

# Modern Vintage

## FLATHEAD POWER® KN-SERIES ENGINES

For 1936-'99 Big Twin Chassis

Flathead Power KN-Series engines are very close in appearance to a stock knucklehead engine, but offer a number of modern features for more power, better engine life, and improved reliability. The main improvement in design is the 1958-'65 style flywheel assembly, which uses a splined sprocket shaft and Timken® sprocket shaft bearing. This necessitates the use of a 1955-'64 style inner tin primary cover and primary chain sprocket. Flathead Power rocker arm cover "tins" are another modern improvement. The KN93 is a standard compression 93" engine and is available with authentic generator style crankcases for early style chassis, primary and transmissions, and with alternator/generator style cases for use with 1970 and later primary covers and late style transmissions. The The KN-Kone motor combines the look of a knucke, with the bullet-proof design and charging system of the 1970-'99 style alternator lower end. The KN74 is ideal for bikes with stock drive train – wont' break your stuff!

### FITMENT

#### KN74

- 1936-'99 chassis

#### KN93

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

#### KN-Kone

- 1970-'98 big twin
- 1999 chassis originally equipped with a Harley-Davidson® Evolution® engine
- Can also be installed in earlier chassis if a transmission with a 1970-up mainshaft is used

### FEATURES AND BENEFITS

- Natural crankcases and black powdercoated 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 and 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
- Alternator style crankcase – *allows the use of modern primary, transmission, clutch components and electrical system*
- One-year warranty

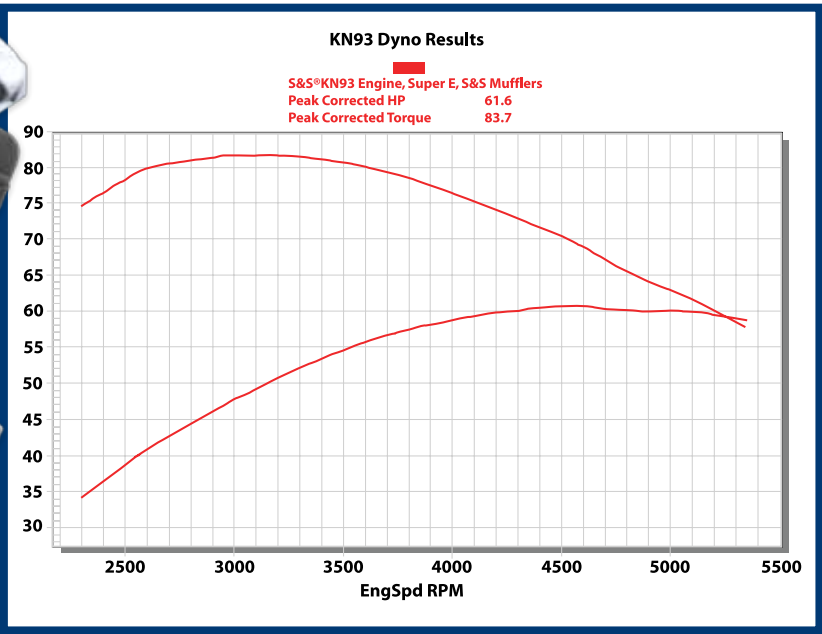


KN-Kone named  
V-Twin's 2011  
Engine of the Year

# Flathead Power®

By S&S® Cycle





**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 #31-2017 (included).
- Alternator/generator engines require a transmission with 1970-Up length main shaft, and custom exhaust pipes must be fabricated.

**S&S® KN-SERIES ENGINE SPECIFICATIONS**

Engine	Displacement	Bore	Stroke	Carb	Camshaft	Piston Type	Compression Ratio
KN74	74"	3 <sup>1</sup> / <sub>16</sub> "	3 <sup>3</sup> / <sub>2</sub> "	Super E	FHP 346	S&S Forged	7.5:1
KN93	93"	3 <sup>5</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>2</sub> "	Super E	FHP 420	S&S Forged	8.2:1
KN-Kone	93"	3 <sup>5</sup> / <sub>8</sub> "	4 <sup>1</sup> / <sub>2</sub> "	Super E	FHP 420	S&S Forged	8.2:1

*Not legal for sale or use on CA or EPA pollution controlled vehicles, 1978 and later.*

**PART NUMBERS**

- KN74 Generator Style ..... **310-0025**
- KN93 Generator Style ..... **106-2161**
- KN93 Alternator/Generator Style..... **106-2560**
- KN-Kone Alternator Style..... **310-0006**

CTO allows you to choose from a wide range of options including colors, finishes, displacement, camshaft configuration and many other performance enhancements. Build the powertrain of your dreams as you carefully select from the radically stroked crankshaft all the way up to that beautiful rocker box finish!

S&S KN-Series engines provide the classic vintage look with modern technology. New this year is the KN74. 74 cubic inches for hardcore vintage buffs.

**CTO PART NUMBERS**

Engine, Assembled, KN74/KN93, Made to Order . . . . . **319-0001**

**CTO ORDERING INFORMATION**

Please provide the following information when ordering an S&S KN74/KN93 engine:

- Displacement? (74" or 93")
- Gearcover Style? (8 Rib, 4 Rib, Polished Billet)
- Crankcase Style? (Gen/Gen, Alt/Gen or Alt/Alt)
- Crankcase Color? (Natural, Silver, Sidewinder Black, Semi-gloss Black, Polished)
- Air Cleaner? (Teardrop, Desperado or Raised Letter)
- Rocker Box? (Natural or Polished)
- Rocker Cover Tins? (Chrome, Gloss Black or Silver)
- Any special information that S&S should know to make sure the correct parts are shipped

## FLATHEAD POWER® CYLINDER HEADS FOR KNUCKLEHEAD ENGINES



Cylinder heads for Flathead Power KN-Series engines and stock knuckle engines are available assembled or unassembled. Unassembled heads include valves, springs, and guides, but valve guides are not installed to allow the use of stock tins. Assembled heads are complete and ready to install. Both assembled and unassembled heads offer your choice of 14mm or 18mm spark plug holes, and stock or o-ring style intake nipples. Assembled heads also offer choices of as-cast or polished knuckle housings and silver, black, or chrome upper tins. Prices depend on options.

**Made to Order** ..... **106-4929**  
**Base Price** ..... MSRP \$1,500.00  
**Options:**  
 18mm Spark Plug Hole ..... MSRP \$50.00  
 Fully Assembled ..... MSRP \$1645.00

**NOTES:**

- Cylinder heads for KN-Series engine or stock knucklehead that is set up for Flathead Power® tins have valve guides installed. Guides are not installed for heads that are set up for stock tins.

## FLATHEAD POWER® HIGH EVACUATION BREATHER GEARS FOR 1936-'99 BIG TWIN

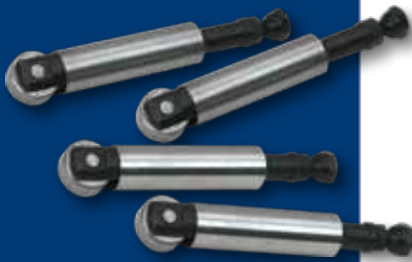


Reduce oil leaks from knuckle valve cover "tins" with the new high evacuation breather gear. Elongated vacuum hole increases duration of suction on oil return suction passage doubling oil return vacuum to the top end. Better oil return, less leakage.

**S&S® EVACUATION BREATHER GEAR KITS FOR 1936-'47 OHC BIG TWIN**

Year of Camshaft	Standard Size	MSRP	+ .030" Oversize	MSRP
1936-'47	<b>106-6010</b>	\$115.10	<b>106-6013</b>	\$115.10

## FLATHEAD POWER® TAPPETS AND TAPPET GUIDES FOR KNUCKLEHEAD ENGINES



These quality tappets fit 1936-'47 Harley-Davidson® knucklehead engines and Flathead Power® KN-Series engines for 1936-'47 chassis. Tappet assemblies include adjusting screw and locking nut. Available in standard and +.005" diameter.

**Tappet Set Standard**  
 MSRP \$394.44 ..... **106-1819**  
**Tappet Set +.005"**  
 MSRP \$394.44 ..... **106-1820**



These cast iron tappet guides are machined for stock oil scavenging passages and feature a stock-appearing, but highly durable silver powdercoat finish. Mounting hardware and gaskets are included.

**Tappet Guide Set (Cast Iron)**  
 MSRP \$394.44 ..... **106-2410**  
**Gasket, Set, Tappet Guide**  
 MSRP \$2.52 ..... **106-2563**

## FLATHEAD POWER® ROCKER ARMS AND SHAFTS FOR 1936-'48 OHV BIG TWINS



Flathead Power rocker arm and shaft sets for KN-Series engines and stock Harley-Davidson® knuckle engines. Individual rocker arm and shaft kits are also available. All four arms and shafts are unique.

**Rocker Arms and Shaft Set (includes Hardware)**  
 MSRP \$615.94 ..... **106-2412**

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 By S&S® Cycle