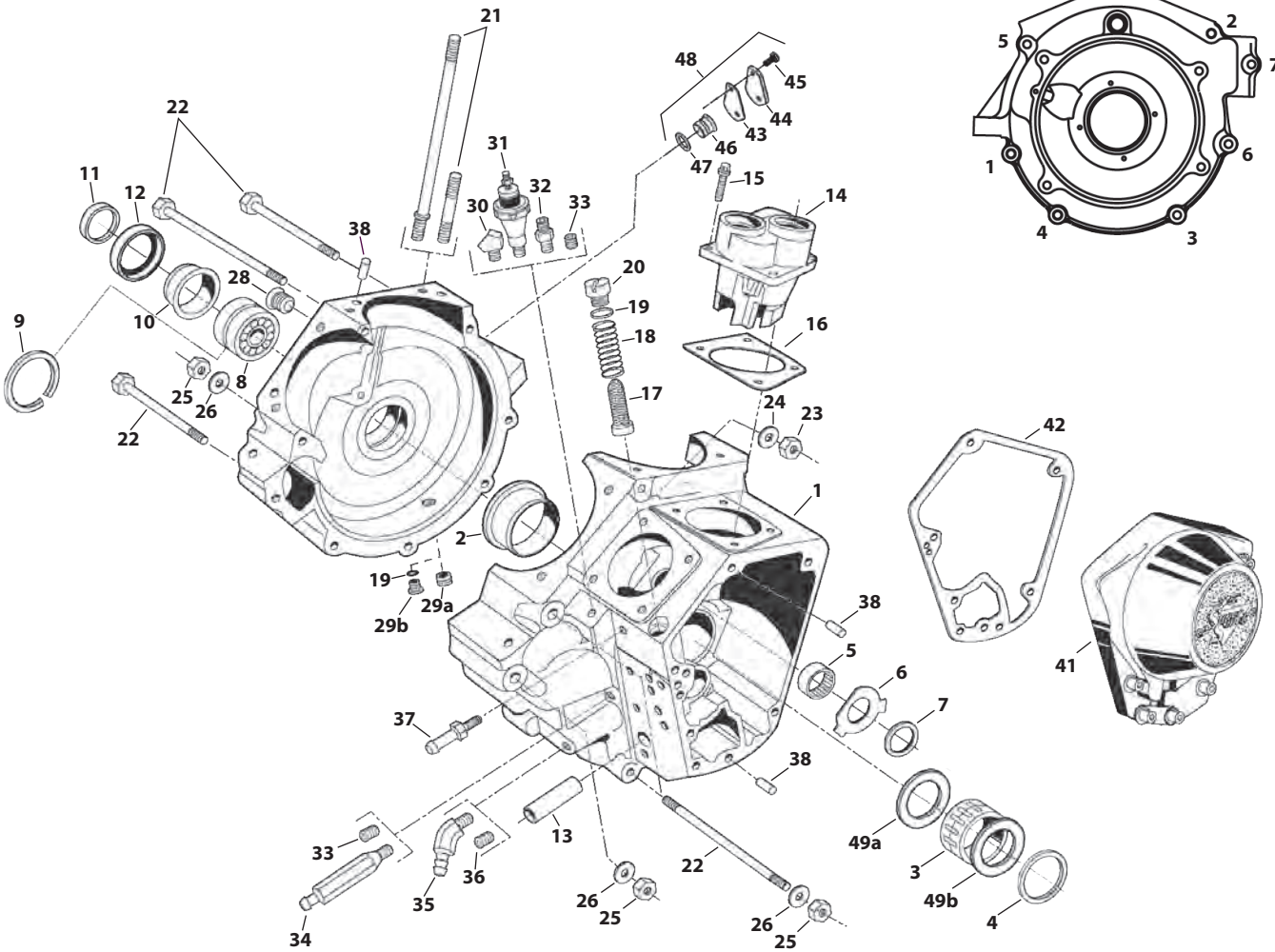
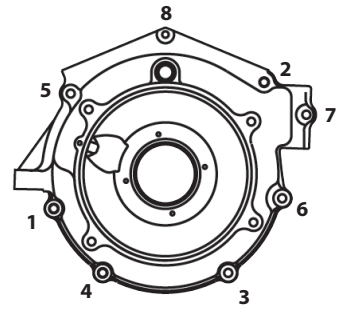


SUPER STOCK CRANKCASE REPLACEMENT PARTS

FOR ALTERNATOR STYLE BIG TWIN ENGINES OF LESS THAN 4" CYLINDER BORE

- | | |
|---|------------------------|
| 1. Crankcase assembly, half..... | N/A |
| 2. Race, right main bearing, All S&S BT
Standard 24599-93, 24599-58A, 24599-58B
<i>Clearanced for .798" lift 1984-'99 style cam w/ 1" base circle</i> | 31-4004 |
| 3. Right main bearing assembly BT
White 24626-87A..... | 31-4005 |
| Green 24628-87A..... | 31-4016 |
| Red 24641-87A..... | 31-4017 |
| Blue 24643-87A..... | 31-4018 |
| 4. Retaining ring, main bearing BT 11177A (each)
5 pack..... | 50-8057
50-1004 |
| 5. Cam needle bearing assembly BT
9058..... | 31-4009 |
| 6. Washer, cam lock - BT 25550-57A (each)
5 pack..... | 33-5201
33-5213 |
| 7. Cam thrust washer - BT
.050" 25550-36 (each)..... | 33-5200 |
| .055" 25551-36 (each)..... | 33-5202 |
| .060" 25552-36 (each)..... | 33-5203 |
| .065" 25553-36 (each)..... | 33-5204 |
| .070" 25554-36 (each)..... | 33-5205 |
| .075" 25555-36 (each)..... | 33-5206 |
| .080" 25556-36 (each)..... | 33-5207 |
| 8. Left Timken® main bearing assembly 1936-'99
S&S BT cases 9028..... | 31-4013 |
| 9. Timken Main Bearing Spacers, 1969-up BT
Fits 1 1/4" stock diameter shaft.
.0995" - .1005" 9124..... | 31-4071 |
| .1015" - .1025" 9125..... | 31-4072 |
| .1035" - .1045" 9126..... | 31-4073 |
| .1055" - .1065" 9127..... | 31-4074 |
| .1075" - .1085" 9128..... | 31-4075 |
| .1195" - .1205" 9134..... | 31-4076 |
| 10. Spacer, drive sprocket, 1965-'99 S&S BT cases
24002-70..... | 31-4011 |
| 11. Spacer, Drive Sprocket, 45A Charging System..... | N/A |
| 12. Seal, sprocket shaft oil 1936-'99 S&S BT cases
12026B (each)..... | 31-4010 |
| 5 pack..... | 31-4110 |
| 13. Bushing, oil pump shaft - All S&S BT cases Standard
24641-36..... | 31-4008 |
| 14. Tappet guide assembly..... | N/S |
| 15. Screw, 12 pt. DHH 1/4" -20 x 7/8" 3770..... | 50-0068 |
| 4 pack..... | 50-0068P |
| 16. Gasket, tappet guide—1948-'99 BT
Front 18634-48C(each)..... | 33-5302F |
| 10 pack front..... | 33-5313F |
| Rear 18633-48B, 18633-48D(each)..... | 33-5302R |
| 10 pack rear..... | 33-5313R |
| Set 18633-48 (each front & rear)..... | 33-5302 |
| 10 pack set..... | 33-5313 |
| 17. Crankcase oil screen - 1948-'99 BT 24981-70, 24981-66
(each)..... | 31-2010 |
| 5 pack..... | 31-7008 |
| 18. Crankcase oil screen spring - 1948-'99 BT
24982-66, 24982-70 (each)..... | 31-2011-S |
| 19. Cover screw o-ring - 1948-up S&S BT
11105, 11273(each)..... | 50-8008 |
| 10 pack..... | 50-8078 |
| 20. Cover screw - 1948-'99 S&S BT 26263-80, 26362-36
each..... | 31-6021 |
| 5 pack..... | 31-7005 |
| 21. Cylinder stud
1984-up BT 16837-85C (each)..... | 31-2321-S |
| 8 pack..... | 31-2321 |
| 1984-up BT with +.500" cases 16832-86C
each..... | 31-2331-S |
| 8 pack..... | 31-2331 |
| 22. Crankcase Hardware
Alternator 1970-'99 and Alt/Gen Cases
Alignment Stud, 5/16" -24 x 5 3/4" 24806-36, 3506..... | 31-2003 |
| (Position 5 & 6)
Screw, HHCS, 5/16" -18 x 3 1/2" 3427..... | 50-0117 |
| (Position 7)
Screw HHCS, 5/16" -24 x 5"..... | 50-0119 |
| Zinc 3430..... | 50-0253-S [±] |
| Chrome (each)..... | 50-0253-S [±] |
| (Position 8)
Screw HHCS, 1/4" -28 x 5 1/2" (each)..... | 50-0090 |
| Screw HHCS, 1/4" -28 x 5 1/2" Chrome (each)..... | 50-0252-S [±] |
| 23. Nut, Hex - 1/4"-28 7683..... | 50-5011 |
| 24. Washer, flat - 1/4" x 5/8" x 1/16"
Zinc 6194, 6245, 6703, 6736, 6228W, 6192 (each)..... | 50-7021 |
| Chrome (each)..... | 50-7104-S [±] |
| 25. Nut, hex - 5/16"-24 zinc 7833, 7883..... | 50-5023 |
| 26. Washer, flat - 5/16" x 1 1/16" x 1/16" 6320, 70907-07, 6016, 6702..... | 50-7034 |
| 27. Hardware Kits (includes studs, screws, nut and washers)
1984-up BT—manufactured after 6-1-08
Chrome..... | 106-4913 [±] |
| 28. Plug, timing hole 220..... | 31-2005 |
| 29. Drain plug
Manufactured before 5-1-2000
a. 3/8"-18 NPT..... | 31-2006 |
| Manufactured after 5-1-2000
b. 1/2"-20 thread..... | 50-8335 |
| 30. Fitting, 1/8" x 1/8" pipe, male/female..... | 50-8112 |
| 31. Oil pressure switch 26561-84
(Includes: 1 each switch, nut, lock washer.)
..... | 31-2016 |
| 32. Fitting, oil line - .375" x 1/8"-27 62484-81..... | 31-2021 |
| 33. Plug, SH pipe - 1/8"-27 each..... | 50-8331A |
| 34. Fitting, primary oil return 63533-65, 63533-41A..... | 31-2019 |
| 35. Fitting, 45° hose—1/4" pipe male x 3/8" male hose..... | 50-8113 |
| 36. Plug, SH pipe, 1/4"-18, 1965-'69 S&S BT 765..... | 50-8330 |
| 37. Fitting, hose - 1/8"-27 pipe male..... | 50-8115 |
| 38. Dowel pin, .250" diameter x 1/2"
(1970-up S&S BT) 358, 366 (each)..... | 50-8022 |
| 2 pack..... | 50-8022-2 |
| 5 pack..... | 50-8105 |
| 39. Screw, SHC - 10-24 x 1" (Stator) (N/S) 2720
each..... | 50-0044 |
| 40. Screw, SHS - 10-24 x 5/16" - (Stator plug clamp) (N/S)
each..... | 50-0045 |
| 41. Gearcover..... | N/A |
| 42. Gearcover gasket 1970-up S&S BT..... | N/A |

Bolt Position Diagram



- 43. Gasket, crank position sensor hole..... **N/A**
- 44. Cover, crank position sensor hole **31-2056-S**
- 45. Screw, Torx, 8-32 x 3/8" 68042-99 **50-0054-S**
- 46. Crank position sensor hole plug **106-1189**
- 47. O-ring (each)..... **50-8270**
- 5 pack..... **50-8275**
- 48. Crank position sensor hole plug kit **106-2997**
- 49. Washer, Right, Main Bearing, Thrust
- a. 1.258" x 1.743" x .071", Steel **31-4038***
- b. 1.258" x 1.743" x .051", Steel **31-4039***

**Thrust washers are normally used with 1958-'86 style bearings with loose rollers and drop in style cages, but can be used to position 1987-up bearings when used on early style flywheels.*

(N/S) = Not Shown
N/A = No longer available































All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

± **WARNING: Cancer and Reproductive Harm**

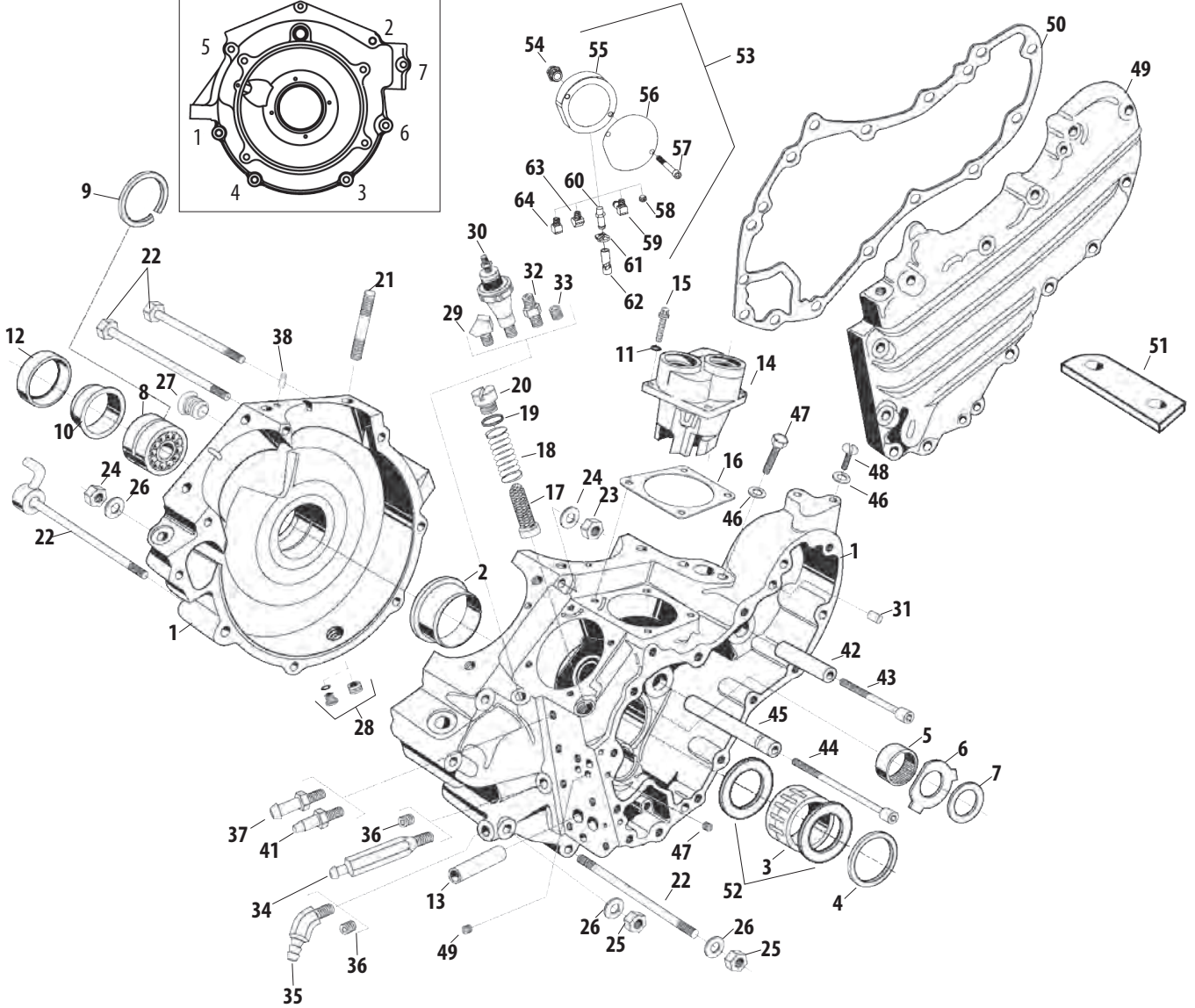
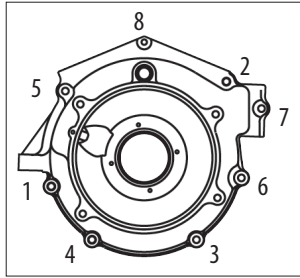


SUPER STOCK CRANKCASE REPLACEMENT PARTS

FOR ALTERNATOR/GENERATOR STYLE BIG TWIN ENGINES OF LESS THAN 4" CYLINDER BORE

- | | |
|--|--|
| 1. Crankcase assembly, half | N/A |
| 2. Race, right main bearing, All S&S BT
Standard 24599-93, 24599-58A, 24599-58B |  31-4004 |
| Clearanced for .798" lift 1984-'99 style cam w/1" base circle | |
| 3. Right main bearing assembly BT | |
| White 24626-87A | 31-4005 |
| Green 24628-87A | 31-4016 |
| Red 24641-87A | 31-4017 |
| Blue 24643-87A | 31-4018 |
| 4. Retaining ring, main bearing BT 11177A (each) | 50-8057 |
| 5 pack | 50-1004 |
| 5. Cam needle bearing assembly 9058 |   31-4009 |
| 6. Washer, cam lock
1958-'99 bt 25550-57A (each) | 33-5201 |
| 5 pack |  33-5213 |
| 7. Cam thrust washer - BT | |
| .050" 25550-36 (each) |  33-5200 |
| .055" 25551-36 (each) |  33-5202 |
| .060" 25552-36 (each) |  33-5203 |
| .065" 25553-36 (each) |  33-5204 |
| .070" 25554-36 (each) |  33-5205 |
| .075" 25555-36 (each) |  33-5206 |
| .080" 25556-36 (each) |  33-5207 |
| 8. Left Timken® main bearing assembly 1936-'99
S&S BT cases 9028 |  31-4013 |
| 9. Timken Main Bearing Spacers, 1969-up bt
<i>Fits 1 1/4" stock diameter shaft.</i> | |
| .0995"-.1005" 9124 | 31-4071 |
| .1015"-.1025" 9125 | 31-4072 |
| .1035"-.1045" 9126 | 31-4073 |
| .1055"-.1065" 9127 | 31-4074 |
| .1075"-.1085" 9128 | 31-4075 |
| .1195"-.1205" 9134 | 31-4076 |
| 10. Spacer, drive sprocket
1936-'64 S&S BT cases | 31-4014 |
| 1965-'99 S&S BT cases 24002-70 |  31-4011 |
| 11. Washer, Countersunk, 1/4" x 1/2" | 106-3848 |
| 12. Seal, sprocket shaft oil 1936-'99 S&S BT cases 120268
(each) |  31-4010 |
| 5 pack |  31-4110 |
| 13. Bushing, oil pump shaft - All S&S BT cases
Standard 24641-36 |  31-4008 |
| 14. Tappet guide, 1936-'47 OHV bt & S&S KN-Series | |
| Set | 106-2410 |
| Front 18600-36 | 106-2665 |
| Rear 18610-36 | 106-2666 |
| Tappet Guide, S&S SH & P series and conversion kits only, uses V-Series lifters | |
| Set | 33-5450± |
| Front | 33-5450F± |
| Rear | 33-5450R± |
| 15. Screw | |
| Screw, 12pt, DHH, 1/4"-20 x 7/8" 3770 (each) | 50-0068 |
| 4 pack | 50-0068P |
| Screw, Slotted, Oval, 1/4"-24 x 5/8" 2329 | 106-3847 |
| Screw, Slotted, Oval, 1"-20 x 3/8" | 500-0043 |
| 16. Gasket, tappet guide—1948-'99 BT | |
| Front 18634-48C (each) |  33-5302F |
| 10 pack front |  33-5313F |
| Rear 18633-48B, 18633-48D (each) |  33-5302R |
| 10 pack rear |  33-5313R |
| Set (each front & rear) 18633-48B, 18633-48D |  33-5302 |
| 10 pack set |  33-5313 |
| Gasket, tappet guide—KN 1936-'47 OHV 18632-36
(each) | 106-2561 |
| 2 pack | 106-2563 |
| 17. Crankcase oil screen - 1948-'99 BT 24981-70, 24981-66
(each) | 31-2010 |
| 5 pack | 31-7008 |
| 18. Crankcase oil screen spring - 1948-'99 bt 24982-66, 24982-70
(each) | 31-2011-S |
| 19. Cover screw o-ring - 1948-up S&S BT (each) | 50-8008 |
| 10 pack | 50-8078 |
| 20. Cover screw - 1948-'99 S&S BT 26263-80, 26362-36
(each) | 31-6021 |
| 5 pack | 31-7005 |
| 21. Cylinder stud
1936-'84 BT Standard 16831-30, 16837-30 |  31-2328-S |
| 8 pack |  31-2328 |
| 1936-'84 BT +5/16" longer 16837-78 | 31-2324-S |
| 22. Crankcase Hardware
Hardware Kit | |
| Alt/Gen Cases | |
| Alignment Stud, 5/16" -24 x 5 3/4" 24806-36, 3506 | 31-2003 |
| (Position 1) | |
| Front Chain Oiler Bolt | 106-4795 |
| (Position 5 & 6) | |
| Screw, HHCS, 5/16" -18 x 3 1/2" | 50-0117 |
| (Position 7) | |
| Screw HHCS, 5/16" -24 x 5" zinc 3430 | 50-0119 |
| Chrome (each) | 50-0253-S± |
| (Position 8) | |
| Screw HHCS, 1/4" -28 x 5 1/2" (each) | 50-0090 |
| Screw HHCS, 1/4" -28 x 5 1/2" Chrome (each) | 50-0252-S± |
| 23. Nut, Hex - 1/4"-28 7683 | 50-5011 |
| 24. Washer, flat - 1/4" x 3/8" x 1/16"
Zinc 7035, 7036 (each) | 50-7021 |
| Chrome (each) | 50-7104-S± |
| 25. Nut, hex - 5/16"-24 zinc 7833, 7883 | 50-5023 |
| 26. Washer, flat - 5/16" x 1 1/16" x 1/16" 6320, 70907-07, 6016, 6702 | 50-7034 |
| 27. Plug, timing hole 720 |  31-2005 |
| 28. Drain plug,
3/8"-18 NPT Manufactured before 5-1-2000 | 31-2006 |
| 1/2"-20 thread Manufactured after 5-1-2000 | 50-8335 |
| 29. Fitting, 1/8" x 1/8" pipe, male/female | 50-8112 |
| 30. Oil pressure switch 26561-84
(Includes: 1 each switch, nut, lock washer) |  31-2016 |
| 31. Dowel pin .375" diameter x 3/4" 1936-'64 S&S BT | 50-8017 |
| 32. Fitting, oil line - .375" x 1/8"-27 62484-81 | 31-2021 |
| 33. Plug, SH pipe - 1/8"-27 (each) | 50-8331A |
| 34. Fitting, primary oil return 63533-65, 63533-41A | 31-2019 |
| 35. Fitting, 45° hose—1/4" pipe male x 3/8" male hose |  50-8113 |
| 36. Plug, SH pipe, 1/4"-18, 1965-'69 S&S BT 765 |   50-8330 |
| 37. Fitting, hose - 1/8"-27 pipe male |  50-8115 |
| 38. Dowel pin, .250" diameter x 1/2"
(1970-up S&S BT) 358, 366 (each) | 50-8022 |
| 2 pack | 50-8022-2 |
| 5 pack | 50-8105 |
| 39. Screw, SHC - 10-24 x 1" (Stator) N/S 2720 (each) | 50-0044 |
| 40. Screw, SHS - 10-24 x 5/16" - (Stator plug clamp) N/S | 50-0045 |
| 41. Fitting, oil line 63533-15 | 31-2018 |
| 42. Idler gear shaft - 1936-'69 BT 25791-36 | 31-2039 |
| 43. Screw, SHC 1/4"-20 x 2" (Idler gear shaft)
25794-36 | 50-0013 |

BOLT POSITION DIAGRAM



- 44. Screw, SHC 1/4" -20 x 3/4" (Circuit breaker drive gear shaft) 1430 **50-0012**
- 45. Shaft, circuit breaker drive gear, 1936-'69 BT 25856-36 **31-2037**
- 46. Washer, lock - 1/4" 7035, 7036 **50-7019**
- 47. Screw, HHC 1/4" -20 x 1/2" 1936-'65 S&S BT timer 3728 **50-0014**
1/4"-20 x 1" 1966-'69 S&S BT timer 2551W **50-0018**
- 48. Screw, standard RH 1/4"-20 x 1/2" 2759 **50-0015**
- 49. Gearcover (See page 137)
- 50. Gearcover gasket 1936-'69 S&S BT 25225-36A **31-2030**
- 51. Spacer, motor mount - 1936-'47 BT 24795-48 **31-2017**
- 52. Washer, Right, Main Bearing, Thrust
1.258" x 1.743" x .071", Steel **31-4038***
1.258" x 1.743" x .051", Steel **31-4039***
- 53. Bracket Kit, Oil Filter 1936-'69 bt (includes 56-66) **106-3134***
- 54. Fitting, Straight, 3/4-16 UNF 2A x 1" 26352-95A **50-8197-S**
- 55. Bracket, Oil Filter **N/A**
- 56. Gasket, Oil Filter Mount **106-4423**
- 57. Screw, SHC, 5/16-24 x 2-3/4" **50-0017**
- 58. Plug, Pipe, 3/4" x 1/8-27 x .188" **50-8331A**
- 59. Fitting, Pipe, 90°, 1/8-27 x .375" **50-8110**

- Fitting, Hose, Straight, 1/8-27 x .500" **50-8115**
- 60. Clamp, Hose, 5/8" - 7/8" **50-8002**
- 61. Hose, Oil Line Return, 375" x 12" **N/A**
- 62. Fitting, Pipe, 45°, 1/8-27 x 1/8-27 **50-8112**
- 63. Fitting, Pipe, 90°, Male/Female, 1/8-27 26338-68, 26561-84A, 26561-81A, 26338-68A **106-2682**
5 pack **50-1007**

*Thrust washers are normally used with 1958-'86 style bearings with loose rollers and drop in style cages, but can be used to position 1987-up bearings when used on early style flywheels
(N/S) = Not Shown
N/A = No longer available

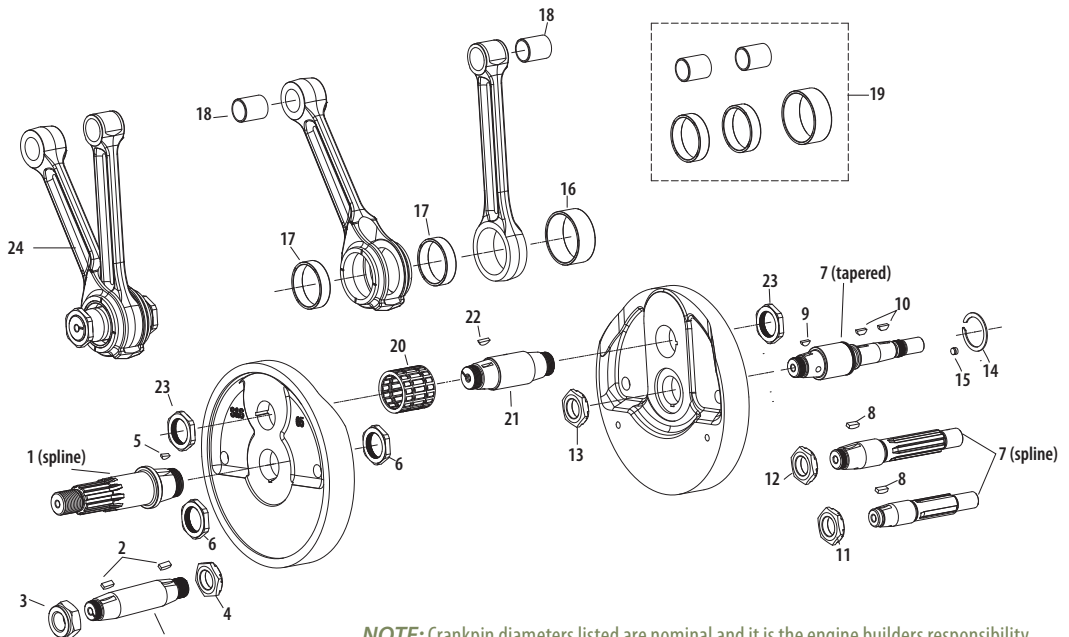
⚠ WARNING: Cancer and Reproductive Harm



FLYWHEEL REPLACEMENT PARTS FOR 1930-'84 BIG TWIN ENGINES

- 1. Sprocket Shaft**
1930-1954 Including UL SVBT stock & S&S E flywheels
(straight-roller bearing) (includes #2, 3, 4) 24001-30 **33-2001**
Note: This shaft uses the larger 55-later thread for added strength and includes the motor sprocket nut. The stock nut will not fit.
1955-1964 S&S SE/SL flywheels
(includes #5 & 6) (spline - Timkin®) **33-2002**
1965-1969 S&S SE/SL flywheels
(includes #5 & 6) (spline - Timkin®) **33-2003**
1970-1999 S&S SE/SL flywheels
(includes #5 & 6) (spline - Timkin®) **33-2004**
- 2. Key** **50-8224**
- 3. Sprocket Shaft Nut** **33-2031**
- 4. Motor Sprocket Nut** **33-2032**
- 5. Key** **50-8225-S**
- 6. Sprocket Shaft Nut** **33-2033**
- 7. Pinion Shaft**
1939-1953 stock/ S&S E flywheels (spline) (includes #8 & 12)
Standard **33-2021**
1958-early 1981 stock & S&S L/AL/SE flywheels (tapered)
(includes #8, 12, 10, 14, 15)
Standard 24006-54A, 24006-73 **33-2024**
.001" OS **33-2025**
Late 1981-1984 stock/ S&S BL/SL/SM flywheels (tapered)
(includes #10, 14, 15, 9, 13)
Standard **33-2027**
- 8. Key** **50-8224**
- 9. Key 11218** **50-8222-S**
5 pack **50-1009**
- 10. Pinion/Oil Pump Key** **50-8221-S**
5 pack **50-1008**
- 11. Pinion Shaft Nut** **N/A**
- 12. Pinion Shaft Nut** **33-2031**
- 13. Pinion Shaft Nut** **33-2034**
- 14. Bearing Retaining Ring 11177A** **50-8057**
5 pack **50-1004**

- 15. Meter Plug**
.0625" hole **50-8316±**
.0925" hole **50-8317±**
no hole **50-8314±**
- 16. Front Rod Race, 1941-1984 24356-36A** **34-4005**
- 17. Rear Rod Race 24345-36A** **34-4006**
- 18. Wristpin Bushing 24334-36** **34-4007**
- 19. Race & Bushing Set (includes #16, 17, 18)** **34-4040**
- 20. Cage and Bearing Set, Standard 24346-87A, 24385-40B** **34-4010**
- 21. Crankpin**
1941-early 1981 (includes #22 & 23)
Standard **34-2003**
.001" OS **34-2007**
.002" OS **34-2008**
Late 1981-1984 (includes #10 & 23)
Standard **34-2102**
.001" OS **34-2103**
.002" OS **34-2105**
.003" OS **34-2106**
- 22. Key** **50-8223-S**
- 23. Crankpin Nut**
1937-'53 EL / 1940-'48 UL/ULH models **34-2005**
1941-early 1981 & late 1981-1984 **34-2104**
1941-1984 Special Retro Engine **34-2006**
- 24. Connecting Rod Assembly**
1936-1952, Heavy Duty (Stepped crankpin) **34-7003**
1941-1981, Heavy Duty **34-7004**
1981-1984, Heavy Duty **34-7011**

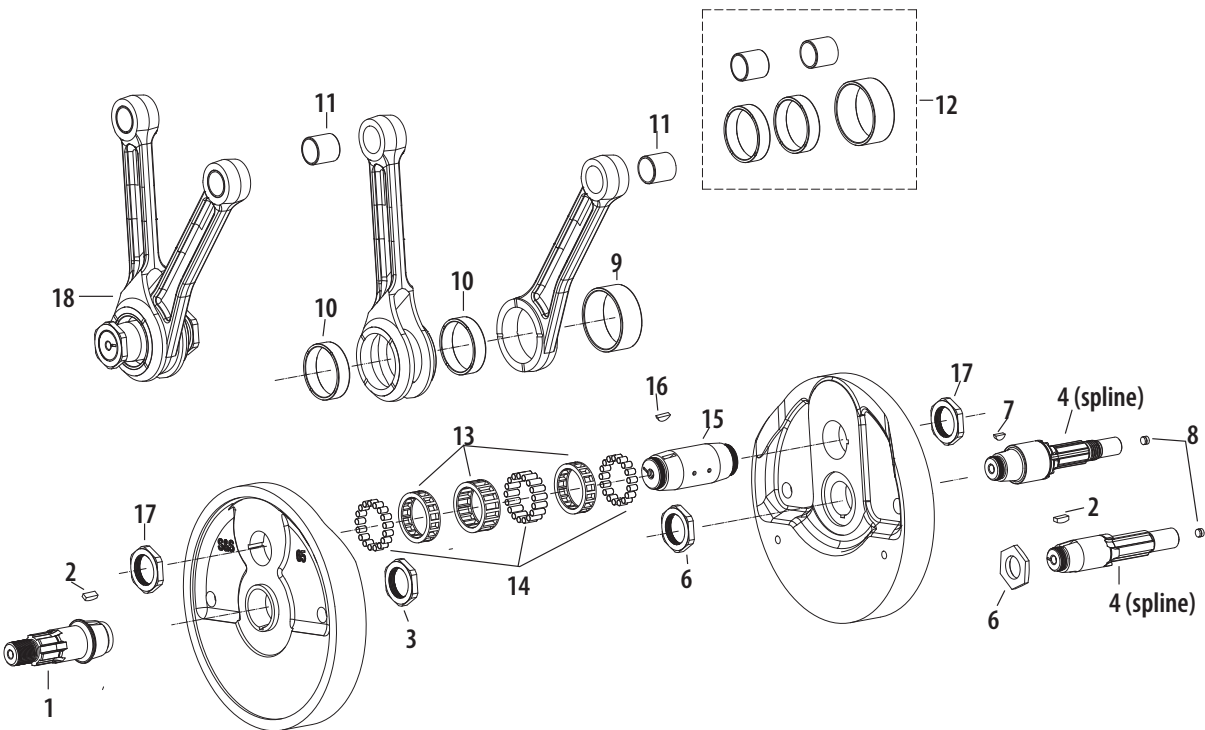


NOTE: Crankpin diameters listed are nominal and it is the engine builders responsibility to confirm correct running clearances when fitting rods to crankpins.












FLYWHEEL REPLACEMENT PARTS

FOR 1957-'85 XL ENGINES

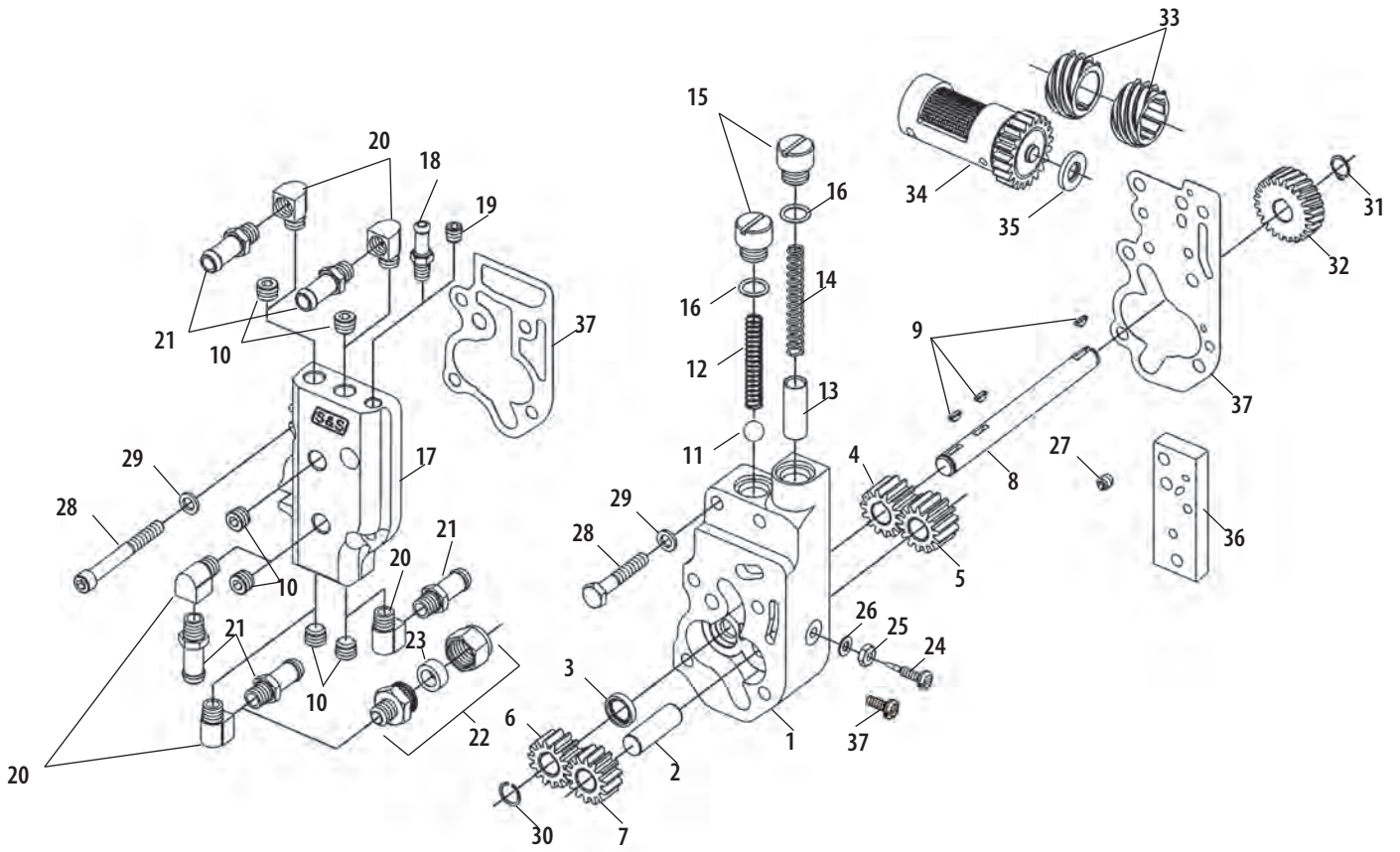
- 1. Sprocket Shaft (includes #2 & 3)
1957-1976 XL w/S&S SB flywheels **33-2301**
1977-1985 XL w/S&S D/SB/SBD/SCD/SC/SCDR/SCR flywheels ... **33-2302**
- 2. Key **50-8224**
- 3. Sprocket Shaft Nut **33-2331**
- 4. Pinion Shaft
Stock 1957-1976 XL and S&S B/SB flywheels (includes #5 & 6)
Standard **33-2321**
Stock 1977-early 1981 XL and S&S B/BD/SB/SBD/ flywheels (includes #5, 6, 8)*
*requires 1977-1986 main bearing
Stock late 1981-1985 XL and S&S C/SC/SCD/SCDR flywheels (includes #6, 7, 8)
- 6. Pinion Shaft Nut **33-2332**
- 7. Key **50-8222-5**
5 pack **50-1009**
- 8. Meter Plug - stock 1977-1985 XL and S&S B/BD/SB/SBD/C/S/SCD/SCDR flywheels
.0626" **50-8316**
- 9. Front Rod Race **34-4505**
- 10. Rear Rod Race (one) **34-4506**
- 11. Wrist Pin Bushing **34-4507**
- 12. Race & Bushing Set (includes #9, 10, 11)
1957-1985 XL (all stock) and all S&S rods **34-4540**
- 13. Alloy Bearing Cage Set **34-4520**
- 14. Bearing Set (std.) **34-4521**
- 15. Crankpin (std.)
1957-early 1981 XL w/ S&S connecting rods (includes #16 & 17)
Standard **34-2503**
Late 1981-1985 XL w/ S&S connecting rods (includes #7 & 17)
Standard **34-2602**
.001" OS **34-2603**
.002" OS **34-2605**
- 16. Crankpin Key **50-8223-5**
5 pack **50-1010**
- 17. Crankpin Nut **34-2504**
- 18. Connecting Rod Assembly
1957-early 1981 XL (stock bore) 7.440" rod length
Heavy Duty **34-7500**
Late 1981-1985 XL (stock bore) 7.440" rod length
Heavy Duty **34-7510**



STANDARD BILLET OIL PUMP KIT REPLACEMENT PARTS

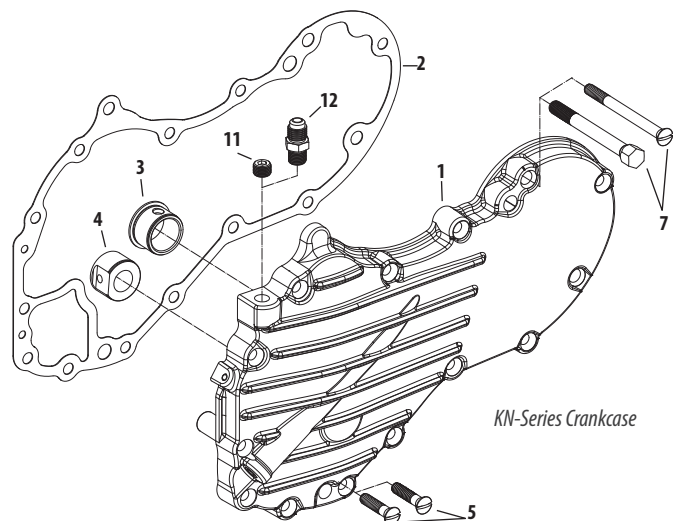
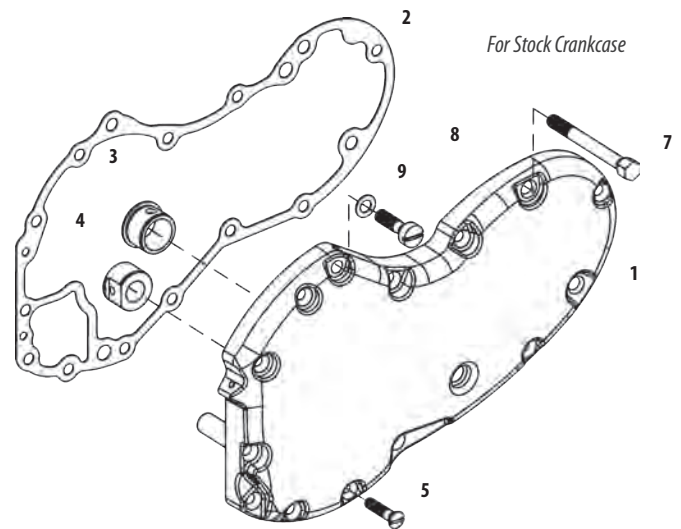
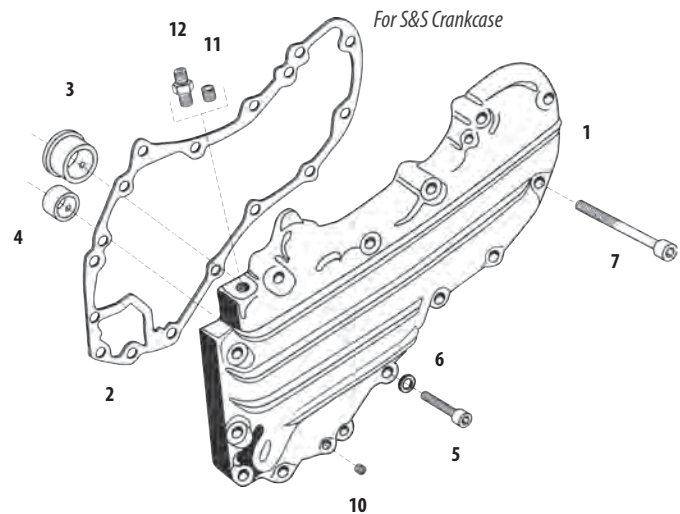
1. Pump body assembly		
Fits 1936-'69	31-6048	
Fits 1970-'91	31-6050	
2. Shaft, idler 26327-68	 31-6004	
3. Seal, drive shaft 26227-58	 31-6005	
4. Gear, return drive 26315-68A		
.....	 31-6013	
5. Gear, return idler 26317-68A	 31-6014	
6. Gear, supply drive 26328-74, 26320-36	 31-6015	
7. Gear, supply idler 26326-62A		
.....	 31-6016	
8. Shaft, drive 26346-70	 31-6011	
9. Key, drive shaft 26347-15 each	50-8220-S	
10 pack	50-8229	
10. Plug, 1/8"-27 each	50-8331A	
11. Check ball valve 8866, 8873		
.....	 50-8091	
12. Spring, check valve 26363-36, 26363-56, 26262-80		
each	31-6022	
10 pack	31-6092	
13. Relief valve 26400-82, 26400-82B	31-6082	
14. Spring, relief valve 26207-83		
each	31-6018	
10 pack	31-6084	
For S&S KN-Series engines (each)	106-4679	
15. Screw, check valve & relief valve cover		
26263-80, 26362-36 each	31-6021	
5 pack	31-7005	
16. O-ring 11105, 11273 (each)	50-8008	
10 pack	50-8078	
17. Pump cover assembly		
Pre-1992 (Top or bottom fittings; accepts pressure gauge.)		
31-6041	31-6059	
18. Fitting, front chain hose	50-8116	
19. Plug, pipe 1/6"-27 x 1/4" pipe	 50-8332	
20. Elbow, supply/return 26338-68, 26561-84A, 26561-81A, 26338-68A		
each	106-2682	
5 pack	50-1007	
21. Fitting, supply/return hose	 50-8115	
22. Return fitting, compression 63523-92		
.....	 50-8120	
23. Seal, tubing, 3/8" x 1/2" O.D. x 1/4" Viton	50-8271	
24. Screw, chain oiler adjusting 63614-72, 63610-70, 26383-32	31-6026	
25. Locknut, chain oiler each 7634, 7638	50-5000	
26. Washer, chain oiler adjuster		
each 6156	50-7008	
27. Plug, 1/4"-20	50-0069	
2 pack	50-0069P	
28. Screws, mounting		
1/4"-24 x 1 1/2" - 1936-'78 (HHCS)		
each	50-0082	
1/4"-24 x 2 1/4" - 1936-'78 (HHCS) 5430W		
each	50-0088	
1/4"-20 x 1 1/2" - 1979-'99 (HHCS)	50-0080	
1/4"-20 x 2 1/4" - 1979-'99 (SHCS) 4717A	50-0078	
1/4"-20 x 1-1/2" - 1979-'99 (SHCS) 4718A	50-0079	
29. Washer, 1/4" (each)	50-7017	
12 pack	50-7013	
30. Retaining ring 695-36, 26348-36 each	50-8058	
10 Pack	50-8106	
31. Retaining ring, external 11002 each	50-8059	
10 Pack	50-8107	
32. Gear, pump drive, 24T 26345-73	33-4230	
33. Gear, pinion shaft pump drive		
A. 1939-'53 splined	33-4237	
B. 1954-'89 26349-73, 26349-73A	33-4232	
34. Gear, Steel breather valve		
1936-Early 47		
Standard 25300-36	106-5070	
+ .030"	106-6012	
1948-Early 77		
Standard 25313-73	33-4246	
+ .030"	33-4247	
Late 1977-99		
Standard 25310-82A, 25313-77B, 25311-90	33-4241	
+ .030"	33-4242	
35. Shim Steel Breather Kit		
8 pack (Includes one of each thickness)	33-4249	
35a. +.100" thick	33-4200	
35b. +.110" thick 25320-79	33-4201	
35c. +.120" thick 25322-79	33-4202	
35d. +.130" thick 25325-79, 25320-82	33-4203	
35e. +.140" thick 25322-82, 25327-79	33-4204	
35f. +.150" thick 25325-82	33-4205	
35g. +.160" thick 25327-82	33-4206	
35h. +.170" thick	33-4207	
36. Drill jig, oil pump	53-0013	
37. Primary chain oiler screw kit (N/S)	31-6291 [±]	
N/S:		
Gasket rebuild kit (N/S) Includes key and retaining ring.		
A. 1936-'91	31-6271	
Master rebuild kit - (N/S)		
Includes: gasket rebuild kit, seal, retaining ring, relief valve spring,		
check valve spring, check valve, ball, and cover screw o-rings.		
A. 1936-'91	31-6275	
Oil pump mounting hardware kit (N/S)	31-6288	
Hardware kit, oil pump cover (N/S)	31-6283 [±]	

(N/S) = Not Shown



GENERATOR STYLE GEARCOVER REPLACEMENT PARTS

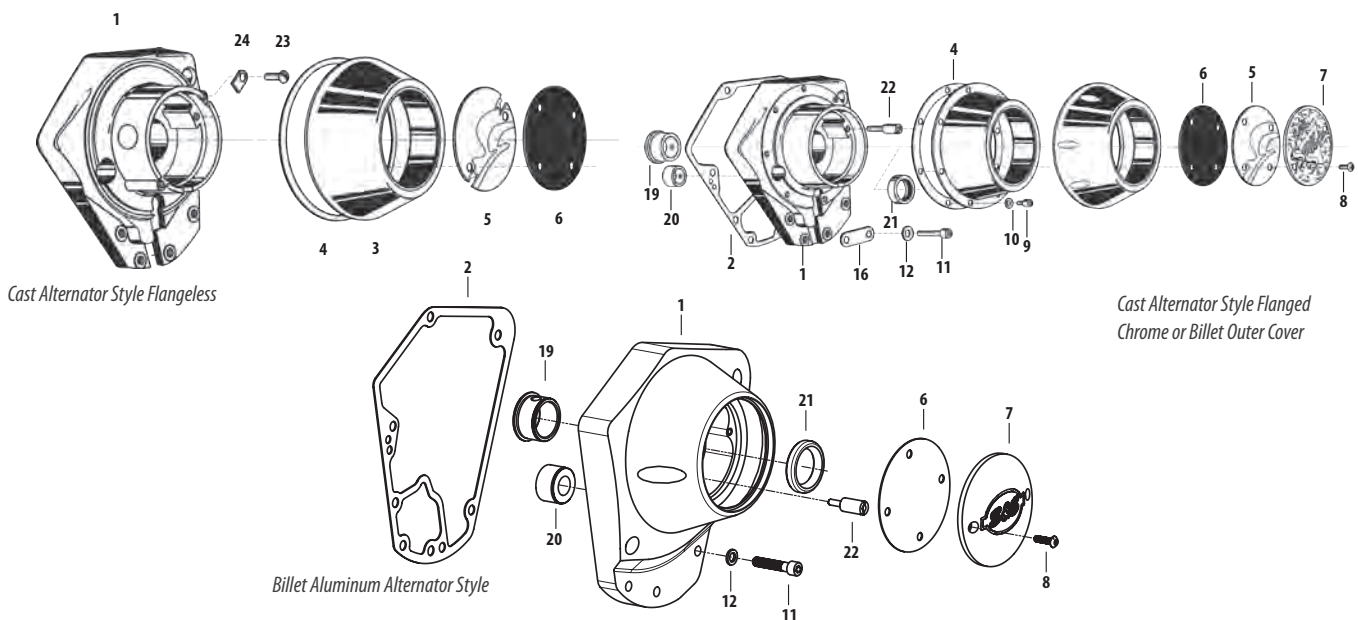
1. Gearcover assembly—(See page 137)
2. Gasket, Gear cover
 - Stock crankcases, 1936-'69 25225-36C **106-2072**
 - S&S crankcases, 1936-'69 25225-36A **31-2030**
3. Bushing, cam, 1936-'69 25581-36 **31-4025**
4. Bushing, pinion shaft
 - 1954-'72 25582-54A, 22582-73 **31-4020**
 - 1936-'53 25582-36 **31-4029**
5. Screw, gear cover mounting
 - Stock crankcases
 - Slotted countersunk, oval, 1/4"-24 x 1 1/8", cadmium 2341HW, 2341
 - each **106-2013**
 - S&S crankcases
 - SHCS 1/4"-20 x 7/8" **50-0025**
 - Slotted countersunk 1/4"-20 x 1 1/8" **106-4732**
6. Washer (S&S crankcases only) .260" x .425" x .060 chrome
 - each **50-7017±**
 - 12 pack **50-7013±**
7. Generator bolt
 - Stock crankcases
 - HH countersunk, 5/16"-24 x 3 1/4" cadmium **106-2107**
 - Slotted countersunk oval 1/4"-24 x 3" (each) **106-3814**
 - S&S crankcases
 - SHCS 5/16"-24 x 2 3/4" **50-0017**
8. Oil passage screw, slotted hollow, includes nylon washer, 1963-'65 BT **106-2014**
9. Washer, flat, 5/16" x 9/16" x .025" white nylon **N/A**
10. Screw, SHS—1/4"-20 x 3/4" **50-0024**
 - 2 pack **50-0024P**
11. Pipe plug, SH 1/8"-27 each **50-8331A**
12. Oil line fitting 17330-42 **106-4734**



GEARCOVER KIT REPLACEMENT PARTS

- | | |
|--|--|
| 1. Gearcover assembly—(See page 138) | |
| 2. Gasket, gearcover
1970-'99 BT 25225-93A, 25225-93B, 25225-70C, 25257-80
each 31-2107
10 pack 106-0232 | |
| 3. Outer Cover for Cast Gearcovers 1970-99 bt
Flangeless type - chrome 31-0238± | |
| 4. Gasket, outer cover - 1970-'99 BT
Flanged type each 31-0218
Flangeless type each 31-0237 | |
| 5. Ignition cover, inner - 1970-'99 BT
Flangeless type 31-0235 | |
| 6. Gasket, ignition cover - 1970-'99 BT
32591-80, 32591-70 each 31-0225 | |
| 7. Ignition cover, outer - 1970-'99 BT
Chrome, billet S&S Logo 31-0332±
Billet, Gloss Black with S&S Logo 310-0897 | |
| 8. Screw, RSH - 8-32 x 1/2" (replaces stock rivets)
Stainless Steel each 50-0048
Chrome each 50-0266-S± | |
| 9. Screw, SH
10-24 x 3/8" - chrome for billet cover 50-0023± | |
| 10. Washer, flat .192" x 5/16" x .035"
each 6150W 50-7009 | |
| 11. Screw, SH - Use in all positions
1970-'99 BT - 1/4"-20 x 1 1/4" 4740A, 3482A
Zinc each 50-0008
Chrome 50-0257-S± | |
| 12. Washer, flat
1/4" x .474" x .050" each 50-7020
1/4" Flat washer, chrome, billet covers
each 50-7017±
12 pack 50-7013± | |
| 16. Wire harness clip 38711-93 31-2029 | |
| 19. Cam bushing, gearcover
1970-'99 BT 25581-70 31-4019 | |
| 20. Pinion shaft bushing, gearcover
1973-'99 BT 25582-93, 25582-73 31-4031 | |
| 21. Gearcover oil seal 1970-'99 BT 83162-51
each 31-4022 | |
| 22. Screw, timing mechanism 32606-82
each 31-0224
2 pack 31-0224P | |
| 23. Screw, standard panhead 8-32 x 3/8" each 50-0004 | |
| 24. Clip, outer cover each 31-0233 | |

N/A= No longer available



Cast Alternator Style Flangeless

Cast Alternator Style Flanged Chrome or Billet Outer Cover









Billet Aluminum Alternator Style





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± WARNING: Cancer and Reproductive Harm



SUPER STOCK® CYLINDER HEADS REPLACEMENT PARTS FOR 1966-'84 BIG TWIN ENGINES

1. Cylinder head (See page 145)
2. Valves
Intake
1.950" 18075-80, 18075-81, 18078-80, 18078-81, 18078-81 **90-2015**
Exhaust—1948-'84 BT
1.720" 18086-80, 18086-81, 18089-80, 18089-81 **90-2022**
3. Valve seats
Intake—1.940"
Standard 18020-79, 18018-66, 18056-66B **90-2017**
+.002" oversize **N/A**
Exhaust—1.750"
Standard 18017-66, 18055-66B, 18010-79 **90-2018**
+.010" oversize **90-2121**
4. Valve guide - cast - 1980-'84 BT
Intake or Exhaust
Standard 18017-66, 18055-66B, 18010-79  **90-2240**
+.001" 18109-81A  **90-2241**
+.002" 18108-81A, 90-2232  **90-2242**
+.003" 18107-81A, 90-2233  **90-2243**
+.004" 18106-81A, 90-2234  **90-2244**
+.006" 18110-81A  **90-2246**
+.060"  **90-2249**
5. Valve guide seal—intake or exhaust
1981-'84 BT 18000-81 4 pack  **900-1005**
6. Valve spring shim - Late 1981-'84 BT
.005" x .765" x 1.500" **50-7121**
.015" x .765" x 1.500" **50-7122**
.025" x .765" x 1.500" **50-7123**
7. Valve spring kit—Late 1981-'84
(Includes springs, top & bottom collars, keepers shims)
.590" lift - steel top collars **90-2063**
8. Valve spring keeper—intake or exhaust
1936-'84 BT 18228-36 each **90-2037-S**
8 pack **50-7165**
9. Screw, SH - 5/16"-18 x 1" 2708A **50-0101**
10. Lock washer - 5/16" 7041 **50-7032**
11. Exhaust pipe gasket - 1966-'84 BT 53834-68A **93-1004-S**
12. Head mount bolt - 7/16"-14 x 1 1/4" 3782 each **50-0171**
13. Flat washer - 7/16" x 1 5/16" x 1/8" 6495HW **50-7064**
14. Rocker cover mounting screw - 1966-'84 BT
Hex head - 5/16"-18 x 1 1/2" 2818 each **50-0109**
Hex head - 5/16"-18 x 2 1/2" 3501 each **50-0104**
15. Flat washer - 5/16" 6320, 70907-07, 6016, 6702 **50-7034**
16. Rocker cover gasket 1966-'84 BT 17540-69, 17540-69A
each **90-4040**
10 pack **90-4064**
17. Intake manifold (See page 160)
18. Manifold seal
O-ring - 1955-'78 BT 27060-55
each **50-8046**
10 pack **50-8132**

- Band - 1979-'84 BT 27062-78
each  **16-0238**
10 pack  **16-0245**
19. Manifold mounting clamp
O-ring type heads - 1955-'78 BT 27063-57 **16-0230**
Band type heads - 1979-'85 BT 27063-80, 27063-78  **16-0231**
 20. Head bolt assembly, stainless - 1948-'84 BT
(Includes head bolt & washer.) 6469HW
10 pack  **93-3024**
20a. Head Bolt, each **93-3024-S**
20b. Head bolt washer - 1936-'84 BT
(For part #90-3024, #90-3026 & #90-3040) **93-3025**
 21. Head gasket, copper - 1966-'84 BT
3 7/16" & 3 1/2" bore 16770-66B each **93-1041**
10 pack **93-1061**
3 5/8" bore each **93-1042**
10 pack **93-1062**
 22. Fitting, oil return, 1/8"-27 pipe 63533-65, 63533-41A **31-2019**
 23. Plug, oil return, 1/8"-27 pipe each **50-8331A**

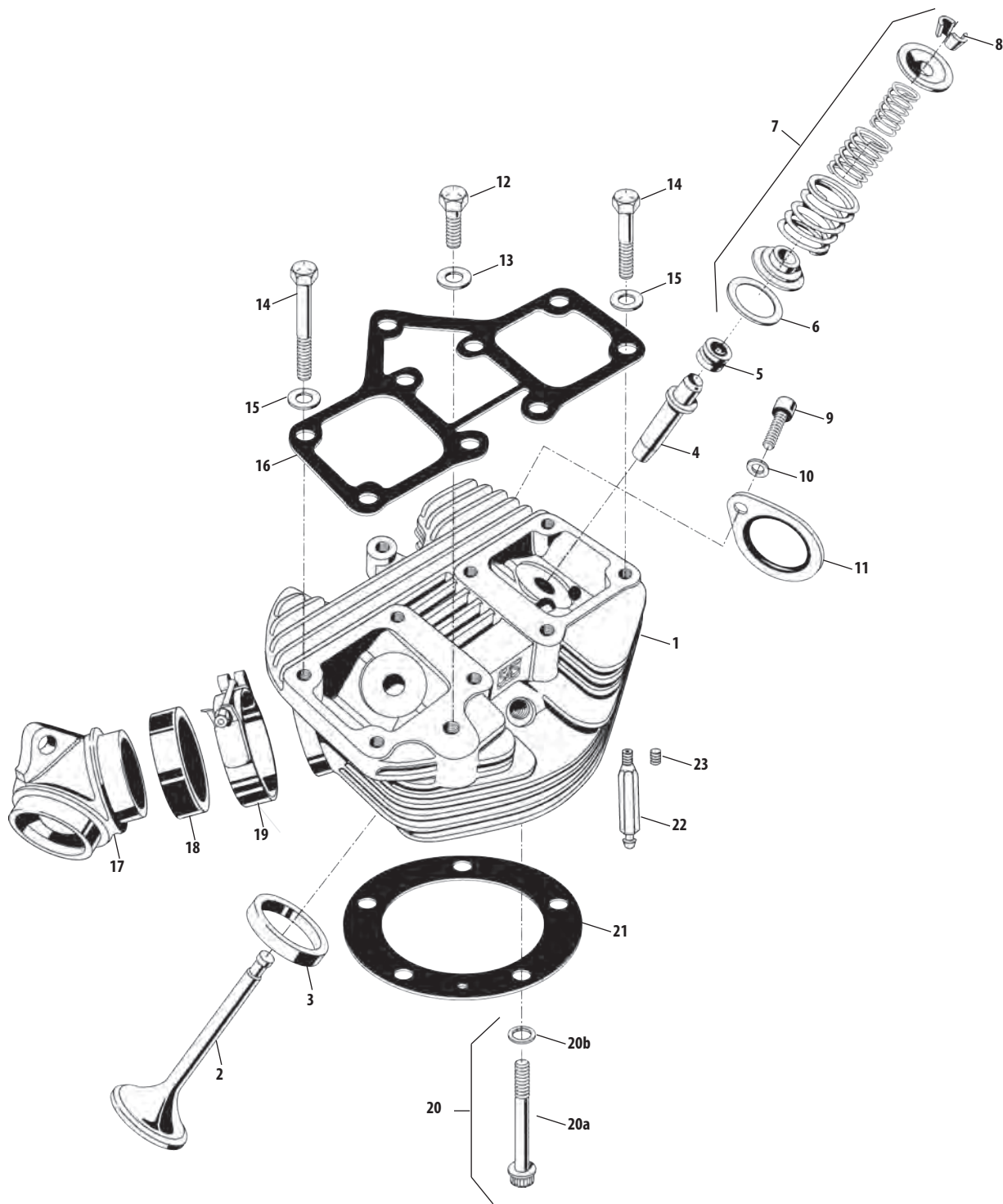
N/A= No longer available

TOP END REBUILD GASKET KITS FOR S&S® ENGINES FOR BIG TWINS

S&S Engine Family	Year Group	Bore Size	Part #
P Series/SH-Series	1966-'84	3 5/8"	90-9501
P Series/SH-Series	1966-'84	3 1/2"	90-9500

CYLINDER HEAD GASKET KITS FOR S&S® ENGINES FOR BIG TWINS













S&S Engine Family	Year Group	Bore Size	Part #
P Series/SH-Series	1966-'84	3 5/8"	90-1918
P Series/SH-Series	1966-'84	3 1/2"	90-1917

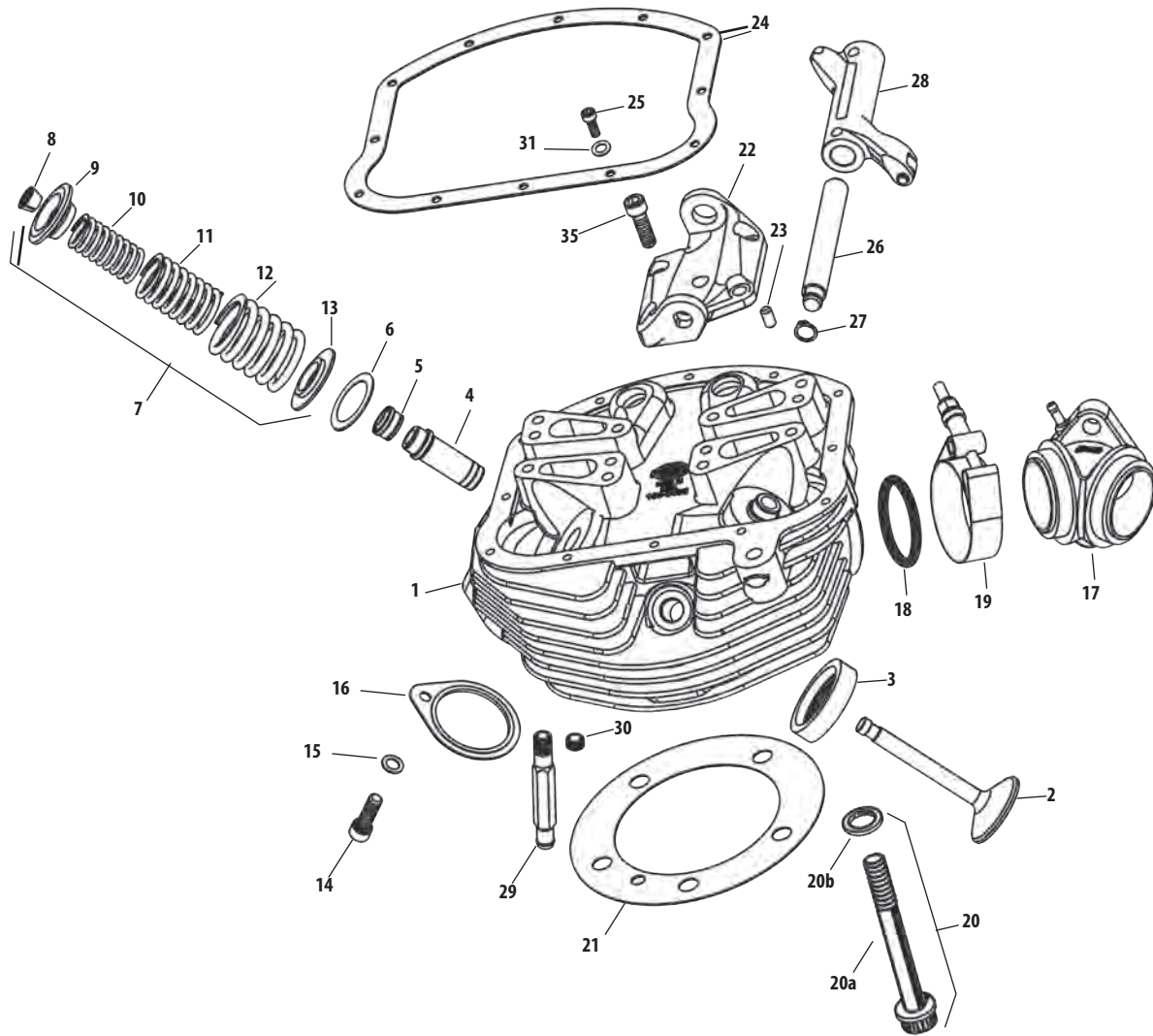


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CYLINDER HEAD REPLACEMENT PARTS

FOR P-SERIES ENGINES, PANHEAD CYLINDER HEAD AND VALVE TRAIN UPDATE KIT & SHOVELHEAD RETRO CONVERSION KIT

1. Cylinder head—(See page 146)
 2. Valves
 - Intake
 - 1.950" 18075-80, 18075-81, 18078-80, 18078-81, 18078-81 **90-2015**
 - Exhaust—1948-'84 bt
 - 1.720" 18086-80, 18086-81, 18089-80, 18089-81 **90-2022**
 3. Valve seats
 - Intake - 1.940"
 - Standard 18020-79, 18018-66, 18056-66B **90-2017**
 - + .002" oversize **N/A**
 - Exhaust - 1.750"
 - Standard 18017-66, 18055-66B, 18010-79 **90-2018**
 - + .010" oversize **90-2121**
 4. Valve guide - cast - 1980-'84 bt
 - Intake or Exhaust (see valve guide diameter chart)
 - Standard  **90-2240**
 - + .001" 18109-81A  **90-2241**
 - + .002" 18108-81A, 90-2232  **90-2242**
 - + .003" 18107-81A, 90-2233  **90-2243**
 - + .004" 18106-81A, 90-2234  **90-2244**
 - + .006" 18110-81A  **90-2246**
 - + .060"  **90-2249**
 5. Valve guide seal—intake or exhaust 1981-'84 bt 18000-81
 - 4 pack  **900-1005**
 6. Valve spring shim - Late 1981-'84 bt
 - .005" x .765" x 1.500" each **50-7121**
 - .015" x .765" x 1.500" each **50-7122**
 - .025" x .765" x 1.500" each **50-7123**
 7. Valve spring kit—Late 1981-'84
(Includes springs, top & bottom collars, keepers shims)
 - .590" lift - steel top collars **90-2063**
 8. Valve spring keeper - Intake or exhaust 1936-'84 bt
 - each **90-2037-S**
 - 8 pack **50-7165**
 9. Top Collar, Steel, .590" **90-2057**
 10. Inner Spring, .590" **90-2054**
 11. Middle Spring, .590" **90-2055**
 12. Outer Spring, .590" **90-2056**
 13. Bottom Collar, Steel, .590" **90-2062**
 14. Screw, SHCS, 5/16-18 x 3/4" Zinc 3275 **50-0302-S**
 15. Lock washer - 5/16" **50-7032**
 16. Exhaust pipe gasket - 1966-'84 bt each **93-1004-S**
 17. Intake manifold (See page 160)
 18. Manifold seal—O-ring - 1955-'78 bt 27060-55
 - each **50-8046**
 - 10 pack **50-8132**
 19. Manifold mounting clamp O-ring type heads
 - 1955-'78 bt 27063-57 **16-0230**
 20. Head bolt assembly, stainless - 1948-'84 bt
(Includes head bolt & washer) 6469HW 10 Pack  **93-3024**
 - a. Head Bolt, 12 pt, 7/16-20 X 2-3/8" x 1" TD 1324-S
 - each  **93-3024-S**
 - b. Head bolt washer - 1936-'84 bt, each **93-3025**
 21. Head Gaskets
 - Head, Gasket, Copper - 1966-84bt
 - 21a. 3 7/16" & 3 1/2" Bore
 - each 16770-66B **93-1041**
 - 10 pack **93-1061**
 - Head Gasket Kit **106-1095**
 - 21b. 3 5/8" Bore
 - each **93-1042**
 - 10 pack **93-1062**
 - Head Gasket Kit **106-1096**
 - Head Gasket, Composite - 1948-65 bt
 - 21c. 3 5/8" Bore
 - each **93-1019**
 - Head Gasket, Copper - 1948-65 bt
 - 21d. 3 7/16" & 3 1/2" Bore
 - each 16770-48 **106-5933**
 - 21e. 3 5/8" Bore
 - each **106-5937**
 - Head Gasket Kit **106-5938**
 22. Rocker arm support
 - Front intake/rear exhaust **106-0928**
 - Rear intake/front exhaust **106-0929**
 23. Pin, 1/4" diameter x 1/2" each **50-8022**
 - 2 pack **50-8022-2**
 - 5 pack **50-8105**
 24. Gasket, rocker cover 1948-'65 bt each **900-0329**
 - Set 117541-48 **900-0339**
 25. Screw, SHC #10-24 x 3/4" 2674, 2675 each **106-0913**
 26. Shaft, Rocker Arm, S&S P-Series   **106-0915**
 - 4 pack **106-0916**
 27. Snap ring SHF-37 3/8" x .050" each **106-0917**
 28. Roller rocker arm
 - Set **900-4320A**
 - Front exhaust/rear intake 17375-66A **900-4320FA**
 - Rear exhaust/front intake 17360-66A **900-4320RA**
 29. Fitting, oil return, 1/8"-27 pipe 63533-65, 63533-41A **31-2019**
 30. Plug, oil return, 1/8"-27 pipe each **50-8331A**
 31. Flat washer, .192" x 5/16" x .035"
 - each **50-7009**
- Not Shown:**
32. Head mount bolt - 7/16"-14 x 1 1/4"
 - each **50-0171**
 33. Flat washer - 7/16" x 15/16" x 1/8" 6495HW **50-7064**
 34. Cover, rocker arm, set, 1948-'65 bt 17500-48A **106-0919**
 35. Screw, SHC, 5/16-18 x 1", Zinc, ASTM A574-92
 - 3201WA, 2708 **50-0101**
- N/A= No longer available**



TOP END REBUILD GASKET KITS FOR S&S® ENGINES

S&S Engine Family	Year Group	Bore	Part #
P Series/SH-Series	1966-'84	3 5/8"	90-9501
P Series/SH-Series	1966-'84	3 1/2"	90-9500

VALVE GUIDE DIAMETERS FOR S&S® P AND SH SERIES ENGINES AND 1980-'84 BIG TWIN

Oversize	Diameter	Part #
Std.	.6250/.6245	90-2240
+.001 18109-81A	.6260/.6255	90-2241
+.002 18108-81A, 90-2232	.6270/.6265	90-2242
+.003 18107-81A, 90-2233	.6522/.6519	90-2243
+.004 18106-81A, 90-2234	.6290/.6285	90-2244
+.006 18104-81A, 90-2236	.6310/.6305	90-2246
+.060	.6850/.6845	90-2249

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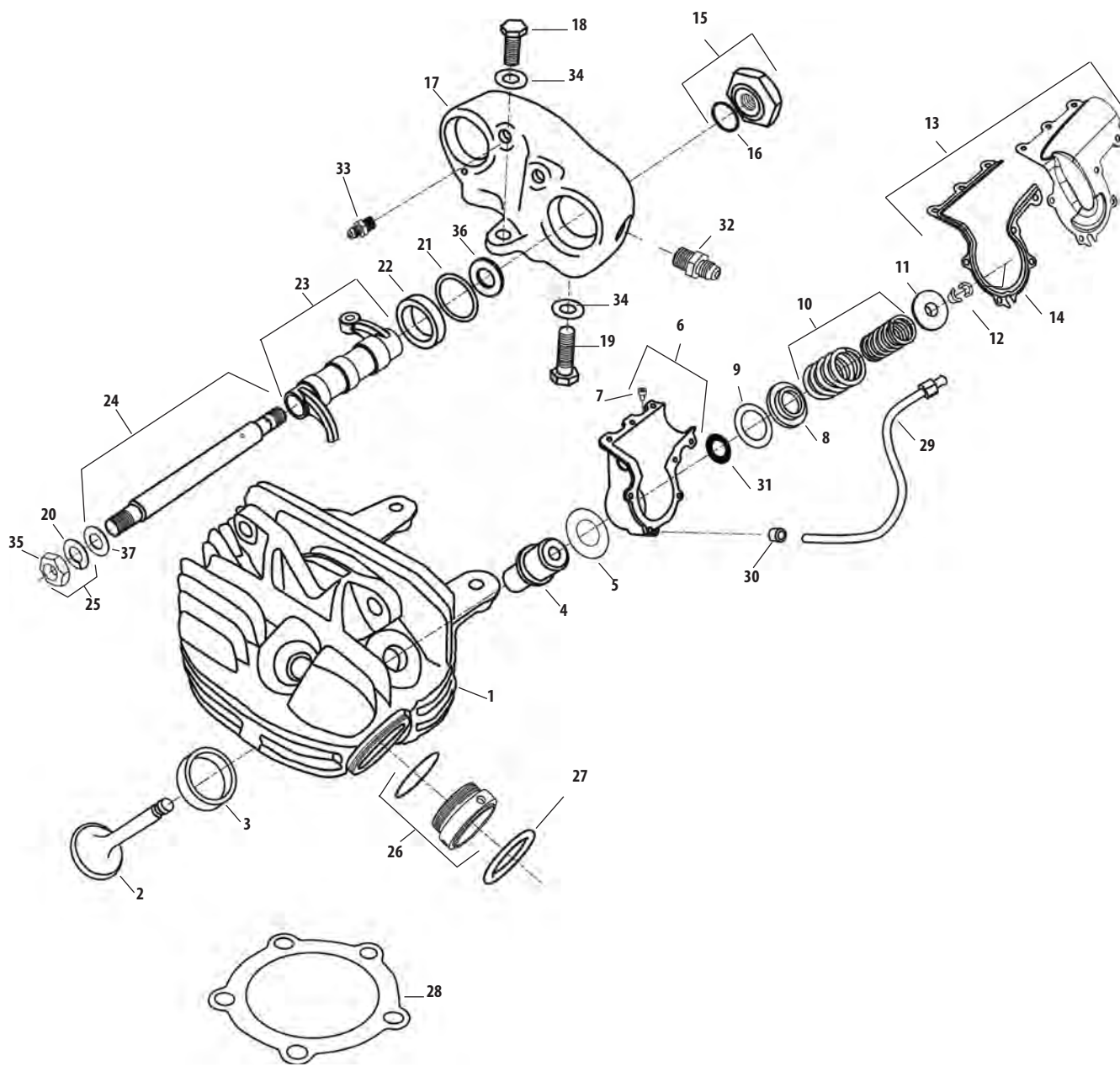


CYLINDER HEAD REPLACEMENT PARTS FOR 1936-'47 KNUCKLEHEADS AND KN-SERIES ENGINES

- | | |
|--|-----------|
| 1. Head, kit, .421" dual steel
For covers, gloss black
1936-'47 OHV BT; KN-Series | N/A |
| 2. Valve
Intake, 1.940" | 106-3630 |
| Exhaust, 1.750" | 106-3629 |
| 3. Valve seat
Intake, 1.940" | 106-2821 |
| Intake/Exhaust, 1.750" | 106-2822 |
| 4. Valve guide, intake/exhaust for Stock (see valve guide diameter chart)
Standard 18185-40, 18181-36 | 106-3637 |
| + .002" | 106-3948 |
| + .004" | 106-3638 |
| + .008" | 106-3639 |
| Valve guide, intake/exhaust for S&S KN-Series
Standard | 900-0526 |
| + .002" | 900-0527 |
| + .004" | 900-0528 |
| + .008" | 900-0529 |
| 5. Gasket, lower valve cover (tin), 1936-'47 OHV BT | 900-0668 |
| 6. Cover, kit, bottom, valve spring, (tins), black anodized,
(includes screws) 1938-'47 BT KN-Series | 900-0674 |
| NOTE - bottom tins will not fit stock upper tins. | |
| 7. Screw, valve spring cover 3477 | 106-3634 |
| NOTE - Valve spring components below are not interchangeable with
stock and must be used together. | |
| 8. Bottom collar, valve spring | 900-0670 |
| 9. Shim, valve spring .015" | 106-4549 |
| 10. Spring, kit, valve, dual, .421" | 106-4362 |
| Springs only, 1936-'47 OHV BT | 900-0535 |
| 11. Top collar, valve spring | 106-3828 |
| 12. Keepers, valve spring, top collar | 90-2037-S |
| 8 Pack | 50-7165 |
| 13. Cover, kit, top, valve spring, (tins) 1938-'47 BT; KN-Series
Gloss Black Powder coat | 106-2893 |
| NOTE - top tins will not fit stock bottom tins. | |
| 14. Gasket, kit, valve spring cover, top, S&S only | 106-3166 |
| 15. Nut, rocker shaft, with o-ring, chrome 1936-'47 OHV BT
17447-36 each | 106-4355± |
| 16. O-ring, (-017), .676" ID x .816" OD, Black, | 50-0466 |
| 17. Housing, rocker arm, (knuckles), 1936-'47 OHV BT
Set, Polished | 900-0617 |
| Front, Polished | 900-0618 |
| Rear, Polished | 900-0619 |
| Set, As Cast | 900-0622 |
| Front, As Cast | 900-0623 |
| Rear, As Cast | 900-0624 |
| 18. Screw, HHCS, 3/8-16 x 1" - Cadmium plated | 106-4597 |
| 19. Screw, HHCS, 3/8-16 x 1 1/2" - Cadmium plated | 106-4598 |
| 20. Washer, Lock, 7/16", Zinc | 106-4357 |
| 21. Washer, packing 1936-'47 OHV BT 17482-36 | 106-4358 |
| 22. Seal, rocker arm, 1936-'47 OHV BT 17475-38 | 106-3636 |
| 23. Rocker arm, non-roller, 1:1 ratio, 1936-'47 OHV BT; KN-Series
(Includes shaft kit) Set of four | 106-2412 |
| Front Intake w/shaft | 106-2862 |
| Front Exhaust w/shaft | 106-2863 |
| Rear Intake w/shaft | 106-2864 |
| Rear Exhaust w/shaft | 106-2865 |
| 24. Shaft, set, rocker arm, 1936-'47 OHV BT; KN Series
(Set of four, Includes spacers and hardware) | 106-2413 |
| 25. Nut kit, rocker arm 7831 | 106-3632 |
| 26. Adaptor, Manifold, conversion, plumber to o-ring | 106-4654 |
| 27. O-ring, manifold 27060-55 each | 50-8046 |
| 10 pack | 50-8132 |
| 28. Gasket, set, head, KN-Series, Copper
3 3/8" bore (each) | 106-2681 |
| 2 pack | 106-2432 |
| 3 7/16" bore | 106-2689 |
| 29. Oil line, Return 1936-'47 OHV BT (S&S Tins Only)
Kit of 4 | 106-4446 |
| Front Intake | 106-4447 |
| Front Exhaust | 106-4448 |
| Rear Intake | 106-4449 |
| Rear Exhaust | 106-4450 |
| 30. Seal, Oil Return Line, FHP tins only
28" OD x .18" ID x 1", Rubber Hose | 106-4456 |
| 31. O-ring | 900-0669 |
| 32. Oil supply fitting, Cad Plated 17325-42 | 106-4618 |
| 33. Oil return fittings, Parkerized 17320-38 | 106-4619 |
| 34. Washer, Lock, .385" x .680" x .094", Zinc | 50-7052 |
| 35. Nut, Jam, 7/16-20, Zinc | 106-4356 |
| 36. Washer, Thrust, Stepped, .015" 17465-36 | 106-4352 |
| 37. Washer, Thrust, Stepped, .060" | 106-4883 |
| Parts Not Shown: | |
| 38. Manifold, kit, o-ring, 1 7/8", VOES, KN93 | 106-4530 |
| 39. Gasket, kit, engine, KN-Series, with hardware | 106-2414 |
| 40. Pushrod, set, non-adjustable, KN93, steel
1936-'47 OHV BT | 930-0009 |
| 41. Cover keeper, kit, pushrod,
KN93 17949-40, 17950-66 | 93-4106 |
| 42. Oil line, supply, "Y" feed, 1936-'47 OHV BT
Stock 74", KN74, KN93, S&S/Stock Carb | 106-4670 |
| 43. Bottom collar spacer—required when using S&S valve springs
with stock steel "tins" | 106-5094 |
| 44. Rocker arm cover gasket kit, 1936-'47 big twin | 900-0493 |

All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

±  WARNING: Cancer and Reproductive Harm



VALVE GUIDE DIAMETERS FOR S&S KN SERIES ENGINES AND 1936-'47 OHV BIG TWIN

Oversize	Diameter	Part #
Std.	.6442/.6439	900-0526
+ .002	.6462/.6459	900-0527
+ .004	.6482/.6479	900-0528
+ .008	.6522/.6519	900-0529

BILLET ROCKER COVER REPLACEMENT PARTS FOR 1966-'84 BIG TWIN ENGINES

- 1. Rocker cover, assembly front N/A
- 2. Rocker cover, assembly rear N/A
- 3. Screw, SHS **50-0294-S**
- 4. Nut, HFH 3/16" UNC **50-8187-S**
- 5. Screw, SHS **50-0318-S**
- 6. O-ring, Viton® -019 each **50-7962-S**
- 7. O-ring, Viton 1.00 mm CS x 14.00mm **50-7963-S**
- 8. O-ring, front, Viton 1.00mm CS x 9.50mm ID **50-7965-S**
O-ring, rear, Viton 1.00mm CS x 11.00mm ID
10 pack **50-7966**
- 9. O-ring, Viton -160 **50-7961-S**
- 10. Rocker shaft set (For S&S rocker covers only.)
Set **90-4351**
Individual **90-4350**
- 11. Plug, rocker arm shaft (4 pack) **50-8340**
- 12. Roller Rocker arm 1966-'84 big twin
Set **900-4320A**
Front 17375-66A **900-4320FA**
Rear 17360-66A **900-4320RA**
- 13. Dowel pin, 187" x .635", Steel **50-8031**
- 14. Gasket kit, S&S billet rocker covers (Not Shown) **90-4311**
- 15. Plug, SH pipe - 1/8-27 **50-8331A**

ROCKER SHAFT AND OIL LINE SEALS

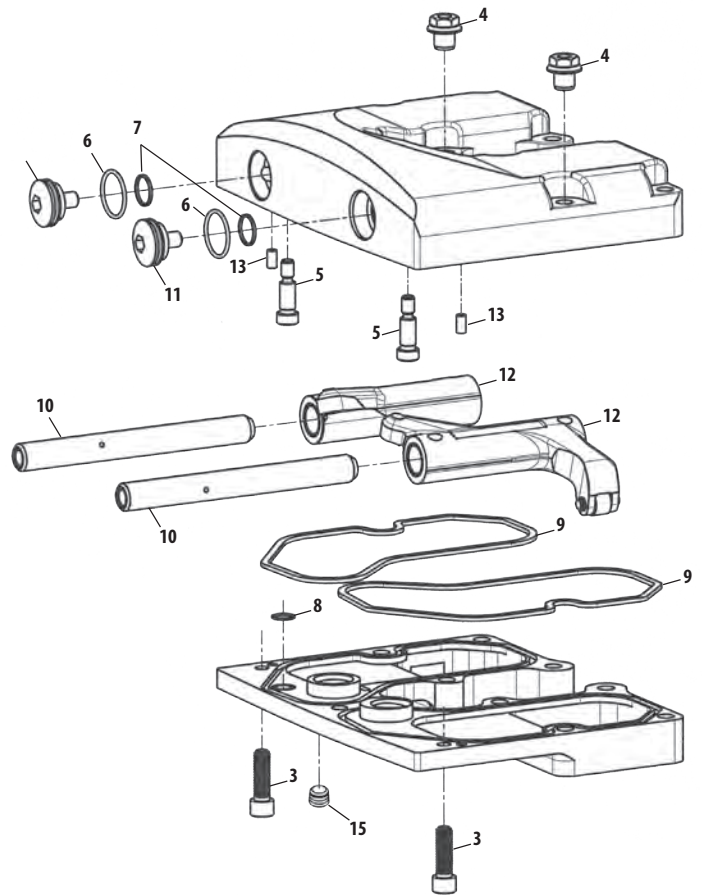
Rocker Shaft Seal

S&S SH-Series and 1966-'84 bt with stock rocker covers (N/S) ... **50-8073-S**

Oil Line Seal—S&S SH-Series and 1966-'84 bt using outside oil lines (N/S)
..... **50-8074-S**

(N/S) = Not Shown

NOTE: Since top cover and base are machined together, replacements are only sold as assemblies to prevent mismatch of polished surfaces.



SUPER B CARBURETOR REPLACEMENT PARTS

- 1. Throttle return spring **11-2082**
- 2. Throttle plate screw
11-2045 each **50-0055-S**
10 pack **50-0064**
- 3. Throttle shaft
Comes with two throttle plate screws **11-2083**
- 4. Throttle shaft bushing
(For repair only) **11-2134**
- 5. Enrichment device **11-2084±**
- 6. Carb body **11-2081±**
- 7. Idle mixture screw each **11-2354**
5 pack **11-2378**
- 8. Idle mixture screw spring each **11-2052**
10 Pack **11-2060**
- 9. O-ring-1 7/8" 16-0056 **50-8013**
- 10. Throttle plate-1 7/8" **11-2055**
- 11. Throttle arm assemble two cable type
(includes #25,26,27,28) **11-2148**
- 12. Intermediate jet-See chart on page 165 **11-2085±**
- 13. Main discharge tube **11-2086**
10 pack **11-2091**
- 14. Main jet-See chart See chart on page 166 **11-2086**
10 pack **11-2091**
- 15. Bowl gasket each **11-2086**
10 pack **11-2091**
- 16. Float
Wire type **11-2187**
Forked type **N/A**
- 17. Float retaining pin **11-2069**
- 18. Bowl
For wire type float **11-2188**
- 19. Needle
For wire type float **11-2195±**
For forked type **11-2095**
- 20. Seat-For wire or forked type float **11-2065**
- 21. Bowl plug each **11-2090**
5 pack **11-2092±**
- 22. Bowl screw each **50-0034**
10 Pack **50-0063**
- 23. Spacer, Kit, Carb, 1-7/8" x 1" **16-0057***
Spacer, Kit, Carb, 2-1/16" x 1" **16-0357***
Spacer, Kit, Carb, 2-1/4" x 1" **16-0157***
- 24. Screw,
1" x 3/8"-16 **50-0161**
1 1/4" x 3/8"-16 **50-0162**
10 pack **50-0177**
1 3/8" x 3/8"-16 **50-0163**
5 pack **50-0178**
2" x 3/8"-16 **50-0164**
5 pack **50-0185**
- 25. Spring, Idle/Accelerator Pump, Super B/D/E **11-2048**
- 26. Screw, SLTD FH, 8-32 x 7/8", Zinc, Steel **50-0038**
10 pack **50-0150**
- 27. Screw, SLTD FH, 8-32 x 5/8", Zinc, Steel **50-0039**
10 pack **50-0146**
- 28. Screw, SLTD FH, 8-32 x 3/16", Zinc, Steel **50-0030-S**
- 29. Tube Fast Idle Pickup .125" x 2.350" **0381F**

CARBURETOR REBUILD KITS

Master Rebuild Kit

Super B

(includes #1, 2, 3, 4, 7, 8, 9, 10, 15, 17, 19, 20, 22, 25, 26, 27, & 28) **11-2914±**

Body Rebuild Kit

Super A/B

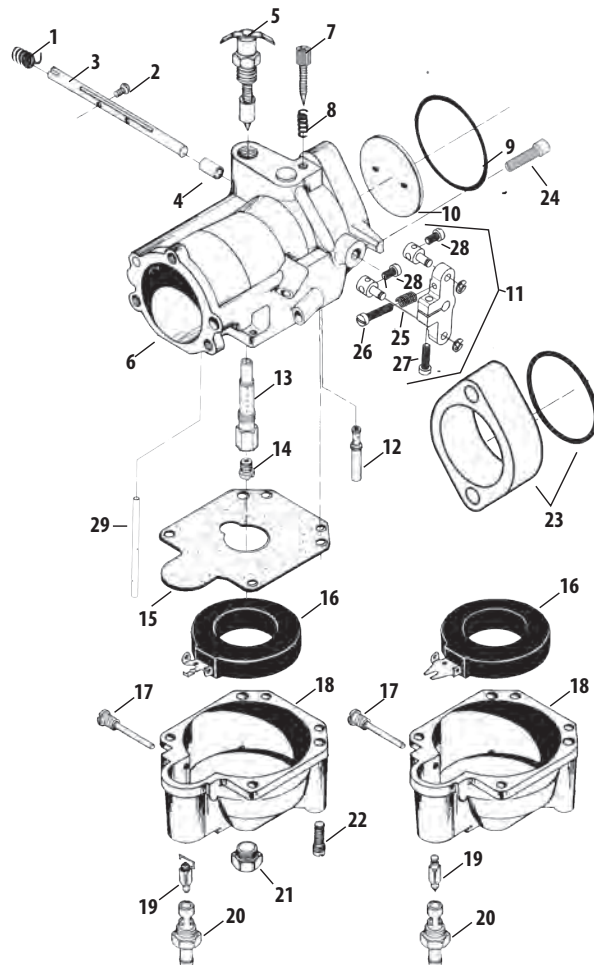
..... **11-2903±**

CARBURETOR KIT

Fully-assembled carburetor

11-0111

DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE. NOT LEGAL FOR SALE OR USE NATIONWIDE ON ANY FEDERAL POLLUTION CONTROLLED MOTOR VEHICLE UNDER THE CLEAN AIR ACT






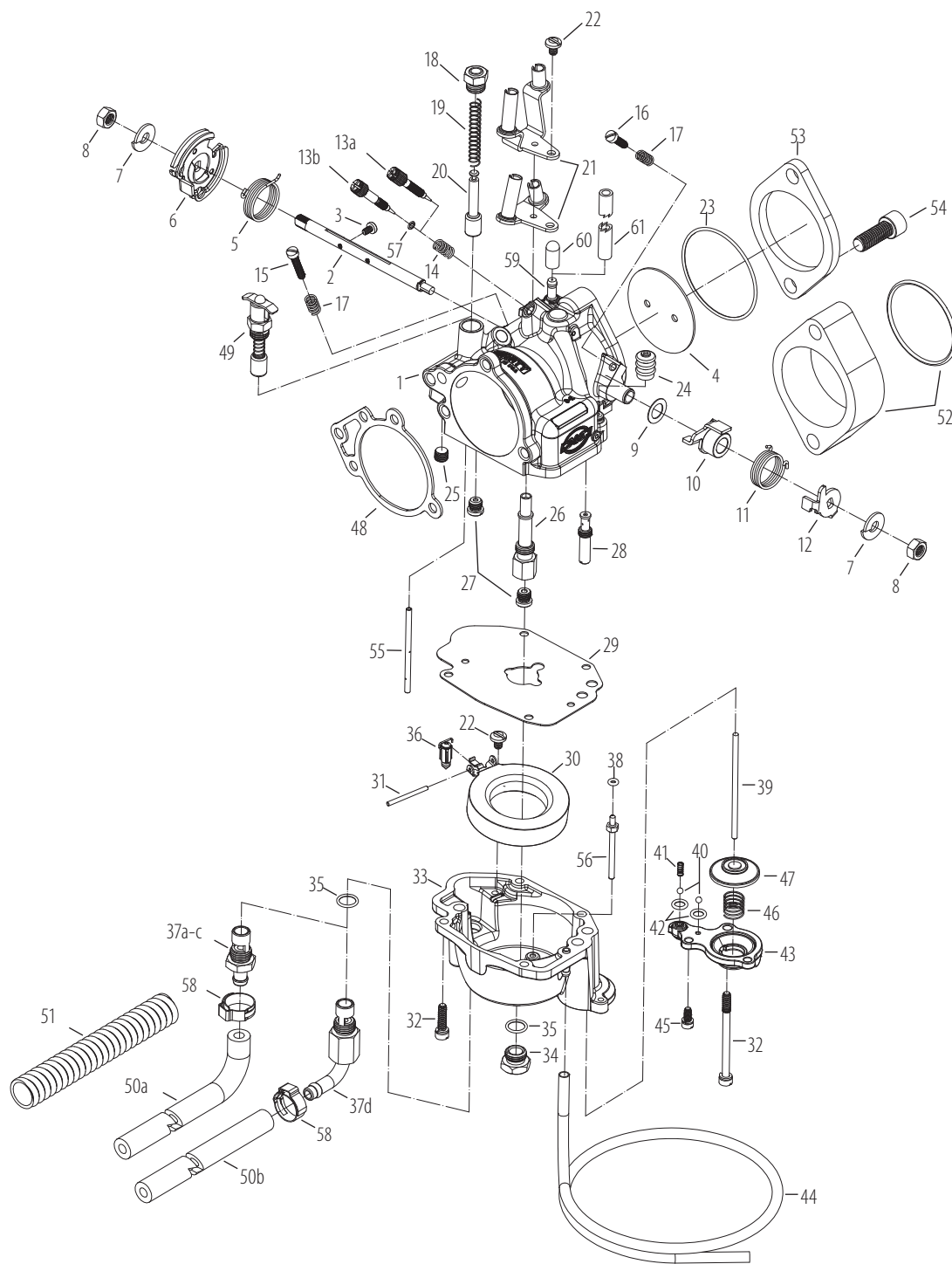
Early Series #94 gas jets were stamped with single digit numbers. Conversions for these numbers are:

1.....	.025"	4.....	.033"
2.....	.028"	5.....	.036"
3.....	.031"	6.....	.040"

± WARNING: Cancer and Reproductive Harm

SUPER E & G CARBURETOR REPLACEMENT PARTS

1. Carb body assembly 1 $\frac{7}{8}$ " Super E.....	11-2381 \pm	32. Bowl screw 10-24 x $\frac{3}{4}$ " - Three required (each).....	50-0034
2 $\frac{1}{16}$ " Super G.....	11-2391 \pm	10 Pack.....	50-0063
2. Throttle shaft 1 $\frac{7}{8}$ " Super E—Includes two plate screws.....	11-2383	10-24 x $\frac{23}{64}$ " - One required (each).....	50-0040
2 $\frac{1}{16}$ " Super G—Includes two plate screws.....	11-2483	10 Pack.....	50-0061
3. Throttle plate screw 11-2045- (two required) (each).....	50-0055-S	33. Carb bowl (only).....	11-2388
10 pack.....	50-0064	Carb bowl complete assembly.....	11-2388P
4. Throttle plate 1 $\frac{7}{8}$ " Super E.....	11-2055	34. Bowl plug (each).....	11-2090
2 $\frac{1}{16}$ " Super G.....	11-2355	5 pack.....	11-2092 \pm
5. Throttle return spring (each).....	11-2382	35. Seat o-ring*(required with part #11-2465 only when replaces 360° style fuel inlet.)	
5 Pack.....	11-3502	each.....	50-8009
6. Throttle spool.....	11-2385	10 pack.....	50-8095
7. Throttle shaft lock washer (two required).....	50-7031	36. Needle 1 $\frac{7}{8}$ " Super E & 2 $\frac{1}{16}$ " Super G.....	11-2195 \pm
8. Throttle shaft nut (two required) (each).....	11-2350	Racing only.....	11-2197 \pm
5 pack.....	11-2363	37. Seat - Includes O-ring #35 (Replaces obsolete seats 11-2347 and 11-2348)	
9. Throttle shaft nylon washer (each).....	50-7050	a. 1 $\frac{7}{8}$ " E & 2 $\frac{1}{16}$ " G (Uses part #11-2195 \pm needle).....	11-2465
10 pack.....	50-7072	b. Racing only (Uses part #11-2197 \pm needle).....	N/A
10. Pump actuator lever.....	11-2376	c. Racing only -threaded fuel inlet (6AN .157" ID)	
11. Actuator spring (each).....	11-2375-S	(Uses part #11-2195 \pm needle).....	11-2395
5 pack.....	11-3501	d. Permeation Compliant fuel inlet seat Super E or G. (Uses part #11-2195 \pm needle).....	106-2011
12. Pump actuator arm.....	11-2377	38. Ejector nozzle o-ring (each).....	50-8011
13. Idle mixture screw a. Idle mixture screw, brass (each).....	11-2354 \pm	10 Pack.....	50-8096
5 pack.....	11-2378 \pm	39. Pump pushrod (each).....	11-2373
b. Idle mixture screw only each.....	110-0003	5 Pack.....	11-2393
Idle mixture screw w/ 500-0036 o-ring		40. Check ball - (two required) (each).....	50-8090
each.....	110-0068 \pm	10 pack.....	50-8125
5 pack.....	110-0069 \pm	41. Check ball spring (each).....	11-2374
14. Idle mixture screw spring (each).....	11-2052	5 Pack.....	11-2392
10 Pack.....	11-2060	42. Pump cap o-ring - (two required) (each).....	50-8012
15. Idle speed screw (each).....	50-0038	10 Pack.....	50-8100
10 Pack.....	50-0150	43. Pump cap assembly.....	11-2389
16. Pump adjustment screw (each).....	50-0039	44. Overflow hose per 24" 27369-76 (each).....	19-0262-S
10 Pack.....	50-0146	5 Pack.....	19-0263
17. Idle speed/pump adjuster spring (each).....	11-2048	45. Pump cap screw 8-32 - (two required) (each).....	50-0042
10 pack.....	11-2053	10 Pack.....	50-0098
18. Plunger nut (each).....	11-2344 \pm	46. Diaphragm spring (each).....	11-2275
5 Pack.....	11-2372 \pm	10 pack.....	11-2278
19. Plunger spring (each).....	11-2340	47. Diaphragm.....	11-2282
10 Pack.....	11-2359	48. Gasket, backplate (each).....	106-1724
20. Fast idle plunger.....	11-2343	10 pack.....	106-2328
21. Cable guide assembly with screw Use with butterfly style cables.....	11-2339P	49. Enrichment device (Use with air horn only).....	11-2084
Use with constant velocity style cables.....	11-2338P	50. Fuel line a. Fuel line with 90° bend 19" (Use with part #11-2465)	
22. Cable clamp/float pin screw (each).....	50-0041	  1,2,3.....	190-0006
10 Pack.....	50-0062	b. Permeation Compliant straight, 311" x .563" x 17.5" (Use with part #106-2011 90° seat).....	190-0001
23. O-ring 1 $\frac{7}{8}$ " Super E (each).....	50-8016	51. Fuel line insulator—12"  1,2,3.....	19-0172
10 Pack.....	50-8094	52. Spacer, Kit, w/ O-ring 1 $\frac{7}{8}$ " x 1".....	16-0057*
2 $\frac{1}{16}$ " Super G (each).....	50-8015	2 $\frac{1}{16}$ " x 1".....	16-0357*
10 pack.....	50-8093	2 $\frac{1}{4}$ " x 1".....	16-0157*
24. Bellows seal (each).....	11-2266	*Use with 1" Spacer Block.....	16-0058
5 Pack.....	11-2279	53. Insulator Block, Manifold, w/ O-ring 1 $\frac{7}{8}$ " x $\frac{1}{4}$ " Super E.....	16-0491
25. Bowl vent plug (each).....	50-0105	1 $\frac{7}{8}$ " x $\frac{3}{8}$ " Super E.....	16-0497
10 pack.....	50-0151	2 $\frac{1}{16}$ " x $\frac{1}{4}$ " Super G.....	16-0492
26. Main discharge tube.....	11-2085 \pm	2 $\frac{1}{16}$ " x $\frac{3}{8}$ " Super G.....	16-0498
27. Main jet—See Chart on page 166		2 $\frac{1}{4}$ " x $\frac{1}{4}$ " Super D.....	16-0499
28. Intermediate Jets—See Chart on page 165 Series #94 fits all Super 1 $\frac{7}{8}$ ", 2 $\frac{1}{16}$ ", 2 $\frac{1}{4}$ " gas carburetors.		54. Screw 1" x $\frac{3}{8}$ "-16 (each).....	50-0161
29. Bowl gasket (each).....	11-2386	1 $\frac{1}{4}$ " x $\frac{3}{8}$ "-16 (each).....	50-0162
10 pack.....	11-2387		
30. Float.....	11-2187		
31. Float pin (each).....	11-2369 \pm		
5 Pack.....	11-2370 \pm		



- 10 pack **50-0177**
- 13/8" x 3/8"-16 (each) **50-0163**
- 5 pack **50-0178**
- 2" x 3/8"-16 (each) **50-0164**
- 5 pack **50-0185**
- 55.** Tube, Fast Idle Pick-Up, Super E/G, 125" x 2.350", Brass **0381F±**
- 56.** Tube, Ejector Nozzle, Super E/G, Flared, Brass **106-6124±**
- 57.** O-ring, 3mm x 5mm x 1mm (each) **500-0036**
- 10 pack **500-0148**
- 58.** Clamp, 5/8" - 7/8" **50-8002**
- 59.** Hose, Fitting straight, .040" **16-0134**
- 60.** VOES Fitting Cap **50-8372**
- 61.** VOES/Oil Return Hose **19-0395**

CARBURETOR REBUILD KITS: SEE PAGE 166

± WARNING: Cancer and Reproductive Harm



L-SERIES MGL & MGAL GAS CARBURETOR REPLACEMENT PARTS

1. Carb body assembly - MGL & MGAL 1 $\frac{1}{8}$ "	N/A
2. Throttle shaft (includes 2 ea. #50-0055-S)	11-2083
3. Choke/throttle plate screw	50-0055-S
10 pack	50-0064
4. Throttle plate -1 $\frac{1}{8}$ "	11-2055
5. Throttle return spring	11-2082
6. Throttle arm assembly, 1 cable	N/A
7. Intermediate plug	N/A
9. Choke lever washer	N/A
13. Idle mixture screw	11-2354
5 pack	11-2378
14. Idle mixture screw spring	11-2052
10 pack	11-2060
18. Choke lever screw	N/A
19. Choke lever spring	N/A
20. Choke plate	N/A
23. O-ring - 1 $\frac{1}{8}$ "	50-8013
26. Main discharge tube	N/A
27. Main jet - state size - see page 166	
28. Intermediate jet	N/A
29. Bowl gasket	11-2070
30. Float - forked type or original brass type	N/A
31. Float retaining pin	11-2069
32. Bowl screw - 10-24 x $\frac{3}{4}$ "	50-0032
33. Carb bowl assembly	
Original type	N/A
Forked type	N/A
34. Bottom plug	N/A
36. Needle - forked type	11-2095
37. Seat - forked/wire type	11-2065
51. Choke shaft assembly	N/A
52. Throttle shaft bushing - for repair only	11-2134
54. Lockwasher - #10	50-7000
55. Intermediate air bleed	N/A
56. Spring, Idle/Accelerator Pump, Super B/D/E/G, .032" Wire, .213" x .245" x .506", Stainless Steel	11-2048
10 pack	11-2053
57. Screw, SLTD FH, 8-32 x 7/8", Zinc, Steel	50-0038
10 pack	50-0150
58. Screw, SLTD FH, 8-32 x 5/8", Zinc, Steel	50-0039
10 pack	50-0146
59. Screw, SLTD FH, 8-32 x 5/16", Zinc, Steel	50-0030-S

CARBURETOR REBUILD KITS

Body Rebuild Kit

MGL/MGAL (includes:#2,3,4,5,23,29,52) 11-2900 \pm

Master Rebuild Kit

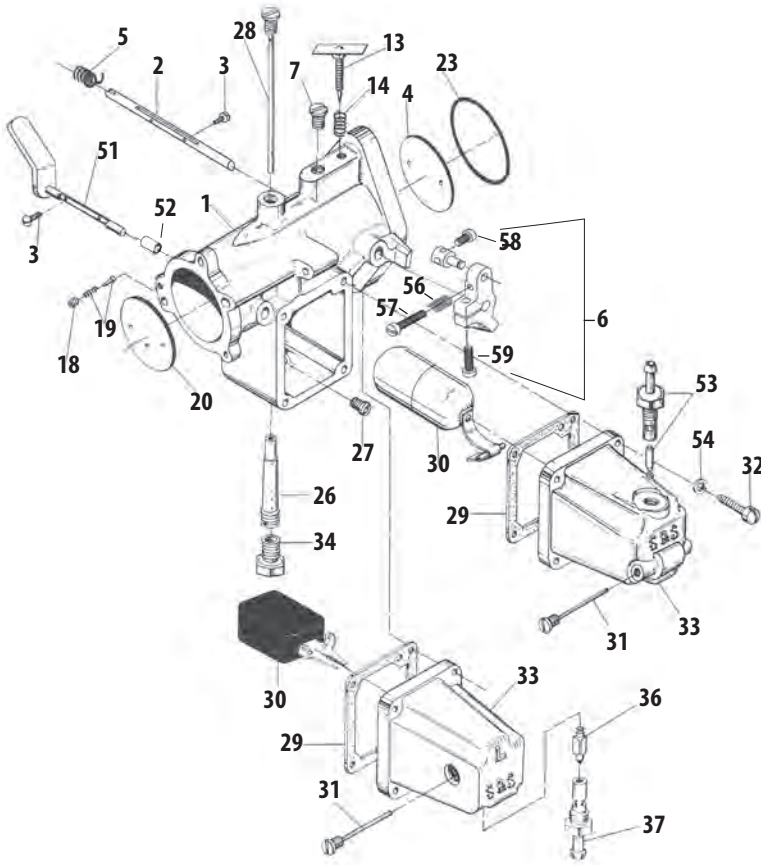
MGL (includes#2,3,4,5,13,14,23,29,31,36,37,52,56) 11-2913 \pm

MGAL (includes#2,3,4,5,13,14,23,29,31,32,52,53,54,56,57,58,59) 11-2911 \pm

N/A = NO LONGER AVAILABLE

N/S = NOT SHOWN

NOTE: When ordering parts, please supply the carb serial number. To order a manifold or air cleaner assembly or any related parts, refer to the Manifold or Air Cleaner sections of this catalog.



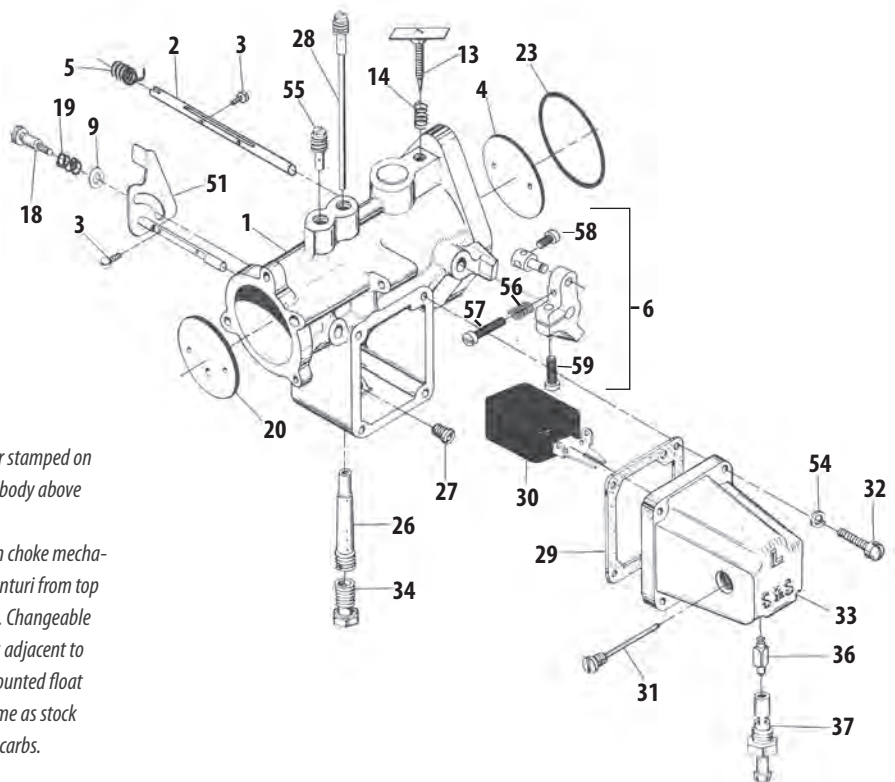
L-Series MGAL Gas Carburetor

Years Produced: 1977 to 1978

Size Produced: 1 7/8" throat

Identification Markings: Serial number stamped on body below "S&S Cycle" - "MGAL" cast on body above "S&S Cycle"

Distinguishing Characteristics: Built-in choke mechanism—intermediate jet goes through venturi from top of carb down into main discharge tube. Side mounted float bowl—bowl vent/throttle cable housing boss cast on body above float bowl. Air cleaner mounting pattern same as stock Tillotson, Bendix, Keihin butterfly type carbs.



L-Series MGL Gas Carburetor

Years Produced: 1980 to 1981

Size Produced: 1 7/8" throat

Identification Markings: Serial number stamped on body below "S&S Cycle" - "MG" cast on body above "S&S Cycle"

Distinguishing Characteristics: Built-in choke mechanism. Intermediate jet goes through venturi from top of carb down into main discharge tube. Changeable intermediate air bleed screws into boss adjacent to intermediate jet on top of carb. Side mounted float bowl. Air cleaner mounting pattern same as stock Tillotson, Bendix, Keihin butterfly type carbs.

L-SERIES GAL & GBL GAS CARBURETOR

REPLACEMENT PARTS

- | | |
|---|-----------|
| 1. Carb body assembly - GAL 1 $\frac{1}{8}$ " or GBL 1 $\frac{3}{4}$ " | N/A |
| 2. Throttle shaft (includes 2 ea. #11-2045) | 11-2083 |
| 3. Choke/throttle plate screw | 50-0055-S |
| 10 pack | 50-0064 |
| 4. Throttle plate | |
| 1 $\frac{1}{8}$ " (GAL) | 11-2055 |
| 1 $\frac{3}{4}$ " (GBL) | 11-2023 |
| 5. Throttle shaft bushing - for repair only | 11-2134 |
| 6. Throttle arm assembly, 1 cable, reversible | N/A |
| 7. Intermediate plug | N/A |
| 13. Idle mixture screw | 11-2354 |
| 5 pack | 11-2378 |
| 14. Idle mixture screw spring | 11-2052 |
| 10 pack | 11-2060 |
| 18. Choke detent screw | N/A |
| 19. Choke detent pin & spring | N/A |
| 20. Choke plate | N/A |
| 23. O-ring - 1 $\frac{1}{8}$ " | 50-8013 |
| 26. Main discharge tube | N/A |
| 27. Main jet - state size - see page 166 | |
| 28. Intermediate jet | N/A |
| 29. Bowl gasket | 11-2070 |
| 30. Float - forked type or original brass type | N/A |
| 31. Float retaining pin | 11-2069 |
| 32. Bowl screw - 10-24 x $\frac{3}{4}$ " | 50-0032 |
| 33. Carb bowl assembly | |
| Original type | N/A |
| Forked type | N/A |
| 34. Bottom plug | N/A |
| 36. Needle - forked type | 11-2095 |
| 37. Seat - forked/wire type | 11-2065 |
| 51. Choke shaft assembly | N/A |
| 54. Lock washer - #10 | 50-7000 |
| 55. Spring, Idle/Accelerator Pump, Super B/D/E/G, .032" Wire, .213" x .245" x .506",
Stainless Steel | 11-2048 |
| 10 pack | 11-2053 |
| 56. Screw, SLTD FH, 8-32 x 7/8", Zinc, Steel | 50-0038 |
| 10 pack | 50-0150 |
| 57. Screw, SLTD FH, 8-32 x 5/8", Zinc, Steel | 50-0039 |
| 10 pack | 50-0146 |
| 58. Screw, SLTD FH, 8-32 x 5/16", Zinc, Steel | 50-0030-S |

CARBURETOR REBUILD KITS

Body Rebuild Kit

GAL 1 $\frac{1}{8}$ " (includes: #2,3,4,5,23,29,52) 11-2900 \ddagger

Master Rebuild Kit

GAL 1 $\frac{1}{8}$ "

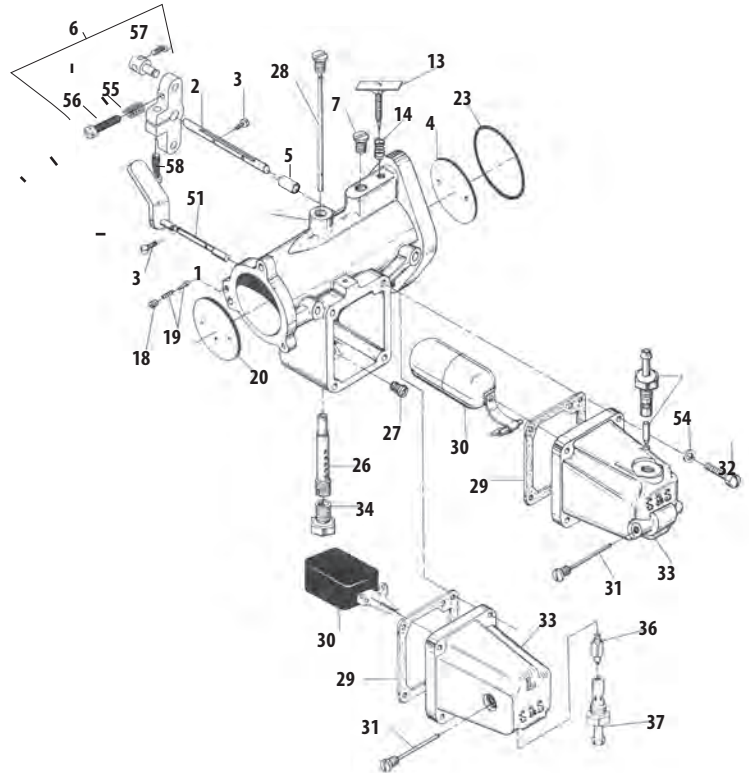
(includes #3, 4, 13, 14, 23, 29, 31, 32, 52, 53, 54, 55, 56, 57, 58) 11-2911 \ddagger

GBL 1 $\frac{3}{4}$ " (includes #3, 4, 13, 14, 23, 29, 31, 32, 52, 53, 54, 55, 56, 57, 58) 11-2912 \ddagger

N/A = NO LONGER AVAILABLE

N/S = NOT SHOWN

\ddagger  WARNING: Cancer and Reproductive Harm



L-Series GAL & GBL Gas Carburetors

Years Produced: 1972 to 1975

Sizes Produced: 1 $\frac{3}{4}$ " and 1 $\frac{1}{8}$ " throats

Identification Markings: serial number stamped on body below "S&S

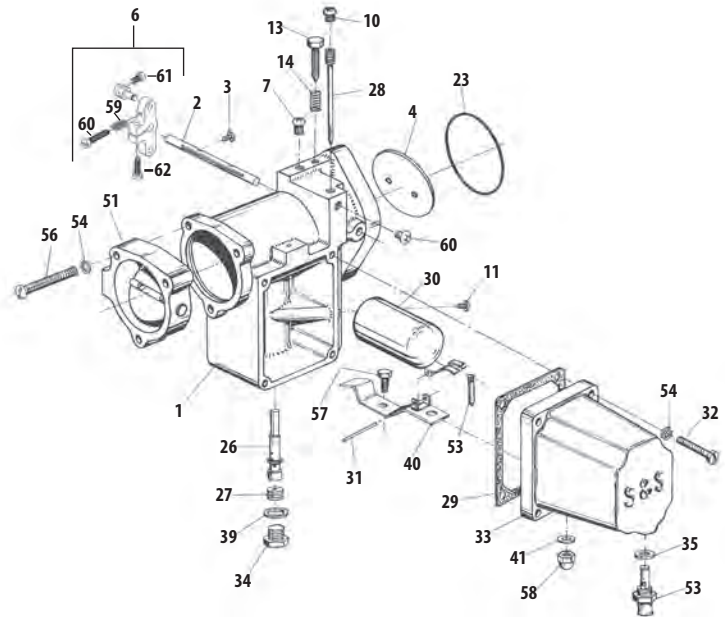
Cycle" - "GAL" means gas type with 1 $\frac{1}{8}$ " throat, late style - "GBL" means gas with 1 $\frac{3}{4}$ " throat, late style

Distinguishing Characteristics: Built-in choke mechanism. Intermediate jet goes through venturi from top of carb down into main discharge tube. Side mounted float bowl. Air cleaner mounting pattern same as stock Tillotson, Bendix, Keihin butterfly type carbs

NOTE: When ordering parts, please supply the carb serial number. To order a manifold or air cleaner assembly or any related parts, refer to the Manifold or Air Cleaner sections of this catalog.

EARLY STYLE GAS & FUEL CARBURETOR REPLACEMENT PARTS

1. Carb body assembly - F, FA 1 7/8", FB 1 3/4" fuel & G, GA 1 7/8", GB 1 3/4" gas	N/A
2. Throttle shaft (includes 2 ea. #11-2045)	
Gas	11-2083
Fuel	11-2184
3. Throttle plate screw	50-0055-S
10 pack	50-0064
4. Throttle plate	
1 3/4" gas & fuel	11-2023
1 7/8" gas	11-2055
6. Throttle arm assembly, 1 cable reversible	N/A
7. Intermediate plug	N/A
10. Intermediate jet plug	N/A
11. Intermediate passage plug	N/A
13. Idle mixture screw	11-2354
5 pack	11-2378
14. Idle mixture screw spring	11-2052
10 pack	11-2060
23. O-ring - 1 3/4" or 1 7/8"	50-8013
26. Main discharge tube	N/A
27. Main jet - gas or fuel	N/A
28. Intermediate jet	N/A
29. Bowl gasket	11-2070
30. Float	N/A
31. Float pin	N/A
32. Bowl screw - 10-24 x 3/4"	50-0032
33. Carb bowl assembly	N/A
34. Bottom plug	N/A
35. Seat o-ring	N/A
39. Fiber washer	N/A
40. Float mounting bracket	N/A
41. Washer - 1/4"	N/A
51. Choke assembly	N/A
52. Throttle shaft bushing - for repair only N/S	11-2134
53. Needle & seat assembly	
Fuel	N/A
54. Lockwasher - #10	50-7000
55. Intermediate air bleed	N/A
56. Air horn/choke mounting screw	N/A
57. Float bracket bolt - 1/4-28 x 1/2"	N/A
58. Nut - 1/4-28	N/A
59. Spring, Idle/Accelerator Pump, Super B/D/E/G, .032" Wire, .213" x .245" x .506", Stainless Steel	11-2048
10 pack	11-2053
60. Screw, SLTD FH, 8-32 x 7/8", Zinc, Steel	50-0038
10 pack	50-0150
61. Screw, SLTD FH, 8-32 x 5/8", Zinc, Steel	50-0039
10 pack	50-0146
62. Screw, SLTD FH, 8-32 x 5/16", Zinc, Steel	50-0030-S



Early Style Gas & Fuel CarburetorS

Years Produced: Gas 1967 to 1971 , Fuel 1967 to 1974

Sized Produced: 1 7/8" and 1 3/4" throats

Identification markings: Serial number stamped on body below "S&S Cycle" - "G" or "GA" means gas type with 1 7/8" throat - "GB" means gas with 1 3/4" throat - "F" or "FA" means fuel with 1 7/8" throat - "FB" means fuel with 1 3/4" throat.

NOTE - Some 1 3/4" carbs were bored out to 1 7/8".

Distinguishing Characteristics: Bolt-on choke assembly, gas type only. Side mounted float bowl. Air cleaner/air horn mounting pattern different from stock.

N/A = NO LONGER AVAILABLE

N/S = NOT SHOWN

CARBURETOR REBUILD KITS

Body Rebuild Kit

G/GA (includes: #3, 4, 23, 29, 52)	11-2900±
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± ⚠️ WARNING: Cancer and Reproductive Harm

NOTE: Some fuel carbs have been converted and are equipped with two float bowls. When ordering parts, please supply the carb serial number. To order a manifold or air cleaner assembly or any related parts, refer to the Manifold or Air Cleaner sections of this catalog.

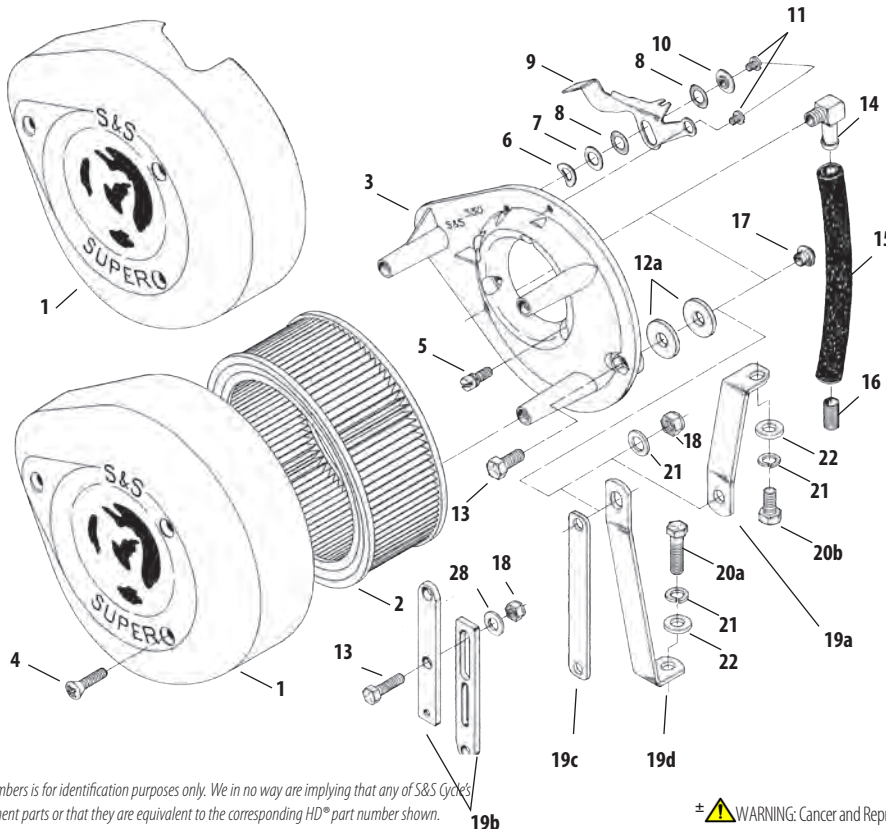


SUPER E & G AIR CLEANERS REPLACEMENT PARTS

FOR 1936-'84 BIG TWINS & 1957-'85 SPORTSTER® MODELS

- | | |
|--|--------------------------|
| 1. Air cleaner cover—All
(Except shovelhead w/5 gallon tanks & cylinders + .075") | |
| Chrome | 17-0378± |
| Gloss Black | 170-0384A |
| Slasher | 17-0004± |
| Shovelhead w/5 gallon tanks & cylinders +.075" | 17-0372± |
| 2. Element, pleated | 106-4722 |
| 3. Backplate | |
| BT 1936-'84 | 17-0330 |
| 4. Cover screw | |
| Nickel 1305 (each) | 50-0072 |
| 3 pack | 50-1052 |
| 10 pack | 50-0094 |
| Black 902 (each) | 50-0310-S |
| 3 pack | 50-0310 |
| Chrome (each) | 50-0347-S± |
| 5. Backplate screw | |
| Zinc Plated (each) | 106-2084 |
| 10 pack | 106-2105 |
| 6. Fast idle friction washer (each) | 50-7035 |
| 10 pack | 50-7058 |
| 7. Fast idle steel washer (each) | 50-7037 |
| 10 pack | 50-7061 |
| 8. Fast idle nylon washer (each) | 50-7036 |
| 10 pack | 50-7060 |
| 9. Fast idle lever | USA 1,2,3 17-0329 |
| 10. Fast idle brass washer (each) | 50-7007± |
| 10 pack | 50-7010± |
| 11. Fast idle lever screw (one required for current backplate) (each) | 50-0041 |
| 10 Pack | 50-0062 |
| 12. Shims
5/16" x .125"
(Use on BT 1936-'84 when insulator block is installed.) | |
| each | 50-7042 |
| 2 pack | 50-7042P |
| 13. Backplate mounting bolt—BT 1936-'84
5/16"-18 x 1" (each) | 50-0108 |
| 14. Elbow fitting (each) | 50-8110 |
| 15. Crankcase breather hose | |
| a. BT 1978-'92 | 17-0113 |
| 16. Vent hose connector | 50-8111 |
| 17. Backplate plug 1/8"-27 (each) | 50-8331A |
| 18. Locknut—5/16"-1
(Use with support bracket - see #19) | 50-5021 |
| 19. Support bracket | |
| a. BT 1966-'82 | 17-0392 |
| b. BT 1983-'84 (includes #13, 18, 28) | 16-0471 |
| c. BT 1948-'65 | 16-0096 |
| d. XL 1957-'85 | 17-0393 |
| 20. Mounting bracket bolt—big twin | |
| a. IH XL 1957-'85—5/16"-18 x 1 1/4" (each) | 50-0110 |
| b. 1966-'82—5/16"-18 x 5/8" (each) | 50-0106 |
| 21. Lockwasher—5/16" | 50-7032 |
| 22. Flatwasher—5/16" x 1/8" | 50-7033 |
| 23. Wire tie (N/S) | 50-8003 |
| 24. Hose clamp (N/S) | 50-8002 |
| 25. Air cleaner assembly
Includes:
Chrome cover, backplate, filter element, and hardware kit.) | |
| BT 1936-'84/1957-'85 XL | 17-0400± |
| BT 1966-'84 with five gallon tanks and cylinders .075" longer than stock | 17-0440± |
| 26. Mounting hardware package (N/S)
Includes all parts needed to install following style air cleaners:
BT 1936-'84 | 17-0441± |
| 27. Spring clamps (N/S) | 50-8001 |
| 28. Washer, Flat, .344" x .688" x .065", Zinc, Steel 6320, 70907-07, 6016, 6702 | 50-7034 |

(N/S) = Not Shown
N/A= No longer available

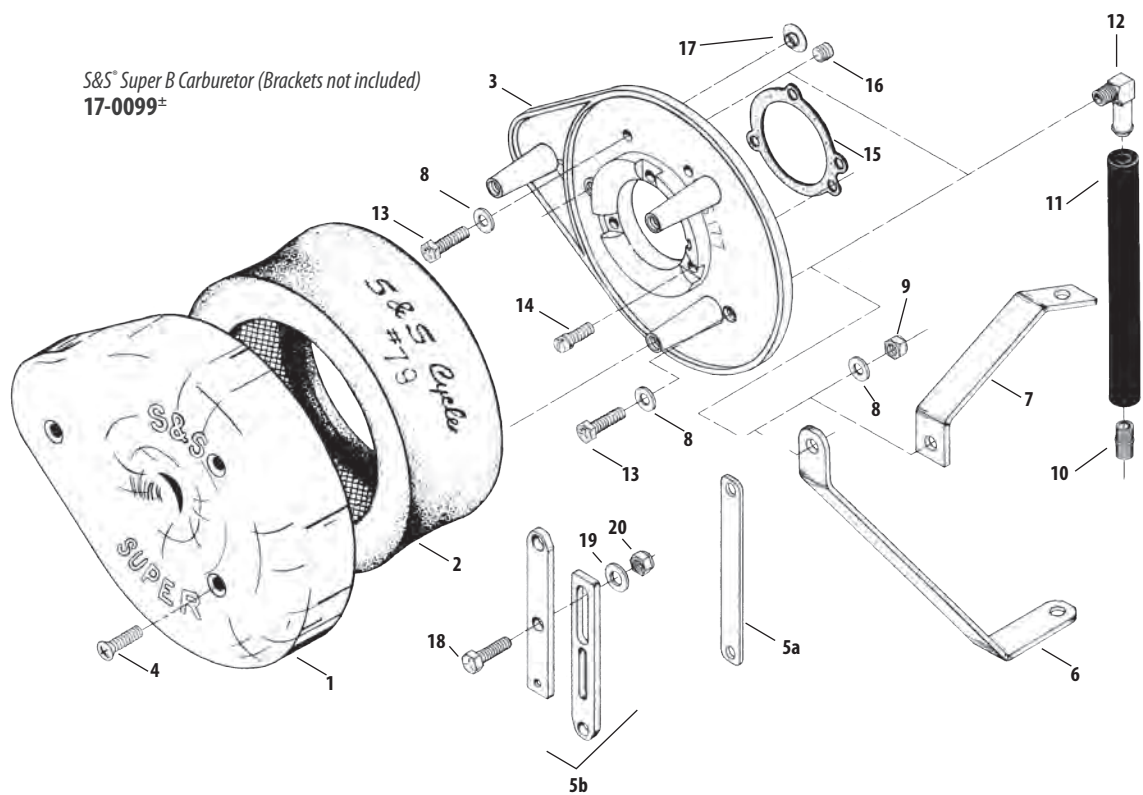


All reference to HD® part numbers is for identification purposes only. We in no way are implying that any of S&S Cycle's products are original equipment parts or that they are equivalent to the corresponding HD® part number shown.

± WARNING: Cancer and Reproductive Harm—

SUPER B AIR CLEANER REPLACEMENT PARTS

- | | | | |
|--|-----------|--|----------|
| 1. Air cleaner cover..... | N/A | 14. Backplate screw, Zinc Plated (each) | 106-2084 |
| 2. Air cleaner element | 17-0079 | 10 pack | 106-2105 |
| 3. Air cleaner backing plate | | 15. Air cleaner gasket (each) | 17-0196 |
| Super B 1 7/8" | N/A | 5 pack | 17-0197 |
| 4. Air cleaner cover screw | | 16. Allen pipe plug - 1/8" -27 each..... | 50-8331A |
| Chrome 1305 (each) | 50-0072± | 17. Plastic plug | 50-8313 |
| 3 pack | 50-1052± | 18. Bolt, Hex Head, Gr5, 5/16-18 x 1", Zinc 3987 | 50-0108 |
| 10 pack | 50-0094± | 19. Washer, Flat, .344" x .688" x .065", Zinc, Steel | |
| Black 902 (each) | 50-0310-5 | 6320, 70907-07, 6016, 6702 | 50-7034 |
| 3 pack | 50-0310 | 20. Nut, Lock, HH, 5/16-18 UNC-2B x .359", Zinc | 50-5021 |
| 5. Support bracket | | | |
| a. 1948-'65 panhead | 16-0096 | | |
| b. 1983-'84 shovelhead | 16-0471 | | |
| 6. Air cleaner support bracket | | | |
| 1957-'85 XL | 17-0093 | | |
| 7. Air cleaner support bracket | | | |
| 1966-'82 BT | 17-0092 | | |
| 8. Washer, Flat, .281" x .625" x .080", Zinc 6194, 6245, 6703, 6736, 6228W, 6192 | | | |
| (each) | 50-7021 | | |
| 9. Nut, Lock, HH, 1/4-28 UNC-2B x .328", Zinc (each) | 50-5010 | | |
| 10. Vent hose connector nipple | 50-8111 | | |
| 11. Vent hose - 3/8" I.D. x 6" | 17-0113 | | |
| 12. 90° elbow fitting (each) | 50-8110 | | |
| 13. Support bracket bolt-1/4"-28 x 7/8" | 50-0074 | | |



S&S® Super B Carburetor (Brackets not included)
17-0099±

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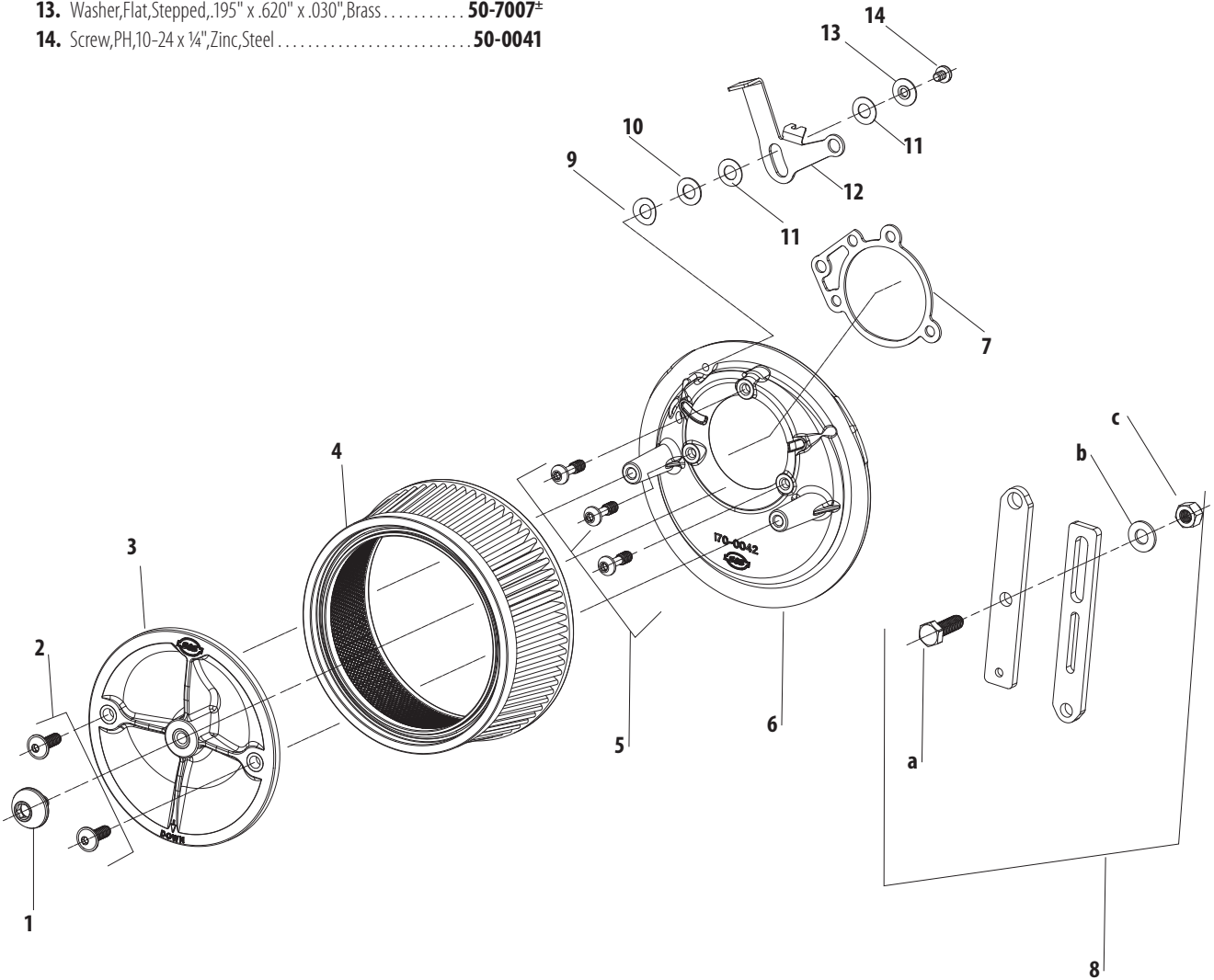
± ⚠️ WARNING: Cancer and Reproductive Harm



UNIVERSAL STEALTH AIR CLEANER

REPLACEMENT PARTS

1. Screw, SHCB, 5/16-18 x .500", Polished, Stainless Steel **170-0508**
2. Screw, SHC, Flanged Button, 1/4-20 UNC x .750"
(each) 2 required **500-0060**
3. Plate, Top, Air Filter, Molded, Plastic **170-0026**
4. Filter, Air, Standard Pleated **170-0126**
5. Screw, SHCB, 1/4-20 UNC X .825" (each) 3 required **500-0059**
6. Backplate, Air Cleaner, Super E/G, Powder coated, Black, Die Cast
1936-'92 bt, 1957-'90 xl **170-0179**
7. Gasket, Backplate, Super E/G, CV Adapter, .0625" **106-1724**
8. Bracket, Kit, Support, Carb, Case To Manifold, w/ Hardware, 1966-99 bt, 1957-2003
xl (includes 50-0108, 50-5021, & 50-7034) **16-0471**
 - a. Bolt, Hex Head, Gr5, 5/16-18 x 1", Zinc **50-0108**
 - b. Washer, Flat, 3/4" x .688" x .065", Zinc, Steel **50-7034**
 - c. Nut, Lock, HH, 5/16-18 UNC-2B x .359", Zinc, Steel/Nylon **50-5021**
9. Washer, Friction, Curved, 3/29" x .625" x .015", Zinc, Steel **50-7035**
10. Washer, Flat, 3/25" x .625" x .032", Zinc, Steel **50-7037**
11. Washer, Flat, 3/23" x .625" x .020", Nylon (each) 2 required **50-7036**
12. Lever, Enrichment, Super E/G, Short, Buell® **17-0327**
13. Washer, Flat, Stepped, 1/95" x .620" x .030", Brass **50-7007±**
14. Screw, PH, 10-24 x 1/4", Zinc, Steel **50-0041**

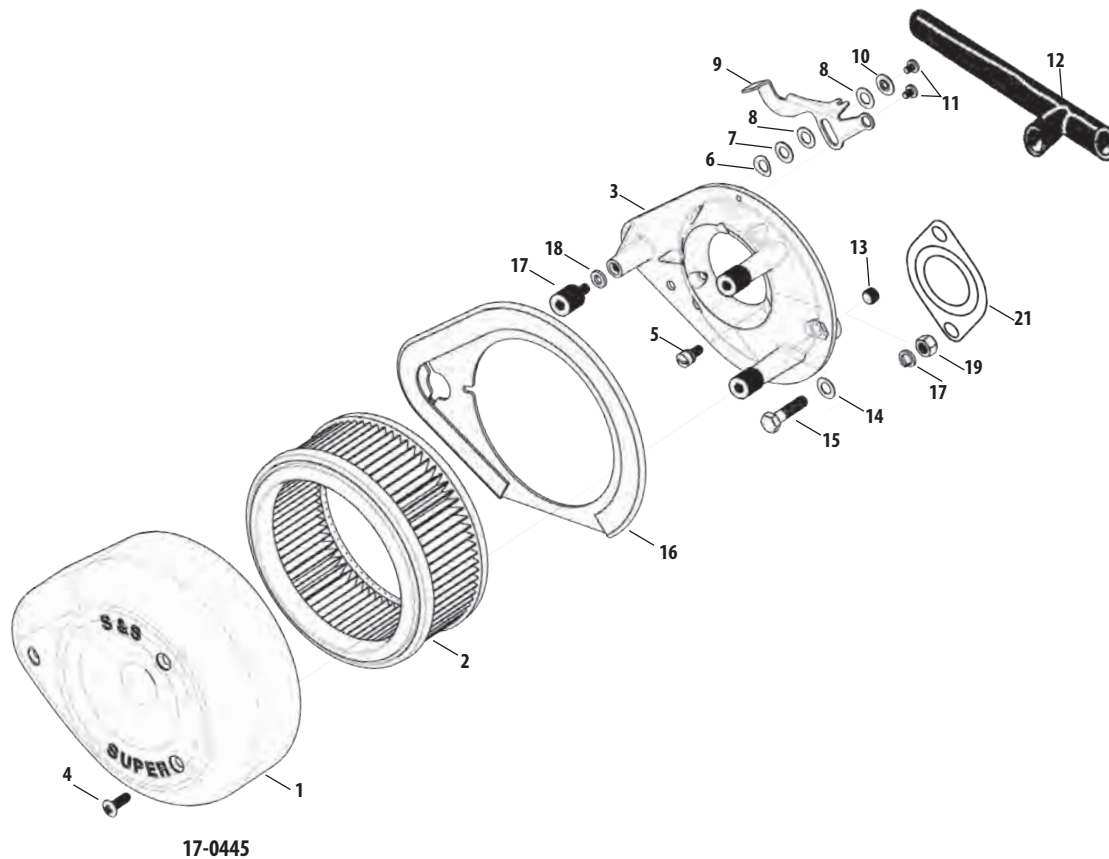


TÜV APPROVED SUPER E & G AIR CLEANER

REPLACEMENT PARTS

1. Air cleaner cover		
Chrome	17-0378±	
2. Element, pleated carbon-TÜV	N/A	
3. Backplate		
1955-'84 bt, 1957-'85 IH XL	17-0330	
4. Cover screw		
Nickel 1305 (each)	50-0072	
3 pack	50-1052	
10 pack	50-0094	
Black #902 (each)	50-0310-S	
3 pack	50-0310	
Chrome (each)	50-0347-S±	
5. Backplate screw		
Zinc Plated (each)	106-2084	
10 pack	106-2105	
6. Fast idle friction washer (each)	50-7035	
10 pack	50-7058	
7. Fast idle steel washer (each)	50-7037	
10 pack	50-7061	
8. Fast idle nylon washer (each)	50-7036	
10 pack	50-7060	
9. Enrichment lever	USA 1,2,3 17-0329	
10. Fast idle brass washer (each)	50-7007±	
10 pack	50-7010±	
11. Fast idle lever screw (each)	50-0041	
10 pack	50-0062	
12. Crankcase breather hose		
TÜV 1970-'84	17-0113	
13. Backplate plug 1/8"-27		
each	50-8331A	
14. Flatwasher-5/16" x 1/16" 6320, 70907-07, 6016, 6702	50-7034	
15. Mounting bracket bolt 3987-		
5/16"-18 x 1"	50-0108	
16. Plate, air cleaner noise reducer	17-0389	
17. Rubber isolator mounts (each)	50-8510-S	
18. Shim, spacers, 1/2" OD x 1/4" ID x .080" (each)	50-7971-S	
19. Locknut, HH, 5/16" -18	50-5021	
20. Spring clamps (N/S)*	50-8001	
21. Restrictor Plate	N/A	

(N/S) = Not Shown

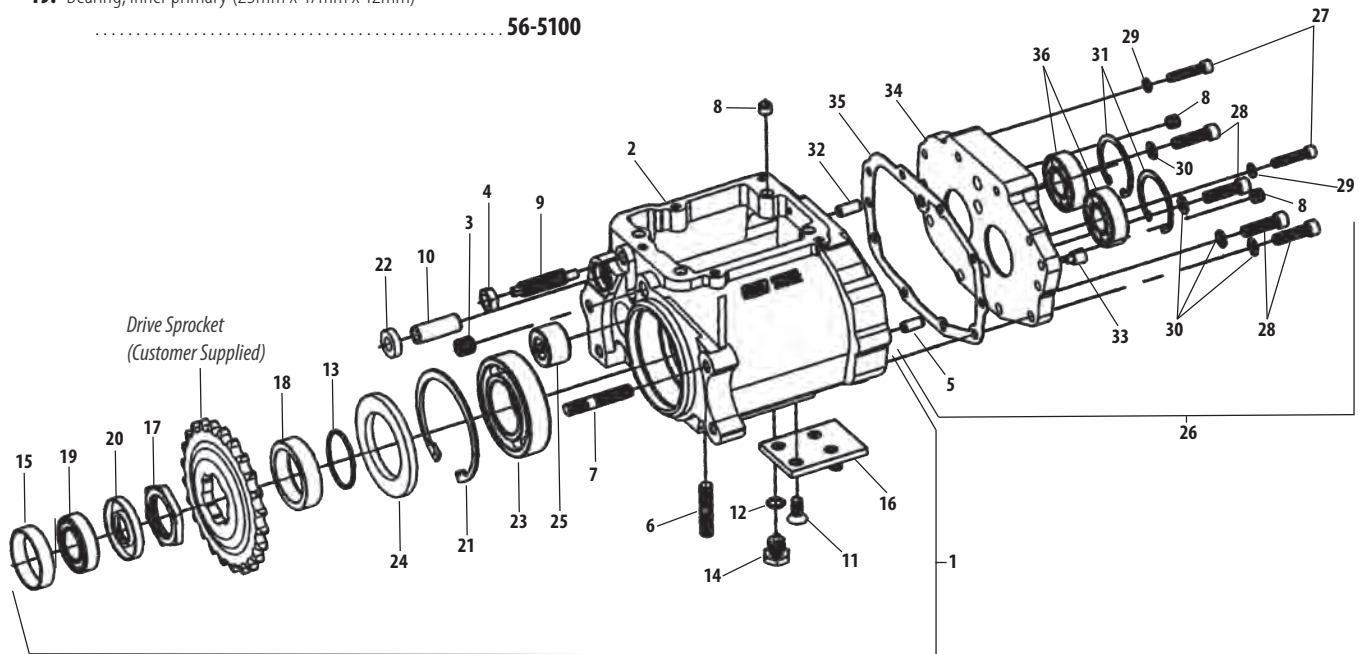


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± ⚠ WARNING: Cancer and Reproductive Harm

5-SPEED TRANSMISSION CASE REPLACEMENT PARTS FOR 4-SPEED BIG TWIN CHASSIS

1. Transmission case assembly, 5-speed
1965-'84 4-speed BT **56-1051**
2. Transmission case only, 5-speed rigid mount
for 1965-'84 4-speed BT frame **N/A**
3. Screw, SH $\frac{1}{2}$ "-20 x $\frac{3}{8}$ " **50-0202**
4. Nut, hex - $\frac{7}{16}$ "-14 each **USA 50-5044**
5. Pin, dowel - .308" diameter x .70"
375 **USA 50-8029**
6. Stud - $\frac{3}{8}$ "-16; $\frac{3}{8}$ "-24 x $1\frac{1}{16}$ " (4) (BT 5-speed) **50-8085**
7. Stud - $\frac{3}{8}$ "-16; $\frac{3}{8}$ "-24 x $2\frac{5}{16}$ " (4) (5-speed BT) **50-8086**
8. Pin, Roll - $\frac{3}{8}$ " x .300" (4) 609 **USA 50-8173**
9. Screw, shifter lever adjustment, 5-speed BT
33119-79B **USA 56-1002**
10. Guide, shifter shaft - 5-speed rigid mount,
1986-'99 BT 33114-79 **56-1067**
11. Screw, SLTD FH, $\frac{5}{16}$ "-18 x $\frac{3}{4}$ " (4) **50-0300**
12. O-ring, $\frac{7}{16}$ " I.D. x $\frac{9}{16}$ " O.D. x $\frac{1}{16}$ " Viton
11105, 11273 each **50-8008**
10 pack **50-8078**
13. Seal, quad, $1\frac{9}{64}$ " I.D. x $1\frac{1}{8}$ " O.D. x $\frac{1}{16}$ " Buna
11165 **50-8045**
14. Plug, $\frac{1}{2}$ "-20, magnetic
..... **USA USA 1,2,3 50-8335**
15. Spacer, mainshaft adapter, 5-speed rigid mount
1965-'84 4-speed BT **56-1068**
16. Adapter, transmission mounting stud,
5-speed rigid mount/1965-'84 4-speed BT **56-1069**
17. Nut, transmission sprocket **56-3003**
18. Spacer, transmission sprocket,
1941-'92 BT **56-3004**
19. Bearing, inner primary (25mm x 47mm x 12mm)
..... **56-5100**
20. Seal, inner primary - 4-speed BT **56-5101**
21. Ring, internal retainer, 3.734" O.D. x .109" Tru-Arc
11161, 11599 **USA 50-8051**
22. Seal, oil shifter shaft - 1984-'99 BT
12045 **USA 56-1064**
23. Bearing, transmission output shaft, 1984-'99 BT
8996A **USA 56-1280**
24. Seal, oil 12067B **USA 56-3033**
25. Bearing, transmission countershaft **56-3034**
26. Door assembly, transmission access
5-speed rigid mount, 1985-'99 BT **USA 56-1027**
27. Capscrew, SH - $\frac{1}{4}$ "-20 x $1\frac{3}{4}$ " (2) 4740A, 3482A **USA 50-0008**
28. Capscrew, SH - $\frac{5}{16}$ "-18 x $1\frac{1}{4}$ " (4)
3210A **USA 50-0121**
29. Washer, flat - $\frac{1}{4}$ " x $\frac{7}{16}$ " x $\frac{1}{16}$ " (2)
each **USA 50-7017**
12 pack **USA 50-7013**
30. Washer, flat - $\frac{5}{16}$ " x .545" x .042" (4) **USA 50-7026**
31. Ring, internal retainer, 2.072" O.D. x .062" Tru-Arc (2)
35021-89 **USA 50-8053**
32. Dowel - $\frac{5}{16}$ " x $\frac{3}{4}$ " 634 (each) **USA 50-8175**
33. Plug, magnetic - $\frac{1}{8}$ "-27 739A **USA 50-8334**
34. Door, transmission access - 5-speed rigid mount
1985-'99 BT 35258-87C **USA 56-1025**
35. Gasket, transmission access door
35652-79B, 35653-98A **USA 56-1026**
36. Bearing, transmission access door (2)
8992A, 8998 **USA 56-3026**



TOOLS & SHOP SUPPLIES



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FLYWHEEL BALANCING KITS

THE S&S® MASTER FLYWHEEL BALANCING KIT

Description	Part #
Designed to allow the average shop to rebalance stock and S&S flywheels accurately and quickly. Whether doing a stock rebuild or a performance upgrade using aftermarket parts, flywheel rebalancing is a desirable step in the engine building process. A complete set of detailed instructions is furnished with each kit. For flywheels with tapered crankpins only.	53-0027

Replacement Parts

1. Balance, Triple Beam Platform	N/A
2. Replacement balance weight set, (1-500g 2-1000g)	53-0021
3. Balance shaft, 1936-'71 OHV bt and 1957-'71 xl	53-0090
4. Balance shaft nut (each)	53-0092
5. Balance stand (each)	53-0088
6. Rod support stand (each)	53-0089
7. Taper adapter, 1972-Early '81 bt (each)	53-0086
8. Taper adapter, Late 1981-'85 bt and S&S BL, SE, SL style (each)	53-0087
9. Shaft adapter, 1977-up xl driveside (screws on) (each)	53-0093
10. Shaft adapter, 1977-up xl camside (screws on) (each)	53-0095
11. Shaft adapter, 1955-'99 bt driveside (screws on) (each)	53-0091
12. Shaft adapter, 1958-'92 bt camside (LH, screws on) (each)	53-0101
13. Shaft adapter, 1993-'99 bt camside (RH, screws on) (each)	53-0102
14. Shaft adapter, counterweight (each)	53-0099
15. Collar spacer, 1970-'99 bt (each)	53-0097
16. Collar spacer, 1986-'90 driveside for xl - .280" (each)	53-0098
17. Collar spacer, 1991-up driveside for xl - .860" (each)	53-0085
18. Bob weight assembly, 1000 gram (each)	53-0094

Repair parts for 53-0094

Screw SHC, 1/2"-13 x 3/4"	Each	50-0200
Screw SHC, 1/2"-13 x 1 1/4"	Each	50-0201

19. Shims

2.7 gram	Each	53-0110
5.4 gram	Each	53-0105
8.1 gram		53-0115
10.8 gram		53-0120
13.4 gram	Each	53-0125
50 gram		53-0150
100 gram 25566-06		53-0100

20. Shim Kit

Includes: Shims (2 each) 2.7, 5.4, 8.1, 10.8, and 13.4 grams & Shims (1 each) 50 grams and 100 grams	53-0111
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S&S® FLYWHEEL BALANCE KITS

Master Balance Kit Without Balance Scale

Includes all parts in #53-0027, except balance & platform scales	53-0028
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Triple Beam Platform Balance Scale

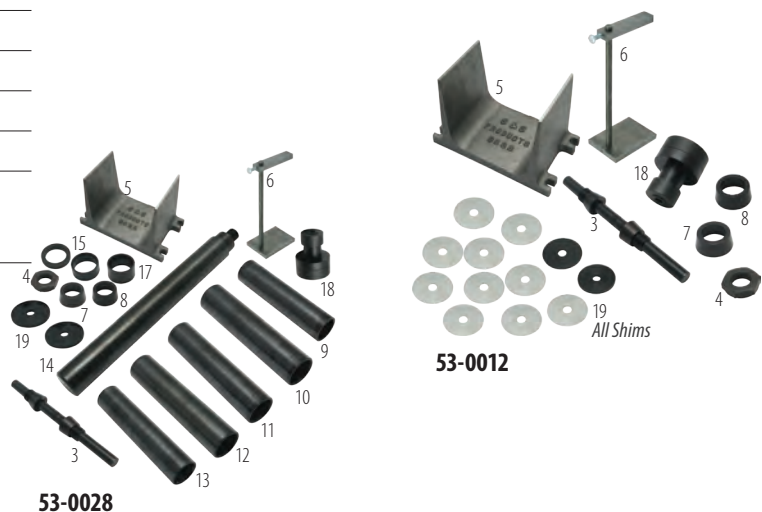
(2610 grams\maximum) without weights	53-0011
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Flywheel Balance Kit For 5-Piece Cranks

For 5-Piece Crank	53-0012
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Includes:

3. Balance shaft	53-0090
4. Balance shaft nut	53-0092
5. Balance stand	53-0088
6. Rod support stand	53-0089
7. Taper adapter	53-0086
8. Taper adapter	53-0087
18. Bob weight 1000 gram	53-0094
19. Shims	



NOTE: These balancing kits will not work with Harley-Davidson® Twin Cam 88® engines, 2000-up Sportster models, or any flywheel assemblies which use pressed-in crankpins.

PRIMARY INNER BEARING RACE INSTALLATION TOOL

- Primary inner bearing race installation tool, with a roller thrust bearing that decreases the effort required to install a bearing race by 30%
- Attachment for the S&S Clutch Puller that allows easy removal of the primary inner bearing race
- All of these S&S tools are CNC machined from the finest 4140 tool steel and heat treated for maximum reliability and service life.



Inner Primary Bearing Race Installer **56-5145**

TOP DEAD CENTER TOOL

- Easy to find the exact top dead center of any engine
- The best way to calibrate your degree wheel when dialing in cams or performing any number of checks and modifications based on the position of the crankshaft
- Available for engines with 14mm or 12mm spark plug holes



S&S® TOP DEAD CENTER TOOL

Description	Part #
14mm	53-0321
12mm	53-0322

S&S ROCKER COVER WRENCH SET

Helpful in areas where the motorcycle frame may prevent the use of conventional tools	53-0040
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CONNECTING ROD CHECKING PINS

These pins are used to check alignment of connecting rods and wristpin bushings with crankcase cylinder decks	
.927"	53-0004

S&S COMPRESSION RELEASE SOCKET KIT

Allows in-frame installation of S&S compression releases and protects wiring from damage during installation	53-0045
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MAIN JET TOOL

For changing main jets in all S&S carburetors using #72 series jets	53-0452
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NOTE: Rocker covers must be removed when installing S&S compression releases. If lack of frame clearance prevents removal of rocker covers, engine must be removed from frame for compression release installation.

BORING PLATE KITS FOR CYLINDER HEADS AND CRANKCASE

- Designed to simplify and reduce the time required to prepare crankcases and cylinder heads for S&S Sidewinder® big bore kit installations
- Machined cast iron with precision ground working surfaces

BORING PLATE KIT FOR 1936-'99 BIG TWIN AND 1986-'03 SPORTSTER® MODELS

Description	Part #
This boring plate kit has panhead and shovelhead head bolt patterns in one end. The other end is machined with the cylinder base patterns of 1936-'99 big twin engines, and 1986-'03 Harley-Davidson® Sportster models. Spacers are available for Evolution® engines which allow the cases to be bored without removing the cylinder studs (see below). Spacers are not included in this kit.	
Kit	53-0006
Screw, 7/16" -20 x 1 1/4" Sockethead Cap	50-0172

SPACERS FOR EVOLUTION CRANKCASES

Spacer part #53-0007 is required for 1986-'03 Sportster models. Spacers part #53-0007 and #53-0008 are both required for 1984-'99 big twin engines.

3 1/16" tall	53-0007
7/8" tall	53-0008

BORING PLATE KIT FOR CRANKCASES & CYLINDERS FOR TWIN CAM 88® ENGINES

This boring plate kit is designed for boring stock crankcases of Harley-Davidson® Twin Cam 88® engines to accept S&S Super Sidewinder® 4" and 4 1/8" bore cylinders with stock cylinder stud pattern. A spacer is included with the kit which allows the cases to be bored without removing the cylinder studs.

Kit	53-0035
Boring plate	53-0036
Spacer, 3 3/4" tall	53-0037



CYLINDER TORQUE PLATE KITS

FITMENT

- S&S 4 $\frac{1}{8}$ " bore
- 4" bore 1999–up big twin
- 3 $\frac{5}{8}$ " 1984–'99 big twin
- Harley-Davidson® Sportster® models in 3 $\frac{5}{8}$ " and 4" bore
- S&S X-Wedge® 4 $\frac{1}{8}$ " bore and 4 $\frac{1}{4}$ " bore*

FEATURES AND BENEFITS

- S&S torque plates can be used in conjunction with an S&S boring fixture and a conventional boring bar, and they can be readily adapted to a Sunnen® type honing machine.

KIT CONTENTS

- Head end plate
- Base end plate
- Four long grade 8 socket head cap screws (holds the assembly together and supplies the pressure)
- Stop arm (keeps the cylinder and plates from turning while honing)

*These torque plates are required to bore or hone X-Wedge cylinders. They have the X-Wedge five bolt pattern and are available for 4 $\frac{1}{8}$ " bore and 4 $\frac{1}{4}$ " bore cylinders.

CYLINDER TORQUE PLATE REPLACEMENT PARTS

(See chart for specific part numbers.)

1. Base end torque plate
2. Head end torque plate
3. Stop arm
4. Torque bolts
5. Vise tab
6. Tab bolt



S&S® CYLINDER TORQUE PLATE KITS AND REPLACEMENT PARTS

Bore Size	Case Bolt Pattern	Kit Part #	Head End Plate	Base End Plate	Stop Arm	Bolt 3/8"-24 x 6"	Bolt 7/16"-20 x 6"	Bolt 7/16"-20 x 7"	Bolt M10 x 1.5MM x 160MM	Vise Tab
4.25	2017–up M8	530-0038	530-0039	530-0044	53-0014	–	–	50-0192	–	53-0034
4 $\frac{1}{8}$ " - 4 $\frac{1}{4}$ "	S&S® X-Wedge®	–	106-0837	106-0835	53-0014	106-0840	–	–	–	53-0034
4 $\frac{3}{8}$ " - 4 $\frac{7}{16}$ "	S&S 4 $\frac{3}{8}$ " Pattern	53-0055	53-0056	53-0057	53-0014	–	–	50-0192	–	53-0034
4 $\frac{1}{8}$ "	Stock 1999–up big twin	53-0054	106-3190	530-0060	53-0014	–	–	–	500-1053	53-0034
4 $\frac{1}{8}$ "	S&S 4 $\frac{1}{8}$ " Pattern	53-0051	53-0052	53-0053	53-0014	–	50-0191	–	–	53-0034
3.927" - 4"	Stock 1999–up big twin	–	–	53-0050	53-0014	–	–	50-0192	–	53-0034
4"	S&S 4" Pattern	–	–	–	53-0014	–	50-0191	50-0192	–	53-0034
3 $\frac{5}{8}$ "	1984–'99 big twin	53-0016	53-0017	53-0018	53-0014	–	–	50-0192	–	53-0034
3 $\frac{5}{8}$ "	1984–'03 Sportster®	53-0016	53-0017	53-0018	53-0014	–	–	50-0192	–	53-0034

S&S Cylinder torque plate kits are intended for aluminum cylinders including 1984–'99 Harley-Davidson® Evolution® big twin engines, 1986–'03 Sportster models, and 1999–up Twin Cam 88® engines.

S&S® CYLINDER TORQUE PLATE KITS

Bore Size	Case Bolt Pattern	Part #
4.25	2017–up M8	530-0038
4 $\frac{3}{8}$ " - 4 $\frac{7}{16}$ "	S&S 4 $\frac{3}{8}$ " Pattern	53-0055
4 $\frac{1}{8}$ "	Stock 1999–up big twin	53-0054
4 $\frac{1}{8}$ "	S&S 4 $\frac{1}{8}$ " Pattern	53-0051
3 $\frac{5}{8}$ "	1984–'99 big twin	53-0016
3 $\frac{5}{8}$ "	1984–'03 Sportster®	53-0016

S&S Cylinder torque plate kits are intended for aluminum cylinders including 1984–'99 Harley-Davidson® Evolution® big twin engines, 1986–'03 Sportster models, and 1999–up big twin engines.

HEAD END PLATE

Bore Size	Case Bolt Pattern	Part #
4.25"	2017–up M8	530-0039
4¼"	S&S® X-Wedge®	106-0837
4¾"	S&S 4¾" Pattern	53-0056
4⅞"	Stock 1999–up big twin	106-3190
4⅞"	S&S 4⅞" Pattern	53-0052
3⅝"	1984–'99 big twin	53-0017
3⅝"	1984–'03 Sportster®	53-0017

BASE END PLATE

Bore Size	Case Bolt Pattern	Part #
4.25"	2017–up M8	530-0044
4¼"	S&S® X-Wedge®	106-0835
4¾"	S&S 4¾" Pattern	53-0057
4⅞"	Stock 1999–up big twin	530-0060
4⅞"	S&S 4⅞" Pattern	53-0053
4"	Stock 1999–up big twin	53-0050
3⅝"	1984–'99 big twin	53-0018
3⅝"	1984–'03 Sportster®	53-0018

STOP ARM

Bore Size	Case Bolt Pattern	Part #
All	All	53-0014

BOLT ⅜"-24 X 6"

Bore Size	Bore Size	Part #
4¼"	S&S® X-Wedge®	106-0840

BOLT 7/16"-20 X 6"

Bore Size	Case Bolt Pattern	Part #	
4⅞"	S&S® 4⅞" Pattern	<i>Each</i>	50-0191
		<i>4 pack</i>	50-0191P
4"	S&S 4" Pattern	<i>Each</i>	50-0191
		<i>4 pack</i>	50-0191P

BOLT 7/16"-20 X 7"

Bore Size	Case Bolt Pattern	Part #	
4.25"	2017–up M8	<i>Each</i>	50-0192
		<i>4 pack</i>	50-0192P
4¾"	S&S 4¾" Pattern	<i>Each</i>	50-0192
		<i>4 pack</i>	50-0192P
4"	Stock 1999–up big twin	<i>Each</i>	50-0192
		<i>4 pack</i>	50-0192P
4"	S&S 4" Pattern	<i>Each</i>	50-0192
		<i>4 pack</i>	50-0192P
3⅝"	1984–'99 big twin	<i>Each</i>	50-0192
		<i>4 pack</i>	50-0192P
3⅝"	1984–'03 Sportster®	<i>Each</i>	50-0192
		<i>4 pack</i>	50-0192P

BOLT M10 x 1.5MM x 160MM

4⅞"	Stock 1999–up big twin	<i>Each</i>	500-1053
		<i>4 pack</i>	500-1052

WISE TAB

Bore Size	Case Bolt Pattern	Part #
All	All	53-0034

TAB BOLT 5/16"-18 X 1"

Bore	Case Bolt Pattern	Part #
All	All <i>3987</i>	<i>Each</i> 50-0108

DEGREE WHEEL KIT

- Multipurpose S&S® degree wheel can be used to do ignition timing, crankcase breather timing, cam degreering, or you name it
- Designed to fit the sprocket shaft of any big twin or Harley-Davidson® Sportster® model simply by using the correct adapter provided
- Each kit also comes with a pointer which is held in place with the center crankcase bolt

**S&S DEGREE WHEEL KIT**

Description	Part #
Kit	53-0020
Adapter for Sportster® models (1 Each)	53-0023
Adapter for big twin (1 Each)	53-0024
Pointer (1 Each)	53-0025
Degree wheel and main adapter assembly (1 Each)	53-0026

CRANKPIN NUT CLEARANCING GAUGES

- Designed to simplify and eliminate clearancing problems that may arise when installing stroker flywheels in stock big twin crankcases
- By painting the bosses to be clearanced and then placing the appropriate gauge on the main bearing race, the crankcases can be marked with a scribe in the proper hole for the stroke and style connecting rod crankpin nuts to be used—*quickly and precisely.*



S&S® CRANKPIN NUT CLEARANCING GAUGES

Description	Part #
1958–'99 Big Twin Gauge	53-0005

ANTI-ROTATION BRACKET

This handy bracket slides over the sprocket shaft splines of big twin engines and bolts to one of the primary bolt holes of the crankcase to keep the crank from rotating. It's like an extra set of hands while installing pistons and cylinders.



Fitment	Part #
1970–2006 Big Twin (except '06 Dyna®)	50-9870
2007–up Big Twin, 2006 Dyna®	530-0018

50-9870

CRANKCASE OIL PASSAGE DRILLING JIG

DRILL JIG IS USED TO DRILL...

- Primary chain oil supply passage from the breather valve gear cavity to the back side of the oil pump body on late generator and early alternator crankcases.
- Pressure relief passage from behind the main oil pressure valve to the gear cavity on alternator crankcases.
- Crankshaft and main bearings supply passage on generator crankcases.
- Crankshaft and main bearings supply passage on early alternator crankcases.



S&S CRANKCASE OIL PASSAGE DRILLING JIG

Description	Part #
The S&S crankcase oil passage drilling jig is used to perform crankcase drilling modifications when installing an S&S oil pump assembly on early big twin crankcases. Made of hardened steel for durability, this fixture enables the builder to do four modifications.	53-0013

TAPPET BLOCK ALIGNMENT TOOL

- Aligns tappet block so the tappet rollers run straight on the cam lobe to prevent camshaft wear



S&S® TAPPET BLOCK ALIGNMENT TOOL

Description	Part #
Tool, Tappet Guide, Alignment	530-0014

S&S® OIL

FEATURES AND BENEFITS

- Ultimate protection
- Superior lubrication for reduced engine wear and lower oil temperatures
- Provides consistent viscosity, and resists thermal breakdown and oxidation at elevated temperatures
- Includes a oil drain plug oring for convenience

S&S® OIL CHANGE KIT—EVERYTHING YOU NEED FOR A COMPLETE OIL CHANGE!

Description	Part #
Harley-Davidson® big twin & Sportster® Models with Evolution® engines (using OEM filter #63796-77A, 63806-83, 63805-80A) 4 quarts of SAE 20W-50 Synthetic Engine Oil with chrome oil filter	3601-0412
Harley-Davidson® Twin Cam 88®/96™/103™/110™ engines (using OEM filter #63798-99, 63731-99A) 4 quarts of SAE 20W-50 Synthetic Engine Oil with chrome oil filter	3601-0413
2017–2019 Harley-Davidson® Models with Milwaukee-Eight® engine 5 quarts of SAE 20W-50 Synthetic Engine Oil with chrome oil filter	3601-0492

S&S® OIL

Description	Part #
20W50 Synthetic, 1 quart	3601-0407
20W50 Synthetic, 2.5 Gallon	3601-0408
Primary, Synthetic, 1 quart	3603-0044
80W140 Gear, Synthetic, 1 quart	3604-0007
Chain/Gear, Synthetic, 1 quart	3604-0008



OIL FILTERS

FEATURES AND BENEFITS

- Captures smaller particles than stock filters
- Low restriction to oil flow
- Direct bypass—bypass oil does not pass over dirty filter media
- Smaller diameter for easier installation
- Black or chrome finish



S&S® OIL FILTERS

Year Application	Micron Rating	QTY	Chrome	Black
1984–'99 Evolution®, 1986–'17 XL and 1991–'02 Buell®	30μ	each	31-4102A 63796-77A	31-4101A 63805-80A
		12 pack	310-0240	310-0239
1999–'17* Twin Cam 88®/96™/103™ and all X-Wedge®	10μ	each	31-4104A 63798-99A	31-4103A 63731-99A
		12 pack	310-0242	310-0241

*Contains an anti-drain back valve

CHAMPION® SPARK PLUGS



CHAMPION® SPARK PLUGS

Application	Size	QTY	Part #
Twin Cam 88®/96™/103™, Sportster®, X-Wedge® & S&S 4½" bore engines	12mm Long Reach Champion® #RA8HC	each	55-1320 32317-86A, 32362-04
		2 pack	55-1322 32317-86A, 32362-04
Evolution®, Vintage Models (SH-Series, Iron XL, KN-Series, P-Series) & S&S 3¾" & 4" bore engines	14mm Long Reach Champion® #RN12YC	each	55-1321 32342-04, 32311-83
		2 pack	55-1323 32342-04, 32311-83

JETS & CARB REBUILD KITS FOR S&S SUPER E & G CARBURETORS

For those who need to rejet their carburetor because of engine modifications, exhaust modifications, or changes in altitude, we have extra jet kits available which are designed to cover most jetting situations.

DEALER JET KITS

Description	Part #
S&S Jet Kit (Includes 3 each of all intermediate jets and 5 each of all main jets, plus a main jet tool)	11-3102

 WARNING: Cancer and Reproductive Harm




JET PACKS

Description	Part #
Low Range Jet Pack — For jetting most stock and moderate performance engines	
Includes one each intermediate jets (.025", .0265", .028", .0295") one each main jets (.062", .064", .066", .068", .070", .072", .074").	11-7270

High Range Jet Pack — For jetting some stock and all performance engines	
Includes one each intermediate jets (.0295", .031", .032", .033") and one each main jets (.072", .074", .076", .078", .080", .082", .084").	11-7271

Master Jet Pack — For jetting all Super B, E, and G equipped engines	
Includes one each intermediate jets (.025", .0265", .028", .0295", .031", .032", .033") and one each main jets (.062", .064", .066", .068", .070", .072", .074", .076", .078", .080", .082", .084").	11-7272

 WARNING: Cancer and Reproductive Harm

INTERMEDIATE JETS — SERIES #94 INDIVIDUAL SELECTION

Size	QTY	Part #	Size	QTY	Part #
.025	each	11-0250	.032	each	11-0320
	3 pack	11-7107		3 pack	11-7112
.0265	each	11-0265	.033	each	11-0330
	3 pack	11-7108		3 pack	11-7113
.028	each	11-0280	.036	each	11-0360
	3 pack	11-7109		3 pack	11-7114
.0295	each	11-0295	.040	each	11-0400
	3 pack	11-7110		3 pack	11-7115
.031	each	11-0310	Blank	each	11-0000
	3 pack	11-7111			

 WARNING: Cancer and Reproductive Harm



11-7272



106-3517

Early Series #94 gas jets were stamped with single digit numbers. Conversions for these numbers are:

1.....	.025"	4.....	.033"
2.....	.028"	5.....	.036"
3.....	.031"	6.....	.040"

NOTE: No returns or exchanges on jets.

MAIN JETS — SERIES #72 INDIVIDUAL SIZE SELECTION±

Size	QTY	Part #	Size	QTY	Part #
.040	each	11-4040	.080	each	11-4080
	5 pack	11-7220		5 pack	11-7240
.042	each	11-4042	.082	each	11-4082
	5 pack	11-7221		5 pack	11-7241
.044	each	11-4044	.084	each	11-4084
	5 pack	11-7222		5 pack	11-7242
.046	each	11-4046	.086	each	11-4086
	5 pack	11-7223		5 pack	11-7243
.048	each	11-4048	.088	each	11-4088
	5 pack	11-7224		5 pack	11-7244
.050	each	11-4050	.090	each	11-4090
	5 pack	11-7225		5 pack	11-7245
.052	each	11-4052	.092	each	11-4092
	5 pack	11-7226		5 pack	11-7246
.054	each	11-4054	.094	each	11-4094
	5 pack	11-7227		5 pack	11-7247
.056	each	11-4056	.096	each	11-4096
	5 pack	11-7228		5 pack	11-7248
.058	each	11-4058	.098	each	11-4098
	5 pack	11-7229		5 pack	11-7249
.060	each	11-4060	.100	each	11-4100
	5 pack	11-7230		5 pack	11-7250
.062	each	11-4062	.102	each	11-4102
	5 pack	11-7231		5 pack	11-7251
.064	each	11-4064	.104	each	11-4104
	5 pack	11-7232		5 pack	11-7252
.066	each	11-4066	.106	each	11-4106
	5 pack	11-7233			
.068	each	11-4068	.110	each	11-4110
	5 pack	11-7234		5 pack	11-7255
.070	each	11-4070	.115	each	11-4115
	5 pack	11-7235		5 pack	11-7256
.072	each	11-4072	.120	each	11-4120
	5 pack	11-7236		5 pack	11-7257
.074	each	11-4074			
	5 pack	11-7237			
.076	each	11-4076			
	5 pack	11-7238			
.078	each	11-4078			
	5 pack	11-7239			

⚠️ WARNING: Cancer and Reproductive Harm

MAIN JET AIR BLEED KIT (ONE JET EACH SIZE)

Sizes	Part #
.042" - .060"	106-3517
.084" - .120"	106-3518

⚠️ WARNING: Cancer and Reproductive Harm — www.P65Warnings.ca.gov

S&S® CARBURETOR REBUILD KITS

To insure that you continue to get the utmost in performance from your S&S carburetor, we have put together a series of rebuild kits that are designed to provide the proper parts to return a worn carburetor to top shape. We have assembled different types of kits to cover the different degrees of rebuild necessary.

MASTER REBUILD KITS

Master rebuild kits contain a body rebuild kit, accelerator pump rebuild kit (Super E and G only), all new fasteners, springs, idle mixture screw, seat, and needle assembly. Everything needed to completely rebuild one carburetor.

MASTER REBUILD KIT

Description	Part #
Super E	11-2923
Super G	11-2924

⚠️ WARNING: Cancer and Reproductive Harm

BODY REBUILD KITS

Body rebuild kits for Super E and G carbs also contain throttle shaft nuts, nylon washers, accelerator pump o-ring, and accelerator pump boot. Body rebuild kits for Super E and G carbs do not contain throttle shaft bushings since these carbs have stainless steel throttle shaft bushings already installed.

BODY REBUILD KIT±

Description	Part #
Super E	11-2906
Super G	11-2907



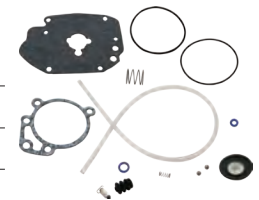
⚠️ WARNING: Cancer and Reproductive Harm

BASIC REBUILD KIT

A gasket and seal kit for low mileage Super E & G carbs. Perfect to reassemble carbs taken apart for inspection and cleaning.

BASIC REBUILD KIT

Description	Part #
Super E & G	110-0067



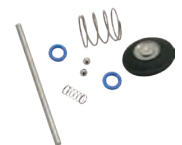
⚠️ WARNING: Cancer and Reproductive Harm

ACCELERATOR PUMP REBUILD KITS

Accelerator pump rebuild kits contain diaphragm, diaphragm spring, check balls, check ball spring, pump pushrod, and required hardware and o-rings.

ACCELERATOR PUMP REBUILD KIT

Description	Part #
Super E & G	11-2918



FUEL LINE KIT

Fuel Line Kit for Super E and G Carburetors p/n 190-0005±

FUEL LINE KIT

Description	Part #
Fuel Line, Kit, Carb, Super E/G, Swivel Retrofit	190-0005±
Fuel Line, .311" x .563" x 17.5", SAE 30R14 (replacement fuel line only)	190-0001

± ⚠️ WARNING: Cancer and Reproductive Harm



190-0005±



TOUCH UP PAINT, LUBRICANT AND SEALANTS



106-3023



51-9000



51-9009



51-9002



500-0143

TOUCH UP PAINT

Description	Part #
S&S touch up paint is included with each powdercoated S&S engine, but it's handy to have a spare! Keep one in the shop and one in your saddle bag. Sold in ½ oz. bottles with applicator cap.	
Wrinkle Black ½ oz, matte finish (used after April 2009)*	510-0053
Silver ½ oz	106-3023
Stone Gray ½ oz	510-0350

*NOTE: Wrinkle Black (51-9001) has a slightly glossy finish. Wrinkle Black (510-0053) has a matte finish with no gloss.

LUBRICANT AND SEALANTS

Use what the pros use! S&S assembles a lot of engines and customers often ask what sealants and lubricants we use. We recommend and use the following:

Torco® Engine Assembly Lube

Protect engine components during assembly and initial start up!

4 oz. Bottle	51-9000
1 oz. Tube	51-9002

Gasgacinch® Gasket Sealer

4 oz. (118ml) Can	51-9009
-------------------	---------

ThreeBond® Liquid Gasket 1194

Great for sealing crankcases! 3.5 oz. (100g) Tube	500-0143
--	----------

ENGINE STANDS

- An economical way to hold an engine on the work bench, for shipping, or for display
- Constructed of heavy gauge stamped steel with "S&S" laser cut in both ends
- Durable blue powder coat finish gives the stands a professional appearance that is suitable for display and protects them from corrosion and minor abrasions
- Exclusively for M8:
 - Designed to fit both touring and Softail® models, in one!
 - Unique "drop-in" design allows for safe and easy mounting



S&S® ENGINE STANDS

Application	Part #
M8 touring & 2018–2020 Softail® models	530-0068
2000–'17 balanced big twin	53-0145
1999–'17 unbalanced big twin	53-0143
1936–'99 big twin	53-0141
S&S X-Wedge®	53-0147

DEALER SERVICE KIT FOR STREET LEGAL EXHAUST



DEALER SERVICE KIT 510-0684

(Includes S&S proprietary tamper-proof bit (**available only to dealers**) and spare fasteners. Provides everything necessary to perform any required service or end cap replacement.)



1984–1999 Evolution® 1926–1984 Vintage Engines

Tools & Shop Supplies

Warranty & Company Policy

Appendix



WARRANTY & COMPANY POLICY

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WARRANTY SERVICE219



LIMITED WARRANTY STANDARD PARTS

WHO IS COVERED BY THIS WARRANTY?

This warranty covers only the original Consumer Purchaser of these parts and is not transferable.

WHAT DOES THIS WARRANTY COVER?

S&S® Cycle, Incorporated (the “Company”) warrants these parts to be free from defects in material and workmanship. If the parts become defective during the warranty coverage period, the Company will, at its option, repair or replace any, or all, defective parts. Repair or replacement of defective parts is the sole and exclusive remedy.

HOW LONG IS THE WARRANTY COVERAGE?

With the exception of electrical and electronic components, the warranty coverage remains in force for a period of twelve (12) months from the date that the original Consumer Purchaser buys the parts. Electrical and electronic components are covered by a warranty duration of six (6) months. However, warranty coverage will automatically terminate if the original Purchaser sells or otherwise transfers all or any portion of the purchased parts.

WHAT IS NOT COVERED BY THIS WARRANTY?

The Company shall not pay or be responsible for the cost of shipping the defective parts to the Company for service under this warranty, nor will the Company pay for the cost of labor to remove and/or replace the defective parts.

Moreover, the Company shall have no obligation under this warranty in the event that the parts become defective in whole or in part as a result of improper assembly, installation, break-in, maintenance, or use, or any other misuse or mistreatment of the parts, including, without limitation, operation of the parts with fuels, oils or lubricants not conforming to specifications published by the Company or continued operation of the parts after a defect or malfunction occurs or is identified or suspected.

The Company shall have no obligation under this warranty for defects in parts with a powdercoat finish, when that option is selected, if the defects are caused by, but not limited to, negligence of parties other than the Company; an accident; ordinary wear and tear; assembly or disassembly; power washing; natural occurrences like stone chips; bead blasting; improper maintenance including the use of any harsh cleaning agent, chemical or solvent; and salt or other substances used on streets and highways for maintenance and safety.

The Company provides touch-up paint with powdercoated parts. It is the customer's responsibility to repair minor finish damage to prevent or inhibit further deterioration.

It is the responsibility of the original Consumer Purchaser to cease operation as soon as a defect or malfunction is identified or suspected. The failure to cease operation once a defect or malfunction exists can cause substantial damage to the Company's parts that could otherwise be avoided.

In addition, the Company shall have no obligation under this warranty for parts defects caused by alteration including, but not limited to, polishing; powdercoating; painting; removing or reconfiguring any components; modification, repair, or unauthorized service.

The Company shall have no obligation under this warranty if the parts are used in racing or similar competitive activities. The Company shall have no obligation under this warranty when a competition application, including but not limited to a turbocharger, supercharger or nitrous oxide, is used with the Engine. Further, the Company shall have no obligation under this warranty for any parts that are included in a Competition Package Option offered by the Company since the Package is for use in racing and similar competitive activities.

THE COMPANY SHALL NOT BE LIABLE FOR AND DISCLAIMS ALL CONSEQUENTIAL, INCIDENTAL, PUNITIVE OR SPECIAL DAMAGES ARISING OUT OF THE USE OF, OR INABILITY TO USE, THESE PARTS.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

VIDEO USAGE POLICY

OVERVIEW

S&S owns all copyright and other intellectual property rights in the videos it produces or distributes. However, S&S customers are welcome to use and share S&S videos within these guidelines provided.

PERMISSIBLE USES

- Videos may only be used for non-commercial purposes or to promote the use or sale of S&S products.
- Videos may be embedded in external websites using video hosting service supplied embed (iframe) code.
- Videos can be added to a customer video hosting service account via playlists while still maintaining original exclusivity of uploaded videos by S&S.
- Reposting or uploading of S&S content is only permissible with written consent from S&S Cycle.
 - If consent is granted to repost/re-upload S&S content, customers may add annotations using functionality provided by video hosting services. This may include the customer's contact and ordering information which would be subject to approval by S&S to ensure branding is intact, prior to making it public. The video itself must remain unaltered.
 - S&S requires that at the beginning of each month, a report of view statistics per video be supplied to S&S.
- Links (url) to S&S YouTube channel or individual YouTube videos may be provided and shared by the customer via email, blog, website, social networks, or printed material.

NON PERMISSIBLE USES

- Customers may not upload or repost any copyrighted materials owned by S&S to another video hosting service account or any website without written consent from S&S.
- Customers may not alter or modify any copyrighted materials owned by S&S.
- Videos may not be used in any way that is likely to disparage, dilute, tarnish, or otherwise harm the S&S brand.

TERMINATION OF LICENSE

Through this Video Usage Policy, S&S is granting its customers a limited, revocable license to display or link to its videos. S&S may, at any time, and at its sole discretion, terminate this license, at which point any copying or display of its videos will be prohibited, unless otherwise specified in writing.

APPENDIX



APPENDIX

IDENTIFICATION OF FLYWHEELS224

ORDERING S&S MANIFOLDS..... 225

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IDENTIFICATION OF FLYWHEELS

S&S® flywheels are manufactured in sets only. We do not sell individual right or left flywheels, nor do we recommend mixing flywheels. This is because the manufacturing techniques and/or tooling changes periodically.

To prevent mixing flywheels, as well as to identify each set, the right and left flywheels are stamped with identical serial numbers (see picture).

SERIAL NUMBER IDENTIFICATION INFORMATION

Serial Number ID, B01810-3SLX, deciphered as follows:

- (B01810)** Serial Number: From this number, S&S can determine when the flywheels were made and sold, to whom they were sold, and how the flywheels were originally balanced
- (3)** Stroke Code: Determines the stroke of the flywheels In this case the stroke is 4¾"
- (SL)** Year Code: The year of the engine the flywheels were machined to fit and that the flywheels were machined to accept an S&S design sprocket shaft
- (X)** Diameter Code: Diameter of the flywheels In this case the diameter is 8¼"



Flywheel Serial Number

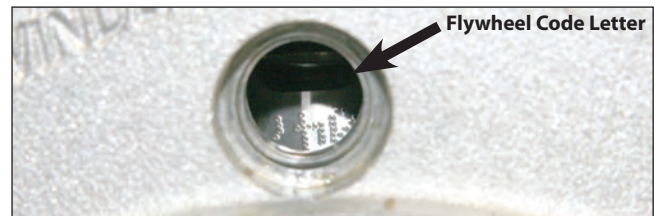
S&S® FLYWHEEL IDENTIFICATION CODES FOR 1936–UP BIG TWIN

Stroke Code	Stroke	Year Code	Engine Year	Sprocket Shaft	Pinion Shaft	Crankpin Type	Diameter Code	Flywheel Diameter
1	4¾"	E	1936–'54	Stock	Stock	1941–'81	None	8½" (Stock)
2	4½"	L	1955–'71	Stock	Stock	1941–'81	A	8¾"
3	4¾"	AL	1972–Early '81	Stock	Stock	1941–'81	X	8¼"
4	5"	SE	1955–Early '81	S&S	Stock	1941–'81		
5	4¼" (Stock 80")	BL	Late 1981–'99	Stock	Stock	1981–'99		
6	4¾"	SL	Late 1981–'99	S&S	Stock	1981–'99		
9	Special order	SF	1999–up	Press In	Press In	Press In		
12	5¼"	SG	S&S 4½" Bore	Press In	Press In	Press In		
13	3½" (Stock 61")	SM	1995–'99 EFI	Press In	S&S	1981–'99		
14	3¾" (Stock 74")	Y	74"/80" Indian®	Stock	Stock	Stock		
16	5½"							
17	4"							
18	3¾"							
19	4½"							
TA	3¾"	Titan Special						
TB	4450"							

FLYWHEEL CODES:

Codes that pertain to the most common regular production flywheels have been listed. Many other codes for racing flywheels and special orders also exist. If you have a question about a set of S&S flywheels with codes different than those shown, contact an S&S technical assistant to properly identify what you have.

Flywheel ID codes that end with an "A" or an "X" designate flywheels with a smaller than stock diameter. Stock big twin flywheels measure 8½", and stock flywheels for Harley-Davidson® Sportster® models are 7¾" in diameter. Typically, "A" means ⅛" smaller, and "X" means ¼" smaller. To verify the code, it is best to measure the flywheels



Flywheel Code Letter

Serial numbers can be seen through the timing hole to identify the stroke of an assembled engine. Keep in mind they will appear upside down in the hole

S&S® FLYWHEEL IDENTIFICATION CODES FOR HARLEY-DAVIDSON® SPORTSTER® & BUELL® MODELS

Stroke Code	Stroke	Year Code	Engine Year	Sprocket Shaft	Pinion Shaft	Crankpin Type	Rod Bearing Type	Diameter Code	Flywheel Diameter
1	4½"	None	1957–'76	Stock	Stock	Stock	Stock	None	7½" (Stock)
2	4¾"	B	1957–Early '81	Stock	Stock	Stock	Stock	A	7¾"
3	4¾"	SB	1957–Early '81	S&S	Stock	Stock	Stock	X	7⅝"
4	4½"	BD	1957–Early '81	Stock		Stock	Stock		
6	4¾"	SBD	1977–Early '81	S&S		Stock	Stock		
7	4¾"	C*	Late 1981–'85	Stock	Stock	Stock	Stock		
8	5"	SC	Late 1981–'85	S&S	Stock	Stock	Stock		
9	Special Order	SCD	Late 1981–'85	S&S		Stock	Stock		
11	4½"	SCR	Late 1981–'85	S&S	Stock	Stock	1987–Up		
12	5¼"	SCDR	Late 1981–'85	S&S		Stock	1987–Up		
15	3¾"	D	Late 1986–'03	S&S	S&S	S&S	S&S		
16	5½"	DR	Late 1986–'03	S&S	S&S	S&S	1987–Up		
17	4"	PS	S&S Prostock	Press In	Press In	Press In			
18	3¾"	KRS	45" WR/KR	Stock	Stock	1957–'81 XL	1957–'81 XL		
19	4½"	YS	45" Indian	Stock	Stock	Stock	Stock		

* Obsolete – S&S no longer makes this design

ORDERING S&S® MANIFOLDS

We make one style of manifolds for both Harley-Davidson® Evolution® and Twin Cam 88® engines to fit stock cylinder heads and S&S cylinder heads—meaning manifolds supplied in S&S carburetor kits can be used with stock or S&S Super Stock® cylinder heads. The only thing that you have to keep in mind is that due to the slightly larger port diameter, these manifolds must be used with S&S manifold seals.

REPLACEMENT & SPECIAL ORDER INTAKE MANIFOLDS

Stock, S&S Engine or S&S Kit: To order a replacement manifold, refer to the manifold size chart for your particular engine type. Manifolds are listed for various sized carburetors and throttle bodies in the correct lengths for engines and kits offered by S&S.

Custom Engine: If the effective cylinder length is different from the standard offerings, a special manifold can be machined to your specifications. Order manifolds using the special order part numbers listed in the charts. Allow two weeks for delivery.

SPECIFYING MANIFOLD LENGTH

When ordering a special manifold, specify the length of the manifold required for your application. There are several methods to specify the length of a manifold:

PORT-TO-PORT DISTANCE: S&S MANIFOLD MEASURING TOOLS

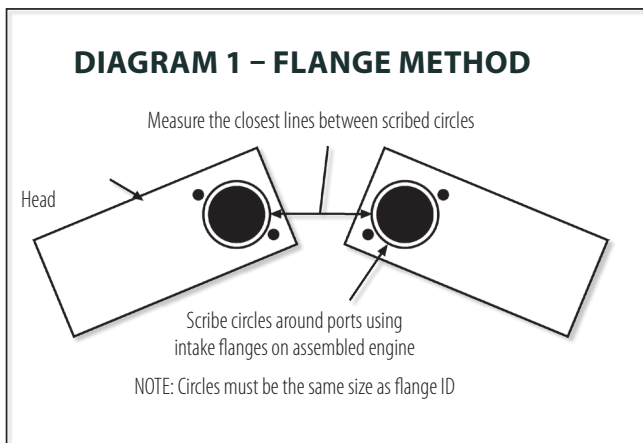
The most accurate method for specifying length for a special order manifold:

- Use the S&S Manifold Measuring Tools to measure port-to-center to port-to-center distance on an engine or an existing manifold.
- Specify whether the measurement was from an engine or from an existing manifold. (Manifold measurements will be approximately 0.30" shorter than engine measurements due to clearance normally built into the manifold).

PORT-TO-PORT DISTANCE: FLANGE METHOD

Another accurate method of specifying manifold length for special order is to measure the port-to-port distance on an assembled or mock-up engine :

- Assemble or mock-up the engine & install the intake flanges on heads
- Scribe a circle around the port using the mounting flange as a template. The circle must be the same size as the ID of the flange. (It is recommended that front flange be installed upside down on the rear head and vice versa, to avoid inaccuracy in the circle diameter).
- Remove the flanges and measure the shortest distance between the scribed circles. See Diagram 1.



EFFECTIVE CYLINDER LENGTH

Ordering a special manifold by effective cylinder length is commonly used since it does not require any special tools, however, this method will not account for machining inaccuracy in the cases or heads.

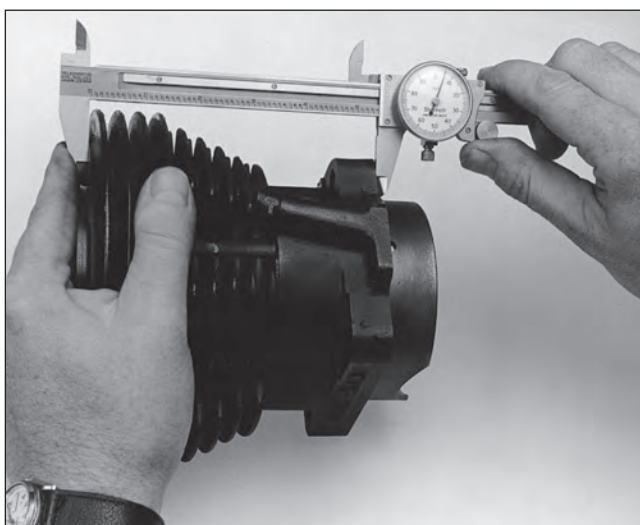
- Measure the cylinder length from gasket-surface to gasket-surface without the head and base gaskets in place. (A precision measuring instrument, such as a dial caliper, should be used to insure accurate results).
- If all components except the cylinder are stock, the actual cylinder length and the effective cylinder length are equal. However, if base plates will be used under the cylinders or if the crankcase deck height is taller than stock, the thickness of the base plates and any extra base gaskets, or the change in deck height must be added to the cylinder length to determine the effective cylinder length.
- If the cylinder heads have been decked to increase compression, the amount they have been shortened must be subtracted from the effective cylinder length.
- If the effective cylinder length is equal to or no more than 0.30" longer than the cylinder length listed for a specific manifold in a chart, that manifold will fit the engine.
- If the effective cylinder length is significantly different from any manifold that is available, the manifold must be special ordered. (When placing an order for a special manifold by effective cylinder length, you will be asked for actual dimensions of the cylinders and other components. S&S will calculate the effective cylinder length).

MANIFOLD SIZE NUMBER

Specifying the length of a special order manifold by size number has proven not to be a reliable method. Many manifolds ordered by this method have proved to be too long because the customer took a size number from a part that had been shortened and no longer matched the original specifications. Manifolds ordered by size number are not returnable because of fitment problems.

MANIFOLDS FOR PANHEAD & KNUCKLEHEAD ENGINES

Port-to-port measurement is easy since the ports are parallel to each other. On an assembled or mocked up engine, a measurement from head-to-head on opposite sides of each port should ideally be taken before the head bolts and base nuts are tightened. To insure that the ports are parallel, the heads and cylinders should be positioned so both measurements are equal. A precision measuring instrument, such as a dial caliper, should be used to ensure accurate results.



YEAR CODES FOR OUR SERIALIZED PRODUCTS

S&S serial numbers begin with the following manufacturing year codes Year codes coincide with S&S Cycle's fiscal year, which starts on Oct 1st of the previous calendar year A product with serial number beginning with the letter "A" was manufactured in fiscal year 1978, between 10-01-77 and 09-31-78, or in the fiscal year 2000

A	1978	R	1992	I	NOT USED
B	1979	S	1993	J	2008
C	1980	T	1994	K	2009
D	1981	U	1995	L	2010
E	1982	V	NOT USED	M	2011
F	1983	W	1996	N	2012
G	1984	X	1997	O	NOT USED
H	1985	Y	1998	P	2013
I	NOT USED	Z	1999	Q	NOT USED
J	1986	A	2000	R	2014
K	1987	B	2001	S	2015
L	1988	C	2002	T	2016
M	1989	D	2003	U	2017
N	1990	E	2004	V	NOT USED
O	NOT USED	F	2005	W	2018
P	1991	G	2006	X	2019
Q	NOT USED	H	2007	Y	2020

OLDER S&S® CARBURETOR REPLACEMENT PARTS

When ordering parts for older S&S carburetors, it is necessary to determine the correct style of float, needle and bowl S&S has used two different mechanisms to connect the float to the inlet needle

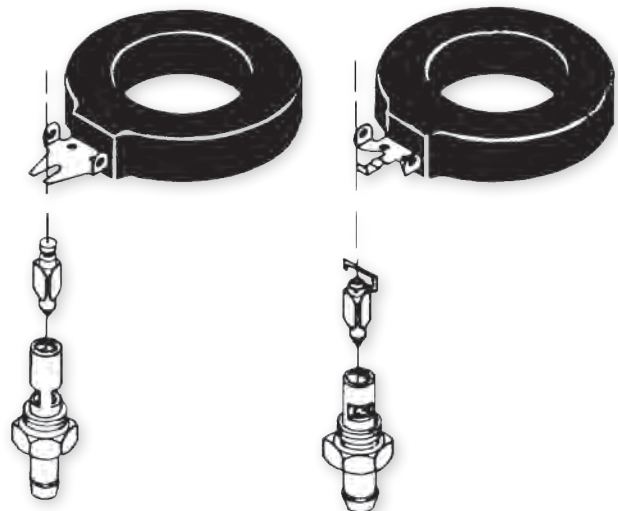
FORKED MECHANISM: Older style that utilizes a forked float tang, which slides into a slot in the top of the needle

WIRE MECHANISM: Current style that features a needle with a wire hook which attaches to the tang of the float

Parts of differing styles may not be used together For example, although the carburetor bowls of the two styles look very similar, they are not interchangeable due to differences in the float retaining pin position Some parts are no longer available for carbs with forked style mechanisms If these parts must be replaced, the entire bowl assembly must be replaced with wire mechanism style components

**FORKED TYPE MECHANISM
(OBSOLETE)**

WIRE TYPE MECHANISM



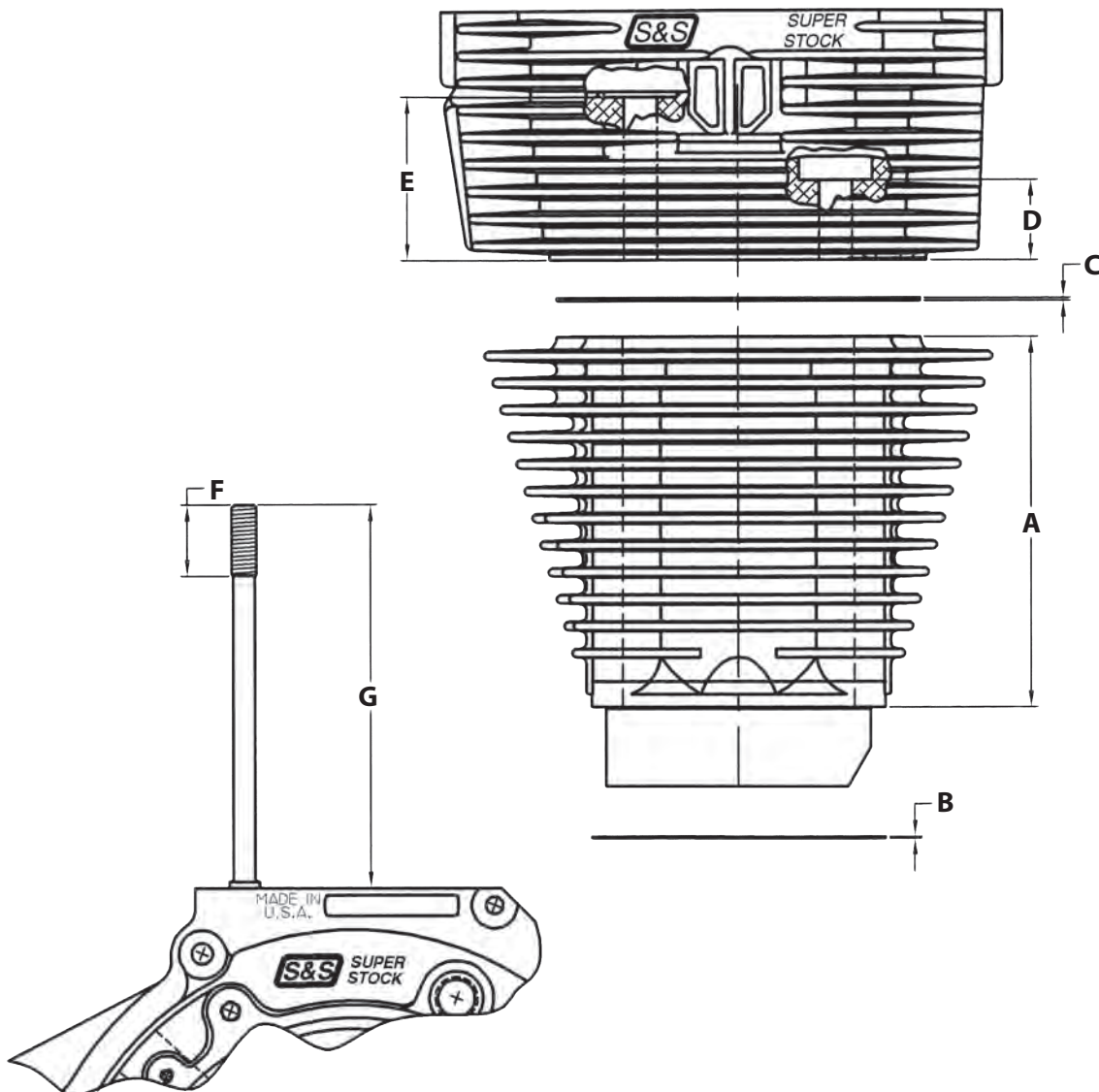
CALCULATING CUSTOM HEAD BOLT LENGTHS

Add:

- A** **Cylinder Length**
(Gasket surface to gasket surface measurement)
- + B** **Base Gasket Thickness**
- + C** **Head Gasket Thickness**
- + D or E** **Cylinder Head Thickness**
(Gasket surface to head bolt washer pad measurement:)
- D** **Short Side**
All S&S = 1.207"
Late 1985-'90 Stock = 1.207"
1991-up Stock = 1.405"
- E** **Long Side**
All S&S = 2.700"
All Stock = 2.700"
- + F** **Desired thread engagement .563"**
Usually 1½ times stud diameter - stock studs are ¾"

Subtract:

- G** **Cylinder Stud Installed Height**
(Crankcase deck to top of stud measurement)



Discover other motorcycle engine parts on our website.

