

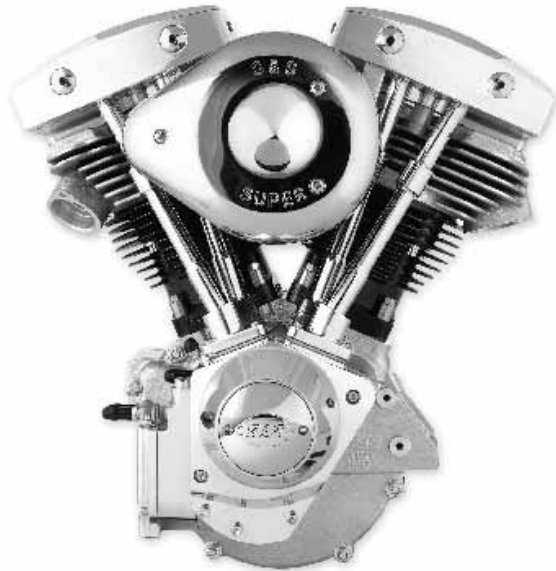
Section 1A

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Shovel

All Motors & Cases warranted direct by manufacturer only



S&S Engine Cases

(For stock 8-1/2" Flywheels only)

1970 to 1984 Shovel for 1936-84 chassis with cast aluminum primary chain cover (requires aluminum oil pump #26190-73 or S&S oil pump PC#316203)

- 310003 Standard Bore
- 310004 Big Bore

S&S 80" Shovelhead Style Engine 1970-84

The S&S 80" engine has long been a favorite with Shovel riders in spite of the fact that there have been larger engines available. The S&S cylinder heads, cam and carburetor provide improved performance, but the combination of stock stroke and cast pistons make for an engine that will last as long as stock, maybe longer. Includes S&S billet rocker and cam covers, rocker arms, tappets, and billet tappet guides.

S&S 80" assembled alternator Shovelhead style engine for 1970-84 chassis.

319902



Velva-Ride Engine Stabilizer BT 1980-on

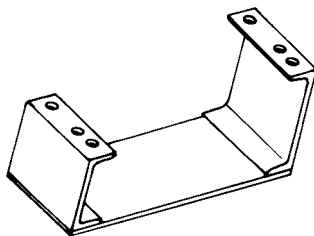
Features a stainless steel body, polished finish rod ends and a plunger with a urethane dampening which combine to act as a mini-shock absorber. Sold Each.

- 30055 Body polished with standard finish ends
- 40026 Body and ends (polished)



FLT-FXR Motor Mount Components

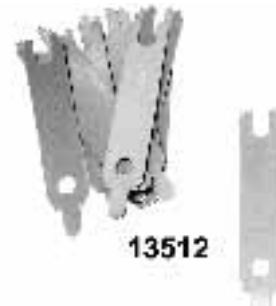
PCP	Description
40021	Front mount, black (16207-79B)
40022	As above chromed (16207-79B)
29010	Stabilizer link, zinc (16219-79B) upper or lower FLT, FXR 1980-on
40019	As above, chrome (16219-79B)
21000	Front bracket (47159-79A)



Big Twin Engine Stand

Perfect for Harley Engine repair. This bench stand works on all Big Twin engine cases 1936-on.

- 2831 Big Twin
- 31432 Sportster



Big Twin Motor Mount Shims

Fit on front and rear 1936-99.

PCP	Thickness
13512	.015 (10 pack)
13514	.036 (5 pack)
13515	.048 (5 pack)

Motor Case Hardware



77101



4634

Crankcase Breather Assembly

Mount your breather in plain view instead of hiding it behind your engine or transmission case. Comes complete with a one-piece filter molded to a lightweight chrome end cap, a chrome zinc die-cast mounting base with 5/16" inlet and a hose clamp. The hose clamp holds the filter to the base when the vent hose is installed.

- 77101** Complete Assembly
- 4634** Replacement Filter ONLY (no chrome)
2" diameter x 1/2" height



3847

5477

4903

Engine Skid Plate

These skid plates incorporate ribs to add strength. Fits Big Twin 4 speeds 1936-84 (replaces OEM: 24490-36)

- 3847** Chrome engine crash plate
- 5477** Highly polished stainless steel skid plate

Chrome Engine Skid Plate for FXR

This chrome plated skid engine plate is designed to protect engine cases from road hazards. It covers the unprotected area on 1982-88 FXR models.

- 4903** Engine skid plate



1758



1759



2896



5258



1690



3591

Timing Plugs

Acorn style plug fits all models Big Twin and Sportster timing plug holes and oil tanks with 5/18-18 drain holes.

1690

Acorn style plug with an oversize thread and one tap for rethreading the stripped out timing hole. Fits all Harley timing holes.

- 1758** Plug and tap
- 1759** Plug ONLY

Cap style plug fits all models for Harley Big Twin and Sportster timing plug holes and oil tanks with 5/18-18 drain holes.

- 2896** With 5/8 - 18" drain hole
- 5258** BT 81-Up 1/2-20 thread

New functional and custom design plug fits all models Harley Big Twin and Sportster timing plug holes and oil tanks with 5/18-18 drain hole. Oil fill on 45's to 1940.

- 3591** Chrome
- 5282** Cad
- 5283** Black oxide



Colony Oversize Timing Plug

3/4" Hex head with 11/16-16 thread.

- | PCP | Finish |
|-------------|------------|
| 9304 | Chrome |
| 9404 | Cad |
| 9714 | Parkerized |



5396

Upper and Lower Motor Mount Kit

Complete stock motor mount kit features heat treated, plated bolts, locknuts and heavy duty washers.

- | PCP | Application |
|-------------|---------------------------|
| 5396 | Shovelhead 1970-84 chrome |
| 5397 | As above, cad |

Motor Case Hardware



Complete Colony Motor Case Kits

Kits contain all the necessary hardware to bolt together the Harley motor cases. Each kit is packaged for the specific application. There are no universal "fits all" kits.

PCP	Big Twins	Style	Finish
5186	1970-78	Acorn	Chrome
1784	1970-78	Stock	Chrome
5187	1970-78	Stock	Cad
5188	1979-95	Acorn	Chrome
1804	1979-95	Stock	Chrome
5189	1979-95	Stock	Cad
1716	1948-64	Stock	Chrome
5183	1948-64	Stock	Cad
5184	1965-69	Acorn	Chrome
1752	1965-69	Stock	Chrome
5185	1965-69	Stock	Cad



Cylinder Base Studs

Precision formed with Rolled threads OEM replacement.

PCP	Fits
5472	1930-77 FX-FL 16831-30) (8 pk)
5473	1978-84 FX-FL (16837-78) (8 pk)
5474	1954-84 XL-XLH (16830-54) (8 pk)



Motor Case Drain Plugs

Reproduction of original Harley Davidson part fits most Big Twins 1930-on.

5172	Chrome Plated
1553	Cad Plated
9675	Parkerized



Cylinder Head Motor Brace Mounting Kit

Accurately reproduced studs, nuts, and washers used to mount motor brace to cylinder head.

PCP	Description
72368	1948-65 Panhead, parkerized
72369	1948-65 Panhead, cadmium
72370	1966-84 Shovelhead



Left Side Engine Case Seals

PCP	Application
11820	1940-54 61-74-80 (24776-40)
1754	1936-54 BT
1753	1955-68 BT (Colony) (24031-55)
14084	Seal only for OEM 24031-55
14085	1969 only BT (24031-69)
14016	1970-99 74 & 80 BT (5 pk) (12026B)
79067	James, as above
14041	1952-73 XL 900-1000 (5 pk) (35151-52A)
79347	James, as above
14042	1974-99 XL 883-1000-11000-1200 (5 pk) (35151-74)
79348	James, as above

Note: PCP# 1753, #1754 are a screw-in insert with integral seal. PCP# 11820 includes seal, spacer and snap ring.

BT Oil Pump



Billet Oil Pump Cover

Polished cover features late oil pressure relief to return excess oil to feed side of pump. Use with all aluminum oil pump bodies. No provision for front or rear chain oiling.

31161 BT 1973-91

Billet Oil Pump Cover

Polished cover is designed to fit models not having the oil tank under transmission. Features late oil pressure relief to return excess oil to feed side of pump. Use with all aluminum oil pump bodies. No provision for front or rear chain oiling.

31162 BT 1973-91



Jims Oil Pump Shaft Kit BT 1968-99

31193



Sifton Oil Pump Pressure Relief Plunger Tool

This tool is designed to safely remove the pressure relief plunger from oil pump without damaging the oil pump bore. This tool can also be used in priming of the oil system before startup. Use on all BT with aluminum type oil pump.

26152



Jims Polished Billet Aluminum Oil Pump

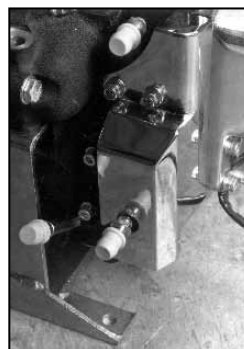
CNC machined Flow Pro 1 pump will provide an increase in oil return (scavenge) volume over stock pumps. Provides increased horsepower by decreasing drag on the flywheels and other rotating parts. Feed and return gears individually matched to each body. Available for late 1973-on BT 74" to 140" motors. 1981-on bolts on with no modifications. Note: 1973-80 cases will require a simple drilling for oil drain hole. Use Jims #2286 drilling tool.

31159 Oil pump body BT 1973-91

Chrome Tight Spot Oil Pump Fitting Set

Features a 5/16" allen socket for easy installation or removal. Includes 1/8" NPT nipples.

16329



Chrome Oil Pump Covers for Big Twins

These chrome covers were designed to bolt-on to stock aluminum oil pumps, offering improved styling and ease of installation. They fit all Big Twins from 1968-91 and do a great job of enhancing the right side of the motorcycle.

45031 Fits all Big Twin models (except Dyna Glide™) **without** a fitting for the primary chain oiler 1968-91

45030 Fits all Big Twin models **with** a fitting for the primary chain oiler (except Dyna Glide™) 1968-91

S&S BT Oil Pumps



S&S Standard Billet Oil Pump Kits

Note that some kits include a breather gear and shim kit with an oil pump assembly. The 1970-72 kits with gears are designed specifically to improve primary chain oiling in engines from these year groups. Improved primary chain oiling is done by using positive crankcase pressure to provide an oil mist from the flywheel cavity through a metering hole in the breather valve gear in the same manner as 1973-84 stock systems do. Primary chain oiling is automatic and precise eliminating potential damage to the primary chain or dry clutch because of too little or too much oil.

Oil pump only kit includes supply gears, return gears, drive shaft, drive shaft keys, drive shaft snap rings, check ball, check ball spring, pressure valve, pressure valve spring, cover screws with o-rings, miscellaneous hose fittings, plugs, screws, paper gaskets, and mounting hardware with both early style 1/4"-24 and late style 1/4"-20 mounting bolts.

Caution:

Incorrect gear fit causes binding and premature wear or damage to gears which may also result in damage to other engine components.

Oil Pump Kits

Oil Pump Assembly Only

316200 1936-72 requires 1973-77 breather gear
316203 1973-91 with universal cover

Oil Pump Assembly with Drive Gear, Breather Gear, Shims

316294 1970-77
316295 1978-91

Oil Pump w/Custom Cover, Without Gears

316204 1973-91

Oil Pump w/Custom Cover and Gears

316239 1973-77

Oil Pump w/Improved Primary Oiling and Gears

316297 1970-72



Note:

Stock 1965-72 engines equipped with H-D oil pumps use different primary chain oiling methods than 1973-on engines. To convert an engine from this year group to 1973-on primary chain oiling method, an S&S oil pump kit #316202 or #316203 can be used in conjunction with a 1973-on breather gear.

Kit # 316294 for 1970-77 and kit # 316295 for 1977-91 contain the same oil pump assembly. The difference between the kits is the pitch diameter of the breather gears provided. These gears match the pitch diameter of the pinion and cam gears in their respective year group. Therefore, if a late pinion and cam gear are used in an early engine, #316295 should be used to insure correct fit between cam and breather gear. The plugging and drilling steps required for the specific year crankcases used still apply regardless of which pump is used.



S&S BT Billet Oil Pump Gasket Kits

S&S Oil Pump Gasket Kit

316271 To 1991 with paper gaskets

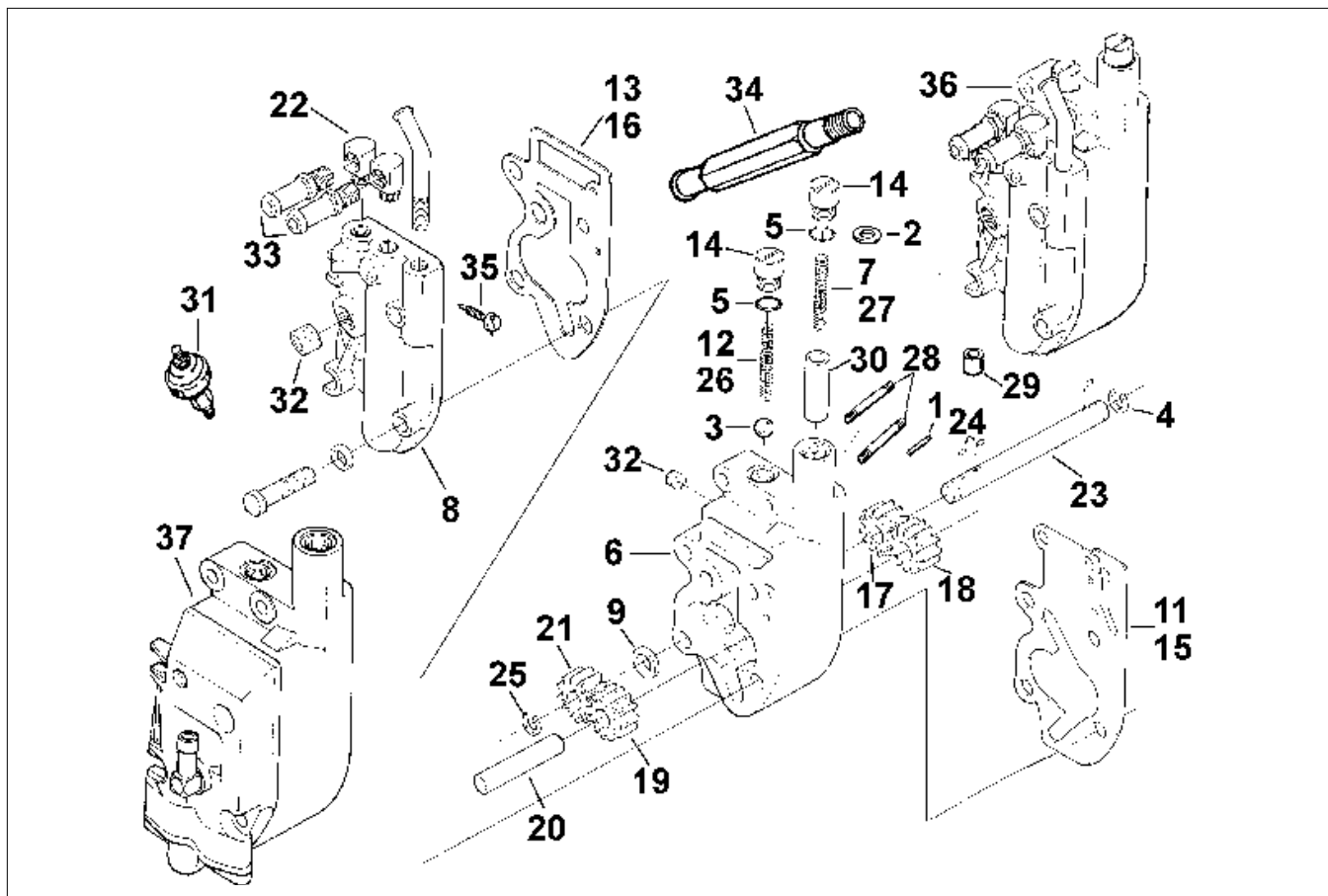


S&S Oil Pump Master Rebuild

Fits all S&S pumps 1936-91

316275 Kit

BT Oil Pump 1968-on



	PCP	OEM	Description	Year	U/M		PCP	OEM	Description	Year	U/M
1	10102	600	Pin Valve Stop	83-99	10Pk	19	30102	26326-62A	Drive Idler Gear	L62-99	Each
2	11700	6581	Brass Washer (.025)	54-78	5 Pk	20	30104	26327-68	Idler Gear Shaft	68-99	Each
3	15574	8873	Ball Chk Valve 3/8"	52-on	10Pk	21	30106	26328-74	Drive Gear	41-99	Each
4	11003	11002	Retaining Ring	68-99	10Pk	22	10520	26338-68	Elbow Fitting (2)	68-92	5 pk
5	14505	11105	O-Ring Chk Valve (2)	79-99	10Pk	23	1408	26346-70	Drive Shaft	68-99	Each
6	N/A	26190-73	Oil Pump Body	73-91	Each	24	10310	26348-15	Key, Drive Shaft (3)	36-99	10pk
7	13131	26207-73A	Relief Valve Spring	73-82	10Pk	25	11060	26348-36	Snap Ring, Shaft	36-99	10pk
	13132	26207-83	" "	83-99	10Pk	26	13135	26363-36	Chk Valve Spring FL	66-80	10pk
8	30109	26216-84	Cover, Oil Pump	84-91	Each	27	13141	26374-54	Relief Valve Spring	54-72	10pk
9	14032	26227-58	Oil Seal	68-99	5 Pk	28	10841	26390-68	Pump Mnt. Stud	68-79	Each
11	79126	26246-68A	Body Gasket (paper)	68-E80	10Pk	29	30108	26400-54	Valve Oil Pump	L54-E82	Each
12	13133	26262-80	Check Valve Spring	81-99	10Pk	30	30113	26400-82	Valve Oil Pump	82-99	Each
13	79135	26258-68B	Gasket Cover Paper	68-E80	10Pk	31	5670	26552-72	Oil Pressure Switch	41-85	Each
14	30111	26263-80	Plug check/relief	81-99	Each		5672	26561-84	Oil Switch 5 Speed	84-99	Each
15	79141	26273-80B	Gasket Body Paper	L80-91	10Pk	32	10545	45830-48	Oil Plug (2)	48-99	5 pk
16	79143	26276-80A	Gasket Cover Paper	L80-91	10Pk	33	10575	63533-41	Fitting Oil Line (2)	41-99	5 pk
17	30100	26315-68A	Drive Gear	68-99	Each	34	10576	63533-65	Return Line Fitting	65-84	Each
18	30101	26317-68A	Idler Gear	68-99	Each	35	24510	63614-72	Screw Chain Slot	L72-E83	Each
						36	29800	26190-73	Oil pump assembly	1973-91	Each

BT Oil Pumps



Topline Oil Pump Assembly 1973-91

Complete late model pump includes all internal components for Big Twins. These are a replacement for years 1973-91. Can be used on earlier models with case modification.
29800 1973-91 (26190-73)



V-Twin Oil Pump Assembly

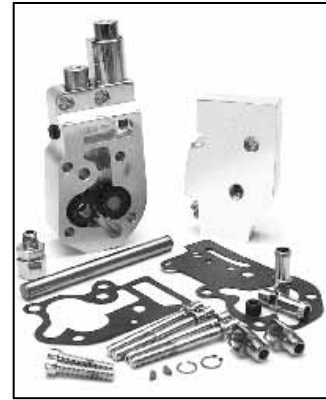
Pump features improved oil pump pressure regulation that will ensure correct oiling to all areas of V-Twin engines 1936-on. Kit includes all necessary fittings, snap rings, keys, gaskets and mounting bolts. Can be used with either chain drive or belt drive models. **Note:** On 1970-80 models a drilling operation is required. Use PCP #530013 drill.

Pump	Breather	Year	Finish
30061	59560	1936-53	Polish
30062	59561	1936-53	Chrome
30061	59562	1954-72	Polish
30062	59563	1954-72	Chrome
30063	-	1973-91	Polish
30064	-	1973-91	Chrome



Jims Oil Pump Drive Gears

Precision machined and heat treated.
31350 24T BT 1973-91 (26345-73)



Jims Polished Billet Aluminum Oil Pump

CNC machined Flow Pro 1 pump will provide an increase in oil return (scavenge) volume over stock pumps. Provides increased horsepower by decreasing drag on the flywheels and other rotating parts. Choice of end cover for custom or stock oil line connection. Feed and return gears are matched to each body. Available for late 1973-present Evo BT 74" to 140" motors. 1981-on bolts on with no modification. 1973-1980 cases will require a simple drilling for oil drain hole by using JIMS #2286 drilling tool. No provisions for front or rear chain oiling.

31165 BT 1973-91 w/top feed and return

31167 BT 1973-91 w/ bottom feed and return



Oil Pump Rebuild Kit

Includes all gaskets, seals, clips, keys, check ball for 1968-up FX-FL Big Twin.

Oil Pump Rebuild Kits

James	Jans	Fits	Material
79817	25601	1968-80	Paper
79819	25602	1981-91	Paper
79816		1968-80	Mylar
79818		1981-91	Mylar

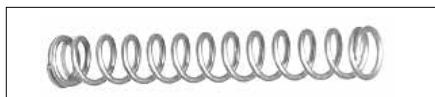
BT Oil Pump



“Super-Pump” Spring Kit, 1972-91 Big Twin

Finally, an answer to low oil pump pressure on 1972-91 Big Twin oil pumps! This kit consists of three separate colour-coded springs made from spring steel. Each spring applies more pressure on the relief valve plunger, thus controlling the output pressure of the oil pump. The average output pressure, (taken at road speed, 55-60 mph) would be as follows: Blue spring 20psi, Yellow spring 24psi, Red spring 28psi. At idle the pressure drops no lower than 10psi. The customer can select the spring desired depending on weight of oil used, driving habits, climate, etc... Plus, springs are easily changed if one of these variables change. These springs work well on S&S and Rev-Tech pumps as well.

13260



Crane Oil Pump Relief Valve Spring

Increases engine oil pressure by 2-3 psi. Highly desirable for extended engine life. Fits 1936-99 “Big Twins”®, including Evolution®.

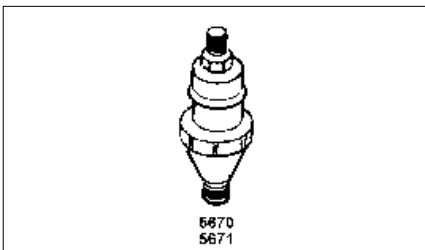
34548



Chain Oil Kit

Cad plated oiler body (63607-54), oiler adjusting screw (63610-53), nut and brass washer used on 1954-62 Pan-heads.

72321



Oil Pressure Switches

USA-made oil pressure switches with precision calibrated heavy duty contacts, plastic insulator and a bright finish.

PCP	Fits
5670	XL and K 1954-76 and BT 1972-83 (26552-72)
5671	XL from 1977-87 (26554-77)
4447	Fitting XL 1957-76 (26420-57)



BT Oil Screen Kit

Includes proper plug screen, O-Ring and spring for 1966-84 Shovel tappet screen.

PCP	Description
2990	1970-80
2991	1981-84



Tappet Oil Screens (each)

3378	1970-99 (24981-70)
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Oil Screen Springs for Tappet Oil Screen

13127	1970-99 (24982-70) (5 pk)
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Jims Oil Pump Drive Shaft

31190	BT 1968-on (26346-70)
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Colony Oil Pump Plugs-OEM

Oil Screen Plug

BT 1970-80. Plug with o-ring (657).

9876 Chrome

9877 Cad

Oil Pump Relief Valve Plug

Fits BT 1968-80. Plug (26377-68) and brass washer (6581).

9607 Chrome

30134 Cad

Oil Screen Plug

FL, FX 1981-99 with o-ring (26263-80).

9644 Chrome

9645 Cad

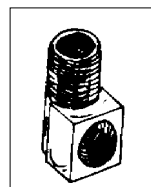


Oil pump Check and Relief Valves

FL, FX 1981-99 with o-ring (26263-80).

9634 Chrome

9635 Cad



Oil Pump Fitting

Chrome 90 degree fitting for all 1968-92 Big Twins. Will also work on many custom applications. (26338-68)

10520 5 Pack



BT Chr. Oil Pump End Cover

Includes cover gasket.

3110 1973-91 without chain oiler

BT Tappet Screen Oil Plug

72073



Oil Pump Hardware

Oil Pump Relief Valve Plug
Fits 1968-1980 Big Twins.
Replaces OEM P/N 26377-68
3577

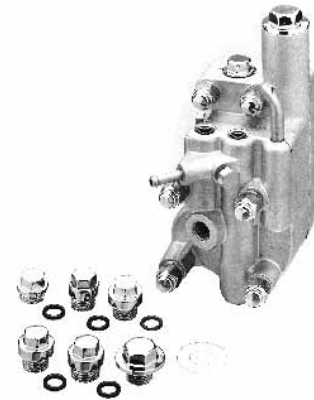
Tappet Oil Screen Plug
Fits 1970-1980 Big Twins.
Replaces OEM P/N 657
3579

Oil Pump Check Valve Plug
Fits 1936-1980 Big Twins.
Replaces OEM P/N 26362-36
3581

Tappet Oil Screen, Oil Pump Check Valve, Relief Valve Plug
Fits 1981-up Big Twins.
Replaces OEM P/N 26263-80
3583

Tappet Oil Screen, Oil Pump Check Valve, Relief Valve Plug Set
Complete set of 3 plugs fit 1970-1980 Big Twins.
3575

Tappet Oil Screen, Oil Pump Check Valve, Relief Valve Plug Set
Complete set of 3 plugs fit 1981-on Big Twins.
Replaces OEM P/N 26263-80
3576



OEM-Style



Stock OEM Style
5332 BT 1968-1977 chrome
5333 BT 1968-1977 cad
5334 BT 1978-91 chrome
9787 BT 1978-91 zinc

Custom-Styles



Chrome Acorn Style
1757 BT 1968-77
1821 BT 1978-91



Chrome Allen
5336 BT 1968-77
5337 BT 1978-on



Oil Pump Repair Kits

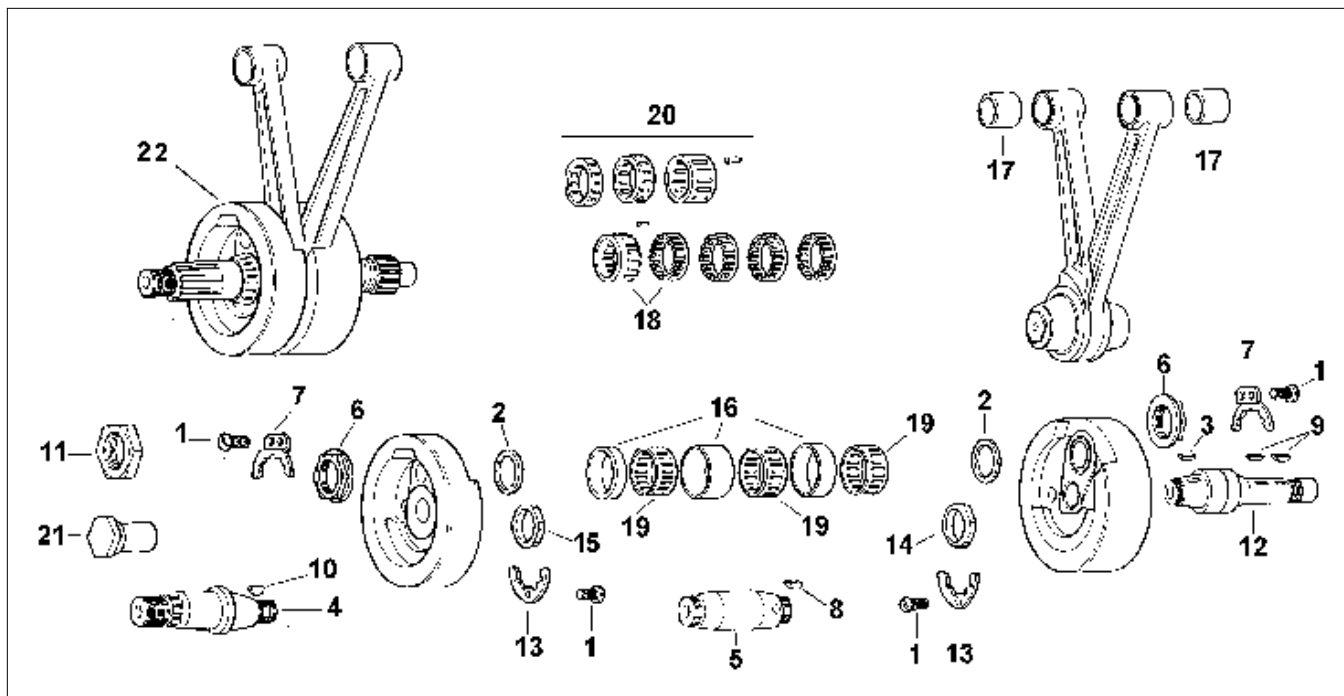
PCP	Application
15420	BT 1936-67
15421	BT 1968-69
15422	BT 1970-on



BT Oil Pump Fitting Kit

PCP	Years	Type
73597	1968-84	Stock
73599	1970-91	Custom

Flywheels Big Twin 1958-83



PCP	OEM	Description	PCP	OEM	Description
1	24502	2660 Screw 10-24x3/8 48-78 (10 pk)	12	1033	24006-58 Pinion shaft 58-72
2	11520	6506 Bronze washer L70-99 (pair)		31245	As above Jims
	11523	As above +.005 (pair)		1046	24006-73 Pinion shaft 73-81
	11526	23973-41 Thrust .055 washer 41-70 (pair)		31246	As above Jims
	11527	- Thrust washer bronze .005 O.S.		2743	24006-80 Pinion shaft L81-E83
				31247	24006-80 As above Jims L81-86
3	10301	11218 Key, pinion to wheel L81-* (10 pk)	13	13708	24018-36 Lock plate shaft nut (2) 41-71 (pr)
	10304	23985-12 Key, pinion to wheel 41-E81 (10pk)	14	12543	24023-72 Nut gear & Sproc. (2) 36-E81 (ea)
4	1025	24001-56 Sprocket shaft 56-64		12539	24016-80 Nut, pinion shaft L81-89 (each)
	31207	As above Jims	15	12541	24017-80 Nut, sprocket 72-E85 (each)
	1026	24001-65 Sprocket shaft 65-69	16	977	24345-36A Rod race, narrow (2) 41-99 (set)
	31210	As above Jims		24356-36A	Rod race, wide (1)
	31213	24001-70 Sprocket shaft, Jims 70-71		31049	As above Jims
	1035	24001-72 Sprocket shaft 72-E81	17	18507	24334-36 Pin Bushing STD 36-98 (pair)
	31214	As above Jims		18597	" " .002 36-98 (pair)
	3386	23909-80 Sprocket shaft L81-E85		18508	" " .005 36-98 (pair)
	31200	As above Jims		18509	" " .010 36-98 (pair)
5	975	23961-41 Crank pin (3 Hole) 41-E81	18	31047	24366-51 Cage set, steel-Jims (4) 41-on
	31136	As above Jims 1 hole		344010	As above S&S 41-on
	31137	As above Jims 3 hole	19	10723	24366-71 Cage set (Alloy) (2) 73-86
	3380	23961-80 Crank pin (3 hole) L81-on		24367-71	Cages (Alloy) (1)
	31140	As above Jims	20	15850	24385-40B Rollers/Cages set STD 41-86
6	12599	23966-54A Nut, crank pin 54-E81 (pair)	21	12569	40392-70 Nut, sprocket 70-90 (each)
	12535	23969-80 Nut, crank pin L81-E83 (pair)	22	58010	23906-78G Flywheel assembly 1978-86
7	30201	23971-54 Lock plate, c/pin 54-80 (pair)			
8	10305	23985-18 Key, c/pin 41-E81 (10 pk)			
9	10306	23985-54 Key, pinion (2) 54-on (10 pk)			
	10310	26348-15 Key, pinion 36-on (10 pk)			
10	10307	23985-56 Key, sprocket 56-71 (10 pk)			
11	12538	24003-55 Nut, sprocket 55-69 (each)			

Sprocket Lock Plate and Screw Kit

3385 24018-72

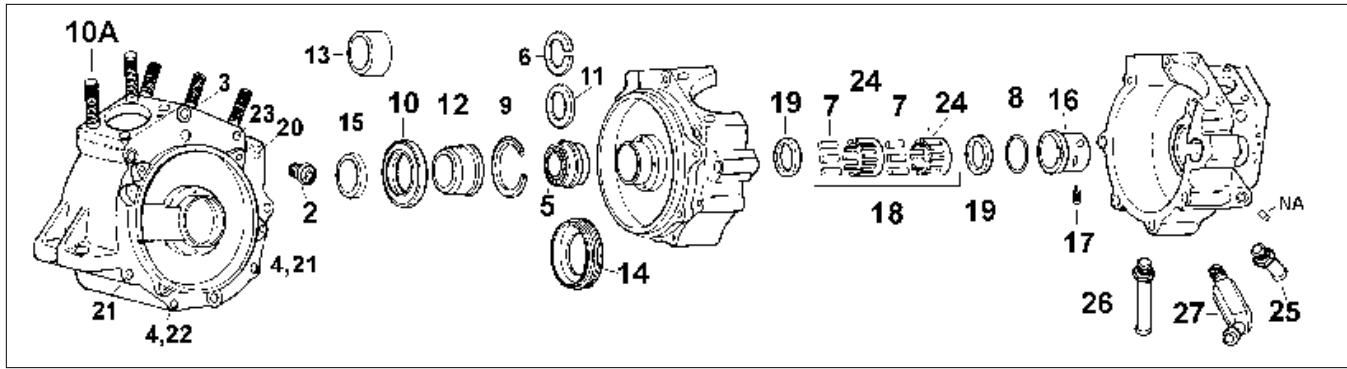


Jims Crank Pin Nuts BT 1954-E81

31004 1"-18 (23966-54A) (pair)



Crankcase Big Twin 1958-83



	PCP	OEM	Description		PCP	OEM	Description
2	10503	720	Timing plug, cad 70-on (5 Pk)	14	1753	24031-55	Retainer & seal nut 55-68 (each)
	9402		As above, chrome 70-on (each)		1762		As above +.002 O.S.
5	15516	9029	Timken bearing 55-68 (each)	15	11850	35850-84	Shaft spacer .010 70-99 (5 pk)
	15500	9028	Timken bearing 69-02 (each)		11851	35851-84	" " .020 70-99 (5 pk)
6	13540	9120-9134	Spacer, bearing assembly (15 pk assortment) (.0915-.1205)		11852	35852-84	" " .032 70-99 (5 pk)
7	15050	9220A	R/S Rollers STD 58-86 (28 pk)		11810	24032-70	Shaft spacer .060 70-99 (each)
	15051	9221A	" .0002 58-86 (28 pk)		11811	24033-70	" " .090 70-99 (each)
	15052	9222A	" .0004 58-86 (28 pk)		11812	24034-70	Shaft spacer .120 70-99 (each)
	15053	9223A	" .0006 58-86 (28 pk)		11813	24035-70	" " .150 70-99 (each)
	15054	9224A	" .0008 58-86 (28 pk)		11814	24036-70	" " .180 70-99 (each)
	15055	9225A	" .001 58-86 (28 pk)		11815	24037-70	" " .210 70-99 (each)
	15056	9225A+2	" .002 58-86 (28 pk)		11853	-	6 Pk assort.of above
8	11007	11007	R/S Retaining ring 58-86 (10 pk)	16	1009	24599-58A	R/S case bush Std. 58-92 (each)
9	11057	24779-55	L/S Retaining ring 55-68 (each)		31070		Jims bushing Std. 58-92 (each)
	11039	11160	Snap ring (Timken) L83-on (5 pk)		1171	24600-58A	Eastern " .002 58-on (each)
10	14016	12026B	Oil seal 70-on (5 pk)		1010	24601-58A	" " " .005 58-on (each)
10A	5472	16831-30	Cylinder studs 30-77 (8 pack)		31071		Jims bushing .010 58-on (each)
	5473	16837-78	Cylinder studs 78-84 (8 pack)		1011	24601-58A	Eastern " .010 58-on (each)
11	13564	23741-55	Bearing shim .003 55-84 (10 pk)		31090		Jims bushing +.032 1958-85 (each)
12	11800	24002-70	Sprocket spacer 70-on (each)	17	24505	24608-54	Screw R/S bush. (2) 54-78 (10 pk)
13	11801	24029-55	Sprocket spacer .336 55-64 & 66-68 (each)	18	15920	24650-58	R/S bear. kit STD 58-85 (each)
	11802	24029-65	" " .621 1965 (each)	19	11816	24692-58	" " washer .070 58-86 (pair)
	11803	24032-66	" " .516 66-69 (each)		317003		As above S&S .070 (5 pk)
	11804	24033-66	" " .546 66-69 (each)		317004		As above S&S .050 (5 pk)
	11805	24034-66	" " .576 66-69 (each)	24	10732	43578-35	R/S retainer cage 58-86 (each)
	11806	24035-66	" " .606 66-69 (each)	25	10575	63533-41	Fitting vent hose L66-* (5 pk)
	11807	24036-66	" " .636 66-69 (each)	26	10576	63533-65	" return hose 65-on (each)
	11808	24037-66	" " .666 66-69 (each)	27	10500	63541-70	Tee, chain oiler 71-78 (each)
	11809	--	6 Piece assortment of above 66-69				

9402



9403



31014



31016

Jims Sprocket Shaft Nuts

PCP	Description
31014	BT 1955-69 (24003-55)

Jims Pinion Shaft Nuts

31016	BT 1954-89 (24023-54)
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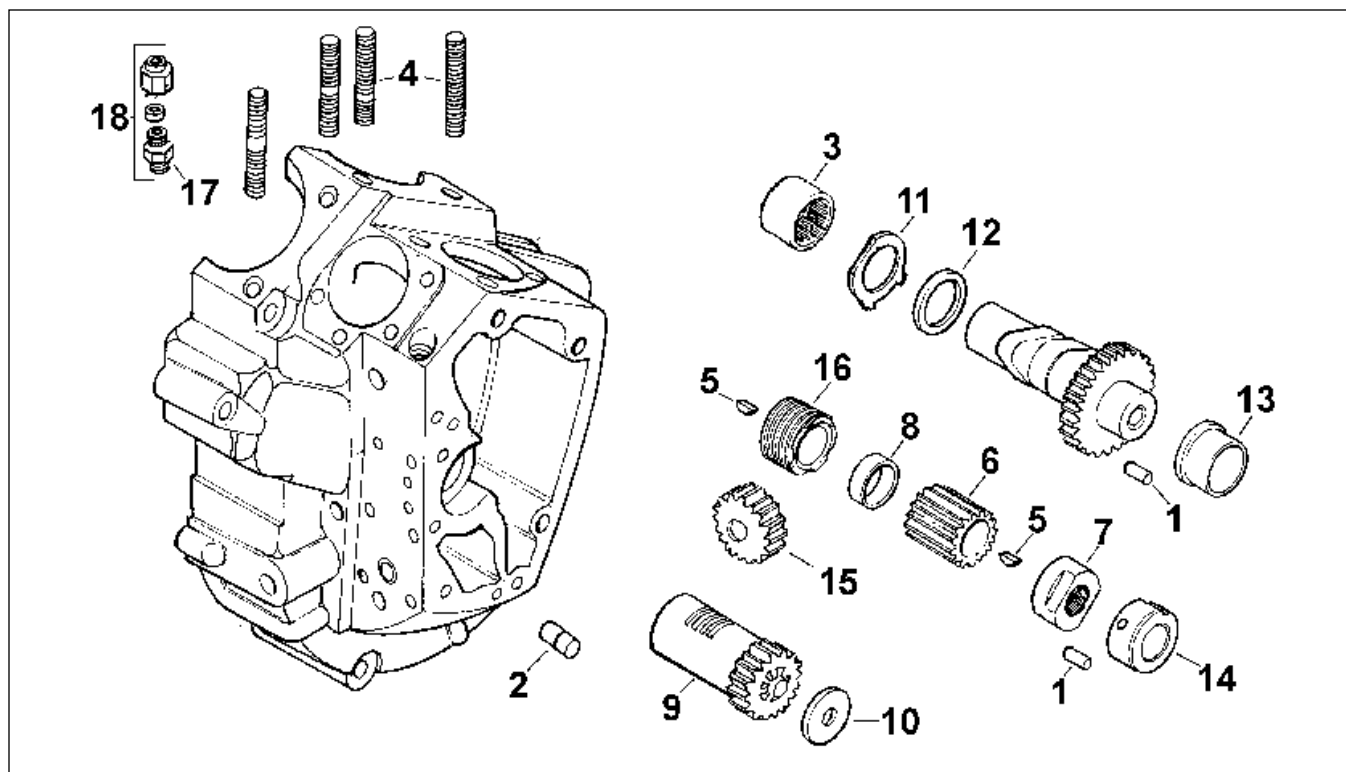
Colony Allen Timing Plug all HD 1970-on

5/8-18 Thread. Sold each and replaces 720.

9402 Chrome

9403 Cad

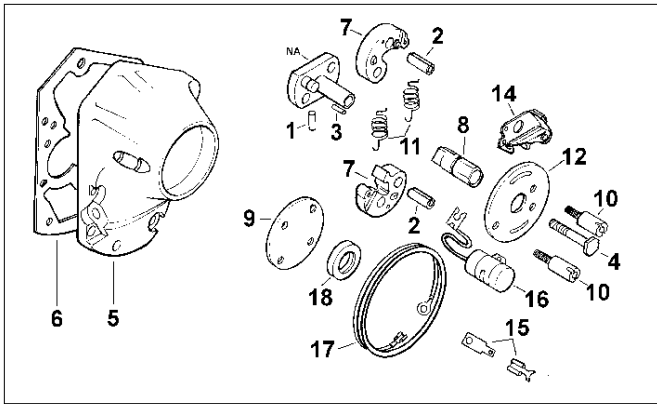
BT Cam Case 1970-on



Big Twin Gear Case 1970-on Shovel

	PCP	OEM	Description	Year	U/M	PCP	OEM	Description	Year	U/M
1	10155	275	Dowel pin (2)	57-on	10 Pk	11565	25326-82	" " .155	L82-*	5 Pk
2	10112	358	Dowel pin (2)	41-on	10 Pk	11566	25327-82	" " .160	L82-*	5 Pk
3	15607	9058	Cam bearing	58-99	Each	11567	25328-82	" " .165	L82-*	5 Pk
4	5472	16831-30	Cylinder stud	30-77	8 Pk	11568	-	Ass't of above sizes	L82-*	8 Pk
	5473	16837-78	Cylinder stud	78-84	8 Pk	11529	25550-57	Lock washer, cam	58-*	5 Pk
5	10306	23985-54	Key, pinion	54-89	10 Pk	12	13522	25550-36	Cam washer .050	36-*
6	31304	24010-54	Pinion gear (blue)	54-77	Each	13523	25551-36	" " .055	36-*	5 Pk
7	12544	24023-54	Nut, pinion	54-89	Each	13524	25552-36	" " .060	36-*	5 Pk
8	1193	24703-54	Spacer, pinion	54-89	Each	13525	25553-36	" " .065	36-*	5 Pk
9	30128	25300-36	Breather, steel	48-77	Each	13526	25554-36	" " .070	36-*	5 Pk
	30135	25313-73	Breath valve, steel	41-E77	Each	13521	25555-84	" " .045	36-*	5 Pk
	30119	25310-82A	Breath valve, plastic	L77-99	Each	13527	25555-36	" " .075	36-*	5 Pk
10	11540	25313-50	Breather washer .115	50-E79	5 Pk	13528	25555-79	" " .080	36-*	5 Pk
	11541	25314-50	" " .120	50-E79	5 Pk	13529	25557-79	" " .085	36-*	5 Pk
	11542	25315-50	" " .125	50-E79	5 Pk	13530	25558-79	" " .090	36-*	5 Pk
	11543	25316-50	" " .110	50-E79	5 Pk	13531	25559-79	" " .095	36-*	5 Pk
	11544	-	Ass't of above (steel)	50-E79	4 Pk	13532	-	" " .100	36-*	5 Pk
	11550	25320-79	Breather washer .110	L79-E82	5 Pk	13520	-	Ass't (.050-.095)		10Pk
	11551	25321-79	" " .115	L79-E82	5 Pk	13	18513	25581-70	Cam bushing cover	70-*
	11552	25332-79	" " .120	L79-E82	5 Pk	18514	--	" " " .005	70-*	Each
	11553	25323-79	" " .125	L79-E82	5 Pk	18629		" " " .010	70-*	Each
	11554	25325-79	" " .130	L79-E82	5 Pk	14	18517	25582-54A	Pinion bushing cover	54-E73
	11555	25326-79	" " .135	L79-E82	5 Pk	18610		" " " .005	55-72	Each
	11556	25327-79	" " .140	L79-E82	5 Pk	18518	25582-73	Pinion bushing cover	L73-92	Each
	11557	25328-79	" " .145	L79-E82	5 Pk	18639		As above +.005		Each
	11558	-	Ass't of above (steel)	L79-E82	8 Pk	31366		Jims +.005	73-92	Each
	11560	25320-82	Plastic washer .130	L82-*	5 Pk	15	650	26345-39	Pump drive gear 25T	39-72
	11561	25321-82	" " .135	L82-*	5 Pk	2268	26345-73	" " " 24T	73-91	Each
	11562	25322-82	" " .140	L82-*	5 Pk	16	781	26349-54	Pinion pump gear	54-72
	11563	25323-82	" " .145	L82-*	5 Pk	544	26349-73A	Pinion pump gear	73-on	Each
	11564	25325-82	" " .150	L82-*	5 Pk	17	10572	63526-57	Fitting, oil line	63-84
						18	2260		Chrome fittings kit	57-85

BT Cam Case



Advance Unit Assembly

Replacement unit assembly for those worn out parts on the stock 1970-E78 models as a complete kit to convert late 1978 models electronic ignitions back to point style ignitions.

- 681** Complete kit
- 4396** Points wire only
- 28123** Kit with needle bearings

Big Twin Cam Cover (Points Ignition) 1970-78

PCP	OEM	Description	Year	U/M
1	10127 615	Pin breaker plate	70-78	10 Pk
2	10183 620	Pin breaker weight	70-78	10 Pk
3	10115 623	Pin	70-78	10 Pk
4	2556 3570	Timer bolt	70-on	Each
5	45469 25266-80A	Chrome gear cover	73-92	Each
6	79280 23225-70B	Gasket, James .030	70-92	10 Pk
	79282 25225-70-X	Gasket, black w/silicone	70-92	5 Pk
7	2555 32522-70	Advance weights	70-78	Pair
8	30052 32542-70A	Cam, breaker	70-78	Each
9	25109 32591-70	Gasket 2 hole	70-79	10 Pk
	25110 32591-80	Gaskets 4 hole	80-99	10 Pk
10	10844 32601-78	Stud timer cover	L72-E82	Pair
	10846 32606-82	" " "	L82-99	Pair
	10896	OS w/12-24 threads	82-99	Pair
11	12165 32605-70	Advance springs	70-78	10 Pk
12	3333 32618-70	Points plate, bare	70-78	Each
14	724 32661-70	Points	70-78	10 Pk
16	727 32726-30A	Condensers	48-78	10 Pk
18	14074 83162-51	Oil seal cover	70-99	5 Pk
	79503	As above w/double lip		5 Pk



Cam Bushing Kit

BT Kits include cam and gear shaft bushings/bearings with lock pins and thrust plate. XL kits include all cam and gear bushings/bearings, lock pins and shims.

BT Kits	Year	XL Kits	Year
15401	1973-92	15408	1977-85
15402	1970-72	15409	1957-77



31357



31359

Jims BT Cam Cover Bushings

PCP	Description (Each)
31357	BT 1936-69 (25581-36)
31359	BT 1970-99 STD
31360	BT 1970-99 .005 (25581-70)
31361	BT 70-99 .9875 (25581-80AB)



29100

Gold Tone Ignition Rotor Cup

Fits 1983-99 and replaces 32402-83.
29100



Jims Pinion Bushing

31366 O/S BT 1973-92 (25582-80AB)

BT Cam Cover



S.S. Competition Advance Mechanism

Rivera Engineering's advance unit features: shaft and plate of stainless steel, advance weights that are heat treated and coated with high-tech, low friction polymers; stainless steel pins, and stainless steel washers. Replaces 32505-78A for 1970-99 mechanical advance applications,
76009 Advance unit



Tuneable Advance Unit

Unit features a stainless base, heat treated weights, cam bolt and colour coded springs that allows full advance at 1400, 2000, and 2600 RPM, depending on which springs are selected. Can be used with all ignitions, points, single or dual fire types which utilize an advance unit. Springs also available separately.

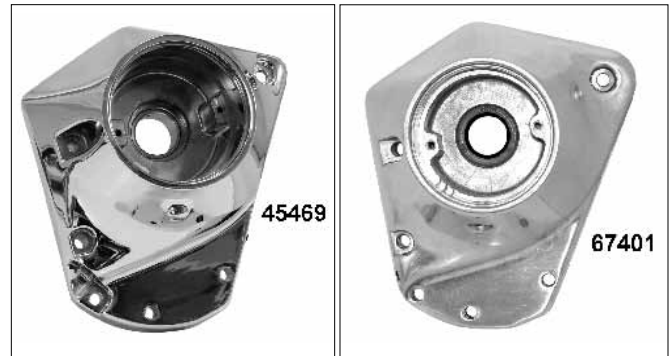
PCP	Description
28127	Tuneable unit
12165	Black, stock springs
13001	Heavy, silver springs
13002	Severe, gold springs



Needle Bearing Advance Unit

Advance unit features redesigned weights which house full complement miniature needle bearings for perfect balance and centrifugal actuation. Unit includes base: cam, weights with installed needle bearings; and stock springs. Fits BT 1970-99, XL 1971-on and can be used with all ignitions, points, electronic, single, or dual types which utilize an advance unit. Springs available separately and allow full advance at RPMS listed.

28123	Complete unit
12165	Stock spring, black, 1400 RPM
13001	Heavy spring, silver 2000 RPM
13002	Severe spring, gold 2600 RPM



BT Nose Cone Gear Covers

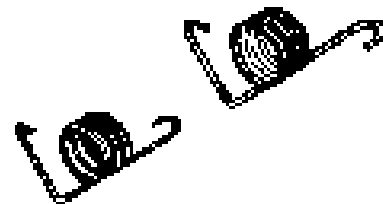
These covers fit 1970 through early 1973 Big Twin models with side oiling pinion shaft or 1973-on end oiling models. Covers come with bushings installed and either chrome or polished finish. Includes seal.

PCP	Description
45467	1970-72 Chrome
45469	1973-92 Chrome (25216-73, 25258-80B)
45470	1973-92 Polished
67400	1973-92 Chrome, U.S.A.
67401	1973-92 Polished, U.S.A.



Rotor & Weight Assembly

Replaces frozen or worn hubs & weights on 1970-78 XL-FX-FL. Includes shaft, weights, springs and cam assembled.
30054 32505-78A



Advance Weight Spring 1970-99

PCP	Description
12165	OEM style (10 pk)
13001	Heavy advance weight springs for slightly modified stock low compression or mild Stroker. Helps solve minor idle problems (pr)
13002	Severe duty weight springs for all high compression and heavily modified engines. Also useful for engines experiencing pinging or erratic idling (pr)

BT Cam Case

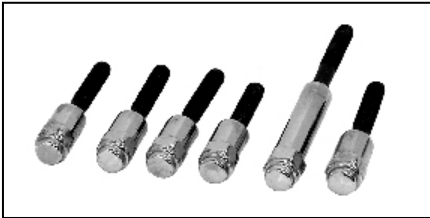


Motor Shop Cam Chest Kit

Includes all internal Big Twin replacement type parts for years listed, including a Sifton cam. Order cam bearings and bushing kit separately.

PCP	Years	Model
30025	1936-47 OHV	Knuckle
30026	1948-53	Pan
30027	1954-69	Pan-Shovel
30028	1970-84	BT Shovel

Colony Cam Cover Screws



Chrome Cap Style

PCP	Application
8466	BT 1970-92



Chrome Acorn Style

PCP	Application
1748	BT 1970-92



Stock O.E.M. Style

PCP	Application
9305	Shovel 1970-80 chrome
9306	Shovel 1970-80 cad



Chrome Allen Style

PCP	Application
5353	Shovel 1970-84



Polished Chrome Timing Cover Screw Kit

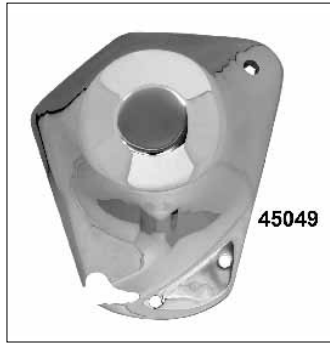
8761 FX 1970-92

Timing Cover Screw Kit All Big Twins 1970-92

24038 Stainless Steel



BT Cam Cover



Chrome Cam Cover BT 1970-92

Stamped steel cover completely encloses your cam and point covers like a second skin. Each cover includes all of the necessary mounting hardware.

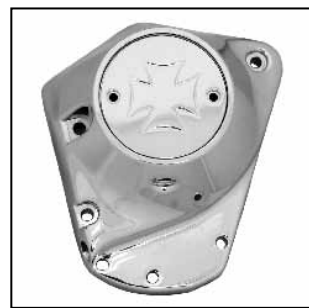
45049



Chrome Nose Cone Cover

This cover slips over your existing nose cone and mounts up with the existing hardware.

45332 BT 1970-92



Chrome Maltese Cross Covers

PCP	Cover	Type
59186	Points	2 Hole

Ignition Wire Hold-Downs

Die-cast aluminum, chrome-plated ignition wire hold-downs neatly secure the ignition wire to the cam cover. They accept a socket head screw (not included). Sold each.

27530 Small wire hold-down for point-type ignitions

27531 Large wire hold-down for electronic-type ignitions.



44067



44068

Bird Design Point Covers

PCP	Application
44067	XL 1971-on
44068	BT 1970-99

Ignition Cover Gasket

Use on all 1970-99 Twins.

Preston	James	Type (10 pack)
25109	-	2-Hole (32591-70)
25110	79309	4-Hole (32591-80)
25224	-	2 Hole rubber

Points Plate Hardware Kit

Screws, nuts, and washers to mount points plate.

24004 1970-78 (11 piece kit)

Point Covers



Live to Ride Point Covers

For all Harleys 1970-99. These highly detailed covers feature a three dimensional eagle emblem available in our chrome or our gold overlay version. Fits ALL Big Twins 1970-99 with horizontal holes

- 45112** Chrome (A Way of Life)
- 45212** Gold overlay (Eagle Spirit)

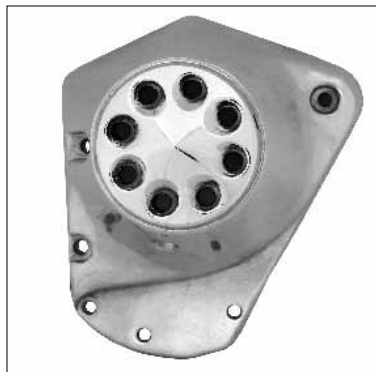
Fits ALL XL's 1970-on w/vertical holes

- 45113** Chrome (Eagle Spirit)

"Dome" Point Cover

A beautiful chrome die-cast point cover for all Harley XL 1971-99 & Big Twins.

3409



Domed Points Cover

Fits side to side and top to bottom type points covers. Chrome plated with six non-functional buttonhead Allen Screws for that high-tech "racers only" look. Complete with hardware.

5486 XL's 1971-85, BT 1970-99 (no TC)

Spinner Points Cover 1970-99

Features a die-cast chrome "HOLY" cover which spins onto a backing plate. This backing plate may be painted for a flash of colour.

59001



Ribbed Points Cover

3102 Chrome XL 57-on



Point Cover Allen Screws

Fits BT & XL 1970-on.

PC #	Style	Length	Year
2864	Acorn	.400	70-99
5256	Cap	.400	70-99
8492	Gold Cap		70-99
5356	B/Head	.500	70-78
5357	B/Head	.600	79-99

BT Breather/Pinion



Jims Breather Valve Gear

Steel breather valve for Big Twins. Made from aerospace quality steel and CNC machined to highest standards for precise control of exhausting crank case pressure. Designed to replace stock plastic valve gear. Also available in +.030" oversize to correct a damaged breather valve hole.

PCP Description

- 31252** BT 1948-E77 standard
- 31253** BT 1948-E77 +.030" oversize
- 31254** BT L77-99 standard
- 31255** BT L77-99 +.030" oversize



Jims Pinion Gear Big Twin 1954-77 (24010-54)

PCP	Size	Color
31301	1.4490-1.4485	ORANGE
31302	1.4485-1.448	BLACK
31303	1.4480-1.4475	RED
31304	1.4475-1.447	BLUE
31305	1.4470-1.4465	GREEN
31306	1.4465-1.446	WHITE
31307	1.4460-1.4455	BROWN
31308	1.4455-1.445	YELLOW



ET Breather Kit

- 30126** BT 1948-77
- 30127** BT 1978-85



Jims Big Twin pinion gear 1977-89 (24040-78)

PCP	Size	Colour
31309	1.4751-1.4756	ORANGE
31310	1.4745-1.4751	WHITE
31311	1.4737-1.4745	YELLOW
31312	1.4729-1.4737	RED
31313	1.4721-1.4729	BLUE
31314	1.4715-1.4721	GREEN
31315	1.4710-1.4715	BLACK



BT Breather Valve 1941-E77

- 30135** BT 1941-77 (25313-73)



Jims Oil Pump Drive Gears

Precision machined and heat treated.
31350 24T BT 1973-91 (26345-73)



S&S BT Steel Breather Gear Kits

Machined breather valve and gear by S&S. Designed to replace the stock steel or plastic OEM parts. Offered in stock duration only in stock O.D. and +.030 oversize (for use in worn or damaged breather holes). Washers are also available separately in sets

PCP	Description
334243	Gear only STD size 1936-47 (slotted) Knuckle
334245	Gear only +.030 1936-47 (slotted) Knuckle
334252	Gear kit 1936-47 STD (25300-36)
334246**	Gear only, Std size 1948-E77 (25313-73)
334247**	Gear only, +.030 1948-E77
334253	Gear kit 1948-E77 STD (25313-73)
334263	Gear kit 1948-E77 +.030"
334241	Gear only, Std size L1977-99 (25313-77A/B)
334242	Gear only, +.030 L1977-99
334250*	Valve gear kit, Std L1977-99 (25313-77A/B)
334260*	Valve gear kit, +.030 L1977-99
334249	Washer set BT 1939-99 (8pc)

*NOTE: Requires the use of 1977-on style and diameter cam and pinion gears; and steel spacing shims.

**NOTE: Must be used with 1954-77 pinion & cam gears; and steel spacing shims

S & S 84" Balanced Stroker Kit 1973-84

Designed for Big Twin motors 1970-84. Kit features a balanced 4 1/2" flywheel assembly. Kit includes a 1970-on sprocket shaft, 1981-89 pinion shaft, heavy duty rod set with iron cages, and STD size 8 1/4:1 cast pistons and rings. Instructions included.

950007 With 3-7/16" Shovel pistons



L-R: early, mid and late pinion gears

S&S Big Twin Pinion Gears and Related Parts

Engine	Pinion Shaft Colour (ordered L-R by largest to smallest)								Pump Drive Gear	Gear Spacer	Gear Nut	Key (10 pk)
	Largest	Average			Smallest							
1939-53	Orange	Black		Blue	Green	White	Brown	Yellow				
		334102		334104	334105	334106	334107		334237*			
1954-77	Orange	Black	Red	Blue	Green	White	Brown	Yellow				
		334121	334122	334123	334124	334125	334126	334127	334128	334232*	334289	334244
1977-89	Orange	White	Yellow	Red	Blue	Green	Black					
		334141	334142	334143	334144	334145	334146	334147		334232	334289	334244

Notes: Gear sizes are listed from largest (Orange) to smallest (Yellow/Black). This colour coding sequence is identical to stock H-D coding. When in doubt use a gear from the middle to the small side of the range. A combination of smaller gears should provide adequate gear clearance under most circumstances. Both excessive and zero gear lash combinations cause engine noise, but no clearance or zero gear lash causes binding and premature wear.

* Requires H-D #26345-73 oil pump drive shaft drive gear, Preston #2268 or Jim's #31350

S&S Shovel Kits



S&S Shovelhead Top End Kits for BT 1966-84

Kits include a set of S&S Shovelhead style cylinder heads, a pair of S&S stock bore cylinders (3-7/16" for 74" and 3-1/2 for 80"), S&S cast 8:1 compression pistons complete with rings and wrist pins, manifold clamp, manifold seal, and all required hardware and gaskets. The 74" top end kits include S&S 92-2500 series 3-31/32" stroke pistons and o-ring style cylinder heads. Top end kits for 80" engines include the S&S 92-2600 series 4-1/4" stroke pistons and rubber band style cylinder heads. Pistons are pre-fit to the cylinders, so there is no machine work to be done, just building.

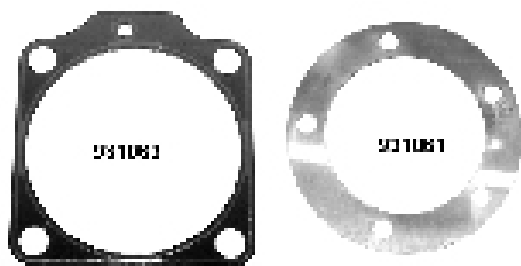
PCP	Engine	Stroke	CR
900097	74" 1966-78	3-31/32"	8:1
900098	80" 1979-84	4-1/4"	8:1



S&S Steel Base Nuts

7-16" Hex allows the use of box end wrench to tighten base nuts on S&S Sidewinder cylinders. Requires .375"-.400" stud engagement-stud height may need to be adjusted.

933063 8 pack



S&S Shovel Head & Base Gaskets (pairs)

931070	.018 base with fibre reinforced graphite, stock size
931069	.020 base with fibre reinforced graphite 3 5/8"
931061	.032 head, copper, stock size
931062	.032 head, copper, 3-5/8"



93" Hot Set Up Sidewinder Big Bore Stroker Kit for 1970-84 Shovelheads

The hot set up 93 provides everything you need for a premium performance upgrade at a price that is competitive with a stock 74" or 80" rebuild. Since its introduction in 1977, the 93 " Sidewinder has been one of S&S's most popular combinations for performance-minded Shovelhead owners. Hot Set Up 93 yields 93 cubic inches with an approximate compression ratio of 8.2:1 or 8.6:1 with optimal forged pistons.

Kit includes a 93" Sidewinder kit with 4-1/2" stroker flywheels assembled with mainshafts and rods, 3-5/8" bore cylinders and pistons, an S&S 514 cam kit, valve springs, adjustable chrome moly pushrods, a Super E carb kit, and installation instructions.

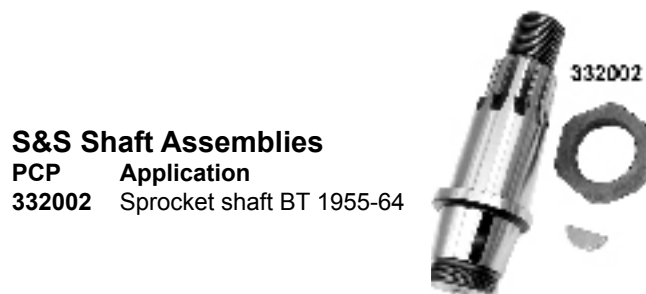
PCP	Application
322266	1970-72
322267	1973-77
322268	1978-84



S&S 1948-84 Pan and Shovel Head Bolts

Stainless steel 12 point bolt measures 3 7/16" x 2-3/8" and includes a washer.

933024	Bolt and washer (20 pack)
933025	Washer (5 pack)



S&S Shaft Assemblies

PCP	Application
332002	Sprocket shaft BT 1955-64

Flywheels

S&S Stroker Power Kits (Pistons are sold separately.)

S&S offers stroker kits for Knucklehead, Panhead and Shovelhead engines in several displacements and moderate compression ratios. These moderate compression ratios allow the use of readily available pump gas without dual plugged heads or special ignition systems. S&S Stroker pistons are available in pre-fit S&S cylinder and piston kits for Shovelhead engines only.



S&S Stock Bore Stroker Kits for Knucklehead, Panhead and Shovelhead Engines										
Displacement	Stroke	Bore	C.R.	Piston Type	Cylinder Length	Engine Life	1948-53	1954-64	1965-69	1970-84
84"	4-1/2"	3-7/16"	8.25:1	C	Stock	Almost stock like	322219	322220	322221	322222
			8.75:1	F	Stock	Almost stock like				
86"	4-5/8"	3-7/16"	8.5:1*	C	Stock	Very good	322272	322106	322107	322108

Notes: C Piston types are cast and F types are forged (pistons sold separately). * Includes .032" base plates.

84" Shovelhead Cast Pistons 8.25:1CR S&S 92-2720 Series	
Oversize	PCP
Standard (74" Cylinders)	922720
+ .010	922721
+ .020	922722
+ .030	922723
+ .040	922724
+ .050	922725
+ .060	922726
+ .070	922727
+ .080	922728
+ .090	922729

84" Shovelhead 3-7/16" to 4-3/4" Stroke Forged Pistons 8.5:1CR S&S 92-2800 Series	
Oversize	PCP
Standard (74" Cylinders)	922800
+ .010	922801
+ .020	922802
+ .030	922803
+ .040	922804
+ .050	922805
+ .060	922806
+ .070	922807
+ .080	922808
+ .090	922809

86" Shovelhead Cast Pistons 8.5:1CR S&S 92-2730 Series	
Oversize	PCP
Standard (74" Cylinders)	922730
+ .010	922731
+ .020	922732
+ .030	922733
+ .040	922734
+ .050	922735
+ .060	922736



Big Twin 4 5/8" Flywheels (Not Balanced)

Fits 1970-80 Big Twins. Stock diameter. Use #332004 sprocket and S&S pinion shaft #332024.

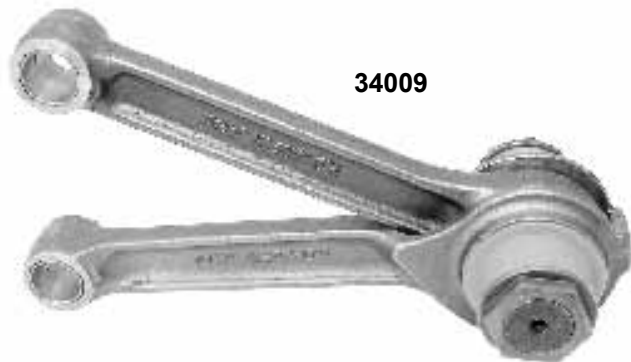
322060 Flywheel set



S&S 1958-81 Big Twin Pinion Shaft Assembly

Replaces 24006-54A, 24006-58, 24006-73.

332024 Fits S&S L, AL, SE or stock flywheels



Preston Stock Replacement Rod Sets

Includes new rods, crank pin nuts, cages and standard rollers. Piston pin bushings are installed and honed for stock wrist pin.

PCP	OEM	Year	Model
34000*	22427-37	36-51	61" Pan-Knuckle (Step pin)
34001*	24281-41A	41-73	74" Pan-Shovel
34002	24281-74A	74-E81	74 & 80 Shovel
34009	As above	+ .120"	across beams
34003	24281-80	81-83	80" Shovel
34005	24275-57	57-80	XL 900-1000
34006	24275-80A	81-85	XL 1000

*Note: Rod sets include steel rod roller cages

Always check rod roller fitting before assembly



S&S Alloy Rod Bearing Retainers

Replacement roller type for Harley connecting rods on BT 1941-99 models and XL 1952-86 models.

344020	1941-99 BT (24366-71, 24367-71)
344520	1954-86 XL (24362-54A, 24364-54A)



BT Rod Bearing Sets 1941-99

Torrington rod bearing sets include bearings with steel cages. They will retro fit to 1941. Available in standard size only.

31169	24356-87A (Jims)
344010	As above, S&S

S&S Supreme Connecting Rods

S&S Supreme connecting rods are made even stronger than our regular heavy duty rods and are recommended for all drag strip applications and any street situation where the best is warranted. (steel cages)

PCP	Model	Years
347206	BT OHV	1941-80 .791 pin O.D. 7.440
347210	80 OHV	1981-84 .791 pin O.D. 7.440
347700	Sportster® .791	1957-80 (for 3 5/16" plus bore)
347710	Sportster .791	1957-80 for 89" Stokers
347720	Sportster® .791	1981-85 for 89" Stokers

S&S regular heavy duty connecting rods are recommended for any street application. (Steel cages)

PCP	Model	Years
347003	EL 61"	1936-52 W/step crank pin
347004	BT OHV	1941-80 .791 Pin O.D. 7.440"
347010	80 OHV (alloy)	1981-84 .791 Pin O.D. 7.440"
347011	80 OHV (steel)	1981-84 .791 Pin O.D. 7.440"
347500	Sportster®	1957-80 7.440" rods
347510	Sportster®	1981-85 7.440" rods



S & S Crank Pin

Includes 2 nuts and key.

PCP	Application
342003	1941-81 74 & 80 OHV (23961-41)
342102	1981-86 BT 1.249 OD and all S&S 1981-99 (23961-80A)
342503	XL 1957-81 (23960-54)
342602	XL 1981-on and S&S 1.249 OD (23960-80A)
342603	As above, 1.250 OD (23948-87)

Rod Components



Crank Pins

Crank Pins available from U.S.A. makers, Eastern, Jims, OEM and Taiwan. American pins are made of 8620 steel, with .062 heat treat penetration.

Note: All crank pins have one or three oil holes.

PCP	OEM	Model	Holes/Brand
975	23961-41	BT 1941-E81	3 Eastern
31136	23961-41	BT 1941-E81	1 Jims
31137	23961-41	BT 1941-E81	3 Jims
31150	23961-41	" less end play	1 Jims ST-1
31151	23961-41	" less end play	3 Jims ST-3
31152	"	BT 1941-E81	1 Jims +.001
31148	23961-41	BT 1941-E81	Jims ACA
3380	23961-80A	"	3 Taiwan
31140	23961-80A	BT L1981-99	3 Jims
31142	23961-80A	" new oil location	3 Jims AF
31149	"	A Cut Above	3 Jims
1098	23960-54	XL 1954-E81	3 Eastern
31132	23960-54	XL 1954-E81	3 Jims
3412	23960-80A	XL L1981-up	3 Taiwan
31133	23960-80A	XL L1981-up	1 Jims
31134	23960-80A	XL L1981-up	3 Jims



Wrist Pin Bushings

Sold in pairs. Bronze OEM type

PCP	Jims	Size	Fits
18507	31354	STD	BT 36-98 (24334-36)
18597		.002	BT 36-98
18508	31355	.005	BT 36-98
18509		.010	BT 36-98 (24335-36)
18598		.002	XL 1957-on
18505	31353	.005	XL 1957-on
18599		.010	XL 1957-on (24332-36)



Connecting Rod Roller Sets

Each set supplies enough rollers for that application only.

Late Big Twins	Early Big Twins	Sportster	Size
1973-*	1941-72	1954-*	
15100	-	15120	-0002 US
1040	2744	2663	STD
1041	2745	2664	0002 OS
1042	2746	2665	0004 OS
1043	2747	2666	0006 OS
1044	2748	2667	0008 OS
1045	2749	2668	001 OS
4113	5269	15127	002 OS
3548	3529	15128	003 OS



Connecting Rod Race Sets

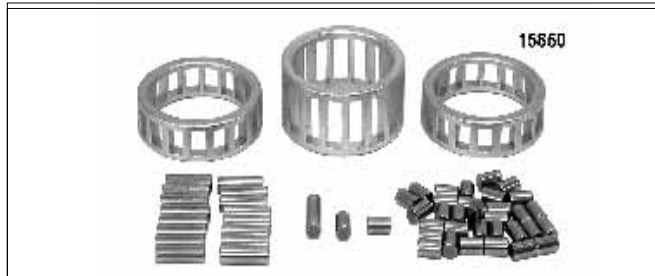
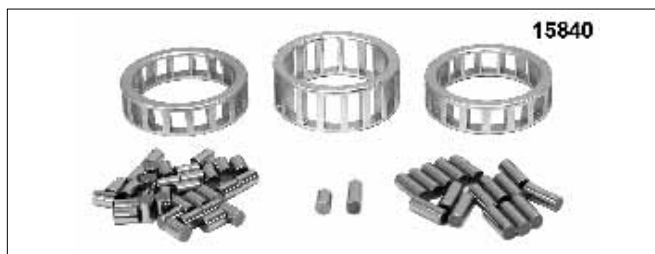
Rod Races are designed for extreme pressure. Made from 52100 steel and hardened.

PCP	Model	Year
1102	Sportster	1954-E86
977	Big Twin	1936-on
31049	Jims, as above	

Connecting Rod Cage Set

Constructed of iron and made to fit BT 74" & 80" OHV 41-81.

344010	S&S
31047	Jims
10721	Preston



Rod Bearing Sets with Cages

Set of alloy cages fitted with standard size Torrington rollers for connecting rods.

PCP	OEM	Cage	Model	Year
15850	24385-40B	Alloy	74 & 80	1941-86
15840	24370-52B	Alloy	Sportster	1957-E86

Cams For Shovel, Pan , Knuckle

Whether you want a better street cam for a stock motor, a big lift cam for a dragster or something in between, Andrews has it. All Andrews cams for these engines are computer designed and precision ground from alloy steel billets. Rocker arm ratios are: Shovel:1.42, Pan:1.50, Knuckle:1.00.



CAMS FOR STREET AND DRAG APPLICATIONS

PCP#	Year	Grind	Timing	Duration		Valve Lift		Lift TDC	Application
				.053	.020	Shovel	Pan		
Stock cyl.	Front	H	-06/46 44/20	220 244	256 282	.390 .390	.412 .412	.051 .176	Stock HD front cylinder timing listed for comparison. Later stock "S" grind cams have similar specs.
Stock cyl.	Rear	H	14/38 44/20	232 244	274 282	.390 .390	.412 .412	.129 .176	Stock HD rear cylinder timing listed for comparison. Later stock "S" grind cams have similar specs.
212011	48-69	J	21/41	242	292	.405	.425	.154	Mild street: Pans and Shovels, smooth idle, more power though RPM range. Bolts in with no head work.
212020	70-77		41/21	242	292	.405	.425	.154	
212030	78-84								
212260	48-69	A2	19/43	242	280	.450	.470	.156	Street/Drags: bolt into shovels (except 80-81) with no head work. More mid-range and high end power. Idle unaffected. (Head setup required on '80 & '81) (see note 1)
212263	70-77		50/18	248	290	.450	.470	.142	
212267	78-84								
212310	48-69	AB	21/43	244	296	.450	.470	.156	"A" intake and a long duration exhaust for cooler running and more high end power. Bolt-in street cam (except 80-81). OK for hydraulic lifters.
212320	70-77		50/26	256	300	.450	.470	.170	
212335	78-84								
N/A	48-69	B2	26/50	256	295	.485	.507	.187	Street/Drags: much more mid-range and high end power. Idle smoothness unaffected. The cam for modified 74/80 inchers and small strokers. Spring spacing required.
212353	70-77		53/25	258	296	.485	.507	.186	
212358	78-84								
212536	70-77	7	59/27	266	325	.510	.535	.186	Hotter version of B grind. Great street cam especially for 84/88 inch strokers: maximum torque available from 2500 to 6500 RPM.
212539	78-84								
212430	70-77	BH	52/24	256	302	.450	.470	.156	Hydraulic version of a "B" cam. Usually a bolt-in but spring spacing may be required on 1980-81 Shovels
212440	78-84								
212610	70-77	C	61/37	278	318	.525	.550	.234	Best production cam made for big street engines. Stokers from 84 to 96 inches really turn on this cam. Broad torque range pulls from 2000-7000+ RPM.
212620	78-84								
212140	70-77	1	36/16	232	288	.427	.450	.136	This is the low compression piston version of 2 an "A" grind cam for 74-80 engines with 7.5 to 1 pistons.
212965	36-47	N	13/41	234	270	.348		.089	Stock replacement Knuckle cam for stock motors or restorations.
		(2)	44/16	240	276	.355		.105	
212970	36-47	S	27/55	262	308	.370		.130	Bolt-in performance cam for stock motors, smooth idle, strong pull to 6000 RPM. This cam is the Knuckle equivalent of a "B" cam in a Shovel motor.
		(2)	55/27	262	308	.370		.130	
212740	66-69	M	28/56	264	309	.590		.210	Street/Drags: 88+ in. motors

Note (1) 1980 & 1981 engines: Height of original stock HD valve guides restricts spring travel (and cam lift) to .430 or less!

Note (2) Knuckle cam bearings are ground to .8115 to fit stock bushings.

(*) Timing listed at .053 cam lift

(**) TDC Shovel lift listed: TDC Pan lift will be 5% higher



S&S 514 & 560S Cam

PCP	Year	Cam	Application	Valve Timing				Lifter Type		
				Int. O/C	Exh. O/C	Duration Int.	Duration Exh.		Lift@TDC Int.	Lift@TDC Exh.
335051	70-77	514	80" to 96" engines w/8:1	23/43	43/23	246	246	.125	.125	Solid
335052	78-84	514	to 9:1 CR. Good mid range performance.							

Notes: Timing designation is function of zero lash @.053" off base circle
 Lifts at TDC are measured at the valve and are for reference only. Overlap valve lifts must be checked on assembled motor.
 Minimum valve to valve clearance of .040" is recommended.
All cams require spring spacing.



S&S 84" Hot Set Up Kit for Pans and Shovels
 Stock bore stroker Hot Set Up Kit fits 1970-84 Shovels. The 4-1/2" stroke produces healthy increases in torque and horse-power with stock like reliability. It requires no complicated machining and yields 84 cubic inches with an approximate compression ratio of 8.25:1. Kits include an 84" stroker kit with 4-1/2" stroker flywheels assembled with mainshafts and rods, 450 cam kit, valve springs, adjustable chrome moly pushrods, and a Super E carb kit. This kit requires special S&S 2720 series pistons available separately.

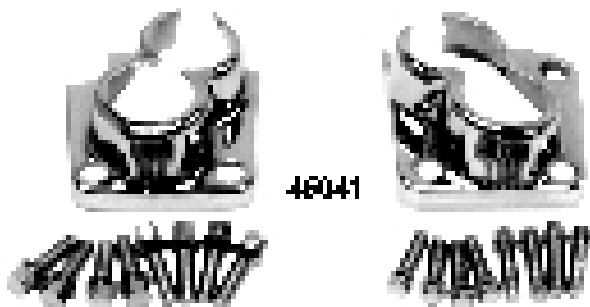
PCP	Application
322287	1970-72
322289	1978-84



S&S Piston Kits

PCP	Size
922720	Standard (74" cylinders)
922721	+ .010
922722	+ .020
922723	+ .030
922724	+ .040
922725	+ .050
922726	+ .060
922727	+ .070
922728	+ .080
922729	+ .090

Lifter Base



Chrome Tappet Block Covers

Stamped steel covers fit over stock units. Each cover has a hidden slot in the back which permits it to be installed without removing your pushrods. Hold in place with a small amount of silicone. Four 12-point chrome screws are also included to replace the four zinc-plated OEM screws which protrude slightly thru the holes in the covers. Sold in sets.

45041 Fits all Shovelheads 1966-84
*NOTE: WILL NOT fit 1981-E82 Big Twins equipped with tappet blocks with oil drain fittings.



Chrome Cap Style

2884 OHV Big Twin 1936-1975
2885 Big Twin 1976-on
2886 Late lifter bases to pre-1976 cases 1/4-24 thread



Chrome Allen Style

5352 OHV Big Twin 1936-1976
5315 Big Twin 1976-99
5316 Late lifter bases to pre-1976 cases 1/4-24 thread
5373 Sportster 1957-1984



Colony Lifter Base Screw Kit

Polished allen bolts for BT 1976-99
8726



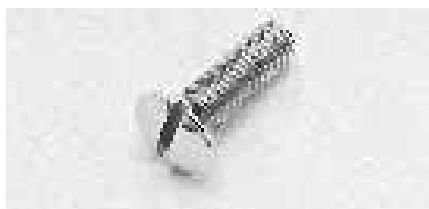
Chrome Acorn Style

1706 OHV Big Twin 1936-1975
1788 Big Twin 1976-99
2632 Late lifter bases to pre-1976 cases 1/4-24 thread
1714 Sportster 1957-84



Lifter Base Screws Hex Head

5/16 hex head lifter base screws are replacements for 1954-1975.
5276 Chrome
5277 Cad



Stock OEM Style

2158 Big Twin 1936-1953 Chrome



Hyd. Pushrod Adjusting Unit (Each)

Fits all Big Twins 1953-85 with hydraulic lifter. OEM 17920-53.

29003 Topline
34020 Preston as above



12 Point Style

5299 BT 1976-on Chrome 1/4-20
5300 BT 1976-on Cad 1/4-20
5301 As above, black
5302 Late lifter bases to pre-1976 cases chrome 1/4-24
5303 As above, cadmium
5304 As above, black



Chrome Lifter Block Bolt Caps for 1976-99 Big Twin

Our chrome lifter block bolt caps are finely machined from aluminum then plated with a chrome finish. They fit all 1976-on Big Twin models and install easily onto the stock 12-point mounting bolts, using a dab of clear silicone.

44001 (8 pack)



Special Tappet Gaskets 74 & 80

Tappet base gaskets without oil return holes for use in engines with solid lifter (5 front, 5 rear).

25057

Lifter Base



Jim's Billet Power Glide Shovel Tappet Blocks

Made of 7075-T651 aluminum with a tensile strength of 83,000 psi. These kits can be used for up to .700" lift with the right valves, valve springs, cam, oil, etc. They feature the benefits of the late EVO style hydraulic system eliminating the total oil loss of hydraulic units, HD#17920-53A.

31290 Kit with 2 blocks & 4 Shovel Power Glide tappets



S&S Tappets and Guides for Shovelheads

PCP	Application
335450	Set of replacement tappet guides
335353	Replacement tappet with HL2T kit (each)



Preston Lifter Blocks for BT Shovelheads

Front and rear lifter blocks for 74" & 80" Big Twins 1966-83. These lifter blocks are available in a deluxe chrome plated set. Replaces OEM 18600-66B Front and 18610-66C rear.

Big Twin Lifter Blocks

PCP	Finish
32330	Chrome front & rear set



Sifton Performance Cam Kit

Includes cam solid lifters, pushrods, and chrome lifter bases.

PCP	Lift	Model
30157	.412	Shovel 1970-E77
30158	.412	Shovel 1978-84



Jims Shovel Super Tappet Block Kit

31267



Sifton Solid Tappet Assembly

Features central surface fine grinding and precision fit rollers and pins. Solid units include adjuster screws and locknuts.

30136 1948-52

Lifter Base

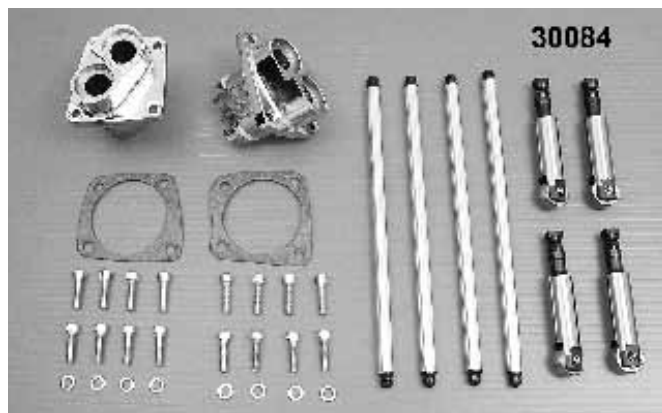


Gary Bang Lifter and Pushrod Assembly

Complete assembly includes 4 hydraulic lifter tappets, 4 hydraulic lifter units, 4 pushrods and a lifter base. (Shovel blocks)

PCP Application

- 30029** Panhead 1948-65, chrome
- 30030** Panhead 1948-65, zinc
- 30031** Shovelhead 1966-84, chrome
- 30032** Shovelhead 1966-84, zinc



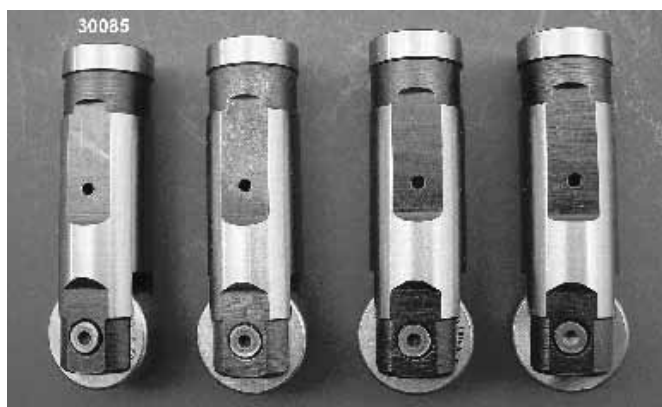
Stock Solid Tappet Kit

Includes lifters with adjuster screw, pushrods and tappet blocks.

PCP	Years	Type
30084	1966-84	Shovel
30155	1948-65	Pan
30156	1948-65	Pan (zinc)

Sifton Hydraulic Lifter Set

4 Piece set replaces 17920-53 on BT 1953-85 models.
30090



Sifton BT Hydraulic Tappet Assembly Set

Set of 4 fits 1953-84 BT models. Features fine grinding precision on body and installed replica roller and pin.

PCP	Size
30085	STD
30086	.005
30087	.010

Sifton Hydraulic Tappet Assemblies

Lifters with genuine Torrington rollers are sold in sets of 4. Order hydraulic unit set separately. Also available in 8 piece tappet and hydraulic lifter kit.

- 30088** Tappet body set (18522-53A)
- 30089** Hydraulic tappet body and lifter set

Sifton Maxi Axle Tappet Assembly

Fits BT 1953-84 and features a built-in integral pump unit.

PCP	Size
30137	STD
30138	.002
30093	.005
30139	.010



Tappets



31616

Power Glide Performance Hydraulic Tappets for Pan and Shovel Performance Cams

These Jim's tappets are perfect in Pan/Shovel tappet blocks, (18600-53/front & 18610-53/rear) or any tappet block using oil passages to tappets. These tappets will accommodate a .550" lift without modification if used with Jim's 18602/3-80A tappet blocks. For stock blocks check for roller to block clearances, use HD#17904-66 or equivalent push rods.

Big Axle	Size (STD O.D. .731)
31616	STD
31617	.002
31618	.005



31609



31113

Jim's Solid Adjustable BT 1948-84

STD O.D. .731. (86 grams)

Big Axle	Size
31609	STD
31610	.002
31611	.005



31612



31602



31120

Jim's BT Hydraulic Tappet 1953-84 (18522-53A)

(89 grams)

Big Axle	Size (STD O.D. .731)
31612	STD
31613	.002
31614	.005

Jim's Solid Adjustable Tappet XL 1957-85 (18508-52B)

(STD O.D. .731)

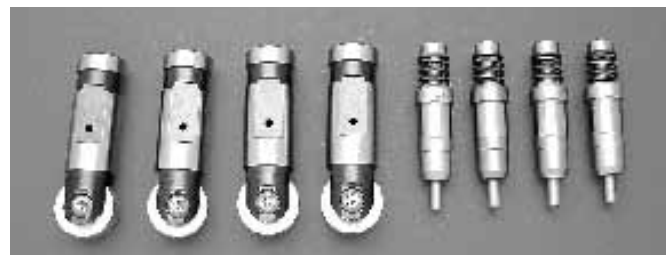
Big Axle	Std	Size
31602	-	STD
31603	-	.002
31604	31120	.005



S&S Solid Lifter Conversion Kit 1953-84

For Panhead and Shovelheads 1953-84. These hardened steel adaptors are installed in place of stock hydraulic units in 1953-84 lifters. Use with stock adjustable pushrods. Kit includes four adaptors.

335348

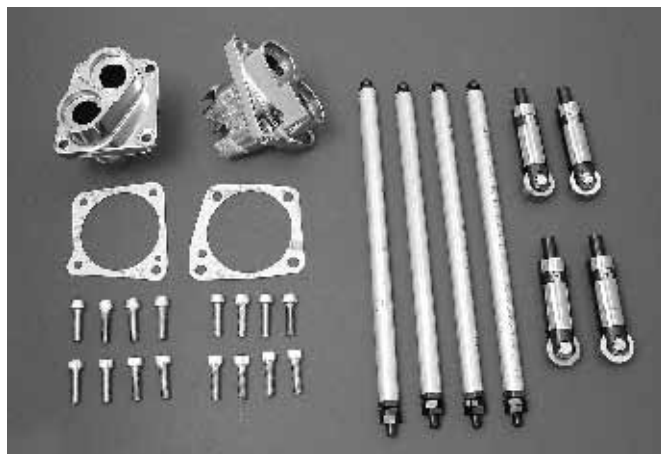


Sifton Hydraulic Tappet Assembly Kit

Includes tappets with large single axle roller design and hydraulic units. Fits BT 1953-84.

30166

Lifter Base



Sifton Lifter Kit

Includes chrome tappet blocks, integral pump lifter set and steel pushrods.

30164 1948-65 Panhead

30154 1966-84 Shovel



S&S Shovelhead Hydraulic Lifter Update Kit

S&S offers a complete kit to upgrade your Shovelhead to modern hydraulic lifters. The kit includes tappets, tappet guides, gaskets, hardware, pushrod cover keepers and a set of Quickie pushrods.

335451 For S&S roller rocker arms

335452 For stock rocker arms



Replica 1948-52 BT Alloy Tappet Block Kit

Includes 4 solid tappets with adjuster screws and lock nuts. Natural finish.

59574



Sifton Hydraulic Pushrod/Lifter Set

Includes 4 max axle lifters with integral pump and 4 adjustable steel pushrods for 1966-84 Shovel.

30165



Tappet Bodies are USA made

(Tappet Screws & Nuts Must Be Ordered Separately).

Eastern OEM	Fits	Size
2693	18490-29	29-73 45" Flathead
2694		29-73 45" Flathead
1078	18491-36	36-47 Knuckle Intake
1079		36-47 Knuckle Intake
1080	18493-36	36-47 Knuckle Exhaust
1081		36-47 Knuckle Exhaust
1082	18492-48	48-52 Big Twin
1083		48-52 Big Twin
32314		48-52 Big Twin
2072	18508-52B	57-85 Sportster
2073		57-85 Sportster
32311		57-85 Sportster
1084	18522-53A	53-84 Big Twin
1085		53-84 Big Twin
32317		53-84 Big Twin



Tappet Roller Repair Kit

Contains new roller assembly and roller pin. Fits all V-Twins, 1929-85. Replaces OEM 18534-29A. Set of 4.

15622 Roller kit for 4 tappets

15614 Roller kit for one tappet (18534-29A)

10184 10 Pins ONLY



S&S 1948-52 Style Adjusting Unit Assembly

Converts stock 1953-84 style hydraulic lifter to 1948-52 style adjustable solid lifter. Includes one adjusting unit sleeve, one adjusting unit screw and one locknut.

335334

S&S Shovel Cylinders and Pistons

S&S 922500 and 922510 Series Pistons and 3-7/16" and 3-1/2" Bore Shovelhead Cylinders

The 922500 series pistons are cast replacement pistons for 74" Panhead and Shovelhead engines. The 922510 series is a modified version of the 922500 series pistons with a lower dome and deck height.

The 922510 series can be used as a low compression 74" piston or as a high compression 80" piston in 4-1/4" stroke engines. Both 922500 and 922510 series are available in oversizes from 3-7/16" STD to +.090. This allows the use of 74" cylinders (3-7/16" bore) or 80" cylinders (3-1/2" bore) in both 74" and 80" engines.

These pistons are normally used with stock H-D cylinders. Shovelhead style cylinders and cylinder kits are available from S&S with 3-7/16" bore cylinders and pistons or with 3-1/2" bore cylinders and pistons. Either size cylinders can be used in 74" or 80" Shovelhead style crankcases.



Displacement	74"	74"	74"	80"	80"	Cast Pistons Recommended Fit: Close: .0020" - .0025" Loose: .0030" - .0035"		
Stroke	3-31/32"	3-31/32"	3-31/32"	4-1/4"	4-1/4"			
Bore	3-7/16"	3-7/16"	3-1/2"	3-7/16"	3-1/2"			
Cylinder Length	5.330"	5.330"	5.330"	5.330"	5.330"			
Compression	8:1	7.25:1	7.25:1	8.75:1	8.75:1			
Cylinders Only	919011	919011	919021	919011	919021			
Replacement Piston Kits						Rings Moly	Wristpin	Keeper Clips
Type	Cast	Cast	Cast	Cast	Cast			
Standard	922500	922510		922510		35210	949255	949254
+ .010	922501	922511		922511		35211		
+ .020	922502	922512		922512		35212		
+ .030	922503	922513		922513		35213		
+ .040	922504	922514		922514		35214		
+ .050	922505	922515		922515		35215		
+ .060		922516	922516	922516	922516	35235		
+ .070		922517	922517	922517	922517	35236		
+ .080		922518	922518	922518	922518	35237		
+ .090		922519	922519	922519	922519	35238		
Piston Deck Height	1.448"	1.320"	1.320"	1.320"	1.320"	(1 engine)	(each)	(4 pack)
Note: Piston kits include pistons, rings, wristpins and keepers. Cylinder kits include cylinders, head bolts, base nuts, head gaskets, base gaskets. Pistons are fit to cylinders.								

S&S Shovel Cylinders and Pistons

S&S Series 92-2600 and 92-2610 Pistons and 3-7/16" and 3-1/2" Bore Shovelhead Cylinders



The 92-2600 and 92-2610 series pistons are cast stroker pistons designed for use with 4-1/4" stroke flywheels to convert 74" Panhead, Kucklehead and Shovelhead engines to 80".

The +.60" and larger oversizes can also be used as stock replacement pistons in 80" Shovelheads. The 92-2610 series is a modified version of the 92-2600 series pistons with a lower dome for lower compression. Both series pistons are available in oversizes from 3-7/16" standard to +.90, allowing the use of 74" cylinders (3-7/16" bore) or 80" cylinders (3-1/2" bore).

These pistons are normally used with stock H-D cylinders. Shovelhead style cylinders and cylinder kits are available from S&S with 3-7/16" bore cylinders and pistons or with 3-1/2" bore cylinders and pistons. Either size cylinders can be used in 74" or 80" Shovelhead style crankcases. No cylinders are available from S&S for Knucklehead or Panhead engines.

Displacement	80"	80"	80"			
Stroke	4-1/4"	4-1/4"	4-1/4"	Cast Pistons Recommended Piston Fit: Close: .0020" - .0025" Loose: .0030" - .0035"		
Bore	3-7/16"	3-1/2"	3-7/16"			
Cylinder Length	5.330"	5.330"	5.330"			
Compression	8:1	8:1	7.5:1			
Cylinders Only	919011	919021	919011			
Replacement Piston Kits				Rings Moly Faced	Wrist Pin Hardened	Keeper Clip
Type	Cast	Cast	Cast			
Standard	922600		922610	35210	949255	949254
+ .010	922601		922611	35211		
+ .020	922602		922612	35212		
+ .030	922603		922613	35213		
+ .040	922604		922614	35214		
+ .050	922605		922615	35215		
+ .060 (Standard 80")	922606	922606		35235		
+ .070	922607	922607		35236		
+ .080	922608	922608		35237		
+ .090	922609	922609		35238		
Piston Deck Height	1.290"	1.290"	1.290"	1.290"		

Note: Concerning 74" and 80" Cylinders

Cylinders for 74" engines have a standard bore of 3-7/16" (3.4375") and are 5.330" long from head gasket surface to base gasket surface. Cylinders for 80" engines are identical except that the bore size is 3-1/2" (3.4975"). S&S 92-2510, 92-2600 and 92-2610 series pistons are designed to be used in 80" engines with 4-1/4" stroke. Normally 80" engines have 3-1/2" bore, but these pistons are available in 3-7/16" bore which allows engine builders to use 74" cylinders to rebuild 80" engines. The gain in engine service life in the form of 6 additional piston oversizes, generally outweighs the slight loss of displacement.

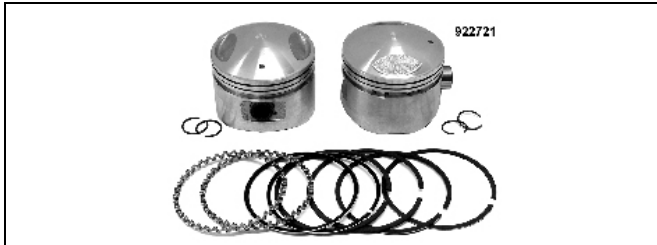
S&S Shovel Cylinders and Pistons

S&S 922720 and 922730 Series Pistons and 3-7/16" and 3-1/2" Bore Shovelhead Cylinders

The 922720 series pistons are cast stroker pistons designed for use with 4-1/2" stroke flywheels to convert stock Panhead or Shovelhead engines to 84".

The 922730 series is a modified version of the 922720 series pistons which have been clearanced for use in 4-5/8" stroke 86" engines.

These pistons are normally used with stock H-D cylinders. Shovelhead style cylinders and cylinder kits are available from S&S with 3-7/16" bore cylinders and pistons. Either size cylinders can be used in 74" or 80" Shovelhead style crankcases.



Displacement	84"	84"	86"	86"	Cast Pistons Recommended Piston Fit: Close: .0020" - .0030" Loose: .0035" - .0040"		
Stroke	4-1/2"	4-1/2"	4-5/8"	4-5/8"			
Bore	3-7/16"	3-1/2"	3-7/16"	3-1/2"			
Cylinder Length	5.330"	5.330"	5.330"	5.330"			
Compression	8.25:1	8.25:1	8.5:1	8.5:1			
Cylinders Only	919011	919021	919011	919021			
Replacement Piston Kits					Rings	Wristpin	Keeper Clips
Type	Cast	Cast	Cast	Cast	Moly Faced	949255	949254
Standard	922720		922730		35210		
+ .010	922721		922731		35211		
+ .020	922722		922732		35212		
+ .030	922723		922733		35213		
+ .040	922724		922734		35214		
+ .050	922725		922735		35215		
+ .060 (Standard 80")	922726	922726	922736	922736	35235		
+ .070	922727	922727			35236		
+ .080	922728	922728			35237		
+ .090	922729	922729			35238		
Piston Deck Height	1.170"	1.170"	1.170"	1.170"	(1 Engine)	(Each)	(5 Pack)
Note: Piston kits include pistons, rings, wristpins and keepers. Cylinder kits include cylinders, head bolts, base nuts, head gaskets, base gaskets. Cylinder with piston kits include a piston kit and a cylinder kit. Pistons are fit to cylinders.							

S&S Shovel Cylinders and Pistons

S&S 92-2800 Series Pistons & 3-7/16" and 3-1/2" Bore Shovelhead Cylinders



The 92-2800 series pistons are forged stroker pistons designed for use with 4-1/2" stroke flywheels to convert stock Panhead, Kucklehead or Shovelhead engines to 84". The 92-2800 pistons can also be used for 3-7/16" to 4-3/4" strokes.



These pistons are normally used with stock H-D cylinders. Shovelhead style cylinders and cylinder kits are available from S&S with 3-7/16" bore cylinders and pistons or with 3-1/2" bore cylinders and pistons. Either size cylinders can be used in 74" or 80" Shovelhead style crankcases. No cylinders are available from S&S for Knucklehead or Panhead engines.

Displacement	84"	84"	Forged Pistons Recommended Piston Fit: Close: .0035" - .0040" Loose: .0050" - .0060"		
Stroke	4-1/2"	4-1/2"			
Bore	3-7/16"	3-1/2"			
Cylinder Length	5.330"	5.330"			
Compression	8.5:1	8.5:1			
Cylinders Only	919011	919021			
Replacement Piston Kits			Rings	Wrist Pin	Keeper
Type	Forged	Forged	Moly Faced	Hardened	Clip
Standard	922800		35210	949250	949251
+010	922801		35211		
+020	922802		35212		
+030	922803		35213		
+040	922804		35214		
+050	922805		35215		
+060 (Standard 80")	922806	922806	35235		
+070	922807	922807	35236		
+080	922808	922808	35237		
+090	922809	922809	35238		
Piston Deck Height	1.180"	1.180"			
Piston Kits include pistons, rings, wrist pins and keepers Cylinder kits include cylinders, head bolts, base nuts, head gaskets, and base gaskets Cylinders with pistons kits include cylinders, piston kit, head bolts, base nuts, head gaskets, and base gaskets. Pistons are fit to cylinders.					

S&S Shovel Cylinders and Pistons

S&S 92-2900 Series Pistons & 3-7/16" and 3-1/2" Bore Shovelhead Cylinders

The 92-2900 series pistons are forged stroker pistons designed for use with 4-3/4" stroke flywheels to convert stock Panhead, Kucklehead or Shovelhead engines to 88". This series of pistons may also be used in engines with 4-5/8" stroke flywheels to build low compression 86" engines.

These pistons are normally used with stock H-D cylinders. Shovelhead style cylinders and cylinder kits are available from S&S with 3-7/16" bore cylinders and pistons or with 3-1/2" bore cylinders and pistons. Either size cylinders can be used in 74" or 80" Shovelhead style crankcases. No cylinders are available from S&S for Knucklehead or Panhead engines.



Displacement	86"	86"	88"	88"	Forged Pistons Recommended Piston Fit: Close: .0035" - .0040" Loose: .0050" - .0060"		
Stroke	4-5/8"	4-5/8"	4-3/4"	4-3/4"			
Bore	3-7/16"	3-1/2"	3-7/16"	3-1/2"			
Cylinder Length	5.330"	5.330"	5.330"	5.330"			
Compression	8.25:1	8.25:1	9:1	9:1			
Cylinders Only	919011	919021	919011	919021			
Cylinders w/Pistons	919019		919019				
Replacement Piston Kits					Rings	Wrist Pin	Keeper
Type	Forged	Forged	Forged	Forged	Moly Faced	Hardened	Clip
Standard	922900		922900		35210	949250	949251
+ .010	922901		922901		35211		
+ .020	922902		922902		35212		
+ .030	922903		922903		35213		
+ .040	922904		922904		35214		
+ .050	922905		922905		35215		
+ .060 (Standard 80")	922906	922906	922906	922906	35235		
+ .070	922907	922907	922907	922907	35236		
+ .080	922908	922908	922908	922908	35237		
+ .090	922909	922909	922909	922909	35238		
Piston Deck Height	1.075"	1.075"	1.075"	1.075"			
Piston Kits include pistons, rings, wrist pins and keepers Cylinder kits include cylinders, head bolts, base nuts, head gaskets, and base gaskets Cylinders with pistons kits include cylinders, piston kit, head bolts, base nuts, head gaskets, and base gaskets. Pistons are fit to cylinders.							

S&S Shovel Cylinders and Pistons



The 92-1620 and 92-1630 series pistons are cast 3-5/8" big bore pistons used in S&S Sidewinder kits for Panhead, Kucklehead or Shovelhead engines, as well as S&S Shovelhead Style long block engines.

The 92-1620 series is used for 4-1/4" and 4-1/2" stroke engines with stock diameter (8-1/2") flywheels and for 4-3/4" stroke engines with 8-1/4" diameter flywheels.

The 92-1630 series is a modified version of the 92-1620 which is clearanced for 4-5/8" stroke engines with stock (8-1/2") diameter flywheels.

Replacement cylinders and cylinder kits with pistons are available for the Sidewinder kits and long block engine kits that S&S offers. Stock crankcases and cylinder heads must be machined to accommodate the larger spigot and fire ring diameters. Full instructions are included with cylinder kits.



Displacement	88"	93"	96"	98"SD^	Cast Pistons Recommended Piston Fit: Close: .0020" - .0030" Loose: .0035" - .0040"		
Stroke	4-1/4"	4-1/2"	4-5/8"	4-3/4"			
Bore	3-5/8"	3-5/8"	3-5/8"	3-5/8"			
Cylinder Length	5.330"	5.405"	5.440"	5.530"			
Compression	7.3:1	8.2:1	8.6:1	8.6:1			
Cylinders Only	919000	919100	919400	919200			
Cylinders w/Pistons		919101		919201			
Replacement Piston Kits					Rings	Wrist Pin	Keeper
Type	Cast	Cast	Cast	Cast	Moly Faced	Hardened	Clip
Standard	921620	921620	921630	921620	941210	949255	949254
+ .010	921621	921621	921631	921621	941211		
+ .020	921622	921622	921632	921622	941212		
+ .030	921623	921623	921633	921623	941213		
+ .040	921624	921624	921634	921624	941214		
Piston Deck Height	1.275"	1.275"	1.275"	1.275"			

Note: Cylinders with pistons kits include cylinders, piston kit, head bolts, base nuts, head gaskets, and base gaskets.

^Small diameter flywheel

***Some early S&S 93" and 96" Sidewinder kits have 5.530" length cylinders --Use 919200 for replacement cylinders**

Note:

Old 1600 series pistons use 92-1200 series ring. If your piston has a .078" compression ring order the 92-1200 series rings. If your compression ring is .059" you have the 1620 series from above.

S&S Shovel Cylinders and Pistons



919000



S&S Shovel Pistons and 3-5/8" Bore Cylinders

The 92-1820 and 92-1830 series pistons are forged 3-5/8" big bore pistons used in S&S Sidewinder kits for Knucklehead, Panhead and Shovelhead engines, as well as S&S Shovelhead style engines.

The 92-1800 series is used for 4-1/4" and 4-1/2" stroke engines with stock diameter (8-1/2") flywheels and for 4-3/4" stroke engines with 8-1/4" diameter flywheels.

The 92-1830 series is a modified version of the 92-1800 which is clearanced for 4-5/8" stroke engines with stock (8-1/2") diameter flywheels.



921830

Replacement cylinders and cylinder kits with pistons are available for the sidewinder kits and long block engine kits. Stock crankcases and cylinder heads must be machined to accommodate the larger spigot and fire ring diameters.

Displacement	88"	93"	93" HC	96"	98" SD [^]		
Stroke	4-1/4"	4-1/2"	4-1/2"	4-5/8"	4-3/4"	Forged Pistons Recommended Piston Fit: Close: .0035" - .0040" Loose: .0045" - .0055"	
Bore	3-5/8"	3-5/8"	3-5/8"	3-5/8"	3-5/8"		
Cylinder Length	5.330"	5.405"	5.363"	5.440"	5.530"		
Compression	7.6:1	8.6:1	9.3:1	9.4:1	9:1		
Cylinders Only	919000	919100	919030	919400	919200		
Cylinders w/Pistons					919203		
Replacement Piston Kits						Rings	Keeper
Type	Forged	Forged	Forged	Forged	Forged	Moly Faced	Button
Standard	921800	921800	921800	921830	921800	941200	949258
+.010	921801	921801	921801	921831	921801	941201	
+.020	921802	921802	921802	921832	921802	941202	
+.030	921803	921803	921803	921833	921803	941203	
+.040				921834		941204	
+.050				921835		941206**	
Piston Deck Height	1.260"	1.260"	1.260"	1.260"	1.260"		(Pair)

Cylinder kits include cylinders, head bolts, base nuts, and base gaskets.

Cylinder kits with pistons include cylinders, piston kit, head bolts, base nuts and head and base gaskets. All piston kits include rings, wrist pins and clips.

Notes:

[^]Small diameter flywheel

*Some early S&S 93" and 96" Sidewinder kits were sold with 5.530" length cylinders-- Use #919200 for replacement cylinders

** Must file end gaps to fit

Cylinders



Big Bore Cylinder Small Parts Kit

For installing 3-5/8" barrels on Shovelhead cases, includes 2 head gaskets one each front and rear cylinder base gasket, 8 cylinder base nuts, and 10 head bolts with washers.

1957 Complete Kit



S&S Teflon Button Style Keepers (4 pack)

Keepers are available in different sizes (thickness) to control wrist end play that varies with bore size. Button style keepers must be fully supported by wrist pin hole.

3 5/8" Bore

PCP Range (Series 1800, 1830)

949258 STD to +.030

949259 +.040 to +.070

3 7/16" and 3 1/2" Bore (Series 2800-2900)

PCP Range

949251 STD to +.040

949252 +.050 to +.090

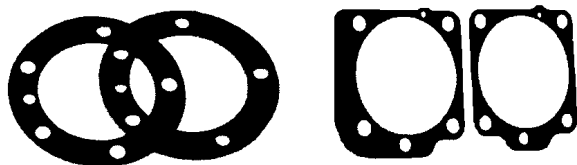
3 3/16" Bore (Series 3700)

PCP Range

949351 STD to +.070

"C" Style Piston Pin Clips (most other series)

949254 4 Pack



Big Bore Gasket Kit

Fits all 3-5/8" cylinders. Includes 2 head & 2 base gaskets. Shovel 1966-84.

79213 James blue teflon gasket kit

25027 Cylinder base gaskets front & rear (set)



Cylinder and Piston Kits

Cylinders are honed and pre-fitted with stock compression cast pistons and Hastings rings. They are ready to run and will require break-in as suggested in the appropriate shop manual. Sold in pairs for stock stroke only. Order gasket set separately.

PCP	Application	Compression
53059	1948-65 Panhead	8.5:1
53060	1966-78 74" Shovelhead	8.5:1
53061	1979-85 80" Shovelhead	8:1
53065	L1973-85 XL 1000cc	9:1



80" Ductile Cast Iron Cylinder Set

Includes 8:1 compression fitted cast pistons with Hastings rings.

53064



S&S Finished Cylinder Base Plate Set

Used in S&S 86" Shovel stroker kits with cast pistons. Stock bore x 1/32" 1948-84 BT models.

932229

Cylinders



Cast Alloy Iron Replacement Cylinders

PCP	OEM	Model	Type	Year
177	16485-55	74"Panhead	Front	1948-65
176	16492-55	74"Panhead	Rear	1948-65
179	16484-66	74"Shovelhead	Front	1966-78
178	16492-66	74"Shovelhead	Rear	1966-78
34810	16498-80A	80"Shovelhead	Front	1979-85
34811	16499-80A	80"Shovelhead	Rear	1979-85
3035	16464-73A	Sportster 1000	Front	1973-85
3038	16465-73A	Sportster 1000	Rear	1973-85
3032	16464-58	Sportster 900	Front	1957-71
3033	16465-58	Sportster 900	Rear	1957-71



All Hastings Ring Sets 3-5/8" Shovel

Can be used on our pistons. All piston moly sets include cast compression rings and 3 piece oil rings. Sold in sets for 2 pistons. Available in sizes listed below:

Moly Top Rings 5/64 (2M5722) Set

Top .078, second .078 and oil .187

4133	STD
4137	+.020
4141	+.040

Moly Top Rings 1/16" (2M5721) Set

Top .065, second .065 and oil .187

35266	STD 3 5/8"
35267	+.010
35268	+.020
35269	+.030
35270	+.040



Shovel Rocker Box Oil Lines

These lines will fit up to plus .200 longer cylinders for Big Twin 1966-84.

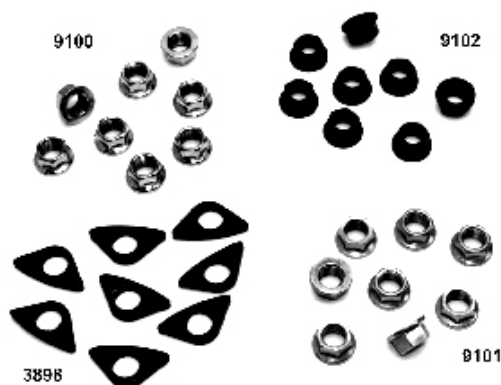
1354 Set (1982-85) style (chrome)



Cylinder Base Studs

Precision formed with Rolled threads OEM replacements.

PCP	OEM	Qty.	Application
5472	16831-30	8	1930-77 FX-FL
5473	16837-78	8	1978-84 FX-FL
5474	16830-54	8	1954-71 XL-XLH
	16830-72		1972-85 XL-XLH



Cylinder Base Nut Set

These flanged, 9/16 hex nuts are duplicates of OEM 16838-78 used on 1978-84 80 cu. in. Shovelhead. The smaller hex size provides wrench clearance on fatter cylinders. Use with triangular washers

9100	Chrome plated
9101	Cad plated
9102	Black oxide
3898	Spacers (8 pack)



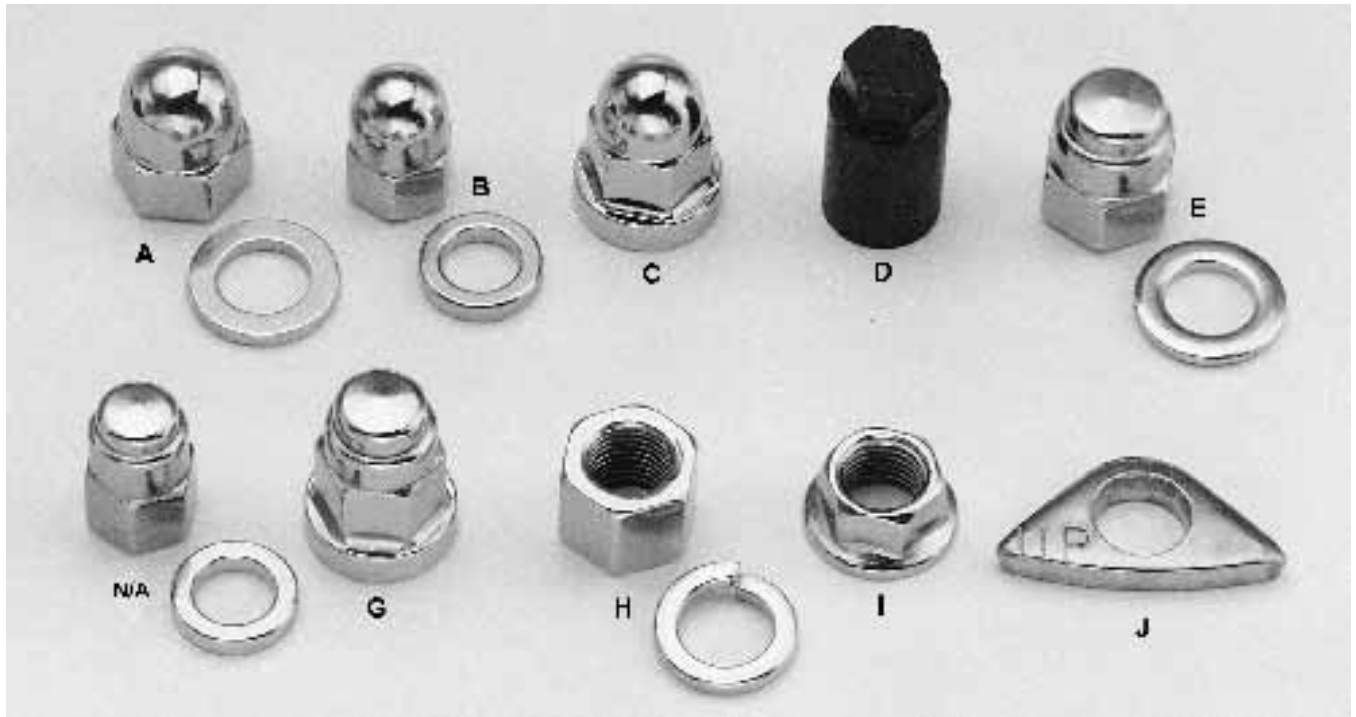
Head Bolt Kits

Cad	Chrome	Description
1820	5214	Pan/Shovel 1948-on w/washers
8945	8944	Sportster 1957-72
9212	9211	Sportster 1973-85

Head Bolt Washer Kits

5200 8488 All HD with 7/16" bolts

Cylinder Base Nuts



- A. PCP 1683** Fits Big Twin 1936-77 Chrome Acorn
- B. 1684** Sportster 1957-1985 Chrome Acorn
- C. 1812** Big Twin 1978-1984 Chromed Milled Hex Acorn
- D. Sportster 1957-1984 XLR Type 7/16 Hex**
3580 Chrome
5123 Black Oxide
- Big Twin Pre-Evolution Big Bore 7/16 Hex**
3578 Chrome
5275 Black Oxide
- E. Big Twin 1930-77**
2878 Chrome cap
- G. 2879** Big Twin 1978-1984 Chrome Milled Hex Cap

- H. Big Twin 1936-1978 Stock**
2153 Chrome
5167 Cad
9623 Parkerized
5201 Cad lockwashers only (8 pc)
- Sportster Stock**
2154 Chrome
5168 Cad
9624 Parkerized
- 7/16 Lockwashers OEM 7055 (8pc)**
5201 Cad
9715 Chrome
9716 Parkerized
- I. Shovelhead 80" 1978-84 OEM 16836-78**
9100 Chrome
9101 Cad
9102 Black oxide

- J. Cylinder Base Stud Spacer Shovelhead 1978-84**
 OEM 16836-78
8860 Chrome



12 Point Head Bolt Kits

These are chrome plated and include washers. The big bore style allows wrench clearance on 1948-84 Pan & Shovels. Special flat washers are included in the XL kit.

PCP	OEM	Model	Years
9211	4709	Sportster	1973-85
5305*	16814-48	BT 74-80	1948-84
3582*	Black Oxide	BT 74-80	1948-84

* Install these bolts with a 7/16" 12 pt. box Wrench.



Big Bore Head Bolt Kit

Heat treated high strength 12 point bolts are made specifically for big bore cylinders where wrench clearances and optimum strength are necessary. Install these bolts with 7/16" 12 point box wrench. Available in black finish only. Kit contains 10 bolts and 10 washers.

3582

Wiseco Piston Kits



Wiseco's extensive R&D programs have revolutionized the power and performance of Wiseco's HD piston kits. All Wiseco pistons are forged for superior strength and dependability. Kits include forged pistons, rings, circlips and wrist pins. Will not fit XR style heads. Top ring .062, 2nd ring .062, oil ring .158.



1200 "74" FL-FLH, Panhead, Shovelhead '48-77

9:1 Compression with Hastings X Ring package.
Top ring .062, 2nd ring .062, oil ring .158.

PCP	Wiseco	Bore	Ring Set Per Cylinder
35905	K1605	STD	35945
35906	K1606	.010	35946
35907	K1607	.020	35947
35908	K1608	.030	35948
35909	K1609	.040	35949
35910*	K1610	.050	35950
35911*	K1611	.060	35951
35912*	K1612	.080	35952

*For Shovelhead only

1000 Iron Sportster 1972-85

10:1 Compression with Hastings X Ring package.
Top ring .062, 2nd ring .062, oil ring .158.

PCP	Wiseco	Bore	Ring Set Per Cylinder
35900	K1600	STD	35940
35901	K1601	.010	35941
35902	K1602	.020	35942
35903	K1603	.030	35943
35904	K1604	.040	35944



Shovelhead 1340 80" 1978-84

7:1 compression with Hastings X Ring package.
Top ring .062, 2nd ring .062, oil ring .158.

PCP	Wiseco	Bore	Ring Set Per Cylinder
35913	K1613	STD	35951
35914	K1614	.010	35953
35915	K1615	.020	35952
35916	K1616	.030	35954
35917	K1617	.040	35955

Shovelhead 1340 80" 1978-84

9.5:1 compression with Hastings X Ring package.
Top ring .062, 2nd ring .062, oil ring .158.

PCP	Wiseco	Bore	Ring Set Per Cylinder
35918	K1623	STD	35951
35919	K1624	.010	35953
35920	K1625	.020	35952
35921	K1626	.030	35954
35922	K1627	.040	35955

Wiseco Wrist Pins, (Sold Each)

35934 1000 Sportster 1972-on 1200 "74" FL-FLH 1948-on
35935 1340 "80" Shovelhead 1978-84

Wiseco Wrist Pin Circlips (sold in pairs)

35933 All Wiseco pistons

NOTE: Hastings X rings and Wiseco XC rings are NOT interchangeable. Wiseco rings sold per cylinder.

Hastings X-Rings .062" Top Ring Fully Filled Barrel Faced Cast Iron Compression Ring	.062" Second Ring Taper Faced Cast Iron Second Ring	.158" Oil Ring 3 Piece Low Tension Oil Ring
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Pistons



Shovelhead 80" 3-1/2" 1979-E83 (3.498 OD)
 Standard and low compression pistons with pins & clips are sold each. Hastings ring sets sold separately and packed for 2 pistons and have .062x.062x.185 oil scraper.

Size	Piston		Rings	
	Low Comp	Std Comp	1/16" Cast	1/16" Moly
STD	2716	2713	35106	35235
.010	2404	694	35107	35236
.020	2405	695	35108	35237
.030	2406	696	35109	35238
.040	2407	697	35110	35239



Panhead & Shovelhead 74 " 1948-78 3-7/16" (3.4375 OD)

Standard and low compression pistons with pins & clips are sold each. Hastings cast ring sets sold separately and packed for 2 pistons and have .062x.062x.185 oil scraper.

Size	Piston		Hastings Rings	
	Low	STD	Cast	Moly
STD	2396	671	35056	35210
.010	2397	672	35057	35211
.020	2398	673	35058	35212
.030	2399	674	35059	35213
.040	2400	675	35060	35214
.050	2401	676	35061	35215
.060	2402	677	35062	35216
.070	2403	678	35063	35217



Sportster 1000 CC 1972-E85 (3.1875 OD)

Standard compression 9:1 pistons with pin & clips are sold each. Hastings ring sets sold separately and packed for 2 pistons and have .062x.062x.185 oil scraper.

Size	Piston	Hastings Rings	
	Each	Cast	Moly
STD	663	35048	35200
.010	664	35049	35201
.020	665	35050	35202
.030	666	35051	35203
.040	667	35052	35204
.050	668	35053	35205
.060	669	35054	35206
.070	670	35055	



Sportster 900 CC 1957-71 (3.000 OD)

Standard compression pistons with pin & clips are sold each. Hastings cast ring sets sold separately and packed for 2 pistons and have .062x.062x.185 oil scraper..

Size	Piston	Hastings Rings
	Each	Cast
STD	35840	35040
.010	2711	35041
.020	2712	35042
.030	658	35043
.040	659	35044
.050	660	35045
.060	661	35046
.070	662	35047

Compression Ratio					
Model	Engine	Bore	Stock CR	Low CR	High CR
Sportster	900cc	3"	9:1	N/A	N/A
Sportster	1000cc	3-3/16"	9:1	8.4:1	N/A
Harley 74"	1200cc	3-7/16"	8.5:1	7.5:1	10:1
Harley 80"	1340cc	3.298	8:1	7:1	N/A

Piston Kits



Panhead & Shovelhead 74" 3-7/16" 1948-78 (3.4375 OD)

Piston kits include 2 STD compression pistons with pins, clips and cast ring set.. Hastings ring sets also sold separately and packed for 2 pistons with 1/16" (.062) compression rings.

Size	Piston Kit	Hastings Rings	
		Cast	Moly
STD	35610	35056	35210
.010	35611	35057	35211
.020	35612	35058	35212
.030	35613	35059	35213
.040	35614	35060	35214
.050	35615	35061	35215
.060	35616	35062	35216
.070	35617	35063	35217



Shovelhead 80" 3-1/2" 1979-E83 (3.498 OD)

Piston kits include 2 STD compression pistons with pins, clips and cast ring set.. Hastings ring sets also sold separately and packed for 2 pistons with 1/16" (.062) compression rings.

Size	Piston Kit	Hastings Rings	
		1/16" Cast	1/16" Moly
STD	35633	35106	35235
.010	35634	35107	35236
.020	35635	35108	35237
.030	35636	35109	35238
.040	35637	35110	35239



Sportster 900 CC 1957-71 (3.000 OD)

Piston kits include 2 STD compression pistons with pins, clips and cast ring set. Hastings cast rings are sold in sets for 2 pistons with 1/16" (.062) compression rings.

Size	Piston Kit	Hastings Rings	
		Cast	Moly
STD	35540	35040	
.010	35541	35041	
.020	35542	35042	
.030	35543	35043	
.040	35544	35044	
.050	35545	35045	
.060	35546	35046	
.070	35547	35047	



Sportster 1000 CC 1972-E85 (3.1875 OD)

Piston kits include 2 STD compression pistons with pins, clips and cast ring set. Hastings ring sets are also sold separately and packed for 2 pistons with 1/16" (.062) compression rings.

Size	Piston Kit	Hastings Rings	
		Cast	Moly
STD	35550	35048	35200
.010	35551	35049	35201
.020	35552	35050	35202
.030	35553	35051	35203
.040	35554	35052	35204
.050	35555	35053	35205
.060	35556	35054	35206
.070	35557	35055	



Piston Pins

PCP	OEM	Fitment
32351	22719-52	XL 1954-84 (each)
32354	22760-73	BT (for spiral) 1973-83 (each)



BT Piston Pin Locks

PCP	OEM	Type	Year	U/M
11048	22581-32	Old "L"	1941-72	Pair
11049	22582-52	Spiral	1973-E77, XL 54-E78	10 Pk
11050	22588-78	Snap ring	L77-E83, XL 1978-85	10 Pk

Pushrods



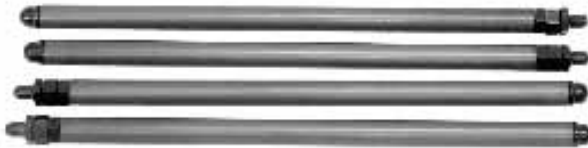
V-Thunder Pushrod Kits

Made from .049 wall 4130 chrome moly steel to exacting tolerances for reliability. These rods fit stock or Velva Touch Lifter units.

30043 Pan 1948-65

30044 Shovel 1966-84

30040 1966-84 Stroker shovel



Andrews BT Shovel Aluminum Pushrods and Adjusters

Quiet operation, 4 aluminum pushrods and adjusters.

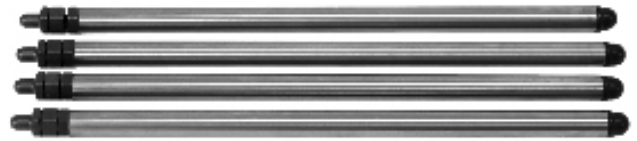
240055



Preston Shovel Pushrod Kit

Pushrods to fit 1966-84 Shovelheads. A tapered split lock nut is used for the best possible way to lock the adjusting bolt into the lifter body. We use a 5/16-32 extra fine thread for easier and close adjustments. All pushrods are long enough to accommodate engines with Stroker cylinders. All wear surfaces are hardened for maximum wear and durability.

2924



Andrews BT Shovel Chrome Moly (4130) Steel Pushrods

Maximum strength, 4 steel pushrods and adjusters.

240030



Preston Shovelhead Solid Lifter Kit

Made from aircraft quality 4130 seamless chrome moly tubing. Extremely rigid, resists flexing even when used with radical cams and high spring rates. Lighter than OEM pushrods. Lengths as long as possible for added rigidity of adjuster. Set includes 4 pushrods and 4 adjustable solid lifter adapters. Smaller diameter than most moly pushrod sets. Won't rub on stock pushrod tubes. (NOT FOR STROKER)

2921 Kit



Stroker Shovel Pushrod Set

This set features alloy rods with an .O.D of .440 (no rubbing) and 32 T.P.I. adjusters for precise settings. Designed for +.200 longer cylinders and includes solid converters and chrome longer upper push rod clips.

1709

Pushrods

Pushrod Kits

S&S pushrods are engineered to help you obtain maximum horsepower through positive valve action and can be used in any stock replacement or high performance engine application. All chrome moly steel pushrods are made of 7/16" OD chrome moly steel tubing with pressed-in heat treated steel ends. This combination provides maximum strength and durability regardless of the performance application.

Important Note

It is recommended that an appropriate cam change be made when using solid lifter pushrods in late 1977-on engines. It is S&S' experience that excessive valve train noises are prevalent when a combination of solid lifter pushrods and the stock hydraulic cam is used.



S&S Adjustable Pushrod Solid Lifter Conversion

Kit Includes 4 adjustable type, chrome moly steel pushrods and 4 special solid lifter conversion hardened steel adapters that are installed in the lifter in place of stock hydraulic unit.

935067 74" & 80" Shovel 1966-84

935014 As above, +1/16"

935016 As above, +5/16"

S&S BT 1953-65, converts hydraulic to 1948-52 style adjustable tappets

935058 STD

935081 -1/8"

935082 +1/16"

S&S BT 1953-65 stock replacement aluminum pushrods. Your stock adjustable screws must be used.

935091



935068

S&S BT 1966-84 Shovel solid tappet conversion kit. Use with 1953-84 lifters.

935068

S&S BT 1948-52 74" Pan solid style kit.

935059



S&S BT 1966-84 Solid tappet pushrod kit. Requires 1948-52 style adjustable tappet.

935069



S&S Sportster 1957-85 stock replacement pushrods

935037



S&S BT 1966-84 stock steel replacement with 1953-84 hydraulic lifters. Stock screws must be used

935070



Pushrods



Preston Aluminium Pushrods For Use With Hydraulic Lifters

These pushrods replace the stock rods and still retain the hydraulic lifters (.500 O.D.).

- 1766** Panhead 1953-65
- 1767** Shovel 1966-84



Preston Aluminum Alloy Tubular Pushrod and Hydraulic Lifter Conversion Kit

Installation of this kit will correct all problems associated with hydraulic lifters and at the same time substantially reduce valve train weight. Complete conversion kits available for the following:

- 1707** BT 74 1948-65
- 1708** BT 74 1966-83



S&S Sportster 1957-85 stock replacement pushrods

935037



Preston BT Shovel Stock Pushrod

Replaces 17904-66 including screw and locknut for all Shovel motors with Hydraulic lifters. 1966-84. Sold each.

- | PCP | Description |
|--------------|-------------------------------|
| 30500 | Steel construction (17904-66) |



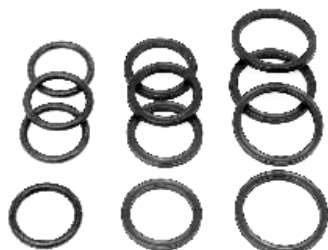
Preston Hydraulic Lifter Converters

Convert 74 hydraulic lifters to solids and still use factory pushrods. Easy and inexpensive way to convert to solid lifters.

2180



- | | |
|--------------|---------------------------|
| 2974 | 4 Lifters with adjusters |
| 2975 | Adjusting screws (4 pack) |
| 12529 | Locknuts 5/16-32 (4 pack) |



Pushrod Cover Seal Kit 80" BT L1979-84

72142



James Tappet Quad Seals BT 1981-84

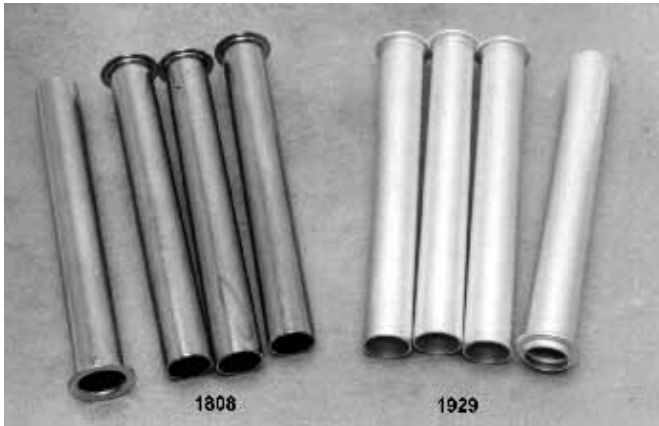
- 79025** 11133-A (10 pack)

Pushrod Covers



Chrome Push Rod Cover Hardware 1936-on

PCP	OEM	Fits
2000	17950-66	FX-FL Clips 1966-on (4 pack)
3419		Clips only for Stokers up to +.200 Shovel cylinders
2001	17950-48	XL, Pan Clips (short) (4 pack)
13101	17947-36	Spring (10 pack)
2002	17945-36	Chrome cup (4 pack)
13557	6762B	Spring washer (10 pack)



Upper, Inner Pushrod Covers

Shovelhead (longest length) inner pushrod covers fit Sportster 1957-1984 and O.H.V. Harley 1936-on.

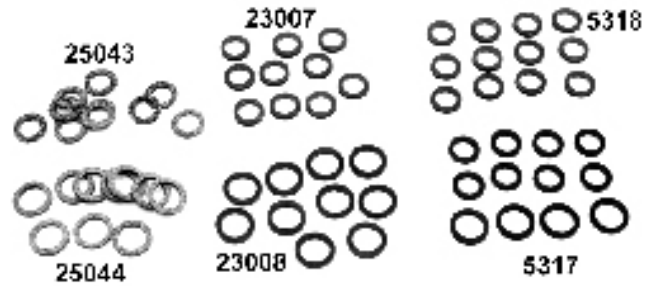
1808	Cork seal style
1929	Quad seal style
9213	L1979-on Shovel and XL L1979-90



BT Chrome Pushrod Cover Dress-Up Kit

Kit includes chrome lifter base covers.

PCP	Application
59174	1980-84 Shovelhead



OEM Push Rod Corks and Seals

PCP	OEM	Description
25043	17955-36	Small neoprene cork (10 pk)
25044	17955-48	Large neoprene cork (10 pk)
23007	17955-36	Small pushrod rubber seals (10 pk)
23008	17955-49	Large pushrod rubber seals (10 pk)
Machined rubber seals replace old style cork for improved sealing and longer life. Packed 12 per kit.		
5317	All Panhead, Shovelhead to 1979	(4 large, 8 small)
5318	XL 1957-1979, Knucklehead 1936-1947	(12 small)



Upper Pushrod Cover Kits

Each kit contains 4 chrome plated retaining clips, 4 chrome plated cups, 4 springs, 4 cork gaskets, and 4 steel washers. Exact duplicates.

Chrome Plated (Outer)	Clip Length
1765	Knucklehead 1936-39 2"
1771	Panhead and Sportster 2-3/8"
1772	Shovelhead and 1940-47 Knucklehead 3-1/2"



S&S Pushrod Cover Kits

Includes top and bottom covers, cover cap, cover spring, and spring washer for four pushrods.

PCP	Application
934040	Shovelhead 1979-84 (o-ring style bottom cover)

Pushrod Covers



Complete Pushrod Cover Kit

All parts from top to bottom fit all V-Twin engines. Visible parts are all chrome and includes upper covers, inner cover, and lower covers.

PCP	Fits
1954	BT Knuckle 1936-39
1953	BT 74" Knuckle 1940-47
1952	BT Panhead 1948-65
1955	All Sportsters 1957-85
1959	Big Twins 1966-E79
1956	Stroker (longer) BT 1966-84
1951	BT Shovelhead Quad Type 1979-84



Billet Chrome Pushrod Cover Set BT 1966-84

Features chromed aluminum construction and includes all parts shown including inner steel tubes, springs and silicone seals.

34716 Kit



Skull Push Rod Cover Cups

Feature die-cast construction with chrome or gold plating, set of 4. Matching Kromettes with 1/4 x 20 studs in 5 packs also available.

PCP	Description
44010	Chrome cups
44002	Chrome kromett
44005	Chrome kromett w. red eyes
44003	Gold kromett



Lower Pushrod Cover Kits

These stock pushrod covers are beautifully plated duplicates of the Harley part. Available in sets of 4 with cork gaskets for the following:

Chrome Plated

1817	Sportster 1957-84
1818	Panhead/Shovelhead 1948-up
1819	Knucklehead 1940-47
1928	Shovelhead Quad Seal Type L1979-84
72091	Colony as above



Shovelhead Valve Spring Kit by Sifton

Includes 4 intake and 2 exhaust valves with nitrated finish, complete spring set, keepers with upper and lower collars. 4 Piece valve set available separately.

PCP	Application
34023	1966-79 Kit
34024	1980-81 Kit
34025	1982-84 Kit
34026	1966-84 Valve set

Valves



Rowe Forged Shovel Valves

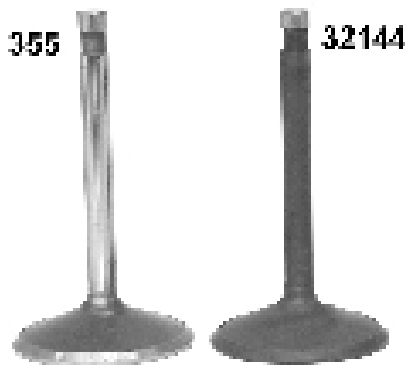
These valves are drop forged, shot peened with tip, stem and seat area machined. Exhaust valves made from 21-4N stainless steel and intakes from silicone #1 material. Offered with black melonite heat treating process (nitride), chromed or plain stems.

PCP	Rowe	Application	Head Diam. ± .005
32206	720-03	Intake black	1.940
32208	720-23	As above, +1/16"	2.000
351	720-01	Intake plain	1.940
32153	720-23	As above, +1/16"	2.000
32207	721-03	Exhaust black	1.750
32209	721-53	As above +1/8"	1.875
32143	721-63	As above +5/32"	1.906
352	721-01	Exhaust plain	1.750

Rowe Machined Shovel Valves

Forged one piece exhaust valves made from 21-4N stainless steel and intakes from silicone #1 material. Precision CNC machined with black melonite heat treating process (nitride), chromed or plain stems.

PCP	Rowe	Application	Head Diam. ± .005
32204	720-13	Intake black	1.940
4177	720-12	Intake chromed	1.940
32205	720-11	Intake plain	1.940
32216	721-13	Exhaust black STD	1.750
2707	721-12	Exhaust chromed H/C	1.750
32212	721-11	Exhaust plain STD	1.750



Rowe Machined Sportster Valves

Forged one piece exhaust valves made from 21-4N stainless steel and intakes from silicone #1 material. Precision CNC machined with black melonite heat treating process (nitride), chromed or plain stems.

PCP	Rowe	Application	Head Diam. ± .005
32147	730-13	Intake black 1970-84	1.940
32148	730-12	Intake chromed 1970-84	1.940
32149	730-11	Intake plain 1970-84	1.940
32150	731-13	Exhaust black 1957-84	1.562
2709	731-12	Exhaust chromed 1957-84	1.562
32151	731-11	Exhaust plain 1957-84	1.562

Rowe Forged Sportster Valves

These valves are forged, shot peened with tip, stem and seat area machined. Exhaust valves made from 21-4N stainless steel and intakes from silicone #1 material. Offered with black melonite heat treating process (nitride), chromed or plain stems.

PCP	Rowe	Application	Head Diam. ± .005
32210	730-03	Intake black 1970-84	1.940
32186	730-33	as above + 1/16"	2.000
355	730-01	Intake plain 1970-84	1.940
32175	734-03	Intake black 1957-69	1.822
32144	731-03	Exhaust black 1957-84	1.562
32145	731-33	As above, +1/16"	1.625
32146	731-53	As above, + 1/8"	1.687
359	731-01	Exhaust plain 1957-84	1.562



AV&V Valve Seats

These valve seats are made from heat and wear resistant high quality alloy steel, and are manufactured with clear identification markings and radius edges for easy installation. These seats will resist intense valve pounding and effectively dissipate heat for constant valve sealing. These valve seats will increase in hardness during engine break-in period.

Exhaust and intake valves are made from the same material, choose size as needed. Machining may be required.

PCP	O.D.	I.D.	Thickness
31787	1.630"	1.180"	.385"
31789	1.757"	1.371"	.315"
31780	1.757"	1.410"	.430"
31788	1.880"	1.439"	.410"
31784	1.944"	1.570"	.400"
31781	2.008"	1.610"	.440"
31782	2.040"	1.590"	.420"
31790	2.068"	1.750"	.315"
31783	2.070"	1.610"	.460"
31785	2.135"	1.750"	.400"
31786	2.163"	1.750"	.455"



S&S Replacement Shovelhead Valves 1966-84

Available with stock and +.005 diameter stems for rebuilds. The intake valve has the stock 1.950" head diameter and the exhaust valve has a 1.720" (-.030) head. The smaller exhaust valve head allows for higher TDC lifts without valve to valve interference as well as improved flow.

PCP	Description
902015	1.950" Intake valve (18075-80/81, 18078-80/81)
902022	1.720" Exhaust valve



AV&V Stainless Steel Valves

These valves are heat treated and nitride processed for excellent wear resistance. These valves feature a 45 degree angle, cut below the lock groove to reduce stress in this area, as well as making valve seal installation easier.

Shovelhead Valves 1966-84

PCP	Valve	Head Diam.
31664	Exhaust	1.750" (also Pan intake/exhaust)
31665	Intake	1.955"



Shovelhead Valves with Forged Stems 1966-84

For standard size heads.
2706 Nitride exhaust valve



Sportster Valves 1957-84 (not Rowe)

2708	Black nitride exhaust 1957-84
4179	Hard chrome intake 1970-84

Valves and Guides

Model	Size	Rowe Cast Iron		Rowe Ampco 45	
		Intake	Exh	Intake	Exh
Pan/Shovel	STD	17616	17660	17530	17560
74 & 80	+.001	17617	17661	17531	
1948-79	+.002	17618	17662	17532	17562
.5655	+.003	17619	17663	17533	17563
	+.004	17620	17664	17534	17564
	+.005	17621	17665	17535	
	+.006	17622	17666	17536	17566
	+.008	17623	17667	17537	17567
	+.010	17624	17668	17538	17568
	+.012	17626	17669		17569
	+.020	17627		17540	17570



Shovelhead	Size	Rowe Cast Iron		Rowe Ampco 45	
		Intake	Exh	Intake	Exh
74 & 80	+.001	17630	17690	17541	17571
1979-84	+.002	17631	17691	17542	17572
.6245	+.003	17632	17692	17543	17573
	+.004	17633	17693		17574
	+.005	17634	17694	17545	17575
	+.006	17635	17695	17546	
	+.008	17636	17696	17547	17577
	+.010	17637	17697	17548	17578
	+.012	17638	17698	17549	17579
	+.020	17639	17699	17550	17580
				17551	17581



Sportster	Size	Rowe Cast Iron		Rowe Ampco 45	
		Intake	Exh	Intake	Exh
1957-E83	+.001	17640	17646	17552	17556
W/Shoulder	+.002	17641	17647	17553	17557
.5645	+.003	17642	17648	17554	17558
	+.004	17643	17649	17555	17559
		17644	17650		



Rowe Unhoned Small Bore Cast Iron Guides

Sportsters 1979-on without flange

Intake	Exhaust	Size
17524	17582	STD
17525	17583	.001
17526	17584	.002
17527	17585	.003
17528	17586	.004



Valve Keeper Keys

Split type, sold in 8 packs, enough for one engine.

PCP	OEM	Description
30014	18228-30	45's 1929-73, XL 57-85
277500	18228-30	Andrews as above
30012	18228-36	BT 1936-84

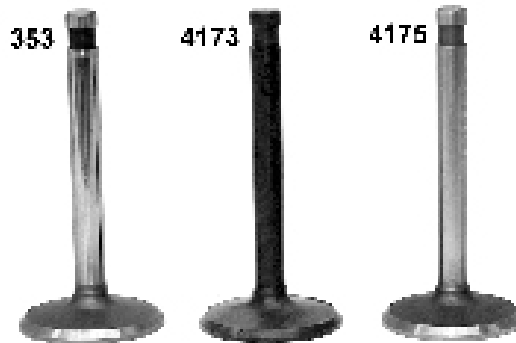


Rowe-Pro SS Dyna-Flo Series

High flow, forged one piece valves made from 21-4N stainless steel. Precision CNC machined with black melonite heat treating process (nitride). Each valve comes with Sliker'n Snott assembly oil. Sold each.

Head Diam.

PCP	Rowe	Application	± .005
32253	931-13	Exhaust all XL Iron Head	1.562
32254	931-33	As above, +1/16"	1.625
32255	931-53	As above, + 1/8"	1.687



Preston Pan Valves w/Forged Stems 1948-65

Head	Standard		Black Nitride		Hard Chrome	
	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
STD	353	352	4173	-	4175	2707
OS	-	-	-	32143	-	-

Valve Guides

AV&V Manganese Bronze Valve Guides

CNC Machined with special hi-temp, Viton o-ring to prevent oil infiltration between guide and head. Tapered and radiused nose for easier installation and better intake and exhaust flow. Valves have a unique super grip finish at the top end to better grip valve seal. Can be used with Stock style or Viton seals. Valves have a shortened top to allow for clearance in high lift applications. With manganese bronze alloy, intake guides can be fit to .0008" and exhaust guides to .0012" or greater when used with AV&V valves only. Manganese bronze alloy lets valves be fit at tighter clearances with increased heat dissipation and greater durability.

AV&V Manganese Bronze Guides Shovel & Pan 1200cc 1948-79

Use on stock replacement applications with OEM style valve seals. Intake or exhaust.

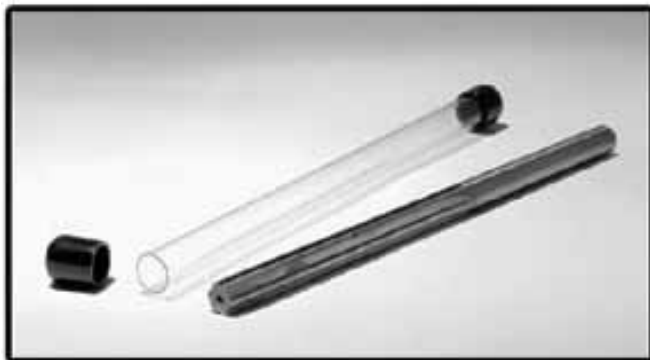
PCP	Size	I.D.	O.D.
34050	STD	.375"	.566"
34051	+ .001	.375"	.567"
34052	+ .002	.375"	.568"
34053	+ .003	.375"	.569"
34054	+ .004	.375"	.570"
34055	+ .005	.375"	.571"
34056	+ .006	.375"	.572"
34057	+ .025"	.375"	.591"



AV&V Manganese Bronze Guides Shovel 1340cc 1979-84

Use on stock replacement applications with OEM style valve seals. Intake or exhaust.

PCP	Size	I.D.	O.D.
34058	STD	.375"	.625"
34059	+ .001	.375"	.626"
34060	+ .002	.375"	.627"
34061	+ .003	.375"	.628"
34062	+ .004	.375"	.629"
34063	+ .025	.375"	.650"



AV&V Solid Carbide Valve Guide Reamers

These unique reamers feature a 2" long pilot pilot for a perfect alignment with the valve guide while reaming and are specially designed for use with manganese bronze material. Valve guides can be reamed to exact dimension without any taper in just a few seconds. These durable tools will last for hundreds of guides. When using AV&V valves and guides this one tool allows you to fit both intake and exhaust.

PCP	Diameter	Application
34048	0.3777"	Pan, Shovel
34049*	0.3782"	Pan, Shovel

*Recommended size for all Pan and Shovel AV&V valves

AV&V Cast Iron Valve Guides

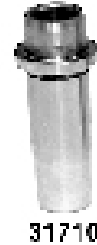
CNC Machined with special hi-temp, Viton o-ring to prevent oil infiltration between guide and head. Tapered and radiused nose for easier installation and better intake and exhaust flow. Valves have a unique super grip valve seal section and can be used with stock or teflon seals. Has an unfinished I.D. and is ready to be honed or reamed after installation. Made from micrograin cast iron.

AV&V Cast Iron Guides Shovel & Pan 1200cc 1948-79

Use on stock replacement applications with OEM valve seals or they may be machined for use with .530" teflon valve seals.

Intake or exhaust.

PCP	Size	I.D.
31710	STD	.375"
31711	+ .001	.375"
31712	+ .002	.375"
31713	+ .003	.375"
31714	+ .004	.375"
31715	+ .005	.375"
31716	+ .006	.375"



31710

AV&V Cast Iron Guides Shovel 1340cc 1979-84

Use on stock replacement applications with OEM valve seals or they may be machined for use with .530" teflon valve seals.

Intake or exhaust.

PCP	Size	I.D.
31720	STD	.375"
31721	+ .001	.375"
31722	+ .002	.375"
31724	+ .004	.375"



31720

AV&V Sportster 1957-E83 Cast Iron Valve Guides for Flange Models only

Use on stock replacement applications with .530" valve seals.

Intake	Exhaust	Size	I.D. Int.	I.D. Exh.
31740	31744	STD	.309"	.339"
31741	31745	+ .001	.309"	.339"
31742*	31746*	+ .002	.309"	.339"
31743*	31747*	+ .003	.309"	.339"

*Note: Jims product



31740

AV&V Sportster L1983-85 Cast Iron Valve Guides for Models without Flange

Use on stock replacement applications with .530" valve seals.

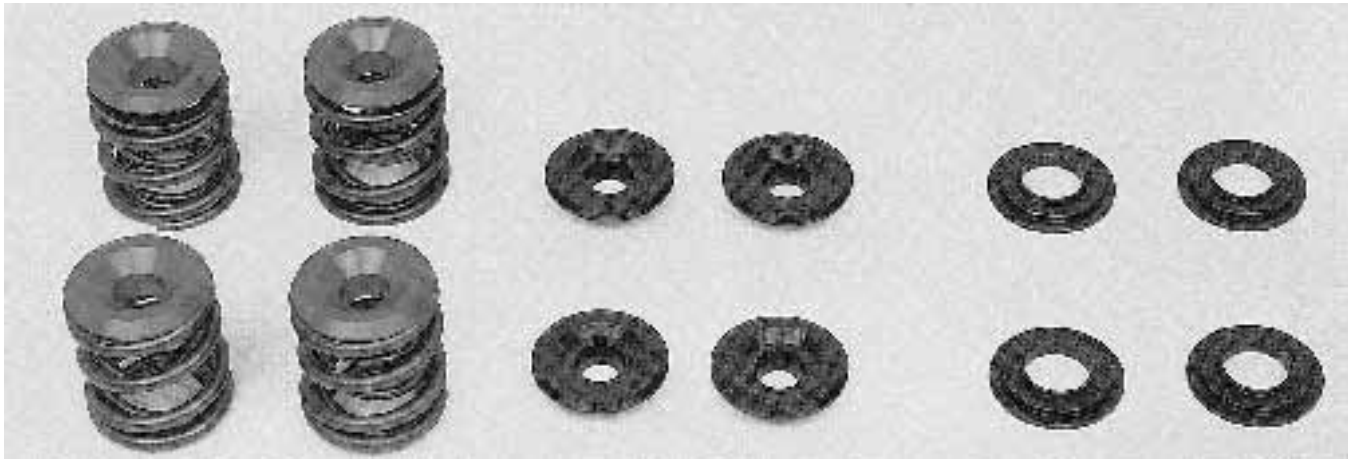
Intake	Exhaust	Size	I.D. Int.	I.D. Exh.
31748*	31752	STD	.309"	.339"
31750*	31754*	+ .002	.309"	.339"
31751*	31755*	+ .003	.309"	.339"

*Note: Jims product



31748

Valve Springs



If you are installing cams in a Shovel engine, the valve spring collars and related parts shown above will make things go a lot smoother. Our springs and collars are designed for easy installation and maximum reliability.

Andrews High Lift Upper Spring Collars

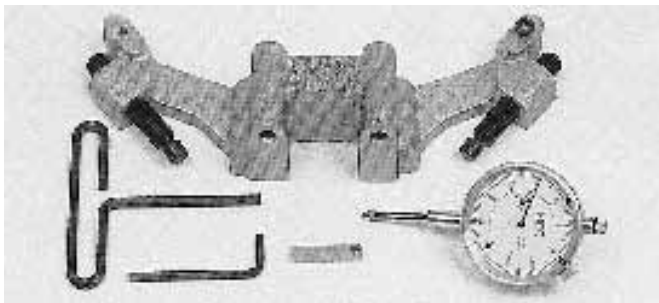
Fits 74 & 80 motors. Used with high lift springs, cams with .600 lift can easily be accommodated. Made from T6 aluminum, collars are light weight, hard coated and very strong.

271100 (4 collars)

Andrews High Lift Springs

Fits 74 & 80" motors and will provide correct spring force for any of our performance cams. Installation does not require complicated machining.

272110 (4 springs)



Valve Train Checker

The Trock Shovel valve checker is the most accurate tool available for measuring valve train on any Shovelhead. If you set up more than 2 pair a year, this tool is worth owning. If valve guides or springs don't have proper clearance, a valve checker will pinpoint the problem quickly.

230010 Shovel valve checker

Andrews Medium Lift Upper Spring Collars

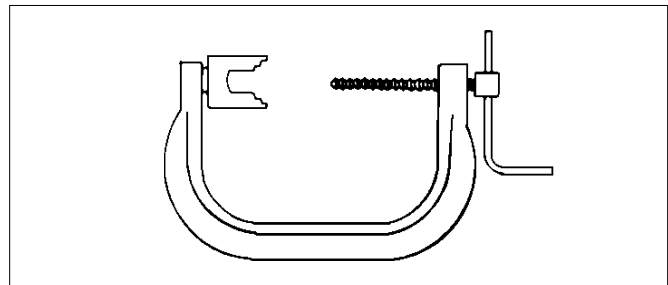
For 74 & 80" motors. Springs are intended to work with stock springs and add approximately .060" spring travel with no modification. This is the easy way to install B or #2 cams in stock heads.

276150 (4 medium lift collars)

Andrews Low Profile Lower Spring Collars

For 74 & 80" motors and are similar to stock 1980 style parts but are lower profile for easier installation of higher lift cams. They are required parts if you are using 1980 style valve guides which utilize the "K" line stem seals. Material is heat treated steel.

273120 (4 low profile lower collars)



Valve Spring Compressor

Necessary for removing or installing valves. Fits all overhead valve Big Twins except Evolution.

2856 OEM 96600-36

Valve Springs



Valve Guide Oil Seal Sets for one engine

- 340** Sportster 1957-86 with 2 sleeves
- 341** Big Twins 1948-79 with one sleeve
- 342** Big Twins 1980-84 with one sleeve



Valve Guide Oil Seals (Sold in 10 packs)

- | PCP | Fits |
|--------------|---|
| 14001 | Intake XL 1954-85 |
| 14002 | Exhaust XL 1954-85 |
| 14003 | BT 1948-78 |
| 14004 | BT 1979-84 |
| 14005 | Special 3/8 x .531 for 80" Shovel (10 pack) |



Valve Guide Seal Installer Tool

- 4110** White plastic valve guide seal installer tool. Fits Sportster and Big Twins 1980-84.
- 4115** Black plastic valve guide seal installer tool. Fits BT models 1948-79

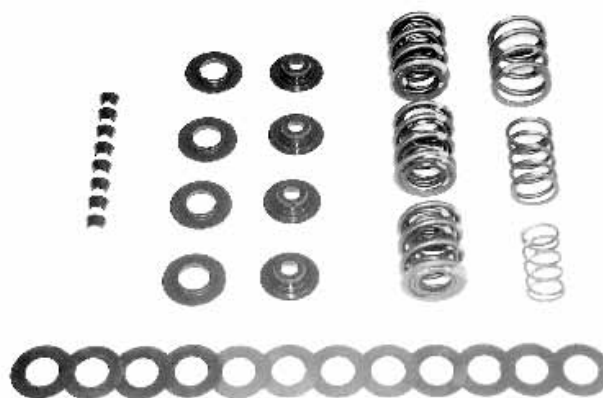
Note: Valve guide oil seals will require machining of valve guide and/or collar in order to re-establish overall valve guide height on all but the latest-style valve guides. Installation tools are available separately. Refer to service manual and valve guide specifications for modifications required.



S&S 1948-84 Valve Spring Kits

.550" Lift double valve spring kit for Panhead and Shovel-head models 1948-84 offers up to .550" lift. Includes 4 inner springs, 4 outer springs and 4 aluminum top collars. Use with stock style bottom collar, valve guides, valves with stock 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 Shovel style heads and stock late 1981-85 Shovels.

- | PCP | Description |
|---------------|----------------|
| 902053 | 1948-84 BT kit |



S&S .590" Lift Triple Valve Spring Kit 1948-84

1948-84 BT with up to .590" lift. Includes 4 top collars, 4 bottom collars, 4 each of outer, middle and inner springs; shims, and 8 keepers. Use with stock valve guides, stock valves with 3/8" stem and stock keepers. Compatible with thin stem valves if thicker keepers that maintain correct valve stem-top collar engagement are used. Note: .590" 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 #902063 or #902064.

- | | |
|-----------------------------------|----------------------------|
| 1948-E1981 For Up To .590" | |
| 902060 | Kit with steel top collars |

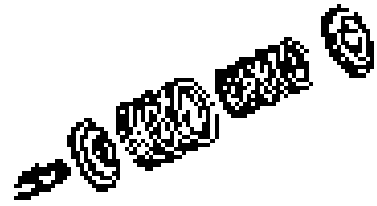
- | | |
|---|---------------------------|
| Late 1981-84 or S&S Shovel-Style | |
| 902063 | Kit with steel top covers |



Manley XL Valve Spring Kit

- For pre-evolution XL models.
32008

Valve Springs



Stock Valve Spring Kits

Each valve spring kit is manufactured from top quality materials. Heat treated with machined ground end for a perfect fit. Available for all 1948-83 BT and 57-Up XL's. Made in USA.

Valve Springs

PCP	OEM	Year	Model
902053	18201-57B	48-84	BT, S&S with top collars
32007	18203-83	83-85	Sportster
32006	18203-57A	57-80	Sportster
32002	18201-41	29-73	45" Side Valves
32000	18200-30	30-48	74 & 80 Side Valve

Valve Collars

61-74-80 OHV

PCP	OEM	Use	Years	Model
30000	18222-36	Lwr	36-47	61 & 74 OHV
30001	18222-48	Lwr	48-79	61 & 74 & 80
30002	18222-79	Lwr	81-84	74 & 80
30004	18221-36	Upr	36-80	61 & 74 & 80
30005	18219-81	Upr	81-84	80

Sportster 883-900-1000-1100-1200

PCP	OEM	Use	Years	Model
30007	18220-57	Lwr	57-E81	900 & 1000
30008	18220-81	Lwr	81-E83	900 & 1000
30009	18220-83	Lwr	L83-85	900 & 1000
30010	18221-57B	Upr	57-84	900 & 1000



Valve Shims



Valve Spring Kits (Eastern)

Includes all springs, collars and keepers necessary for each application.

PCP	Model	Year	Replaces
32010	45"	32-40	18201-32, 18222-30, 18228-30
32011	45"	41-73	18201-41, 18222-30, 18228-30
32012	74-VL	30-36	18200-30, 18221-30, 18222-30, 18228-30
32013	74 & 80 UL-ULH	37-48	18200-30, 18221-30, 18222-30, 18223-37, 18228-30
32014	61 & 74	36-47	18201-57B, 18204-36A, 18221-36, 18222-36, 18228-36
32015	Pan, BT Shovel	48-79	18201-57B, 18204-36A, 18221-36, 18222-48, 18228-36
32016	Shovel Big Twin	80-81	18201-82, 18202-82, 18221-36, 18222-48, 18228-36
32017	Shovel Big Twin	81-84	18201-82, 18202-82, 18209-81, 18222-81, 18228-36
32021	XL	57-81	All Models
32022	XL	81-83	18203-57A, 18204-57A, 18220-81, 18221-57B, 18228-30
32023	XL	83-85	18203-83, 18204-83, 18220-83, 18221-57A, 18228-30

PCP	Fits	Years	U/M
13508	Big Twins .030" thick	48-79	25 Pack
13509	Shovelhead .015" thick	79-84	25 Pack
13510	Shovelhead .030" thick	79-84	25 Pack



AV&V High Performance Valve Springs

Pan and Shovel valve springs are manufactured from an ultra clean, high silicon and vanadium alloy wire and are then subjected to an intensive shot peen process to provide fatigue resistance. Recommended for up to .530" lift.

PCP	Diameter Inside-Out-side	*Seat Pressure and Initial Height	Nominal Open Pressure and Height	Coil Bind
34034	0.950" - 1.540"	155-160 # @ 1.455"	320# @ .980"	.850

* Note: On late style Shovelheads (1980-84) 1.455" = +/- 1.630" valve stem protrusion (stock protrusion = 1.600" to 1.640")

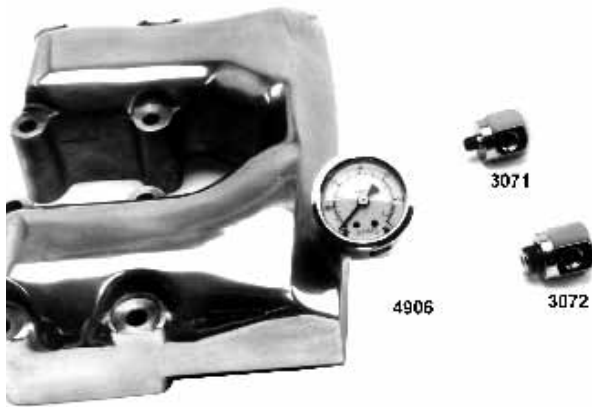
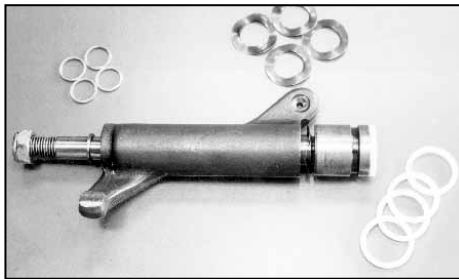
BT Shovelhead



Rocker Adjuster Kit

Fits all Shovelheads and stops noisy top end clatter. Kit contains 4 steel spacers, 4 tempered preload washers and 4 no-leak rocker seals. Fits all 1966-83 FL, FX models.

- 4959** Rocker adjuster kit
- 14502** No leak seals 57-86 (4 pack)



Rocker Box Oil Gauge (0-60 Pound Gauge)

Unique design screws in rear exhaust rocker shaft on all 1971-84 Sportsters and 1966-84 Shovelheads.

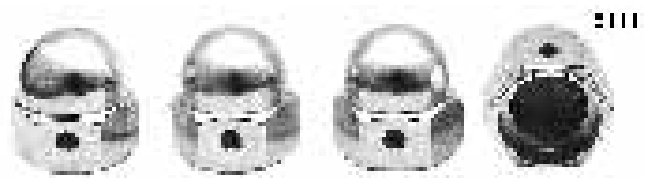
- 4906** 1971-84 Complete (oil filled)
- 3071** 1957-70 Fittings ONLY
- 3072** 1971-84 Fittings ONLY



Chrome Shovelhead Rocker Arm Cover

Chromed rocker arm cover sets for all Shovelhead powered motors, 1966-84. Triple step chrome plate. Replaces OEM 17516-77B; 17517-77B; 17518-80, 17519-80

- 2935** Chrome set
- 34930** Rear, polished
- 34931** Front, polished
- 34932** Pair, polished
- 10819** Stud set



Head Bolt Covers

Fit over 12 point head bolts on 1973-85 XL Sportster and include 8 covers.

PCP	Finish	Style	Model	Year
9111	Gold	Acorn	XLH	1973-85
9112	Chrome	Cap	XLH	1973-85
9113	Gold	Cap	XLH	1973-85



Fluoro-Viton Seals

Seals are made from a fluoro- viton polymer with teflon added to prevent valve to seal friction. A metal spring keeps constant seal to valve tension to prevent oil consumption. These seals are then bonded to a steel jacket that provides a secure fit to the guide. The internal ribs are designed to allow for installation without any tools, but hold secure after installation. These seals are sold in 5 packs.

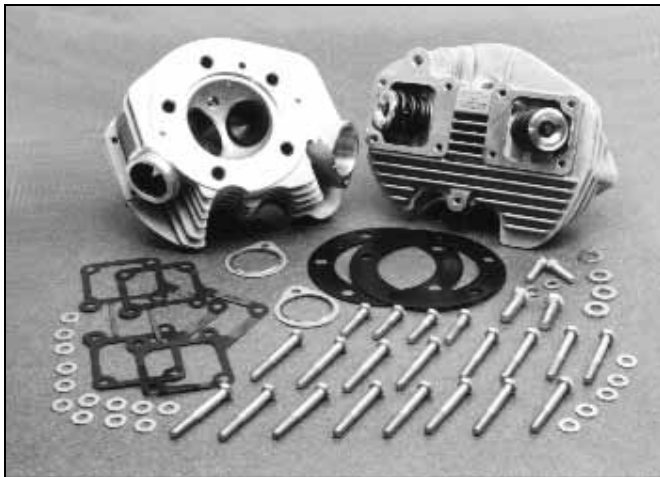
PCP	Application	Stem	Guide
32272	80" Late Shovel	3-8	.625
32269	80" Shovel	3/8	.531
32273	74" Pan/Shovel	3/8	.562
32270	XL int.	5/16	.531
32271	XL exh.	11/32	.531

Engine Air Scoop for Harley

Copper-buffed and chrome-plated. This attractive and functional item forces needed air to rear cylinders.

- 3218** Pre-1975 (29092-77)
- 441** With cutaway for petcock 1975-84 Shovelhead

BT Shovelhead



S&S High Output Super Stock Cylinder Heads
Single plug, designed primarily for stock replacement including, front and rear cylinder heads completely assembled with valve seals and guides, valves, valve springs, required gaskets including cylinder base and head gaskets, rocker cover and exhaust pipe mounting hardware, and installation instructions. Intake valve is 1-15/16" and exhaust valve is 1-3/4".

S&S Head sets only are bare with only seats and guides installed.

All parts are interchangeable with stock parts. Dual plug heads are not stock but are available on a special order basis only.

Engine Type	Bore	Aluminum Finish		Black Powdercoat Finish	
		Complete Assembly	Head Set Only	Complete Assembly	Head Set Only
1966-78 O-ring	Stock	901496		901596	901592
	3-5/8"	901497	901493	901597	901593
1979-84 Band	Stock	901498	901494	901598	901594
	3-5/8"	901499	901495	901599	901595

Note: Head set only is bare, valves and springs are **NOT** included



S&S Shovelhead Style Rocker Arms

Forged steel and shot peened for maximum strength. Roller tip reduces side thrusting on valve stem in high lift applications and .750" bushings provide 50% more load bearing area than stock. Can be oiled through the pushrods when used with S&S Shovel tappet guides and pushrods. Compatible with stock or S&S billet rocker boxes. Set includes two each front and rear rocker arms.

904320

S&S Shovelhead Rocker Covers

Constructed from CNC machined, polished billet aluminum. Two piece design allows for installation and removal in some frames. Top and bottom are sealed with o-ring type seal for leak free operation. Can be used with stock style rocker arms or S&S Shovel style roller rocker arms. Top end oil can be supplied through stock oil fitting or through pushrods when used with S&S tappet guides and pushrods. Cleared for lifts of up to .590 with S&S roller rocker arms.

PCP	Description
904305	Rocker cover set includes rocker shafts
904320	Roller rocker arm set (4)
904350	Replacement rocker shafts

BT Shovelhead



Shovelhead Top End Kits

Includes prefitted cylinder set, late style assembled heads, cylinder base nuts, rocker box studs and nuts, top end gasketset and choice of polished or chrome assembled rocker boxes. All kits offer 8.5:1 compression.

74"	80"	Rocker Finish
950860	950862	Polished
950861	950863	Chrome



Motor Sprocket Nuts

PCP	Application (Each)
12521	45 cu. in 1929-73 (7991)
12524	XL 1957-69 (8025)
12568	XL 1970-88 (40387-70)
12537	BT 1930-54 (24003-30)
12538	BT 1955-69 (24003-55)
12569	BT 1970-90 (40392-70)



Sifton Rocker Arm and Shaft Kit Shovel 66-84

Kit includes 4 rocker arms with bushings installed, 4 shafts, shims, spacers and chrome end caps and nuts.
30071



Jims Rocker Arm Bushing (Must be Reamed)

31100 Stock replacement BT 1966-on, XL 1957-on (17428-57) (8 pack)



Jims Shovelhead Rocker Shaft

Available in +.005" for worn out rocker boxes. Std. O.D. on big end is .937", smaller end is .434". Oversize O.D. on big end is .942", small end size is .439".

PCP	Description
31103	Use on BT 1966-83 (17611-66B)
31197	Oversize +.005 (17611-66B5)



12 Point Head Bolt Kits

These are chrome plated and include washers. The big bore types allows wrench clearance on 1948-84 Pan & Shovels. Special flat washers are included in the XL kit.

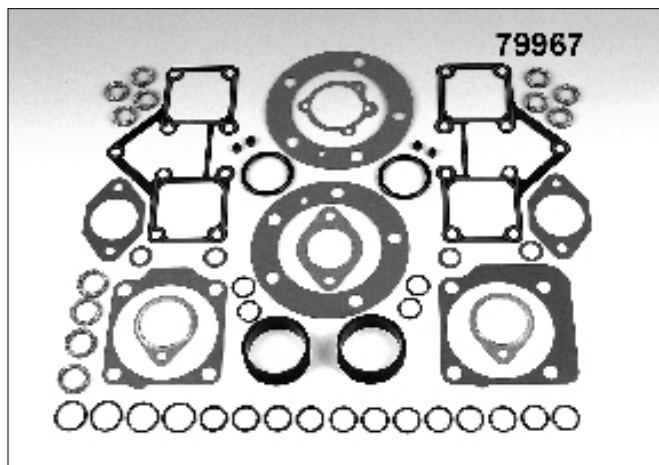
PCP	Model
9211	Sportster 1973-85, chrome (4709)
9212	As above, cad finish
5305*	BT 74-80" 1948-84, chrome (16814-48)
3582*	As above, black oxide

* Install these bolts with a 7/16" 12 pt. box Wrench.

BT Shovel Top End

1966-on Cylinders, Rocker Arms, Valves and Gaskets

#	PCP	OEM	Description	#	PCP	OEM	Description
1	20092	531	Cotter pins 3/32 x 7/8 (100 pk)	25	2678	17360-66	Rocker arm, rear exhaust and front intake
3	12000	6466W	Washer 7/16 x 3/4 x .025 (10 pk)	26	2679	17375-66	Rocker arm, front exhaust and rear intake
4	5200 8488	6469HW	Washer, head bolt cad (10 pk) As above, chrome	27	18503	17428-57	Bushing rocker arm (4 pk)
8	13557	6762B	Spring washer (10 pk)	28	(See Colony for rocker arm shaft end screw)		
11	9101	7839	Cad nut 7/16 x 1/2 x 5/8 hex (8 pk)	29	822	17452-66	Spacer, rocker arm (4 pk)
13	12511	7872	Red cap nut 3/8-20 (4 pk)	30	34930	17500-66	Rocker arm cover polished
14	14501 14572 79004	11101	O-ring, rocker arm shaft Oversize as above (10 pk) James as above (25 pk)	31	34931	17502-66	Rocker arm cover polished
15	179 34810 178 34811	16484-66 16498-30 16492-66 16499-80	74" Front cylinder 1966-78 80" Front cylinder 1978-84 74" Rear cylinder 1966-78 80" Rear cylinder 1979-84	32	10818	17506-66	Stud, rocker arm cover (ea)
16	(See S&S for front and rear heads)			33	10820	17508-66	Stud, rocker arm cover (ea)
17	1546	16725-66A	Heli-coil insert, spark plug hole	34	1365	17611-66	Shaft, rocker arm
18	25296 79212	16770-66 16770-66	Gasket, cylinder head, blue Gasket, cylinder head	35	30500	17904-66	Push rod assembly (ea)
19	79232 79234 79550	16776-63 16777-63	Gasket, front cylinder base Gasket, rear cylinder base As above steel/coated .018 (set)	36	29003	17920-53	Push rod hydraulic unit (ea)
20	1820 5214 5368 1727 3898	16814-48	Cyl/head bolt kit cad 12pt (20 pc) Chrome head bolt kit (20pc) Chrome allen bolt kit (20 pc) Chrome acorn head bolts (20 pc)	37	1808	17935-66	Inner p/rod cover 1966-78 (4 pk) As above L1979-84 (4 pk)
21	5472 5473	16836-78 16831-30 16837-78	Black stud spacers 78-84 (8 pk) Clinder base stud 1930-77 (8 pk) As above, 1978-84 (8 pk)	38	1818 1928	17938-48B	Lower p/rod cover 1966-78 (4 pk) As above quad seal type L79-84 (4 pk)
22	1372 4492	16852-67 16853-48	Bracket, chrome motor mount As above with choke bracket	39	2002	17945-36B	Cap, cover spring (4 pk)
23	10817	16864-48	Stud, cylinder head motor brace	40	13101	17947-36	Spring, pushrod cover (10 pk)
				41	2000	17950-66	Retainer, spring cap (4 pk)
				42	25043 79268	17955-36	Small cork p/rod washer (10 pk) James as above (100 pk)
				43	25044 79104	17955-48	Large cork p/rod washer (10 pk) James as above (100 pk)
				44	1464	18018-66	Insert, intake valve seat
				45	1466	18017-66	Insert, exhaust valve seat
				46	351	18074-66	Intake valve
				47	352	18082-57	Exhaust valve
				48	17616 17630	18163-48	Valve guide, intake STD 48-78 As above 1979-84
				49	17660 17690	18188-48A	Valve guide, exhaust STD 48-78 As above 1979-84
				50	79090	18196-51	Gasket, valve guide (20 pk)
				51	902053 32015 32016 32017	18201-57 18202-57	S&S valve spring set 1966-84 Complete valve spring set 48-79 As above 1980-81 As above 1981-84
				55	30004 30005	18221-36 18219-81	Upper collar 1936-80 (4 pk) Upper collar 1981-84 (4 pk)
				56	30001 30002	18222-48 18222-79	Lower collar 1948-79 (4 pk) Lower collar 1981-84 (4 pk)
				57	30012	18228-36	Valve key (8 pk)
				58	1084	18522-53A	Tappet with roller 1953-84
				59	15614 15622	18534-29A	Tappet roller kit (ea) As above (set of 4)
				60	12529	18570-38	P/rod split nuts 5/16-32 (4 pk)
				61	32330	18600/10-66	Tappet blocks, chrome (set)
				62	79270 79273	18633-48A 18634-48A	Gasket, R/tappet guide (10 pk) Gasket, F/tappet guide (10 pk)
				63	5277 5300	18660-53	Cad screw, tappet guide (16 pc) Cad 12 point screw 1976-* (8 pk)
				66	10572	63526-57	Oil line fitting, arm cover (5 pk)
				67	2260		Chrome fittings kit 1966-on
				68	14073	63529-57	Oil line sleeve (10 pk)
				69	1354		Complete oil line kit chrome 1966-84 (1982-85 style)



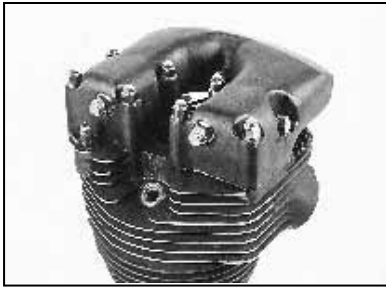
SEE THE GASKET SECTION FOR MORE GASKETS

Top End Kits

These kits include all gaskets and O-rings including push rod corks from the cylinder base and up. Perfect for piston and valve jobs.

PCP	OEM	Fits
25709	17034-66	Preston 1966-E78
79967	17034-66	James 1966-84 with blue teflon head gasket
79962		As above, big bore
79968	17034-66X	James 1966-84 Fire ring head gasket, cork o-rings and silicone rocker gaskets.

Rocker Box Nuts/Bolts



Chrome Rocker Box Cap Nut Kit

Chrome plated rocker shaft nuts and washers, plus rocker box cap nuts add a fresh new detailed look to all Shovelhead engines 1966-83.

2875

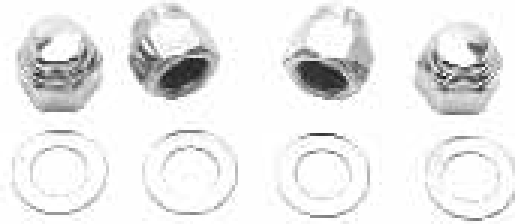


Chrome Plated Rocker Shaft End Plugs

These chrome plated rocker arm shaft end plugs will add that classic Knucklehead look to any Sportster or Shovelhead engine. Installation or removal is much easier than original slotted Harley part. Packaged 4 per set.

1717 Fits Sportster & Shovelhead 1971-84

1718 Fits Sportster 1957-1970 & Shovelhead 1966-70



Rocker Shaft End Nut Kit

Cap style end nuts and washers will replace the "Red Dot" nuts found on all Shovelhead 1966-84 and Sportster 1957-84.

2634 Chrome Plated



Shovelhead Stud Kit

This kit contains 8 long studs, 2 short stud and 1 motor mount stud.

PCP **OEM**

10819 17506-66, 17508-66 & 16864-48



Rocker Shaft End Nut Kit

Acorn style end nuts and washers will replace the "Red Dot" nuts found on all Shovelhead 1966-84 and Sportster 1957-84.

5319 Chrome Plated

5320 Gold Plated

Rocker End Shaft Plastic Cap Nut

OEM type nut with coloured plastic end 7/16 x 20 thread.

4 pack. Replaces OEM 7872.

PCP **Colour**

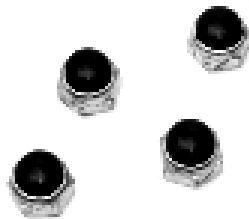
12511 Red

12512 Black

12605 Green

12606 Blue

12607 Orange



Cylinder Head Motor Brace Mounting Kit

Accurately reproduced studs, nuts, and washers used to mount motor brace to cylinder head.

PCP **Description**

72368 1948-65 Panhead, parkerized

72369 1948-65 Panhead, cadmium

72370 1966-84 Shovelhead

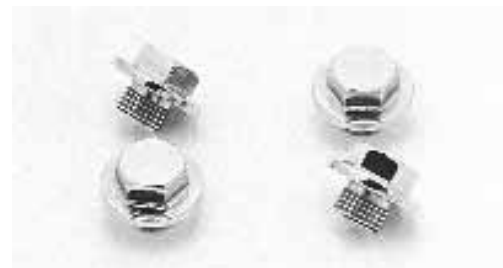
Rocker Box Nuts/Bolts



Rocker Shaft End Caps

Colony designed end caps provide ease of installation, ample clearance between gas tank, and a custom touch for all Shovelhead 1971-on and Sportster 1971-84.

- 3589** Chrome Plated
- 5285** Cad Plated
- 5286** Black Oxide



Rocker Box Bolt Kit

Chrome plated acorn style bolts fit rocker boxes all Sportster 1957-84.

- 1712** 1957-76
- 1789** 1977-84



Rocker Box Bolt Kit

Chrome plated cap style bolts fit rocker boxes all Sportster 1957-84.

- 2876** 1957-76
- 2877** 1977-84



Rocker Box Nut Kit

Chrome plated acorn nuts fit rocker boxes and rocker arm shafts. Kit includes rocker arm shaft washers. Fits all Shovelhead 1966-84.

1713



Rocker Box Nut Kit

Plated hex nuts and flatwashers add a clean, detailed, stock look to all Shovelhead Harley Davidson 1966-83.

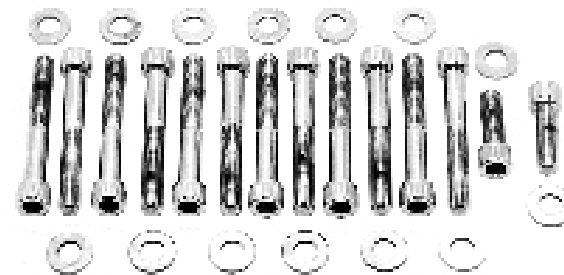
- 5280** Chrome Plated
- 5281** Cad Plated



Rocker Shaft End Cap and Nut Kit

Nice reproduction of original style end caps in choice of chrome or cad plating for Sportster and Shovelhead.

- 3586** 1957-70 Chrome
- 5216** 1957-70 Cad
- 3588** 1971-84 Chrome
- 5217** 1971-84 Cad
- 72020** 1957-70 Cad XL slot style

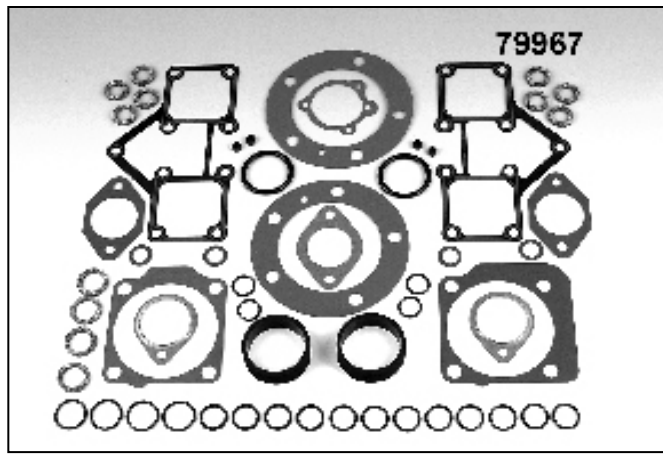
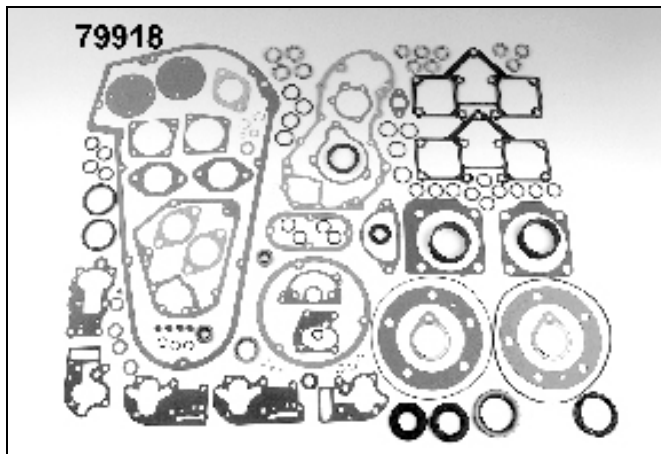


Rocker Box Bolt Kit

Chrome plated allen style bolts fit rocker boxes all Sportster 1957-84.

- 5380** 1957-76
- 5381** 1977-84

BT Shovelhead

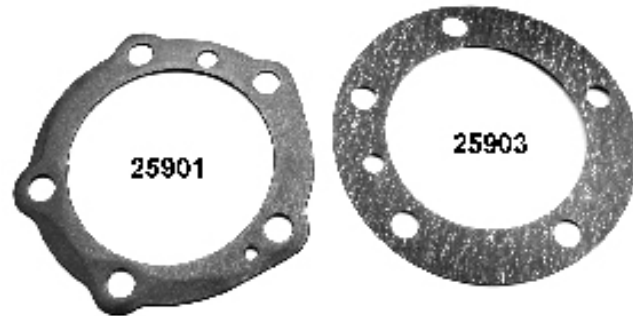


James Motor Gasket Kits

PCP	OEM	Description
79916	17028-48	FL 74" 1948-65 w/blue teflon
79918	17029-70	FL,FX,FLT 1966-84 w/blue teflon
79919	17029-70-A	Shovelheads 1966-84 w/fire ring

James FL Top End Gasket Kits

PCP	OEM	Description
79965	17034-48	1948-65
79966	17034-48-X	1948-65
79967	17034-66	1966-84 w/blue teflon head gasket
79968	17034-66X	1966-84 w/fire ring head gasket

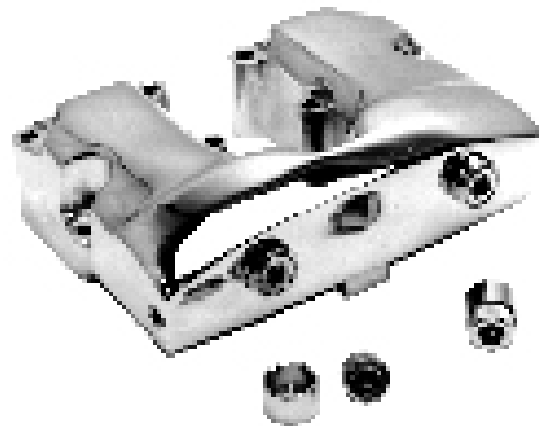


James Shovelhead Gaskets

79212	16770-66-A	Head gasket, blue teflon (10 pk)
79213	16770-66-S	BB top set, blue teflon, paper base
79214	16770-66-X	Firering head gasket set 1966-84
79232	16776-63	Front cylinder gasket (10 pk)
79234	16777-63	Rear cylinder gasket (10 pk)
79235	16777-66-S	Big bore front & rear cylinder (10 pk)
79471	16777-66X	As above, metal coated .038 (set)
79263	17540-69-A	Rocker box gasket .031 thick (10 pk)
79264	17540-69-X	Rocker box gasket w/silicone (10pk)
79311	17540-99-X	As above metal (pair)
79104	17955-48	Large cork pushrod gasket (100 pk)
79106	17955-48-FL	Cork pushrod gasket kit
79270	18633-48-A/C	Rear tappet guide 1948-91.031 (10)
79271	18633-48D	As above .020 1992-99 (10 pk)
79273	18634-48-A/B	Front tappet guide 1948-91.031 (10)
79274	18634-48C	As above .020 1992-99 (10 pk)
79278	25225-36-C	Gear cover gasket 1941-69 (10 pk)
79280	25225-70-B	Gear cover 70-92 black .031 (10 pk)
79281	25225-70-K	Gear cover gasket kit 1970-92
79282	25225-70-X	Cam cover w/silicone 1970-92 (5 pk)

Topline Head Gaskets

PCP	Application
25901	Head gasket teflon Pan 1948-65 (16770-48) (pr)
25903	Head gasket Shovel (16770-66B) (10 pk)



No Lead Seat Conversions

Nickle Chrome Alloy Composition for Shovelheads. Shovel intake seats may be used in Pans as oversize intake seats. Stock fit .0035. These are .006 interference fit.

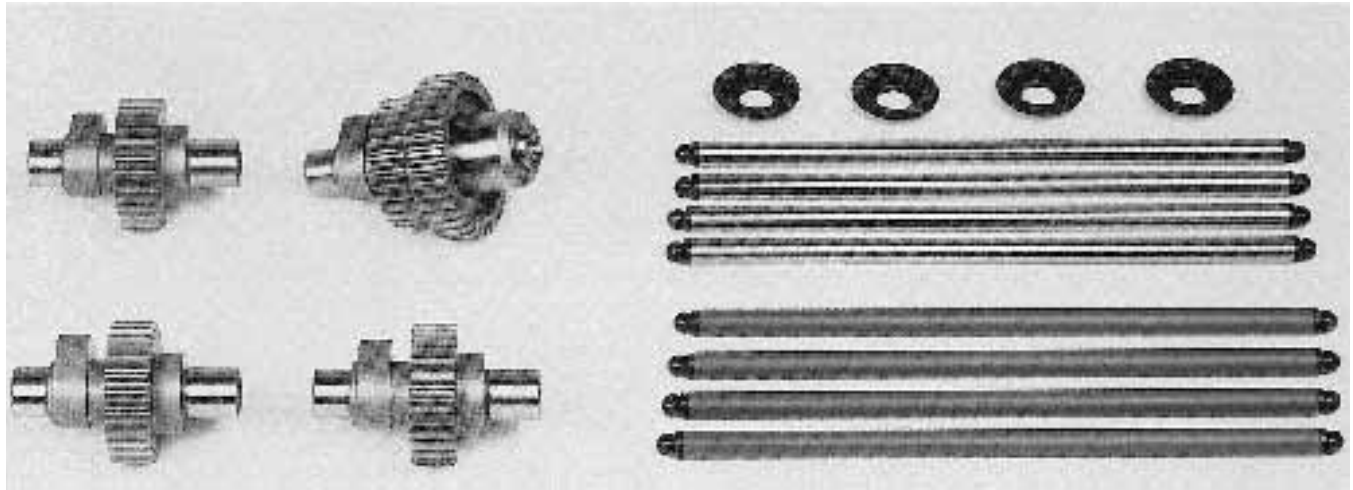
17520 Shovel Intake



Allen Rocker Shaft Plugs

Set of 4 chrome shaft plugs fits 1971-on FL-XL models. Includes sockets and cups.

5419



Sportster Cams (Iron Head)

Pictured is a late style XL cam gear kit, lower collar and pushrods made from either steel or aluminum. Steel pushrods are the best choice for stroker motors and drag application where the greatest strength is needed. For street applications where quiet operation is desired, aluminum pushrods are the recommended choice. Both pushrod kits are made from 7/16 diameter tubing which will not interfere with rod covers. Lower spring collars are similar to late style HD parts and will provide .060 more spring travel over stock collars. High lift cams are easier to install with these collars.

XL Valve Gear

Steel chrome-moly pushrods for maximum strength.

240040 4 steel pushrods

Aluminum Sportster pushrods for quiet operation

240060 4 aluminum pushrods

Low profile lower spring collars similar to late HD will provide .060 more spring travel than stock collars.

277160 4 lower collars

High Lift Keepers- .100" more spring travel using stock upper collars, high lift springs may be needed.

277500 4 High lift keepers

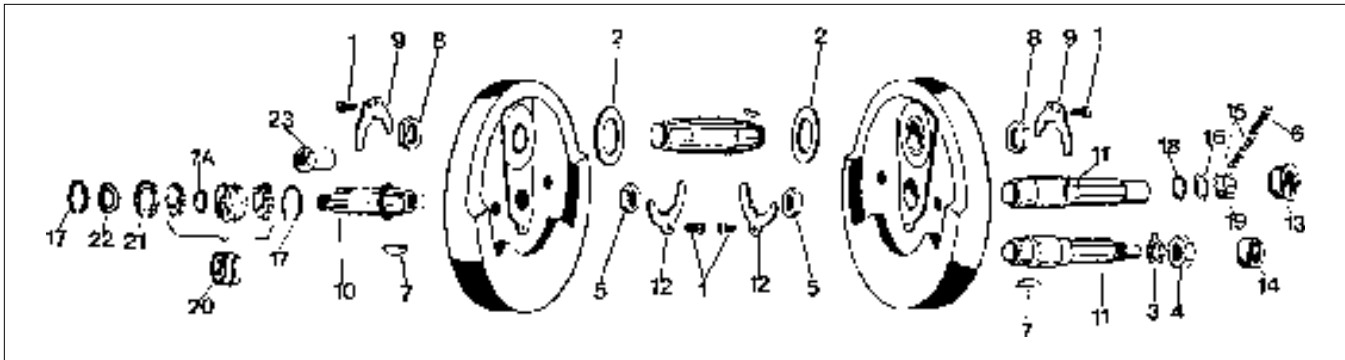
Touring and High Performance Cams

PCP#	Year	Grind	Duration Timing	Max .053	Lift .020	Lift	TDC	Application
Stock	76-85	Q	10/32 35/07	222 222	262 262	.400 .380	.114 .114	Specifications are listed for comparison and reference.
214010	57-70	P	34/40	254	294	.400	.200	4/1 Kit consists of exhaust cams only for use with stock P intakes. Bolt-in power for all XL with no head work. (Stock P exhaust is .380 lift, 242 deg. duration)
214014	71-80	PB+	43/31	254	298	.410	.192	
214020	81-84**							
214025	84-85							
214040	57-70	PB+	34/40	254	298	.410	.208	If you have an XL with P or Q cams, bolt-in more power with this great street grind. No head work needed: more power thru RPM range with stock springs. (to 7000 RPM)
214045	71-80		43/31	254	298	.410	.208	
214050	81-84**							
214055	84-85							
214075	57-70	Y	35/47	262	310	.425	.206	Street 900/1000: Biggest cam available for no headwork installation. (1982 engines may require spring spacing) Stock springs OK. Great mid-range and upper end power. Needs 9.0 or higher compression pistons
214080	71-80		53/29	262	310	.425	.182	
214085	81-84**							
214090	84-85							
214105	57-70	R5	33/41	254	306	.445	.209	Street/Drags: Modified 900/1000 motors and small strokers. Big boost in torque over stock cams (2000-7500 RPM). Stock springs OK, but head set-up required.
214110	71-80		43/31	254	306	.445	.200	
214115	81-84**							
214120	84-85							
214135	57-70	X	35/55	270	314	.450	.210	Street/Drags: For stroker motors to 76 inches. More mid-range and upper end power. Lower lift means easier installation in 1977-on engines with extended pinion housing. Stock springs OK: needs 9.0 compression minimum.
214140	71-80		57/33	270	314	.450	.206	
214145	81-84**							
214150	84-85							
214190	57-70	V9	32/52	264	311	.490	.207	Street/Drags: Excellent cams for small strokers, 65-76 inches. High lift short duration makes for broad torque range: 2500-7000+ RPM.
214195	71-80		52/32	264	311	.490	.207	
214200	81-84**							

(*) timing listed for .053 lift engines

(**) 1981-84 cam gears differ from 1971-80 only on #4 cam, which does not have a tachometer gear

XL Bottom End 1957-85



PCP	OEM	Description	Year	U/M	PCP	OEM	Description	Year	U/M
1	24502 2660	Screw 10-24x3/8	57-78	10Pk	11	1095 24005-57	Pinion shaft	57-76	Each
2	11520 6506	Washer/crank pin	L72-on	Pair	31241		Jims as above		Each
	1100 23972-57A	Washer/crank pin	57-71	Pair	2659 24005-75		Pinion shaft	77-E81	Each
	11528 -	"C/Pin bronze +.005	54-71	Pair	31250		Jims as above		Each
	4118 23972-72A	C/Pin bronze	72-E78	Pair	32550 24005-80		Pinion shaft	L81-85	Each
3	13701 7044A	Lock tab, pinion	77-on	5 Pk	31242		As above, Jims		
4	12515 7913	Nut, Pinion	79-on	Each	12 13706 24015-36A		Lock tab, shafts	57-70	5 Pk
5	12523 8011	Nut, both shafts	54-E81	Each	13 1069 24585-57		Bushing/pinion STD	57-76	Each
	12531 23902-81	Nut, both shafts	L81-on	Each	31054		Jims as above		Each
6	1072 9421	Rollers STD (13)	57-78	Set	1070 -		Bushing/pinion .002	57-76	Each
	1073 9422	" .0002	57-78	Set	1071 --		Bushing/pinion .005	57-76	Each
	1074 9423	" .0004	57-78	Set	31055		Jims as above .005		Each
	1075 9424	" .0006	57-78	Set	14 15615 24648-77		Pinion bearing ONLY	77-85	Each
	1076 9425	" .0008	57-78	Set	29140		T/L as above		
	1077 9426	" .001	57-78	Set	18707 -		Pinion bearing race	77-85	Each
	15413	Pinion bearing	77-86	Set	15 15890 24650-55		Cage & rollers	54-76	Set
7	10301 11218	Key, c/pin & pinion	L81-on	10Pk	16 11818 24692-54		Pinion washer	54-76	Each
	10304 23985-12	Key, both shafts	L54-E81	10Pk	17 11053 24701-52		Snap ring, race	54-76	5 Pk
7A	13565 23741-52	Shim. .003 M/S bear.	52-76	10Pk	18 11054 24701-54		Snap ring, pinion	54-76	10Pk
	13566 23741-77	Shim. .003 M/S bear.	77-on	10Pk	19 10728 24718-54		Pinion cage	54-76	Each
8	12534 23967-54A	Nut, crank pin	57-E81	Pair	20 15505 24729-52		Bearing assy.	54-76	Each
	31005	Jims, as above			15506 24729-74		Bearing assy.	77-85	Each
	12530 23901-81	Nut, crank pin	L81-on	Pair	21 3116 24781-54		Sprocket spacer	54-77	Each
9	13703 23971-41	Lock tab, c/pin	L54-E81	Pair	22 14041 35151-52A		Oil seal spk/shaft	54-E74	5 Pk
10	1094 24000-57	Sprocket shaft	57-76	Each	14042 35151-74		Oil seal spk/shaft	L74-on	5 Pk
	31202	Jims as above		Each	23 12568 40387-70		Nut, spk/shaft	70-88	Each
	2379 24000-75	Sprocket shaft	77-E81	Each					
	31203	Jims as above		Each					
	3414 24000-80	Sprocket shaft	L81-85	Each					
	31204	Jims as above		Each					



Pinion Bearing Sets

Bearing set for right side that includes rollers, cages and snap rings and washers when required.

PCP Application

15412	XL 1954-76
15413	XL 1977-86



S&S XL Flywheel Shafts

PCP	Type	Size	Year	Flywheel
332326	Pinion	+.001	1957-76	Stock
332322	Pinion	STD	1977-81	Stock
332302	Sprocket	STD	1977-85	S&S D, SB, SC, SBD, SCD, SCDD, SCR



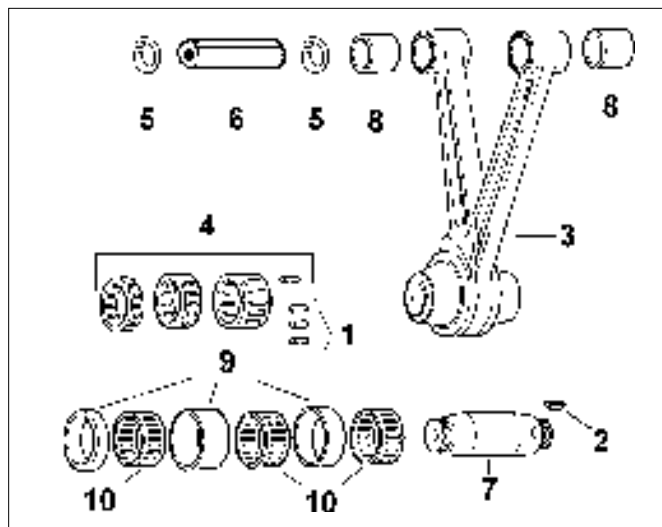
5374 Allen, cam cover screw kit XL 1971-84

Sportster 1957-85



Colony Motor Case Kit

PCP	Application	Style
9878	XL 1957-76	Stock cad
9879	XL 1977-90	Stock zinc



Oil Pump Mounting Kit

PCP	Application	Style
8815	XL 1952-E71	Stock cad
9615	XL 1971-76	Stock cad



342602

S & S Crank Pin

Includes 2 nuts and key.

PCP	Application
342503	XL 1957-81 (23960-54)
342602	XL 1981-on and S&S 1.249 OD (23960-80A)
342603	As above, 1.250 OD (23948-87)



Jims Crank Pin Nuts XL 1954-E81

31005	1"-20 (23967-54A) (pair)
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XL Rod Components 1957-85

	PCP	OEM	Description	Year	U/M
1	15120	9161/9540	Rod Rollers -.0002	54-85	Set
	2663	9150/9441	Rod Rollers STD	54-85	Set
	2664	9152/9442	Rod Rollers +.0002	54-85	Set
	2665	9154/9443	Rod Rollers +.0004	54-85	Set
	2666	9156/9444	Rod Rollers +.0006	54-85	Set
	2667	9158/9445	Rod Rollers +.0008	54-85	Set
	2668	9160/9446	Rod Rollers +.001	54-85	Set
	15127	9160/9446	Rod Rollers +.002	54-85	Set
	15128	9160/9446	Rod Rollers +.003	54-85	Set
	2	10305	23985-18	Key, Crank Pin	57-E81
10301		11218	Key, Crank Pin	L81-*	10Pk
3	34005	24275-57	Rod Set	57-80	Set
	34006	24275-80	Rod Set	81-85	Set
4	15840	24370-52B	Bearing Set	57-E86	Set
5	11049	22582-52	Spiral Clip, Piston Pin	73-77	10Pk
	11050	22588-78	Clip, Piston Pin	78-85	10Pk
6	32351	22719-52A	Piston Pin STD	54-84	Each
7	1098	23960-54	C/pin STD (3 hole)	54-E81	Each
	3412	23960-80A	Crank Pin STD	L81-*	Each
	18504	24331-36	Bush/Piston STD	57-*	Pair
8	18598	-	" " +.002	57-*	Pair
	18505	--	" " +.005	57-*	Pair
	18599	24332-36	" " +.010	57-*	Pair
	9	1102	24341-52A	Narrow (2) Rod Race	54-E86
		24352-52A	Wide (1) " "		
10720		24362-54A	Narrow (2) Cage	54-86	Set
		24364-54A	Wide (1) Cage		

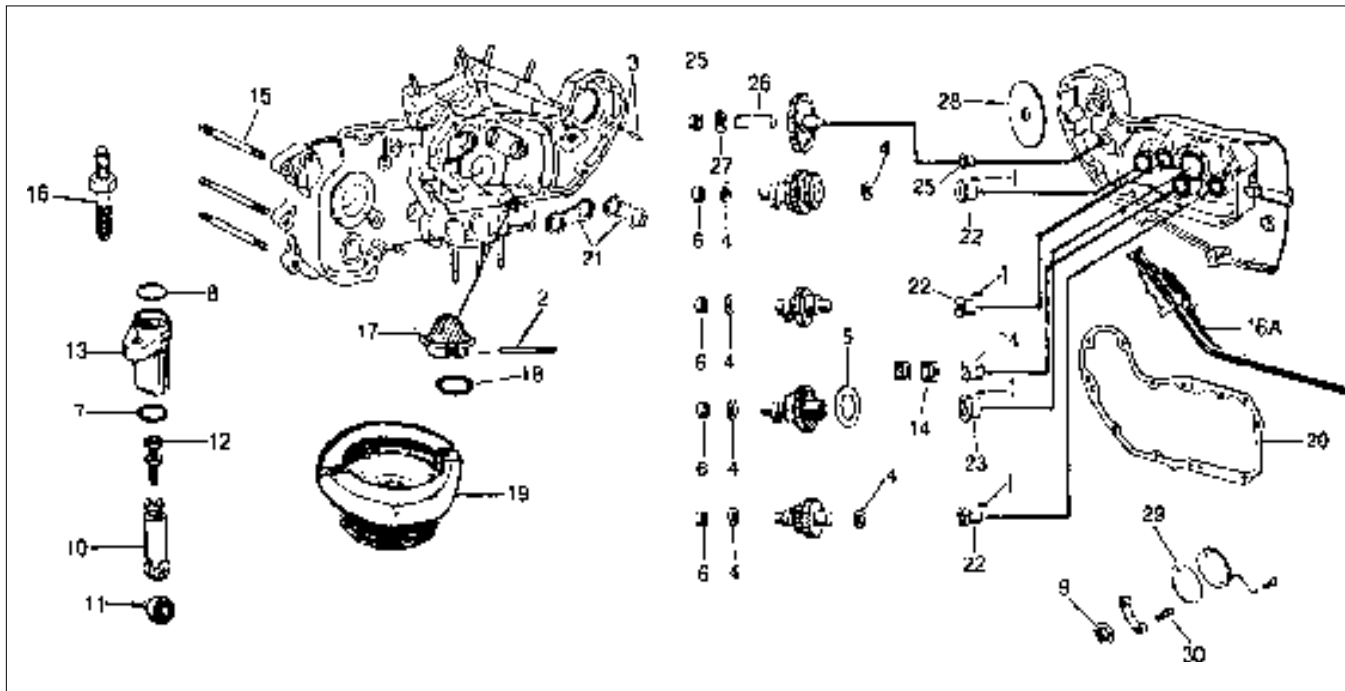


Rod Bearing Sets with Cages 1957-E86

Replacement type bearing retainers are fitted with standard size bearings for HD connecting rods. Kits are supplied with aluminum cages.

15840

XL Cam Cover 1957-85



	PCP	OEM	Description	Year	U/M		PCP	OEM	Description	Year	U/M
1	10155	275	Pin, bushing	57-*	10Pk	14	29020	24011-37	Pinion gear	57-73	Each
2	10139	333	Pin, strainer	52-76	5 Pk	15	N/A	24817-52	Stud (3) casing	54-*	Each
3	10113	375	Pin, casing	57-70	10Pk	16	10839	24827-66A	Stud/Intake block	65-72	Each
4	13561	6769	Shim cams .007	57-85	10Pk	16A	1434	24912-52A	Breather pipe, chr.	54-76	Each
	13562	6770	As above .005	57-85	10Pk	17	2671	24975-37	Oil strainer	54-76	Each
	13582	6771	As above .015	52-*	10Pk	18	25059	24978-57	Gasket, strainer	54-81	10Pk
5	13550	6773	Shim #2 cam .005	52-*	10Pk	19	3411	25075-55	Breather valve	52-76	Each
	13551	6775	As above .010	52-*	10Pk	20	79276	25224-52	Gasket, cam cover	52-81	10Pk
	13552	6778	As above .015	52-*	10Pk		79288	25263-81	Gasket, cam cover	82-85	10Pk
6	15606	9057	Bearing cam	58-*	Each	21	13711	25551-58	Cam thrust plate	58-*	Each
7	14500	11100	'O' Ring, block	57-85	10Pk	22	18519	25586-37	Bushing cam	52-*	Each
8	14501	11101	'O' Ring, push rod	79-86	10Pk		18557		As above .005		Each
	25043	17955-36	Cork, push rod (12)	52-E79	10Pk	23	18521	25588-57	Bushing #2 cam	57-90	Each
9	14008	11124	Seal, cam cover	71-03	5 Pk		18596		As above +.005		Each
10	2072	18508-52B	Cam follower STD	57-85	Each	24	18526	25593-57	Bushing pinion	57-76	Each
	2073	-	Cam follower .005	57-85	Each		18614		As above, +.005	57-76	Each
	32311	--	Cam follower .010	57-85	Each		18527	25593-74	Bushing cam	77-*	Each
11	15614	18534-29A	Bearing	57-85	Each	25	18531	25597-57	Bushing idler	57-84	Each
	15622	--	Bearing set	57-85	Set	26	10901	25787-57	Stud, idler gear	57-85	Each
	10184	--	Bearing pins	57-85	10Pk	27	79116	25811-11	Washer, idler gear	54-74	20Pk
12	1470	18554-57	Tappet adjusters	57-85	4 Pk	28	12002	31067-63	Washer, generator	58-81	5 Pk
13	31130	18607-57A	Tappet block (Jims)	57-85	Each	29	25110	32591-80	Gasket 4 Hole	70-*	10Pk
							79309		James, as above	70-*	10Pk
						30	10844	32601-78	Stud, ignition	72-E82	Pair

Point Cover Allen Screws All Sportster 1970-*

PC #	Style	Long	Year
2864	Acorn	.400	
5256	Cap	.400	
8492	Gold Cap		
5356	Button Head Allens	.500	70-78
5357	Button Head Allens	.600	79-99



Sportster 1957-on



Cam Bushing Kit

XL kits include all cam and gear bushings/bearings, lock pins and shims as required.

- 15408 1977-85
- 15409 1957-77



Jims Sportster Cam Bushings (each)

- 31370 XL 1954-on .005 (25586-37)
- 31371 R/Int. XL 1957-90 (25588-57)
- 31372 R/Int. XL 1957-90 .005



Jims Pinion Bushing

- | PCP | Description |
|-------|-----------------------|
| 31374 | XL 1957-76 (25593-57) |
| 31375 | XL 1957-76 .005 |
| 31376 | XL 1977-on (25593-74) |



Jims Pinion Shaft Spacer

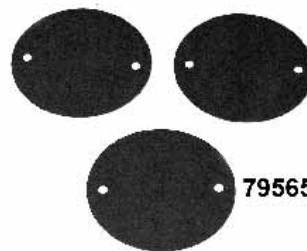
- 31043 24703-54B



Chrome XLH-XLCH Tappet Block Cover Set

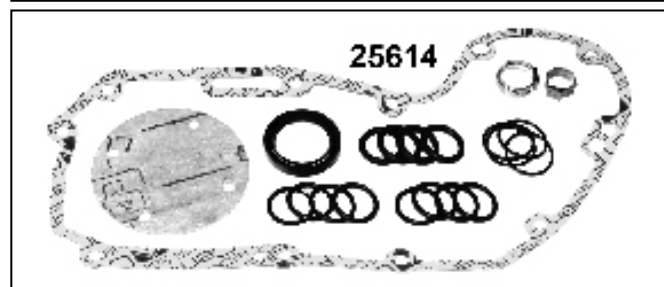
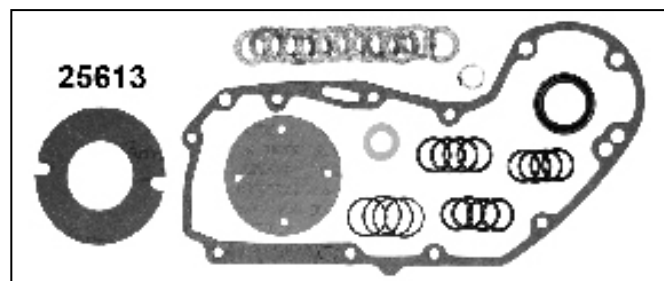
Set fits 1957-85 and features exact contour to fit over existing stock style lifter blocks. Covers are securely held in place by the 4 chrome allen bolt included with your kit. Please note: pushrods must be removed for installation.

45074



James XL Cam Cover Gaskets

- | PCP | Year | Engine | Description |
|-------|---------|---------|--|
| 79565 | 1970-79 | XL/H/CR | Circuit breaker cover gasket w/ 2 holes (10pk) |



Quick Change Cam Gear Gasket and Seal Kit

Includes both cork and quad seals for pushrods to fit all year ranges.

- | PCP | Application |
|-------|-------------|
| 25613 | 1957-81 |
| 25614 | 1982-85 |



Genuine Torrington Bearing Set XL L58-90

- 15632 4 Piece set

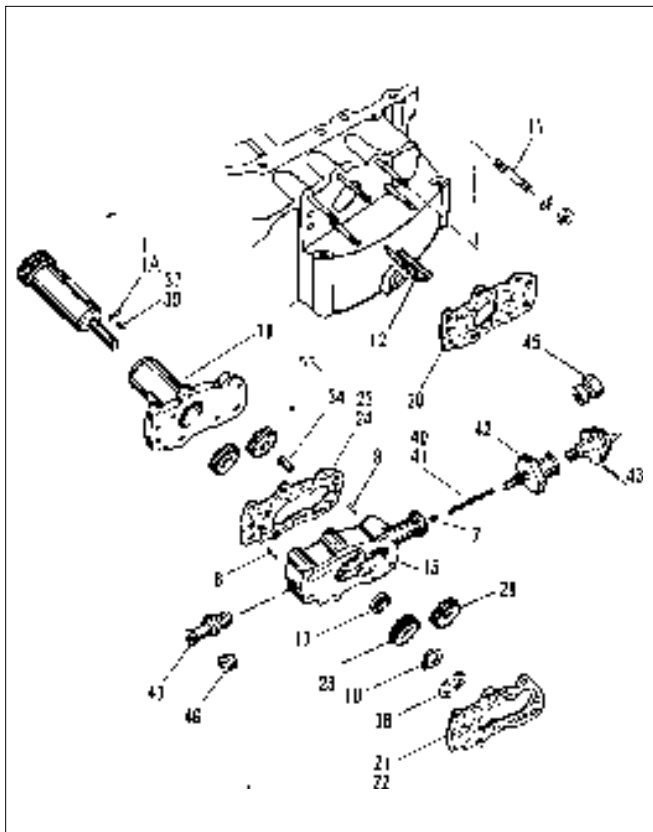
Topline Pinion Bearing/ Race XL 1977-85

- 29140 24648-77



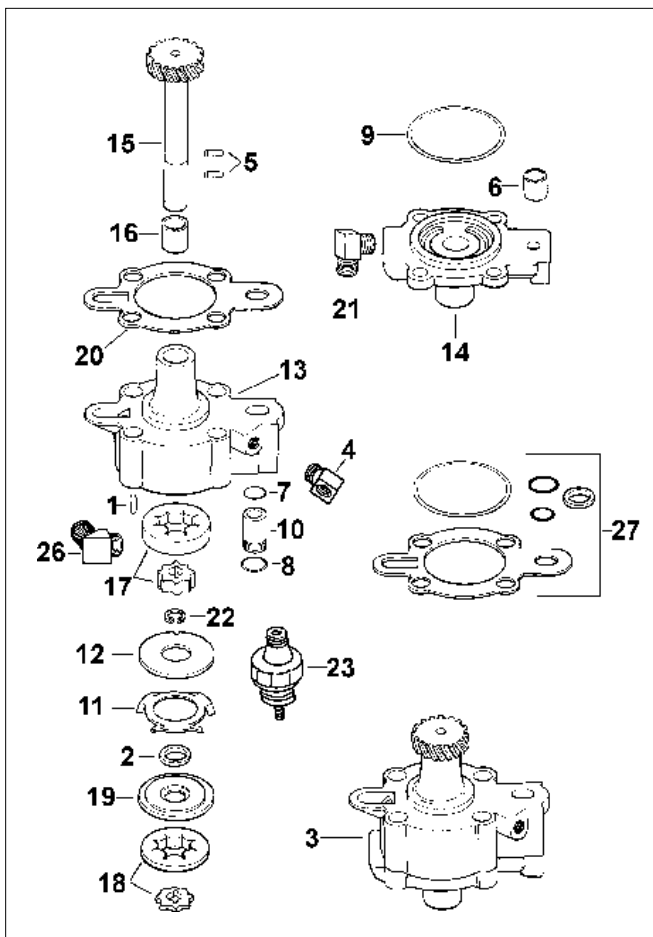
Oil Pump XL 1952-76

	PC	OEM	Description	Year	U/M
1	10192	240	Feed pin	61-72	10Pk
1A	10116	603	Roll pin	72-76	10Pk
7	15574	8873	Check ball	54-71	10Pk
8	10125	9095	Dowl	61-76	10Pk
10	11003	11002	Retainer	56-76	10Pk
11	5404	24819-52	Stud & nuts	54-76	Kit
12	4428	25276-52	Screen	54-73	Each
15	30122	26214-72	Body	72-76	Each
17	14032	26227-58	Seal	58-76	5 Pk
18	17518	26241-52	Inner pump	54-76	Each
20	79128	26256-52	Gasket, case	54-76	10Pk
21	79131	26258-52	Outer gasket	54-61	10Pk
22	79132	26258-62	Outer gasket	62-71	10Pk
23	79136	26259-52	Inner gasket	54-62	10Pk
24	79137	26259-62	Inner gasket	62-71	10Pk
26	29063	26315-72A	Gear, scavenger	72-76	Each
28	29064	26317-72A	Gear idler scavenger	72-76	Each
37	10308	26340-36	Key	60-71	10Pk
38	11059	26341-37	Retainer half	62-71	5 Pk
39	10310	26348-15	Key	72-76	10Pk
40	3410	26364-57	Check spring	57-72	Each
41	3415	26364-72	Check spring	72-76	Each
42	4447	26420-57	Fitting	56-75	Each
43	5670	26552-72	Switch	54-76	Each
45	10523	26569-58	Fitting	54-76	Each
46	10545	45830-48	Plug	58-76	5 Pk
47	10575	63533-41	Feed fitting	67-76	5 Pk

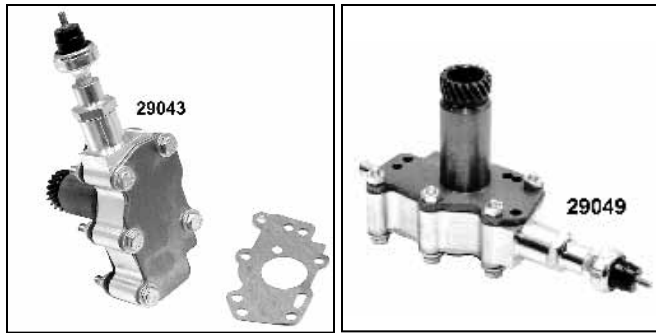


Oil Pump XL 1977-on

	PCP	OEM	Description	Year	U/M
1	10185	643	Roll pin	77-*	10Pk
2	14020	12036A	Seal, outer plate	77-82	5 Pk
3	29050	26197-83	Oil pump	77-83	Each
4	10520	26338-68	Fitting, pump	86-*	5 Pk
5	10130	26430-76	Pin, gear shaft (2)	76-*	5 Pk
6	18535	26431-76	Bushing, cover	77-*	5 Pk
7	14538	26432-76A	'O' Ring body	77-82	10Pk
8	14539	26433-77	'O' Ring check valve	79-82	10Pk
9	14540	26434-76A	'O' Ring	77-*	10Pk
10	29053	26435-76A	Check valve	77-82	Each
11	29054	26461-77	Spring, washer	77-*	Each
12	29055	26463-77	Inner plate	77-*	Each
13	29056	26484-86	Pump body	86-*	Each
14	29057	26486-75B	Pump cover	77-83	Each
	29058	26486-86	Pump cover	86-*	Each
15	29059	26488-75	Gear shift	77-*	Each
16	18536	26489-75	Bushing, body	77-90	5 Pk
	31382		As above, Jims		Each
17	29060	26491-83	Gerotor set, return	83-*	Set
18	29061	26492-86	Gerotor set, feed	86-*	Set
19	29062	26493-75A	Outer plate	77-*	Each
20	25084	26495-75	Pump gasket	77-*	10Pk
21	10522	26496-75	Fitting 90 degree	L83-*	Each
22	11061	26497-75	Snap ring	77-*	10Pk
23	5671	26554-77	Switch	77-*	Each
26	10562	62564-86	Fitting connector	86-*	Each
	10565	62601-86	Fitting connector	86-*	Each
	10578	63540-62	Fitting connector	77-*	Each
27	25605	-	Gasket & seals	77-*	Kit



Sportster 1957-on



XL Oil Pump Assembly 1957-76

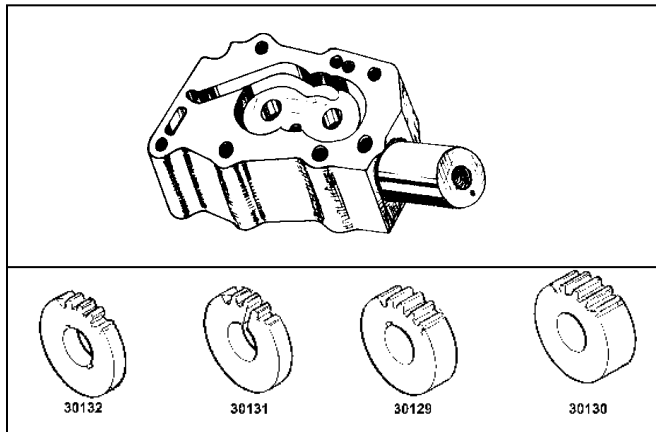
Oil pump assembly features an aluminum body, oil pressure switch, and all internal parts.

- 29043** Preston assembly 1957-66 (26204-56)
29049 Preston assembly 1967-76 (26204-67A)

Sportster Oil Pump Assembly

These oil pumps come complete with all gears as shown and fit model listed. (natural finish)

- 29050** 1977-85 (replaces 26197-83)



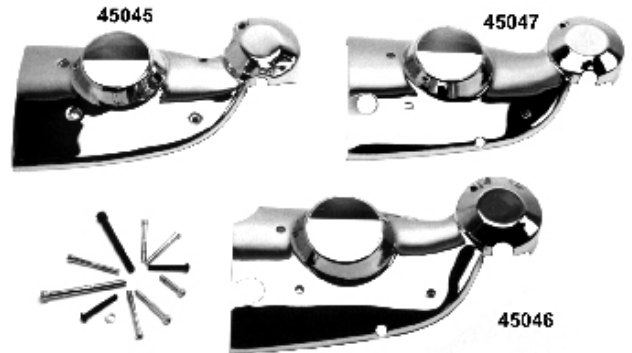
XL Machined Oil Pump Body 1957-76

Machined body replaces 26214-72 on XL models from 1972-76 and accepts later gears listed in chart below. Includes gear dowel press and is American made.

30122

Also accepts:

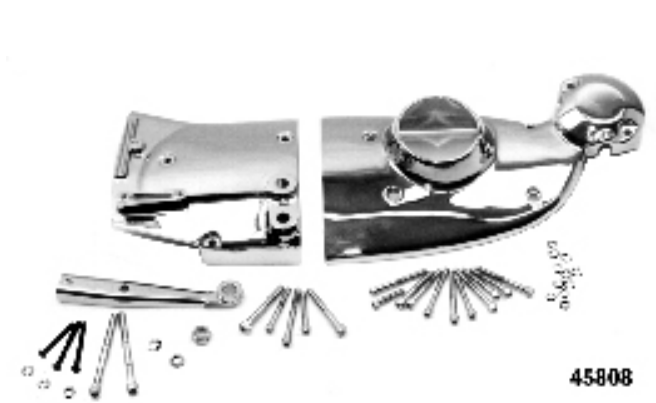
- | | | |
|--------------|-----------|---------------------|
| 30129 | 26315-72A | Scavenger gear |
| 30130 | 26317-72A | Scavenger idle gear |
| 30131 | 26322-52A | Idle gear |
| 30132 | 26323-52A | Feed gear |



Chrome XL Cam Covers 1971-on

These form fitting chrome steel covers fit over stock cam cases on 1971-on Sportster models. No need to remove cam case or disturb cams or gears. Both covers held in place by existing screws.

- 45046** 1971-78 XLH electric start
45047 1971-78 XLCH kick start (with hardware)
45019 1979-80 XLH
45053 1981-82 XLH
45045 1983-90 Sportster



Custom Dress-Up Kit

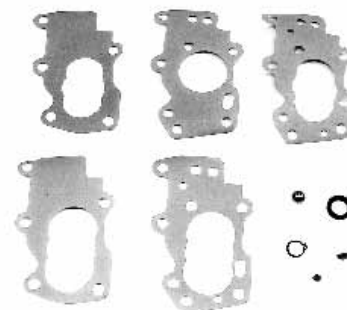
Fits right side of XL models 1983-on. Includes chrome steel cam cover trim, chrome diecast sprocket cover, chrome master cylinder reinforcement bracket and hardware.

- 45808** Chain XL 1983-90



XL Oil Pump Drive Gear

PCP	OEM	Fits
29068	26318-75	1977-87 Pinion

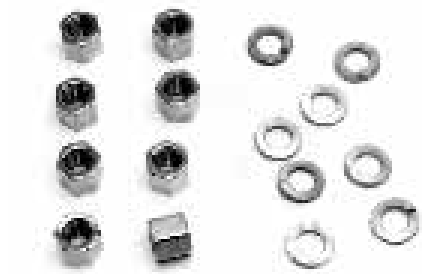
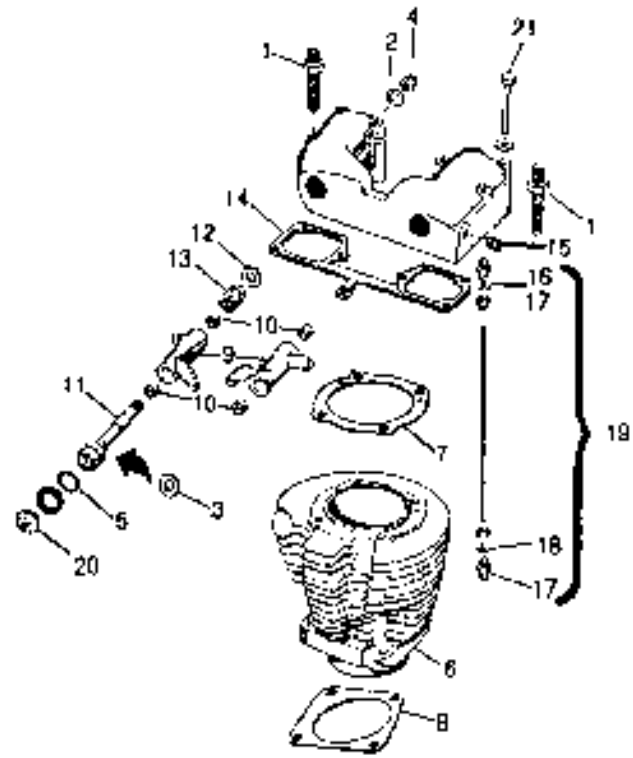


James Oil Pump Gasket and Seal Kits

- 79813** 1952-76
79814 1977-90

XL Top End 1957-85

	PCP	OEM	Description	Year	U/M
1	10800	3412	Stud	79-85	Each
2	12000	6466W	Washer	57-85	10Pk
3	13559	6767	Rocker shim .007	57-85	10Pk
	13560	--	Rocker shim .015	57-85	10Pk
4	12511	7872	Red end cap	57-85	4 Pk
	5319	7875	Acorn nut, chrome	57-85	4 Pk
5	14501	11101	'O' Ring, rocker	57-85	10Pk
6	3035	16464-73C	Front cylinder 1000	73-85	Each
	3038	16465-73C	Rear cylinder 1000	73-85	Each
7	79204	16769-57	Head gasket	57-71	10pk
	79205	16769-72A	head gasket, copper	72-E73	10Pk
	79206	16769-73	Head gasket	73-85	10Pk
		16769-82	.016 copper		
8	79221	16774-57	Base gasket	57-71	10Pk
	25020	16774-72	Base gasket	72-85	10Pk
9	2013	17394-57A	Front exhaust arm	57-85	Each
	2014	17395-57A	Rear exhaust arm	57-85	Each
	2015	17396-57A	Front intake arm	57-85	Each
	2016	17397-57A	Rear intake arm	57-85	Each
10	18503	17428-57	Bushing, rocker	57-85	4 Pk
11	1364	17435-57B	Rocker shaft	57-85	Each
12	11531	17451-57	Spacer (4)	57-85	10Pk
13	13100	17483-57	Spring	57-85	10Pk
14	79259	17536-70	Gasket rocker	57-85	10Pk
15	10545	45830-48	Plug	57-85	5 Pk
16	10561	62484-81	Fitting, oil line	81-85	Each
17	10572	63526-57	Fitting, oil line	57-85	5 Pk
18	14073	63529-57	Seals	57-85	10Pk
	14402		As, above red silicone		10Pk
19	1355	-	Oil line kit	57-85	Kit



Cylinder Base Nut Kits

Exact duplicate of stock. Each kit contains 8 nuts and 8 lockwashers.

- 2154 XL & 45's Chrome
- 5168 XL & 45's Cad



Colony Rocker Box Bolt Kit

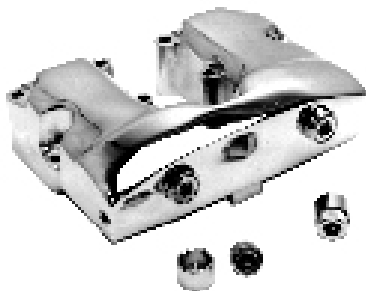
Stock style hex head bolts and washers fit all XL 1957-85.

PCP	Application
9829	1957-76 chrome
9830	1957-76 cad
9831	1977-85 chrome
9832	1977-85 cad



1957-85 Sportster Rocker Box

Available for ironhead sportster in the oem natural finish. USA made. Each
 30212 Front rocker cover (17514-71)
 30213 Rear rocker cover (17515-71)



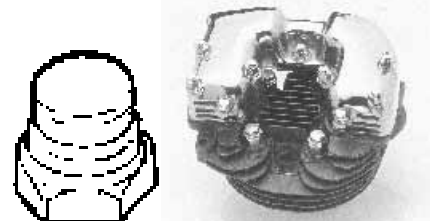
Allen Rocker Shaft Plugs

Set of 4 chrome shaft plugs fits 1971-up FL-XL models. Includes sockets and cups.
 5419



Colony Cylinder Head Bolt Kit for Sportsters

PCP	Application	Style
1725	1957-E73	Acorn
2859	1957-72	Cap
1744	1973-85	Acorn



Rocker End Shaft Plastic Cap Nut

OEM type nut with coloured plastic end 7/16 x 20 thread - 4 pack. Replaces OEM 7872.

PCP	Colour
12511	Red
12512	Black
12605	Green
12606	Blue
12607	Orange

Sportster 1957-on



AV&V Valve Seats

These valve seats are made from heat and wear resistant high quality alloy steel, and are manufactured with clear identification markings and radius edges for easy installation. These seats will resist intense valve pounding and effectively dissipate heat for constant valve sealing. These valve seats will increase in hardness during engine break-in period.

Exhaust and intake valves are made from the same material, choose size as needed. Machining may be required.

PCP	O.D.	I.D.	Thickness
31787	1.630"	1.180"	.385"
31789	1.757"	1.371"	.315"
31780	1.757"	1.410"	.430"
31788	1.880"	1.439"	.410"
31784	1.944"	1.570"	.400"
31781	2.008"	1.610"	.440"
31782	2.040"	1.590"	.420"
31790	2.068"	1.750"	.315"
31783	2.070"	1.610"	.460"
31785	2.135"	1.750"	.400"
31786	2.163"	1.750"	.455"

XL Oversize Valve Seat

Can be used with unleaded gas.

PCP	Years	Size
17730	1957-69	2 x 1.687 x 9/32" (Stock 1.690 port size)
17731	1970-85	2-1/16" x 1.687 x 9/32" (Stock 1.650 port)



Jims Ironhead Sportster Rocker Shaft

Available in +.005" for worn out rocker boxes. Std. O.D. on big end is .937", smaller end is .434". Oversize is +.005 at the two diameters that are held by rocker boxes. Oversize O.D. on big end is .942, small end is .439.

PCP	Description
31101	Use on XL 1957-85 (17435-57B)
31196	Oversize +.005" (17435-57B5)



AV&V Stainless Steel Valves

These valves are heat treated and nitride processed for excellent wear resistance. These valves feature a 45 degree angle, cut below the lock groove to reduce stress in this area, as well as making valve seal installation easier.

Sportster 900-1000cc Valves

PCP	Valve	Application	Head Diam.
31666	Exhaust	900cc 1958-69	1.562"
31818	Intake	900cc 1957-71	1.812"
31666	Exhaust	1000cc 1970-84	1.562"
31667	Intake	1000cc 1970-84	1.940"



Sifton Rocker Arm and Shaft Kit

Kit fits 1957-84 XL Iron Head models and includes 4 rocker arms with bushings installed, 4 shafts, shims, spacers, chrome replica end caps and nuts.

30070

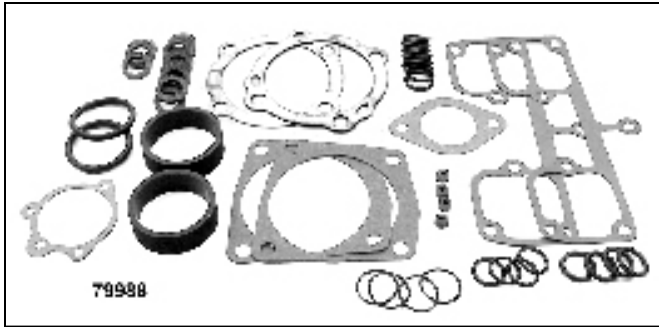


Rocker Box Bolt Kit

Chrome plated acorn style bolts fit rocker boxes on all Sportster 1957-1984.

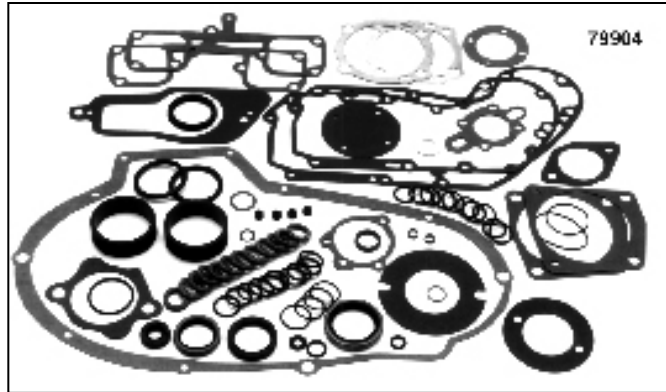
1712	1957-76
1789	1977-84

Sportster 1957-on



James Top End Gasket Kits (Iron Head)

PCP	OEM	Description
79950	17030-57	XL 900cc 1957-71 w/teflon
79988	17030-72-A	XL 1000cc 1973-85



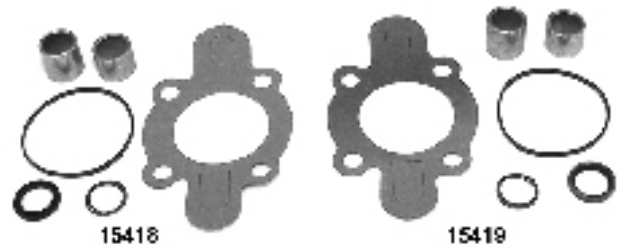
James Motor Gasket Kits (Iron Head)

PCP	OEM	Description
79902	17026-71	XL 900cc 1957-71 w/teflon
79904	17026-73	XL 1000cc L1973-85 w/.032 copper



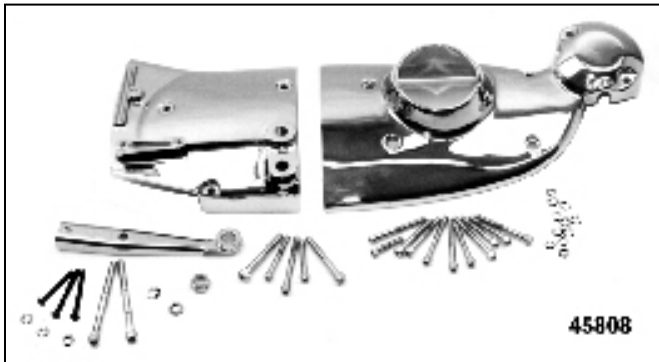
Jim's Machining Motor Nuts

PCP	OEM	Description	Model
31004	23966-54A	Crank pin nuts (pair)	BT 1954-E81
31006	23969-83	Crank pin nuts (pair)	BT L1983-99
31001	23901-81	Crank pin nuts (pair)	XL L1981-on
31002	23902-81	Sprocket shaft nut (each) Pinion shaft nut	XL L1981-85
31008	24017-80	Sprocket shaft nut (each)	BT 1972-85
31009	24023-36	Pinion shaft nut (each)	BT 1930-E81
31007	24016-80	Pinion shaft nut (each)	BT L1981-89



Oil Pump Repair Kits

PCP	Application
15418	XL 1977-82
15419	XL 1983-on



XL Custom Dress-Up Kit

1980-82 kits include chrome sprocket cover, master cylinder cam cover trim and hardware. Kits for XL 1983-on models fit right side and include chrome steel cam cover trim, sprocket cover, master cylinder reinforcement bracket, and hardware.

PCP	Year	Drive	Type
45823	1971-76	Chain	Kick
45824	1971-76	Chain	Electric
45825	1971-76	Chain	Kick and electric
45826	1977-78	Chain	Kick
45827	1977-78	Chain	Electric
45828	1977-78	Chain	Kick and electric
45812	1980	Chain	Electric
45813	1981-82	Chain	Electric
45808	1983-90	Chain	Electric

