Intake

Engine

Brake

MIRROR







#### **REVERSE GEAR KITS FOR BIG TWINS**

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A reverse gear is great for trikes and sidecars, but can also be used on regular 2-wheel motorcycles. These very complete and easy to install reverse gear kit is entirely Made in Holland. It features a CNC machined billet steel and aluminum housing and hardened gears. The complete unit is only 20mm (.790") thick and fitted between the transmission trap door and clutch control cover. It features a hand-operated lever to put the bike in reverse gear. Just pull the clutch lever when the bike is in neutral and switch into reverse with the billet aluminum hand operated lever. The included relay and switch make your neutral indicator light go out and now you are able to drive the bike backwards, using the clutch and throttle like when you drive forward. Installation does not affect any of your forward gears. Kit includes everything you need, including installation instructions, gaskets, and hardware. Available for most 1987 and later Big Twin and Twin Cam Touring models with stock headers.

- Installation on 2006 thru 2012 models equipped with an OEM or Screamin' Eagle hydraulic clutch requires the use of the additional parts kit ZPN743403
- Installation on 2013 thru 2016 models equipped with an OEM or Screamin' Eagle hydraulic clutch requires the use of additional parts kit ZPN743406

**Note:** Reverse gear kits are designed for use on Touring models. Installation on most Softail and Dyna models requires purchase of an aftermarket exhaust system with proper rear header clearance.

Note: Reverse gear kits are designed for use on Touring models. Installation on most Softail and Dyna models requires purchase of an aftermarket exhaust system with proper rear header clearance.

743400 Fits stock and aftermarket 5 speed transmissions on 1987 thru 2006 Big Twin and Twin Cam. Installation on earlier 5-speed Big Twins requires conversion to the 1987-up clutch release mechanism, cable, cover, dipstick and trapdoor ZPN234202 or 234203

**743401** Fits stock 6-speed transmissions in 2006 thru 2011 Dyna, 2007 thru 2010 Softail and 2007 thru 2008 Touring

743407 Fits stock 6-speed transmissions in 2014 thru 2016 Touring, 2012 thru 2017 Dyna and 2011 to present Softail (except 2017 FLSS and FLSTFBS). Models with 0EM or Screamin' Eagle hydraulic clutch require additional parts kit ZPN743406

743408 Fits stock 6-speed transmissions in 2017 to present Touring, 2017 FLSS Slim S and FLSTFBS Fatboy S. Comes complete with new cover for the stock slave cylinder. **743402** Fits stock 6-speed transmissions in 2009 thru 2013 Touring. Models with OEM or Screamin' Eagle hydraulic clutch require additional parts kit ZPN743403. Models with the late 2-piece hydraulic clutch actuator cover also need additional parts kit ZPN743406

**743403** Additional parts kit for use with 2006 thru 2013 0EM or Screamin' Eagle hydraulic clutch



**743406** Transmission end cover to host the OEM clutch slave cylinder on 2013 thru 2016 OEM or Screamin' Eagle hydraulic clutch.

**743404** Replacement micro switch for ZPN743400 & 743401

**743405** Replacement micro switch for ZPN 743402, 743407 & 743408

743441 Replacement transmission gasket for 5-speed reverse kits

743442 Replacement transmission gasket for 6-speed reverse kits

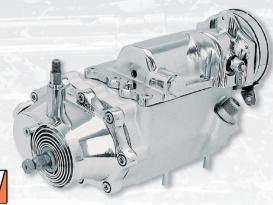


#### **COMPLETE 4-SPEED BIG TWIN TRANSMISSIONS**

Complete and ready to install transmissions for most 4-speed Big Twin models. Order kick starter arm, clutch arm and final drive sprocket separately. Transmissions are assembled in-house at Zodiac by our qualified and experienced mechanics upon order. Please allow 4-7 days to complete.

744131 Transmission with 2.60: 1 first gear, foot shift ratchet top and Zodiac gears & shafts, fits 1936-1964 Big Twin

**744134** Transmission with 2.44: 1 first gear, foot shift ratchet top and Andrews gears & shafts, fits 1936-1964 Big Twin





COMPLETE CLOSE RATIO 4 SPEED TRANSMISSIONS WITH KICK STARTER

Fits all 4speed Big Twin frames from 1970 thru early 1984, and is available in two different versions. One version has a 2.44: 1 closeratio first gear with a 1.35: 1 close ratio third gear, which is an ideal combination for FX models. The other version has a 2.60: 1 close ratio first gear with a 1.35: 1 close ratio third gear and is ideal for FL models. The shifter clutches and shifter dog faces are widened .020" to prevent

chipping. The transmission cases are machined from 356 aluminum alloy castings that are heat-treated to T6 and have been clearanced to accept belt drive pulleys. Included is a set of speedometer drive gears that will drive 1: 1 ratio speedometers. Transmission sprocket and clutch arm are not included, these must be ordered separately. Perfect for those of you building new bikes, or replacing your original transmission that's left you on the roadside just once too often.

**232763** Complete transmission 2.44: 1 (FX models) **232764** Complete transmission 2.60: 1 (FL models)



#### 5-SPEED TRANSMISSIONS FOR 4-SPEED BIG TWINS

Upon order we take the S&S 5-in-4 transmission cases and assemble them with your choice of Andrews, Jims or Zodiac gears and ship them with a bottle of Spectro transmission oil. First gear has 3.24: 1, second gear 2.21: 1, third gear 1.60: 1, fourth gear 1.23: 1 and fifth gear 1.00: 1 ratio. The 5-in-4-speed case is designed for 4-speed Big Twin style frames with 1970 thru 1984 Shovelhead style drivelines and chain final drive. The transmission case is only compatible with chain final drive, not with the factory H-D primary belt drive as used on 1980 thru 1983 FXSB Sturgis models. Also does not fit Softail models.

#### **Transmissions for electric start applications**

**701296** With Andrews gears and shafts installed **701297** With Zodiac gears and shafts installed **701298** With Jims gears and shafts installed

#### Transmissions with chrome kicker kit installed

**701293** With Andrews gears and shafts installed **701294** With Zodiac gears and shafts installed **701295** With Jims gears and shafts installed



#### **ZODIAC 5 SPEED TRANSMISSIONS FOR EVOLUTION SOFTAIL**

These transmissions are available as stock replacement or with extended main shaft and main drive gear and all parts you need to offset the primary for Wide Tire conversions and custom builds. Transmissions feature the 1994-2006 type "Low Noise" gears and shafts, machined from Ultra Strong 20ChMnT High stress gear steel, tempered and stress released to a core hardness of 35 to 45 Rockwell, and a surface hardness of 58 to 60 Rockwell. All transmissions have the hole for the 1996-up electronic speed sensor closed off with a removable plug. All take a 1994-2006 style final belt drive pulley, but 45mm offset transmissions include a special 1994-2006 style offset pulley. Transmissions come assembled. Just install, oil up with the included Spectro Transmission oil and put into gear. Gears and shafts feature a **5 year or 100.000 km limited warranty** .

#### Fits 1990-1999 Evolution Softail

237637 Stock style transmission, plain aluminum housing
236211 Stock style transmission, polished aluminum housing
237638 Stock style transmission, black housing

# Offset transmission for wide tire conversions and custom builds, include all parts to offset the primary chain case and feature extended main shaft and main drive gear

711582 25mm Offset transmission, plain aluminum housing

**701867** 45mm Offset transmission, plain aluminum housing. Includes 32 tooth final belt drive pulley

711682 55mm Offset transmission, plain aluminum housing

711585 25mm Offset transmission, polished aluminum housing

**701898** 45mm Offset transmission, polished aluminum housing. Includes 32 tooth final belt drive pulley

**711685** 55mm Offset transmission, polished aluminum housing

711583 25mm Offset transmission, black housing

**701866** 45mm Offset transmission, black housing. Includes 32 tooth final belt drive

**711683** 55mm Offset transmission, black housing

O1 HELMETS, . LUGGAGE, DIO & MORE

O3 EXHAUST

04 ELECTRIC — & LIGHT

ENGINE ELECTRICS

06 -INTAKE

O8 RIMARY

TRANSMISSION

10 FINAL DRIVE

> 11 WHEELS & -

13 F00T

14 HANDLEBAR

15 FRONT — SUSPENSION

16 CHASSIS/ FRAME & SHOCKS

FENDER & STRUTS & STRUTS 18 GAS TANK &

01L TANK, FILTER -& LINE

FASTENERS

21 MIRROR

WINDSHIELD

OIL, CHEMICALS & TOOLS

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CROSS REF ZPN > PAGE

26 ALPHABETICAL INDEX



#### **ZODIAC 5 SPEED TRANSMISSIONS FOR TWIN CAM SOFTAIL**

These transmissions are available as stock replacement or with extended main shaft and main drive gear and all parts you need to offset the primary for Wide Tire conversions and custom builds. Transmissions feature the 1994-2006 type "Low Noise" gears and shafts, machined from Ultra Strong 20ChMnT High stress gear steel, tempered and stress released to a core hardness of 35 to 45 Rockwell, and a surface hardness of 58 to 60 Rockwell. All transmissions have the hole for the 1996-up electronic speed sensor closed off with a removable plug. All take a 1994-2006 style final belt drive pulley, but 45mm offset transmissions include a special 1994-2006 style offset pulley. Transmissions come assembled. Just install, oil up with the included Spectro Transmission oil and put into gear. Gears and shafts feature a **5 year or 100.000 km limited warranty** .

#### Fits 2000-2006 Twin Cam Softail

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**711686** Stock style transmission, plain aluminum housing **711687** Stock style transmission, black housing

Offset 2000-2006 Twin Cam style transmission for wide tire conversions and custom builds, includes all parts to offset the primary chain case and feature extended main shaft and main drive gear

711688 25mm Offset transmission, plain aluminum housing

**711690** 45mm Offset transmission, plain aluminum housing. Includes 32 tooth final belt drive pulley

711692 55mm Offset transmission, plain aluminum housing

711689 25mm Offset transmission, black housing

**711691** 45mm Offset transmission, black housing. Includes 32 tooth final belt drive pulley

711693 55mm Offset transmission, black housing

polished Softail housing, as well as for 1990 thru 1994 FXR models in Delkron housing. Other models and years can be built to order. The Zodiac transmission is stronger than anything available at present. The Zodiac gears are machined from Ultra Strong 20ChMnT High stress gear steel. This steel has superior strength over any other gear steel used in the aftermarket. Gears and shafts are tempered and stress released. The complete and ready to bolt-in 6 Speed transmission is based on the stock 5 Speed design, meaning there are no installation problems or frame modifications needed. The billet trap door features the electronic speed sensor hole, which can be plugged off (plug included), if a front wheel driven speedo is used. Offset transmissions come complete with all parts to offset the primary.

**Note:** Unlisted 6 Speed Transmissions for FXR and Dyna models can be built on special order. Delivery time is approx. 10 days.

**Note:** The use of an electronic speedo on a 6 speed transmission on 1994 to present models may require the use of a recalibration unit such as ZPN236690 or 236082.

Complete 6 Speed Transmissions, fit all 1990 thru 1999 Softail. Can also be used on 1985 thru 1989 models if used in combination with a 1990 to present clutch and a 1989 to present starter motor

Stock	25mm	45mm	55mm	
	offset	offset	offset	
700856	700863	700867	701133	Plain housing
700858	700865	700898	701134	Polished housing
700855	700862	700866	701135	Black housing

Complete 6 Speed Transmissions, fit 2000 thru 2006 Twin Cam Softail

Stock	25mm offset	45mm offset	55mm offset	
700860	700920	700949	701137	Silver housing
700861	700927	700973	701138	Black housing





#### **ZODIAC 6 SPEED OVERDRIVE TRANSMISSIONS**

The 6 Speed Overdrive transmission is the latest in torque multiplication technology and in fact the strongest and most reliable available to date. Zodiac based the 6 Speed Overdrive transmission on their race proven 5 Speed design. Unlike your stock transmission, which has a 1: 1 ratio in top gear, this transmission gives you a 1: 0.86 gear ratio in 6th speed. This means less RPM to drive at the same speed, resulting in less vibration, less wear and tear, and better fuel economy. The Zodiac Six Speed features an improved shift system over the stock 5 Speed. The shift drum is not a cast part but a CNC produced precision part. The drum fork pin grooves have a more exact shifts, the plunger/compression spring detent system has been upgraded with a late style roller/torsion spring for smoother shifts, and the dynamic load rating of the shift drum bearings has been increased 100% for improved radial loading characteristics. The gears are as wide as in your stock 5 Speed transmission with an added .beefy. 6th gear for the main shaft and a one-piece 6th gear/counter shaft unit. All of this for uncompromised torque capacity and strength. Zodiac 6 Speed overdrive comes with a billet aluminum trap door. The complete 6 Speed transmissions are available for Softails in a black or natural aluminum Delkron housing or our reinforced and economical priced



#### **ECO LINE TRANSMISSIONS**

Although these transmissions are extremely economically priced, they feature an extreme high quality. Gears and shafts are made of High Stress gear steel and have a smooth tooth surface that guarantees a noiseless and trouble free transmission. When you are used to cruise at high speed an Eco Line 6 Speed overdrive transmission is the choice for you. This offers the same 1 to 1 gear ratio in 5th gear as a stock 5-speed transmission, but a 1 to 0, 86 ratio in 6th gear. This reduces engine speed with as much as 14%, providing considerably extension of engine life with fewer vibrations and reduced fuel consumption. Zodiac's Eco Line transmissions feature a 2 year limited warranty and are available for 1990 thru 1999 Softails.

**Note:** The use of an electronic speedo on a 6 speed transmission on 1994 to present models may require the use of a recalibration unit such as ZPN236690 or 236082.

Eco Line transmissions, fits Softails 1990 thru 1999 741700 Polished finish



#### **ZODIAC'S TPD RIGHT SIDE DRIVE TRANSMISSIONS**

Ready-to-install Right Side Drive transmissions built around our TPD RSD transmission conversion kits. We have completed these transmissions with our high quality low-noise gears for hundreds of thousands of miles dependable service. The gears and shafts used are of such a high quality that they feature a 5 year or 100.000 km warranty. These RSD transmissions are designed for use with up-to 300 wide rear tires when used with a stock style drive pulley. Those who want to use an up-to 330 wide rear must also order the RSD 330 offset kit, which includes an offset drive pulley, extended clutch push rod, and a spacer ring for the pulley cover/clutch actuator. To allow you to make your own choice between hydraulic and cable operated clutch the matching pulley cover/clutch actuator must also be ordered separately.

Note: FXR, Dyna and FLH/FLT style RSD transmissions can be build to order.

#### **Complete RSD transmissions**

236373 Natural aluminum Evolution Softail housing

236375 Black Evolution Softail housing

236374 Polished Evolution Softail housing

741943 Silver painted 2000 thru 2006 style Twin Cam Softail housing

#### **Optional parts**

701839 Pulley, pushrod, spacer ring and hardware for use of the RSD transmission with 330 wide rear tire

720375 RSD Pulley cover with cable operated clutch actuator, chrome

**744129** RSD hydraulic operated clutch actuator/pulley cover, chrome

**723470** RSD hydraulic operated clutch actuator/pulley cover, black



#### **4-SPEED BIG TWIN TRANSMISSION CASES**

Replica cast aluminum transmission housing for 4-speed Big Twins. Made to meet the requirements of restoration enthusiasts.

**744128** Ratchet top style, fits 1936 thru 1964, Ultima (OEM 34700-36). Comes with the lower studs and outer main shaft bearing race installed. Does not accept the reverse gear idler shaft. Must be used with a 1941-early 1976 counter shaft (0EM 35614-65)

**781047** Ratchet top style, fits 1936 thru 1964, V-Twin Mfg. (OEM 2258-36 & 34700-36). Comes with installed main drive case race and counter shaft bushings. Accepts reverse gear idler shaft.

**781046** Ratchet top style, fits 1965 thru early 1979, V-Twin Mfg. (OEM 34702-78). Uses Torrington style 4th gear bearing (OEM 8905)

781045 Rotary top style, fits late 1979 thru 1984, V-Twin Mfg. (OEM 34702-80). Uses Torrington style 4th gear bearing (OEM 8905). Some models might require a bearing retainer (OEM 35111-80) and bearing housing (OEM 35100-79)

234723 Counter shaft, fits 1941-early 1976, Andrews (OEM 35614-65)

231456 Torrington style 4th gear bearing (OEM 8905)

231874 Bearing retainer (OEM 35111-80)

231770 Bearing housing (0EM 35100-79)



#### SAMWEL'S TRANSMISSION KITS FOR 45CI MODELS

Complete set of gears to convert an existing 1941 thru 1973 style 3-speed transmission in a smooth shifting and reliable 4-speed. Fits in the genuine transmission housing with minor modifications to clear for the new first gear. Features drop forged gears for extra strength and comes with a special transmission side cover that has clearance for the 4-speed gear set and has a very close to stock appearance. European made quality for your good-old seven fifty.

745844 Three-to-four speed conversion kit



www.zodiac.nl 09-005 HELMETS LUGGAGE

03 EXHAUST

ELECTRIC & LIGHT

06 Intake 07 FNGINE

TRANSMISSION

10 FINAL DRIVE WHEELS 8

12 Brake

14 Handlebar

FENDER & STRUTS GAS TANK

OIL TANK, FILTER

FASTENERS

21 MIRROR

OIL, CHEMICAL

ALPHABETICAL

-01

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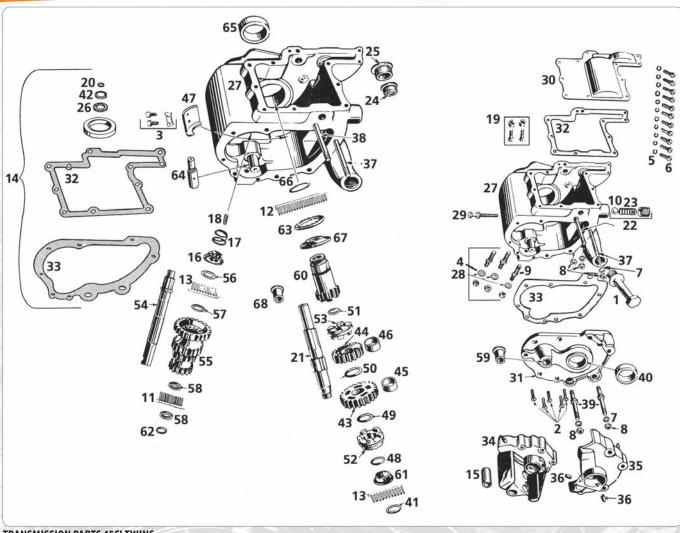
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## TRANSMISSION PARTS 45CI TWINS

Fits 1932 thru 1974 transmissions, unless otherwise indicated.

-		Transmission mount kit, fits all 1929 thru 1974 45CI Solo & Servicar	
		(Pos. 4, 9 & 29)	
	235253	Chrome, Colony	
	235254	Cad plated, Colony	
	235255	Parkerized, Colony	
1		Oil filler plug, 1935-1940	
	769049	Parkerized, Colony	2326-35
1		Oil filler plug, 1941-1974	
	235146	Chrome, Colony	703
	235147	Cad plated, Colony	703
	235148	Parkerized, Colony	703
2		Side cover screws, set of 5	2278
	235249	Chrome, Colony	
	235250	Cad plated, Colony	
	235251	Parkerized, Colony	
3	235252	Retaining bracket bolts with locktab, Colony	3754 & 35335-33
4	743954	7/16" spring washer, Zodiac, 50-pack	6490
4 5 6	-	#10 washer	7025
6		Top & side cover screw kit (pos. 2, 5 & 6)	1206, 2278 & 7025
	235246	Chrome, Colony	
	235247	Cad plated, Colony	
	235248	Parkerized, Colony	
7	743952	5/16" spring washer, Zodiac, 50-pack	7040
8	743985	5/16-24 UNF nut, Zodiac, 50-pack	7752
9	745978	Bottom stud nut, Samwel, 3-pack	7863
10	234684	Ball bearing 1/2", Eastern, 25-pack	8872
11		Set of 24 countershaft rollers	
	234675	Standard size, Eastern	9075
		. 0004!! Fastawa	0076
	234676	+.0004", Eastern +, 0008", Eastern	9076

12		Set of 88 main drive gear rollers (44 needed per bike)	d
	234638	Standard size, Eastern	9084
	234639	+.0004", Eastern	9085
	234640	+.0008", Eastern	9086
	234641	+.001", Eastern	
13		Set of 40 main and countershaft rollers:	
	234672	Standard size, Eastern	9090
	234673	+.0004", Eastern	9091
	234674	+.0008", Eastern	9092
14		Gasket & seal kit	33030-41
	231060	Genuine James Gaskets	
	700261	Athena	
15	234685	Bushing, starter shaft, Eastern	33101-32
16	234686	Starter clutch gear, Eastern	33380-32
<u>17</u>	234687	Spring, shifter gear, Eastern, 10-pack	33390-26
18	234688	Spring, starter shaft, Eastern, 10-pack	33455-26
19	235149	Tripper bolt and nut kit, Colony	33456-26 +
			33458-41
20	234689	Seal, shifter cam shaft, Eastern, 10-pack	34036-36
21	234857	Mainshaft, transmission, Eastern	35043-41
22	235259	Shifter cam plunger cap, spring (23) and ball (10),	34053-36 +
		Colony	34057-36 +
			8872
23	234697	Spring, countershaft, Eastern, 10-pack	34057-36
24	234787	Bushing, shifter shaft, small, Eastern	34427-38
25	234838	Bushing, shifter shaft, large, Eastern	34432-38
26	234856	Shifter shaft seal, Eastern, 10-pack	34459-26
27	235260	Transmission housing, Samwel	34702-41
28	235264	Bottom stud kit, Colony	34725-26
29		Transmission adjuster screw	34736-27
	235256	Chrome, Colony	
	235257	Cad plated, Colony	

# 45CI TRANSMISSION PARTS TRANSMISSION

30         235262         Top cover, chrome, Samwel         34813-41           31         235263         Side cover with bushings, Samwel         34821-41           32         700280         Top cover gasket, Athena, 10-pack         34825-41           33         700281         Side cover gasket, Athena, 10-pack         34826-41           34         235266         Sprocket cover, 1941-1954 Servicar, 1941-1943 Solo34873-41         84831-39           34         235266         Sprocket cover, 1944-up Solo, Samwel         34873-44           36         235269         Sprocket cover bushing, 1941-1943 Solo & 1942         WLA, Samwel           36         235271         Sprocket cover bushing, 1944-1952 Solo, Samwel         34890-33           38         236896         Sprocket cover stud, Samwel         34890-33           38         236896         Sprocket cover stud, Samwel         34891-33           39         236896         Sprocket cover stud, Samwel         34891-33           39         236896         Sprocket cover stud, Samwel         34892-33           39         236899         Shoulder stud, left or right, Samwel         34892-33           234858         Standard size, Eastern         235102-33           235099         +.002", Eastern         3521-34 </th <th></th> <th></th> <th></th> <th>4</th>				4
30         235262         Top cover, chrome, Samwel         34813-41           31         235263         Side cover with bushings, Samwel         34821-41           32         700280         Top cover gasket, Athena, 10-pack         34825-41           33         700281         Side cover gasket, Athena, 10-pack         34826-41           33         700282         Seal, shifter cam shaft, Athena, 10-pack         34831-39           34         235266         Sprocket cover, 1941-1954 Servicar, 1941-1943 Solo34873-41         & 1942 WLA, Samwel           35         235268         Sprocket cover, 1944-up Solo, Samwel         34873-44           36         235271         Sprocket cover bushing, 1941-1943 Solo & 1942         34885-41           WLA, Samwel         34890-33         34890-33         34890-33           38         236896         Sprocket cover stud, Samwel         34890-33           39         236899         Shoulder stud, left or right, Samwel         34892-33           40         Bushing, outer bearing race         35102-33           234858         Standard size, Eastern         35102-33           234959         +.002", Eastern         35219-41           235099         +.010", Eastern         35219-41           235099         +.01		235258	Parkerized, Colony	
31         235263         Side cover with bushings, Samwel         34821-41           32         700280         Top cover gasket, Athena, 10-pack         34825-41           33         700281         Side cover gasket, Athena, 10-pack         34826-41           33         700282         Seal, shifter cam shaft, Athena, 10-pack         34831-39           34         235266         Sprocket cover, 1941-1954 Servicar, 1941-1943 Solo34873-41         & 1942 WLA, Samwel           35         235269         Sprocket cover, 1944-up Solo, Samwel         34873-44           36         235271         Sprocket cover bushing, 1941-1943 Solo & 1942         34885-41           WLA, Samwel         34890-33         34890-33         34890-33           38         236896         Sprocket cover stud, Samwel         34891-33           39         236899         Shoulder stud, left or right, Samwel         34892-33           40         Bushing, outer bearing race         35102-33           234858         Standard size, Eastern         35102-33           234959         +.002", Eastern         3520-33           23509         +.010", Eastern         35219-41           41         235109         Mainshaft bearing thrust washer, Eastern, 5-pack         35210-31           42	30	235261		34813-41
31         235263         Side cover with bushings, Samwel         34821-41           32         700280         Top cover gasket, Athena, 10-pack         34825-41           33         700281         Side cover gasket, Athena, 10-pack         34826-41           33         700282         Seal, shifter cam shaft, Athena, 10-pack         34831-39           34         235266         Sprocket cover, 1941-1954 Servicar, 1941-1943 Solo34873-41         & 1942 WLA, Samwel           35         235269         Sprocket cover, 1944-up Solo, Samwel         34873-44           36         235270         Sprocket cover bushing, 1941-1943 Solo & 1942         34885-41           WLA, Samwel         34890-33         34890-33         34890-33           38         236896         Sprocket cover stud, Samwel         34891-33           39         236899         Shoulder stud, left or right, Samwel         34892-33           234858         Standard size, Eastern         35102-33           234859         +.002", Eastern         35102-33           234959         +.002", Eastern         35102-33           234959         +.001", Eastern         35219-41           235099         +.010", Eastern         35219-41           42         mainshaft sprocket side oil retainer	30	235262	Top cover, chrome, Samwel	34813-41
33         700281         Side cover gasket, Athena, 10-pack         34826-41           33         700282         Seal, shifter cam shaft, Athena, 10-pack         34831-39           34         235266         Sprocket cover, 1941-1954 Servicar, 1941-1943 Solo34873-41         & 1942 WLA, Samwel         34873-44           36         235269         Sprocket cover, 1944-up Solo, Samwel         34885-41           36         235271         Sprocket cover bushing, 1941-1943 Solo & 1942         34885-41           37         235270         Sprocket cover bushing, 1944-1952 Solo, Samwel         34890-33           38         236896         Sprocket cover stud, Samwel         34890-33           39         236899         Shoulder stud, left or right, Samwel         34892-33           234858         Standard size, Eastern         35102-33           234859         +.002", Eastern         35102-33           235099         +.005", Eastern         35210-34           235099         +.010", Eastern         35210-34           41         235102         Mainshaft bearing thrust washer, Eastern, 5-pack         35110-33           -         Mainshaft sprocket side oil retainer         3521-34           42         -         mainshaft sprocket oil seal         3522-1-36	31	235263	Side cover with bushings, Samwel	34821-41
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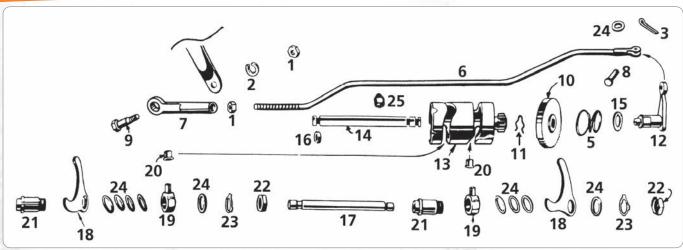
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12	236915	Shaft, gear shifter lever, WLA & WLC, Samwel	34449-40
13	-	Cam, gear shifting, 1940	34012-40
13	236916	Cam, gear shifting, Samwel	34012-41
		. 3	

Pos.	ZPN		OEM
14	-	Shaft, gear shifting fork, 1938-1940	2244-38
14	236917	Shaft, gear shifting fork, 1941-up, Samwel	34031-41
15	234856	Oil seal, gear shifting cam shaft, Eastern,	34459-26
		10-pack	
16	700274	Oil seal, gear shifting cam shaft, Athena, 10-pac	k34036-36
16	234689	Oil seal, gear shifting cam shaft, Eastern,	34036-36
		10-pack	
17	236918	Shaft, gear shifting fork, Samwel	34140-41
18	236919	Gear shifting fork, 2nd and high, 1933-1940,	2246-33
		Samwel	
18	236920	Gear shifting fork, low and reverse, 1933-1940,	2247-33
		Samwel	
18	236921	Gear shifting fork, 1941-up, Samwel	34161-41
19	233454	Gear shifting finger, Bender	34165-36
20	744387	Roller, gear shifting finger, Bender	34168-39
20	231774	Roller, gear shifting finger, Bender, 10-pack	34168-39
21	233453	Bushing, gear shifting fork, 1940 WLA, Bender	34175-36
21	236922	Bushing, gear shifting fork, 1941-up WLA, WLC,	34176-41
		Samwel	
22	233452	Nut, bushing, Bender	34179-33
23	290262	Bushing lock washer, Zodiac, 10-pack	34180-33
24	744390	Spacer shim, 5/64" thick, Eastern	6754
24	236397	Spacer shim, 5/64" thick, Eastern, 10-pack	6754
24	231761	Spacer shim, .014" thick, Eastern, 10-pack	6752
24	231760	Spacer shim, .007" thick, Eastern, 10-pack	6750
25	236925	Screw, shifter cam lock	34051-38

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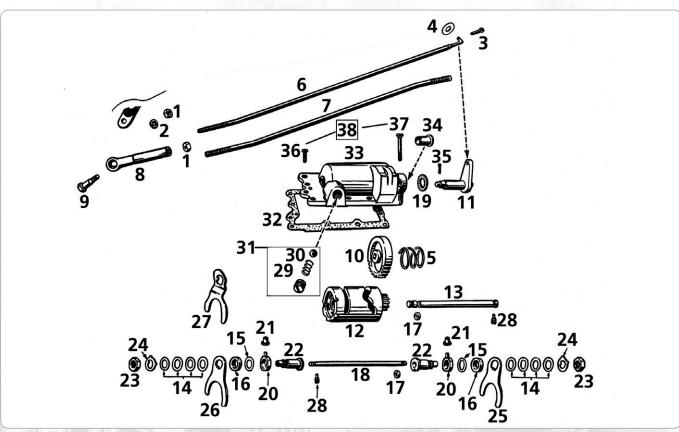
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	TIN HAND.	JIII TERTARIS	
1	743985	Nut, 5/16"-24, 50-pack	7752
2	743952	Washer, 5/16", 50-pack	7040
3	232177	Cotter pin 1/16"x 1/2", 100-pack	510
4	-	Washer, 1/4" x 7/16" x 1/32"	6220
5	234687	Spring, gear shifter shaft, Eastern, 10-pack	33390-26
6	780082	Rod, gear shifter, white plated, 1936-1950	33857-36
	781198	Rod, gear shifter, chrome, 1936-1950	33857-36
7	781228	Rod, gear shifter, cad plated, 1951-up	33857-51
	781229	Rod, gear shifter, chrome, 1951-up	33857-51
8	114022	Gear shifter rod end yoke, 1936-up, chrome, Zodiac	33870-51
	781196	Gear shifter rod end yoke, 1936-up, parkerized, V-Twin Mfg.	33870-51
	781197	Gear shifter rod end yoke, 1936-up, cad plated, V-Twin Mfg.	33870-51
9	781042	Shoulder bolt, shifter rod end, chrome, V-Twin Mfg.	33879-36
		Shifter rod end bolt kit (Pos. 1, 2, 9 &	
		additional wave washer)	
	236907	Cadmium, Colony	
	236908	Chrome, Colony	
	236912	Parkerized, Colony	
10	236913	Shifter gear, Samwel	33960-36
<u>11</u>	236926	Shaft, gear shifter lever, 1937-1950, Samwel	34448-36
11	-	Shaft, gear shifter lever, 1951-up	34448-51
12	768001	Cam, gear shifting, 1940-1954 4-speed	34010-36
12	-	Cam, gear shifting, 1939-1954 3-speed with reverse	34011-39
13	236928	Gear shifting fork shaft, Bender Cycle USA	34030-36
14	231761	Spacer shim, .014" thick, Eastern, 10-pack	6752
15	231760	Spacer shim, .007" thick, Eastern, 10-pack	6750
16	744390	Spacer shim, 5/64" thick, Eastern	6754
	236397	Spacer shim, 5/64" thick, Eastern, 10-pack	6754
17	700274	Oil seal, gear shifting cam shaft, Athena, 10-pack	34036-36
17	234689	Oil seal, gear shifting cam shaft, Eastern, 10-pack	34036-36
18	233528	Shaft, gear shifting fork, Samwel	34140-36
19	234856	Oil seal, gear shifting cam shaft, Eastern, 10-pack	34459-26
20	233454	Gear shifting finger, Bender	34165-36
21	744387	Roller, gear shifting finger, Bender	34168-39
	231774	Roller, gear shifting finger, Bender, 10-pack	34168-39
22	233453	Bushing, gear shifting fork, Bender	34175-36
23	233452	Nut, bushing, Bender	34179-33
24	290262	Bushing lock washer, Zodiac, 10-pack	34180-33
25	191401	Shift fork, mainshaft, Zodiac	34158-36
25	234722	Shift fork, mainshaft, Andrews	34158-36
26	191402	Shift fork, countershaft, Zodiac	34159-36

26	234721	Shift fork, countershaft, Andrews	34159-36
27	-	Shift fork, reverse gear	34160-39
28	236927	Cam shaft lock screw, Samwel	34050-36
28	736927	Cam shaft lock screw, Colony USA	34050-36
29	234697	Spring, countershaft, Eastern, 10-pack	34057-36
30	234684	Ball, 1/2", Eastern, 25-pack	8872
31	235259	Shifter cam plunger kit (Pos. 29 & 30), Colony	34053-36
32	700278	Top cover gasket, Athena, 10-pack	34824-36
32	740318	Top cover gasket, Genuine James Gaskets, 10-pack	34824-36
33	789823	Top cover, 1937-1954 handshift	34804-36
34	231465	Bushing, shifter shaft, Eastern	34430-36
35	-	Cotter pin, 3/32" x 5/8"	528
36	-	Screw, 1/4"-24 NS x 13/16"	2333
37	-	Screw, 1/4"-24 NS x 2"	2349
38	740051	Top cover screw kit (Pos. 36, 37 & grease nipple),	
		Colony	
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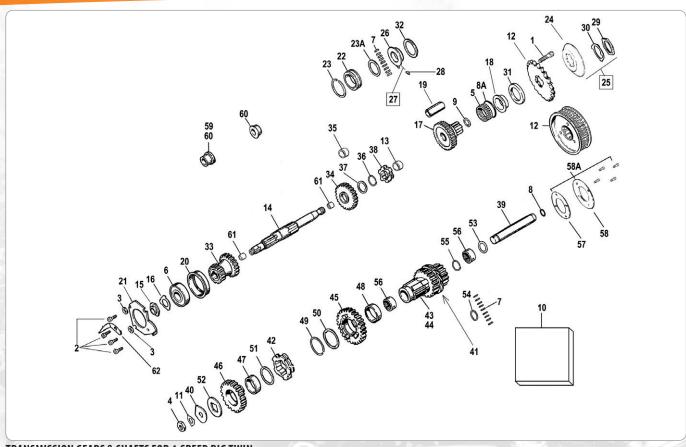
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TRANSMISSION GEARS & SHAFTS FOR 4-SPEED BIG TWIN
Stock replacement parts for the 4 speed and 3-and-reverse transmission as used in 1936 thru 1986 Big Twin models. As always, we show OEM part numbers for reference only. The actual OEM part might have been slightly different or could have included a bushing, washer or retaining ring where the replacement is just the main part.

Replacements however can be used for the years as indicated but please note that after all these years your transmission may no longer be completely like stock. All parts are sold each unless differently indicated.

1 742511	C     10 24-2/0		
	Screw, socket head, #10-24x3/8", 10-pack	1984-1986	857
2 780062	Screw, oval head, 1/4-24x13/16", Colony, 10-pack	1937-1979	2333W
2 -	Screw, Pozidriv pan head, 1/4-20x3/4"	1980	2607
2 742552	Screw, socket head, 1/4-24x5/8", 10-pack	1981-1986	3789A
3 782450	Lockwasher, #6, internal tooth, 100-pack	1941-1964	7112
4 292015	Nut, 1/2-20x7/32x7/8 hex	1937-1979	7911
5 231456	Mainshaft needle bearing	Late 1977-1981	8905
5 231457	Mainshaft needle bearing	1982-1986	8906
5 231457 6 231420 7 234638	Mainshaft ball bearing	1937-1986	9020
, 254050	Bearing roller, main drive gear & countershaft, standard, .125"x.615", set of 88	1937-Early 1977	9084
7 234639	Bearing roller, main drive gear & countershaft, +.0004", .125"x.6154", set of 88	1937-Early 1977	9085
7 234640	Bearing roller, main drive gear & countershaft, +.0008", .125"x.6158", set of 88	1937-Early 1977	9086
7 234641	Bearing roller, main drive gear & countershaft, +.0010", .125"x.6160", set of 88	1937-Early 1977	-
8 744393	O-ring, countershaft	1965-1986	11115
8 700004	O-ring, countershaft, Eastern, 10-pack	1965-1986	11115
8 231170	O-ring, countershaft, Genuine James, 25-pack	1965-1986	11115
8A 237060	O-ring, mainshaft, Genuine James	1985 FXST, 1985-1986 FXWG, FXSB, FXEF	11166

Pos.	ZPN	Description	Years	OEM
8A	237061	O-ring, mainshaft, Genuine James, 10-pack	1985 FXST, 1985-1986 FXWG, FXSB, FXEF	11166
9	231181	Oil seal, metal housing, each	Late 1981-1986	12013A
9	700018	Oil seal, metal housing, Athena, 5-pack	Late 1981-1986	12013A
9	740391	Oil seal, metal housing, Genuine James, 5-pack	Late 1981-1986	12013A
9	022361	Oil seal, Genuine Zodiac, each	Late 1966-Early 1981	12022
9	237049	Oil seal, Genuine James, 5-pack	Late 1966-Early 1981	12022
9	237050	Oil seal, Cometic, 5-pack	Late 1966-Early 1981	12022
10	231155	Gasket & seal set, Genuine James	1936-1986	33031-36, 33031-65A, 33031-80
10	700263	Oil seal set, Athena	1936-1969	-
10	700264	Gasket set, Athena	1971-1979	33031-65A
10	700265	Gasket set, Athena	1980-1986	33031-80
11	744396	Tab washer, kickstarter gear	1937-1979	33082-16
11	292014	Tab washer, kickstarter gear, 10-pack	1937-1979	33082-16
11	-	Spacer, reverse idler gear	Late 1964-1968	33237-64
12	-	Refer to Final Drive & Sprocket section	1936-1979	35203-36
13	234354	Inner race mainshaft support bearing	Late 1984-1986	34090-84
14	231584	Mainshaft, 11.730" length, Genuine Zodiac	1937-1954	35040-50

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Pos.	ZPN	Description	Years	OEM .	Pos.	ZPN	Description	Years	OEM
14	234726	Mainshaft, 11.730" length, Andrews	1937-1954	35040-50	22	231579	Outer bearing race, standard, Jims	1937-Early	35125-37
14	231585	Mainshaft, 11.985" length, Genuine Zodiac	1965-1969	35039-65	22	235892	Outer bearing race, Jims, .002"	1977 Late	-
14	758561	Mainshaft, 11.985" length, V-Twin Mfg.	1965-1969	35039-65			oversize	1937-Early 1977	
14	234727	Mainshaft, 11.985" length, Andrews	1965-1969	35039-65	22	237919	Outer bearing race, Eastern USA, .002" oversize	Late 1937-Early	-
14	231586	Mainshaft, chain drive models, 12.470" length, Genuine Zodiac	1970-1985	35039-70B	22	231580	Outer bearing race, Jims, .004"	1977 Late	_
14	234728	Mainshaft, chain drive models, 12.470" length, Andrews	1970-1985	35039-70B			oversize	1937-Early 1977	
14	233040	Mainshaft, chain drive models, 12.470" length, Jims	1970-1985	35039-70B	22	237920	Outer bearing race, Eastern USA, .005" oversize	Late 1937-Early	-
14	731711	Mainshaft, belt drive models, V-Twin Mfg.	1980-1984 except late	35039-80	23	731703	Bearing retaining ring	1977 1937-Early	35129-36
			1984 FXST					1977	
14	-	Mainshaft. Use ZPN 237150 with clutch hub key ZPN 233482	Late 1984 FXST	35039-84	23	233522	Bearing retaining ring, 10-pack	1937-Early 1977	35129-36
14	237150	(OEM 37523-85) Mainshaft, belt drive models,	1985-1986	35039-85	23A	233469	Bearing roller retaining ring, Bender Cycle USA	1937-Early 1977	35130-36, 35131-36
15	231576	13.725" length, Andrews Mainshaft bearing nut	1937-1986	35046-36	23A	789391	Bearing roller retaining ring, 5-pack, V-Twin Mfg.	1937-Early 1977	35130-36, 35131-36
16	744382	Tab washer	1940-1986	35050-40	24	231871	Main drive gear oil deflector	Late	35159-39
16 17	292075	Tab washer, 10-pack	1940-1986	35050-40	25	720025	Main drive gear oil deflecter !st	1938-1968	25150 20
17	231530	Main drive gear, loose roller type, 26 Teeth, Eastern	Late 1938-Early 1977	35065-38, 35065-65B	25	739935	Main drive gear oil deflector with sprocket nut and tab washer	1938-1968	35159-39, 35211-36, 35216-36
17	234832	Main drive gear, loose roller type, 26 Teeth, V-Twin Mfg.	Late 1938-Early 1977	35065-38, 35065-65B	26	210060	Mainshaft gear spacer	Late 1937-Early 1977	35171-37
17	234717	Main drive gear, loose roller type, 26 Teeth, Andrews	Late 1938-Early 1977	35065-38, 35065-65B	27	710750	"The Cure" no-leak mainshaft gear spacer & key	Late 1937-Early 1977	35171-37
17	231531	Main drive gear, caged bearing style, 26 Teeth, Genuine Zodiac	Late 1977-1986	35065-77A, 35067-84	27	710751	"Total Cure" no-leak mainshaft gear spacer, key and oil seal	Late 1937-Early	35171-37
17	234718	Main drive gear, caged bearing style, 26 Teeth, Andrews	Late 1977-1986	35065-77A, 35067-84	27	710759	Replacement Viton O-ring for	1977 Late	_
18	231527	Main drive gear spacer	Late 1979-1979	35070-77			"The Cure" & "Total Cure"	1937-Early 1977	
18	710754	"The Cure" no-leak main drive gear spacer	Late 1979-1979	35070-77	28	744385	Main drive gear spacer key	1938-Early 1977	35175-38
18	710756	"Total Cure" no-leak main drive gear spacer with dual-lip oil seal	Late 1979-1979	35070-77	28	742451	Main drive gear spacer key, Genuine James, 5-pack	1938-Early 1977	35175-38
18	710759	Replacement Viton O-ring for "The Cure" & "Total Cure"	Late 1979-1979	-	28	231588	Main drive gear spacer key, Bender Cycle, 10-pack	1938-Early 1977	35175-38
18 18	231528 710752	Main drive gear spacer "The Cure" no-leak main drive gear spacer	1980-1981 1980-1981	35070-80 35070-80	<u>29</u> 29	231495 346009	Front sprocket nut, Bender Cycle Front sprocket nut, Genuine Zodiac	1937-1986 1937-1986	35211-36 35211-36
18	710757	"Total Cure" no-leak main drive gear spacer with oil seal	1980-1981	35070-80	29	346011	Front sprocket Super nut, Genuine Zodiac	1937-1986	35211-36
18 18	231767 739934	Main drive gear spacer Main drive gear spacer	1982-1984 1985-1986	35070-82A 35070-84	29	760650	Front sprocket Super nut, Genuine James	1937-1986	35211-36
			FXWG, FXSB		30	744383	Front sprocket nut tab washer	1937-1986	35216-36
18	731702	Main drive gear spacer	Late 1980-1981	35079-80	30	742452	Front sprocket nut tab washer, Genuine James, 5-pack	1937-1968	35216-36
18	231768	Main drive gear spacer, 5-pack	Late 1980-1981	35079-80	30	292026	Front sprocket nut tab washer, Genuine Zodiac, 10-pack	1937-1968	35216-36
18	710753	"The Cure" no-leak main drive	1982-1984	35079-82A	31	022348	Main shaft oil seal, left, Genuine	1937-Early	35230-36,
18	710758	gear spacer, chain drive models "Total Cure" no-leak main drive gear spacer with oil seal, chain	1982-1984	35079-82A	31	700310	Zodiac Main shaft oil seal, left, Athena	1977 1937-Early 1977	35230-39 35230-36, 35230-39
18	710759	drive models  Replacement Viton O-ring for	1982-1984		31	758533	Double joint Cometic, 5-pack	1937-Early 1977	35230-39 35230-36, 35230-39
18	231529	"The Cure" & "Total Cure"  Main drive gear spacer	1985 FXEF,	35079-84	31	022328	Oil seal, mainshaft, Genuine Zodiac	Late 1979-1981	37741-67
19	231421	Main drive gear bushing, V-Twin	FXST 1931-1984	35094-31,	31	700330	Oil seal, mainshaft, Athena	Late 1979-1981	37741-67
19	721543	Mfg.  Main drive gear bushing, V-IWIII  Main drive gear bushing, Jims	1931-1984	35094-31, 35094-65 35094-31,	31	231180	Oil seal, mainshaft, Genuine Zodiac	1982-1986	37741-82
				35094-65	31	700478	Oil seal, mainshaft, Athena	1982-1986	37741-82
20	231769	Mainshaft ball bearing housing	1937-1979	35100-36	31B	758575	Kit with standard oil seal, Genuine		35230-36,
<u>20</u> 21	231770 231873	Mainshaft ball bearing housing Bearing housing retaining plate	1980-1986 1937-1979	35100-79 35111-36	31B	758534	Zodiac Kit with double lip oil seal,	1977 1937-Early	35230-39 35230-36,
21 21	231874	Bearing housing retaining plate	1980-1986	35111-80	310	1 30334	Genuine Zodiac	1937-Early 1977	35230-36, 35230-39
22	237918	Outer bearing race, standard,	Late	35125-37	31B	231039	Kit with double lip oil seal,	1937-Early	35230-36,
		V-Twin Mfg.	1937-Early 1977		32	744388	Genuine James Mainshaft cork washer	1977 1937-Early	35230-39 35231-36
							•	1977	

Pos.	ZPN 231534	<b>Description</b> Mainshaft cork washer, Genuine	<b>Years</b> 1937-Early	<b>OEM</b> 35231-36	Pos. 43	ZPN -	<b>Description</b> Countershaft 3rd & 4th cluster	<b>Years</b> Late 1961	<b>OEM</b> 35700-6
	700312	James, 5-pack  Mainshaft cork washer, Athena,	1937-Early 1977 1937-Early	35231-36	43	231590	gear Countershaft 3rd & 4th cluster Gountershaft 3rd & 4th cluster	1962-1968	35700-6
32	/00312	Mainsnart cork wasner, Atnena, 10-pack	1937-Early 1977	35231-30	45	231590	gear, 17 & 24 Teeth, Eastern	1902-1908	33/00-0
33	731704	Mainshaft 1st & 2nd gear, 15 & 20 Teeth, V-Twin Mfg.		35282-36	44	731707	Countershaft 3rd & 4th cluster gear, 15 & 17 Teeth, V-Twin Mfg.	1936-1976	35713-3
33	237915	Mainshaft 1st & 2nd gear, 15 & 20 Teeth, with countershaft 2nd	1940-1958	35282-36 + 35765-36	44	231590	Countershaft 3rd & 4th cluster gear, 15 & 17 Teeth, Eastern	1969-1972	35700-6
33	231581	gear, Andrews Mainshaft 1st & 2nd gear, 15 & 20	1050_1073	35282-59	44	-	Countershaft 3rd & 4th cluster gear, 15 & 17 Teeth	1973-Early 1976	35700-7
,,	231301	Teeth, Eastern	1939-1973	33202-33	44	731706	Countershaft 3rd & 4th cluster	Late	35716-
3	237271	Mainshaft 1st & 2nd gear, 15 & 20 Teeth, with countershaft 2nd	1959-1973	35282-59 + 35765-36			gear, 15 & 17 Teeth	1976-1983 except FXWG	
33	231582	gear, Andrews Mainshaft 1st & 2nd gear, 17 & 20	1974-1979	35282-74	44	731708	Countershaft 3rd & 4th cluster gear, 15 & 17 Teeth, V-Twin Mfg.	Late 1976-1983	35716-
33	237916	Teeth, V-Twin Mfg. Mainshaft 1st & 2nd gear, 17 &	1980-1986	35282-79	44	731706	Countershaft 3rd & 4th cluster	except FXWG 1980-1983	35699
		25 Teeth					gear, 15 & 17 Teeth, with 7 Teeth	FXWG,	35716
33	-	Mainshaft 1st & 2nd gear, 17 & 20 Teeth for 3 + reverse		35286-39	44	-	speedometer drive gear Countershaft gear for 3 + reverse,	1984-1986 1939-1954	35703
3	-	Mainshaft 2nd gear for 3 + reverse	1941-1968	35293-36	44	-	19 Teeth Countershaft gear for 3 + reverse,	Late 1961	35703
3 <u>4</u> 34	237273 231587	Mainshaft 3rd gear, Andrews Mainshaft 3rd gear, Genuine	1937-1958 1959-1986	35306-36 35306-59	44	-	19 Teeth  Countershaft gear for 3 + reverse,	1962-1968	35703
		Zodiac				224===	19 Teeth		
34 35	237272 231445	Mainshaft 3rd gear, Andrews Mainshaft gear bushing, Eastern	1959-1986 1938-1968	35306-59 35322-38	45	231537	Countershaft 2nd gear, 21 Teeth, Eastern	1940-1979	35751
36	744384	Retaining ring 3rd gear	1937-1986	35337-36	45	234712	Countershaft 2nd gear, 21 Teeth,	1940-1979	35751
36	231540	Retaining ring 3rd gear, Bender, 10-pack	1937-1986	35337-36	45	234580	Andrews Countershaft 2nd gear, 21 Teeth,	1980-1986	35751
37	744386	Mainshaft retaining washer, 2nd & 3rd gear, Bender	1937-1986	35365-36	46	234579	Eastern Countershaft 1st gear, 24 Teeth,	1937-1973	35765
37	231771	Mainshaft retaining washer, 2nd	1937-1986	35365-36			Eastern		
37	232195	& 3rd gear, Bender, 5-pack Mainshaft retaining washer, 2nd	1937-1986	35365-36	46	231536	Countershaft 1st gear, 24 Teeth, Genuine Zodiac	1974-1986	35717
37	232194	& 3rd gear, Eastern  Mainshaft retaining washer, 2nd	1937-1986	35365-36	46	781051	Countershaft 1st gear for 3 + reverse, V-Twin Mfg.	1941-1968	35762
	222484	& 3rd gear, Eastern, 5-pack	1037 1007		46	-	Countershaft reverse gear	1939-1968	35775
37 37	233471 233472	.005" oversize, 5-pack .010" oversize, 5-pack	1937-1986 1937-1986		47	231422	Low or reverse gear bushing, Eastern	1936-1986	35789
37	233473	.015" oversize, 5-pack	1937-1986		48	231423	Countershaft 1st or 2nd gear	1940-1986	35791
38	292021	Shifter clutch, main shaft, Genuine Zodiac	1937-1986	35440-38	49	744394	bushing. V-Twin Mfg. Spring lock ring for retaining	1940-1986	35810
38	234720	Shifter clutch, main shaft, Andrews	1937-1986	35440-38	49	233521	washer	1940-1986	35810
38	231674	Speedometer drive block-off plate	1973-Early 1977	35606-73	50	233468	washer, 10-pack Gear retaining washer for 2nd or	1940-1986	35811
38	744392	Speedometer drive block-off	1973-Early	35607-73			low gear		
38	700313	gasket Speedometer drive block-off	1977 1973-Early	35607-73	51	233474	Bearing washer for low or reverse gear		35812
39	731705	gasket, Athena, 10-pack Countershaft, 1965-1976 style,	1977 1936-Early	35614-65,	52	233460	Countershaft gear end washers, set of 7 sizes	1937-1986	35875
39	234723	V-Twin Mfg. Countershaft, 1965-1976 style,	1976 1936-Early	35612-36 35614-65,	52	233461	Countershaft gear end washer, .074", 5-pack	1937-1986	35876
39	231593	Andrews Countershaft, Eastern	1976 Late	35612-36 35614-76	52	233462	Countershaft gear end washer, .078", 5-pack	1937-1986	35877
			1976-1979		52	233463	Countershaft gear end washer,	1937-1986	35878
39	234724	Countershaft, Andrews	Late 1976-1979	35614-76	52	233464	.082", 5-pack Countershaft gear end washer,	1937-1986	35879
39 39	231594 234725	Countershaft, V-Twin Mfg.	1980-1986	35614-80	52	233465	.085", 5-pack Countershaft gear end washer,	1937-1986	35882
40	744395	Countershaft, Andrews Countershaft lock plate	1980-1986 1937-1986	35614-80 35630-36			.090", 5-pack		
40	236398	Countershaft lock plate, Eastern, 5-pack	1937-1986	35630-36	52	233466	Countershaft gear end washer, .095", 5-pack	1937-1986	35883
41	781049	Speedometer drive gear, 7 teeth, V-Twin Mfg.	1937-Early 1961	35635-36	52	233467	Countershaft gear end washer, .100", 5-pack	1937-1986	35884
41 41	- 781050	Speedometer drive gear, 8 teeth Speedometer drive gear, 4 teeth,	Late 1961 1962-1968	35635-61 35635-62	53	233475	Countershaft gear roller thrust washer	1937-1986	35915
41	781048	V-Twin Mfg.  Speedometer drive gear, 7 teeth	1971-1972 &		54	233476	Countershaft roller retaining washer (2)	1937-1968	35917
••	. 5.0-10	-pecasinetes wire year, r teetil	1980-1983 FXWG		55	233526	Roller retaining ring washer (2), 10-pack	1937-Early 1977	35920
42	292022	Countershaft shifter clutch, Genuine Zodiac	1937-1968	35665-36A	56	231458	Needle bearing, countershaft (2)	Late 1977-1986	35961
42	234719	Countershaft shifter clutch,	1937-1968	35665-36A	57	700317	End cap gasket, Athena, 10-pack	1937-1968	36025
43	234715	Andrews Countershaft 3rd & 4th cluster	1937-Early	35700-36	<u>58</u> 58A	231872	Countershaft end cap, Eastern One-piece rubberized end cap	1937-1968	36027
	434/ ID	Countersmant DIU & 4th Cluster	בלון Edily – / כלו	JJ/00-30	JOH	742455	seal kit with screws, Genuine	1937-1968	36025

01 HELMETS, LUGGAGE, AUDIO & MORE

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TRANSMISSION

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13 FOOT CONTROL

14 HANDLEBAR

Pos.	ZPN	Description	Years	OEM	Pos.	ZPN	Description	Years	OEM
59	231448	Countershaft bushing	1937-Early	36046-36	60	-	Reverse idler gear bushing	1933-1953	36150-31
		-	1976		60	-	Reverse idler gear shaft	1937-1953	36158-36
60	231449	Countershaft bushing	1937-1968	36048-36,	61	731710	Bushing, mainshaft, Eastern	1937-Early	37436-36
		-		36048-65				1980	
60	231447	Countershaft bushing	Late	36045-76	61	731709	Bushing, mainshaft, Eastern,	1937-Early	37436-36
		-	1976-1979				5-pack	1980	
60	231450	Countershaft bushing	Late	36048-76A	62	290223	Kick starter oil deflector, Genuine	1937-1979	33429-39
		3	1976-1979				Zodiac		
60	231450	Countershaft bushing (2)	1980-1986	36048-76A	62	290291	Kick starter oil deflector, Genuine	1980-1986	33429-80
60	-	Reverse idler gear	1937-1954	36140-36			Zodiac		



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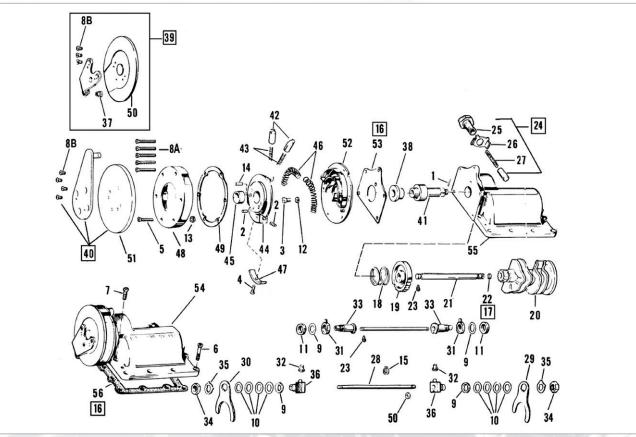
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## 1952-1979 FOOT SHIFT RATCHET TOP

Pos.	ZPN	Description		OEM
1	-	Cotter pin, 3/32"x5/8", 100-pack		528
1	769069	Cotter pin, 3/32"x1", 100-pack		534
2	769070	Roll pin, 1/16"x1/4", 25-pack		623
3	-	Screw, 1/4-20 x 11/16" Fillister		1369
		head		
4	-	Screw, #6-32 x 7/16 counter sunk		1608
		Pozidriv flat head		
5	-	Screw, #10-24 x 1 5/32" socket head		1764
6	-	Screw, 1/4-24x 2" socket head		1765W
7	-	Screw, 1/4-24 x 13/16" socket head		1766W
8A	-	Screw, #10-24 x 1 3/8" flat head	1952-1954	1760
8B	-	Screw, #10-24 x 1/4" socket head	1965-1979	1767W
8 <b>B</b>	238224	Screw, #10-24 x 1/2" socket head,	1952-1964	1761W
		10-pack		
9	744390	Shim, 21/32" x 55/64" x .007"		6750
	231760	Shim, 21/32" x 55/64" x .007",		6750
		10-pack		
10	231761	Shim, 21/32" x 55/64" x .015",		6752
		10-pack		
11	236397	Shim, 21/32" x 55/64" x .083",		6754
		10-pack		
12	782454	Lockwasher, 1/4" internal tooth,		7124
		100-pack		
13	-	Nut, #10-24 x 1/8" x 3/8" hex		7620W
14	-	Pawl carrier pin		9106A
15	231762	Retaining ring, fork shaft, 10-pack		11036
16	700263	Gasket & seal kit, Athena	1936-1964	33031-36
16	700264	Gasket & seal kit, Athena	1965-1979	33031-65/
16	231155	Gasket & seal kit, Genuine James	1936-1979	33031-36,
				33031-65 <i>k</i>
17	700311	Oil seal kit, Athena	1936-1979	
17	231149	Oil seal kit, Genuine James	1936-1979	
18	234687	Gear spring, Eastern USA, 10-pack		33390-26
19	768006	Gear, 4-speed		33960-36/
19	-	Gear, 3-speed & reverse		33960-65
20	782127	Shifter cam, V-Twin Mfg.	1952-1978	34019-73
		-	FL,	
			1971-1973	
			FX	
20	768002	Shifter cam, V-Twin Mfg.	1974-1984	34006-76
			FX	
21	236917	Cam shaft, foot shifter, Samwel		34031-41

Pos.	ZPN	Description		OEM
22	234689	Oil seal, Eastern USA, 10-pack		34036-36
22	700274	Oil seal, Athena, 10-pack		34036-36
23	236927	Lock screw, Samwel, each		34050-36
23	736927	Lock screw, Colony, each		34050-36
24	768000	Cam follower & retainer kit, Colony	1952-1979	34062-52
		USA		+
				34064-52
				+
				34066-52
				+
				34068-52A
25	-	Cam follower retainer, hex head	1952-1979	34064-52
26	768004	Lock tab, 10-pack		34066-52
26	768097	Lock tab, each		34066-52
27	768005	Spring, 10-pack		34068-52A
27	768096	Spring, each		34068-52A
28	233528	Fork shaft, Bender Cycle USA	1936-early	34140-36
			1976	
28	233529	Fork shaft, Bender Cycle USA	late	34145-76,
			1976-1984	34186-76
28	768003	Fork shaft, V-Twin Mfg.	late	34145-76,
			1976-1984	34186-76
29	191401	Mainshaft shifter fork, Genuine		34158-36
20	224722	Zodiac		24150.26
29	234722	Mainshaft shifter fork, Andrews		34158-36
30	191402	Countershaft shifter fork, Genuine Zodiac		34159-36
30	234721	Countershaft shifter fork, Andrews		34159-36
31	233454	Shifter finger, Bender Cycle USA		34165-36
32	744387	Finger roller, Bender Cycle USA		34168-39
32	231774	Finger roller, Bender Cycle USA,		34168-39
	231//4	10-pack		34100-33
33	233453	Bushing, fork, Bender Cycle USA		34175-36
34	233452	Nut, bushing, Bender Cycle USA		34179-33
35	290262	Lock tab, Genuine Zodiac, 10-pack		34180-33
36	768019	Shifter finger	late	34182-76
30	700017	Shinter hinger	1976-1979	J+102 70
37	_	Shifter shaft lever bushing	1952-1979	34428-52
38	231429	Shaft bushing, Bender Cycle USA	.,,,,	34435-52
39	301685	Chrome lever, cover and screws,	1952-1979	34447-52
		Genuine Zodiac	FL	- · · · · · · · · · ·
			•	

## TRANSMISSION PARTS 4 SPEED BIG-TWIN TRANSMISSION

Pos.	ZPN	Description		OEM
40	301684	Chrome lever, cover and screws,	1974-1979	34447-74
		Genuine Zodiac	FX	+
				34555-74
41	768007	Shifter shaft, V-Twin Mfg.		34453-52
42	768008	Shifter pawl, set left & right	1953-early	34477-53
			1975	+
				34478-53
42	768009	Shifter pawl, each	late	34478-75
		Similar parity catal	1975-1979	5 6 . 5
43	768010	Pawl spring, 10-pack		34482-53
43	768099	Pawl spring, set of 2		34482-53
44	768011	Pawl carrier		34488-52B
45	768012	Pawl carrier bushing		34498-52
46	768013	Carrier spring, 10-pack		34500-52A
46	768098	Carrier spring, set of 2		34500-52A
47	768014	Pawl retainer		34525-54
48	232778	Shifter cover, aluminum		34551-52
48	301757	Shifter cover, chrome, Genuine		34551-52
		Zodiac		3 133 1 32
49	700275	Cover gasket, Athena, 10-pack		34552-52
49	740317	Cover gasket, Genuine James,		34552-52
.,	. 10517	10-pack		3 1332 32
		10 pacit		

Pos.	ZPN	Description		OEM
50	234689	Oil seal, Eastern USA, 10-pack		34036-36
50	700274	Oil seal, Athena, 10-pack		34036-36
51	768015	Chrome cover, FL		34555-52
51	768016	Chrome cover, FX		34555-74
52	768017	Adapter plate		34560-52
53	740381	Plate gasket, Genuine James, 10-pack		34565-52
54	768021	Complete shifter top, plain finish, V-Twin Mfg.	1952-1958	
54	768018	Complete shifter top, plain finish, V-Twin Mfg.	1965-1979 FL	34799-65
54	768020	Complete shifter top, chrome, V-Twin Mfg.	1965-1979 FL	34799-65
54	768022	Complete shifter top, plain finish, V-Twin Mfg.	1974-1979 FX	
55	301758	Shifter top, Genuine Zodiac		34803-59
56	700278	Top cover gasket, Athena, 10-pack	1936-1979	34824-36
56	740318	Top cover gasket, James, 10-pack	1936-1979	34824-36

11 WHEELS & TIRE 12 Brake FOOT CONTROL 14 HANDLEBAR FRONT SUSPENSION 16 CHASSIS/ FRAME & SHOCKS FENDER & STRUTS 18 GAS TANK & INSTRUMENT 01L TANK, FILTER & LINE 20 FASTENERS 21 MIRROR 22 WINDSHIELD OIL, CHEMICALS & TOOLS Z4
TECHTIPS & CROSS REF

01 HELMETS, LUGGAGE, AUDIO & MORE

> 02 SEAT

03 EXHAUST

04 ELECTRIC & LIGHT

05 ENGINE ELECTRICS

> 06 INTAKE

07 ENGINE

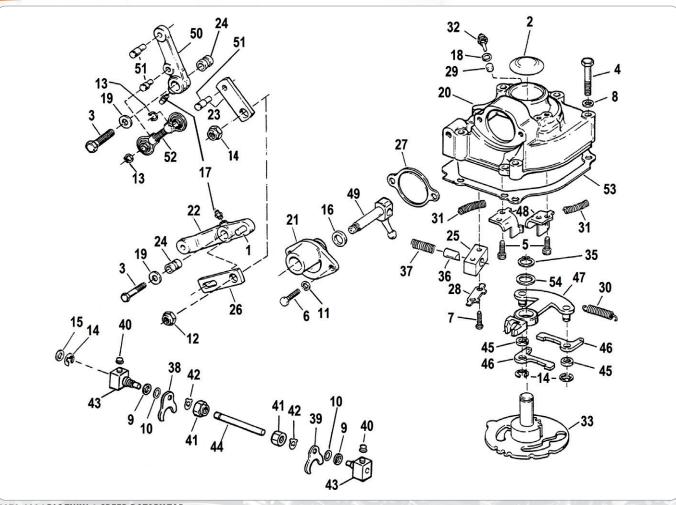
08 PRIMARY

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CROSS REF ZPN > PAGE

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1979-1986 BIG TWIN 4-SPEED ROTARY TOP
Stock replacement parts for the rotary top shifter mechanism as used in 1979 thru
1986 Big Twin 4-speed FL & FLH, FXB, FXE, FXEF, FXS, FXSB, FXST and FXWG. As always,
we show OEM part numbers for reference only. The actual OEM part might have been

slightly different or could have included a bushing, washer or retaining ring where the replacement is just the main part. Replacements however can be used for the models and years as indicated. All parts are sold each unless differently indicated.

Pos.	ZPN	Description	Application	<b>OEM</b>
1.	-	Pin, shift lever	1980-1986 FXWG,	215
			1984-1985 FXST,	
			1980-1984 FLH	
2.	769072	Plug, chrome	all	650
3.	742107	Bolt, 5/16-18 X 1-1/2 hex.	all	2818
		Head, Grade 5 steel		
4.	742057	Hex head bolt, 1/4-20 x 1 1/2"	all	2872W
		UNC, dealer 10-pack		
	742061	Hex head bolt, 1/4-20 x 2"	all	2881W
		UNC, dealer 10-pack		
5.	742552	Socket head screw, 1/4-20 x	all	3789A
		3/4" UNC, dealer 10-pack		
6.	742053	Hex head bolt, 1/4-20 x 7/8"	all	3802W
		UNC, dealer 10-pack		
7.	742055	Hex head bolt, 1/4-20 x 1 1/4"	all	3993
		UNC, dealer 10-pack		
8.	-	Washer, 3/8" X 13/16" X 1/16"	1979-early 1981	6701
	-	Washer, 1/4" X 5/8" X 1/16"	late 1981-1986	6703
	236072	Washer, 9/32" X 5/8" X 1/16"	1985-1986 FXWG,	6736
			FXSB, FXEF	
9.	231760	Shim, 21/32 x 7/8 x 0.007",	all	6750
		10-pack		
10.	231761	Shim, 21/32 x 27/32 x .010",	all	6752
		10-pack		
11.	743951	Lockwasher, 1/4", 50-pack	all	7036
12.	789239	Locknut, 3/8-24 X 7/16 X 9/16	late 1981-1986	7775
		hex, 10-pack		
	-	Locknut, 3/8-24 x 3/4 x 9/16	1979-early 1981	7776W
		hex	•	
	769073	Retaining ring (4), 10-pack	All models except	11016
13.				
13.			FXWG	
13. 14.	231762	Retaining ring, shifter pawls & fork shaft (2), 10-pack	all	11036

Pos.	ZPN	Description	Application	OEM
15.	232002	0-ring, 10-pack	all	11171
16.	027651	Oil seal, shaft cover, Genuine	all	12010
		Zodiac		
17.	-	Grease fitting	all	25715-47
18.	700019	Washer, transmission neutral	all	25811-11
		switch, Athena, 20-pack		
	-	Washer	1984 FXST,	6185
			1985-1986 FXWG,	
			FXSB, FXEF	
19.	789238	Thrust washer, shift lever (2)	all	32535-48
	769074	Thrust washer, shift lever (2), 5-pack	all	32535-48
20.	781052	Rotary top cover assembly,	1980-1986 FXWG	33158-80
		plain aluminum		
	-	Rotary top cover with pawls.	1979-1984 FXE,	33165-80
		Order as individual parts	FXEF	
	-	Rotary top cover with pawls.	late 1979-1980	33166-80
		Order as individual parts	FXS, FXB,	
			1983-1986 FXSB	
	237921	Rotary top cover, plain	all	33167-79
		aluminum, V-Twin Mfg.		
	781053	Rotary top cover assembly	1980-1982 FXB	33183-80
	-	Rotary top cover assembly.	late 1979-1984	33171-79A
		Order as individual parts	FXE, FXEF	
	-	Rotary top cover assembly.	late 1979-1980	33172-79A
		Order as individual parts	FXS, FXB,	
			1983-1986 FXSB	
	-	Rotary top cover assembly.	late 1979- early	33170-79
		Order as individual parts	1980 FL, FLH	22470 704
	-	Rotary top cover assembly.	1980-1984 FL,	33170-79A
		Order as individual parts	FLH, 1985 FXST,	
			1985-1986 FXWG,	
			FXSB, FXEF	

# TRANSMISSION PARTS 4 SPEED BIG-TWIN TRANSMISSION

Pos.	ZPN	Description	Application	OEM
21.	789216	Cover, shifter shaft, plain	all	33174-79
-		aluminum, V-Twin Mfg.		
	789217	Cover, shifter shaft, chrome,	all	33174-79
		V-Twin Mfg.		
	-	Cover, shifter shaft, painted	all	33176-79
22.	292123	Shifter lever assembly with	1980-1986 FXWG	33177-79
		fitting and pin		
23.	789218	Shifter arm lever, chrome	late 1979-1986	33185-79
		•	except FXWG	
24.	769075	Spacer, shift lever	all	33187-79
25.	789219	Plunger body, cam follower	all	33188-79
26.	789220	Shifter arm lever	1980-1986 FXWG	33190-79
27.	700271	Gasket, shaft cover, Athena,	all	33196-79
		10-pack		
	700271	Gasket, shaft cover, James,	all	33196-79
		10-pack		
28.	769081	Lock, plunger body bolt	all	33197-79
	769076	Lock, plunger body bolt,	all	33197-79
		10-pack		
29.	789221	Bushing, neutral switch	all	33198-79
30.	769078	Spring, shifter pawls	all	33199-79
	769077	Spring, shifter pawls, 10-pack	all	33199-79
31.	769080	Pawl carrier spring, set of 2	all	33201-79
	769079	Pawl carrier spring, 10-pack	all	33201-79
32.	722009	Neutral switch	all	33901-79
33.	-	Shifter cam plate	all	34020-791
34.	234689	Seal, Eastern USA, 10-pack	late 1979-early	34036-36
			1980	
	700274	Seal, Athena, 10-pack	late 1979-early	34036-36
			1980	
	744391	Seal, Athena	late 1979-early	34036-36
			1980	
	231171	O-ring, Genuine Zodiac,	late 1980-1984	34036-80
		10-pack		
35.	789223	Retaining ring, shifter cam,	all	34040-52
		10-pack		
36.	789236	Shifter cam follower	all	34062-52
<b>37.</b>	768096	Spring, shifter cam follower,	all	34068-52/
		each		
	768005	Spring, shifter cam follower,	all	34068-52 <i>F</i>
		10-pack		

Pos.	ZPN	Description	Application	OEM
38.	191401	Shifter fork, mainshaft, Genuine Zodiac	all	34158-36
	234722	Shifter fork, mainshaft, Andrews	all	34158-36
39.	191402	Shifter fork, countershaft, Genuine Zodiac	all	34159-36
	234721	Shifter fork, countershaft, Andrews	all	34159-36
40.	789235	Roller, shifter finger	all	34168-52
	231773	Roller, shifter finger, 10-pack	all	34168-52
41.	233452	Locknut, shifter fork	all	34179-33
42.	744389	Lockwasher, shifter fork, Genuine Zodiac	all	34180-33
	290262	Lockwasher, shifter fork, Genuine Zodiac, 10-pack	all	34180-33
43.	789224	Shifter finger (2)	all	34184-79
44.	233529	Shifter fork shaft	all	34186-76
45.	789226	Spacer, shifter pawl	all	34461-72
	789225	Spacer, shifter pawl, 5-pack	all	34461-72
46.	789227	Shifter pawl, set of 2, Eastern USA	all	34476-72
47.	789228	Pawl carrier	all	34494-74C
48.	789229	Shifter pawl stop, set front	late 1980-1986	34517-80,
		& rear		34518-80
49.	789230	Shaft, shifter lever	all	34652-80
50.	292125	Shift lever with fittings and pins	all models except FXWG	34655-79
	-	Shift lever only	FXWG	34656-79
51.	789232	Rod, shifter linkage	1985 FXSB, FXEF	34659-79
52.	-	Shifter kit, Pos. 33, 37, 48 & 49. Order as individual parts	all	34661-80
53.	700279	Gasket, shifter cover, Athena, 10-pack	all	34824-79
	740319	Gasket, shifter cover, James, 10-pack	all	34824-79
54.	789234	Thrust washer, shifter cam	all	35336-74
-	789233	Thrust washer, shifter cam, 5-pack	all	35336-74

HELMETS, LUGGAGE, AUDIO & MORE EXHAUST ELECTRIC & LIGHT ENGINE ELECTRICS INTAKE ENGINE PRIMARY Transmission FINAL DRIVE WHEELS & TIRE Brake FOOT CONTROL HANDLEBAR FRONT SUSPENSION CHASSIS/ FRAME & SHOCKS FENDER & STRUTS GAS TANK & INSTRUMENT 01L TANK, FILTER & LINE FASTENERS



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#### **JIMS 4 SPEED TRANSMISSION REBUILD KITS**

Complete rebuild kits for all 4 Speed Big Twin transmissions from 1936 thru 1986. Jims Transmission Parts and James gaskets guarantee a high quality. Includes bushings, shafts, keys, lock rings, retaining rings and a standard size bearing race plus all gaskets and oil seals. All together in one neat package, it's a big time saver.

237344 Fits 1936 thru early 1976 237345 Fits late 1976 thru early 1977 235887 Fits late 1977 thru 1979 235888 Fits 1980 thru 1986



#### **TRANSMISSION ROLLERS FOR 4 SPEED BIG TWINS**

Transmission rollers, fit main drive gear and counter shaft in 1941 to early 1977 4 Speed Big Twins and the main drive gear in 1937 thru 1973 45Cl models. Standard size is .125" x .615". Available in stock replacement quality in convenient packs with 88 pieces needed for one Big Twin transmission or two 45Ci transmissions, or Jims-USA 100-packs.

## Standard size (OEM 9084)

234638 Stock replacement, set of 88

+.0004" (0EM 9085) 234639 Stock replacement, set of 88

+.0008" (OEM 9086)

234640 Stock replacement, set of 88

Super oversized +.001" 234641 Stock replacement, set of 88



#### "THE CURE" MAIN DRIVE GEAR SEAL **KIT FOR 4-SPEED BIG TWIN**

Every Harley 4-speed Big Twin rider knows "The Leak": the ever-present oil leak from the main drive gear. Now Zodiac has "The Cure", a seal kit that will stop this oil leak! The stable and reliable Harley-Davidson 4-speed transmission has been built for half a century, but the oil leak has always been present. The reason is that Harley designed the main drive gear spacer without a seal. This state of the art hardened two piece stainless steel spacer features an additional Viton O-ring that permanently prevents oil coming out between the spacer and the main drive gear. It can be installed easily without disassembly of the transmission as it is located just behind the main shaft oil seal. Kits replace the OEM 35171-37 spacers from 1937 thru early 1977, OEM 35070-77 from late 1977 thru 1979, OEM 35070-80 from 1980 thru 1981 and 35079-82A from 1982 thru 1985. They include the spacer washer, spacer sleeve, Viton O-ring and detailed installation instructions. Order the Total Cure kit when you do not have the main drive seal.

#### "The Cure" main drive gear seal kits

**710750** Fits 1937 thru early 1977 4-speed Big Twin **710754** Fits late 1977 thru 1979 4-speed Big Twin

710752 Fits 1980 thru 1981 4-speed Big Twin

710753 Fits 1982 thru 1985 4-speed Big Twin with chain drive

#### "The Total Cure" main drive gear seal kits with key, oil seal, cork seal and sprocket lock tab

710751 Fits 1937 thru early 1977 4-speed Big Twin **710756** Fits late 1977 thru 1979 4-speed Big Twin

710757 Fits 1980 thru 1981 4-speed Big Twin

710758 Fits 1982 thru 1985 4-speed Big Twin with chain drive

#### **Replacement parts**

**710759** Special Viton O-ring for The Cure & Total Cure kits



## Genuine

#### **JAMES' COUNTERSHAFT END SEAL** KIT FOR 4-SPEED BIG TWIN

This rubber molded steel end cap provides state of the art sealing technology for your classic motorcycle. Comes complete with stainless steel screws and lock washers. Fits all 4-speed Big Twin transmissions 1936 thru 1964.

742455 Transmission countershaft end seal kit (OEM 36025-36)



#### JIMS 4 SPEED MAINSHAFT 1970 **THRU EARLY 1985**

Stock replacement mainshaft for Big Twin 1970 to early 1985 fits OEMas well as aftermarket 4 Speed transmission.

233040 Mainshaft 4 Speed (OEM 35039-70A & 35039-80)



#### **NEEDLE BEARING COUNTER SHAFT**

Needle bearing counter shaft, open end, fits 1954 thru 1990.

231458 Needle Bearing countershaft (OEM 35961-52)



#### **COUNTERSHAFT LOCK PLATE FOR** 4-SPEED BIG TWIN

Exact replica of the countershaft lock plate as found on 1936-1986 4-speed Big Twin models.

744395 Countershaft lock plate (OEM 35630-36)

Countershaft lock plate, 5-pack (OEM 35630-36)



## TRANSMISSION THRUST WASHERS

These high-quality USA made transmission thrust washers fit all 4 Speed Big Twins from 1936 thru 1986. These washers were manufactured to meet or exceed OEM specifications.

233475 Fits the counter shaft bearing (outer) from 1936 thru 1986 (OEM 35915-36)

233476 Fits the counter shaft bearing (inner) from 1936 thru 1986 (OEM 35917-36)



#### **RETAINING WASHER ROLLER BEARING**

Retaining washer. Fits the 4th gear roller bearings in 1936-early 1977 Big Twin transmissions.

233469 Retaining washer roller bearing, Bender Cycle USA (OEM 35131-36)

5-Pack retaining washer 789391 roller bearing, V-Twin Mfg. (OEM 35131-36)



#### **SHIFTER PARTS**

These high-quality American-made shift fork parts were manufactured to meet or exceed OEM specifications.

233454 [1.] Shifter finger, fits all 4 Speed Big Twins from 1936 thru early 1976 (OEM 34165-36)

233453 [2.] Shift fork bushing, fits all 4 Speed Big Twins 1936 thru early 1976 (OEM 34175-36)



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- 233452 [3.] Shift fork nut, fits all 4 Speed Big Twins from 1936 thru 1986 (OEM 34179-33)
- 233528 [4.] Shifter fork shaft, fits 4 Speed Big Twins from 1937 thru early 1976 (OEM 34140-36)
- 233529 [5.] Shifter fork shaft, fits 4 Speed Big Twins from late 1976 thru 1986 (OEM 34186-76)
- 231773 [6.] Shifter finger rollers, fits Sportster 1954 up and 4 Speed Big Twins late 1979 thru 1986 (OEM 34168-54) (10 pack)
- 744387 Shifter finger roller, fits Big Twins 4 Speed 1941 thru early 1979 (OEM 34168-39)
- 231774 Shifter finger rollers, fits Big Twins 4 Speed 1941 thru early 1979 (OEM 34168-39) (10 pack)
- 231760 [7.] Shifter fork shims, fits 4 Speed Big Twins 1941 thru 1986, 0.007", 10 pack (OEM 6750)
- 231761 Shifter fork shims, fits 4 Speed Big Twin 1941 thru 1986, 0.010", 10 pack (0EM 6752)
- 744390 Shifter fork shim, fits 4 Speed Big Twin 1941 thru 1986, 0.08" (OEM 6754)
- 236397 Shifter fork shims, fits 4 Speed Big Twin 1941 thru 1986, 0.08", 10 pack (0EM 6754)
- 231171 [8.] 0-ring shift shaft, 1979 thru 1986 (10 pack) (0EM 34036-80)
- 231762 [9.] Shifter shaft retainer ring, fits all 4 Speed Big Twin, also fits miscellaneous shifter, clutch and control levers on 1972 thru 1988 (OEM 11036)





#### **SHIFTER FORKS BIG TWIN 1936 THRU 1986**

191401 Shifter fork main shaft (OEM 34158-36)

191402 Shifter fork counter shaft (OEM 34159-36)





#### SHIFTER CLUTCH

Fits all 4 Speed transmissions 1936 thru

292021 Shift Clutch 1-2 (0EM 2297-36B & 35440-38T)

292022 Shift Clutch 3-4 (OEM 35665-36A)



**ANDREWS SHIFT CLUTCHES** 

positive shifts.

234719 Shift clutch 1-2

234720 Shift clutch 3-4

Replacement clutches are

heat treated and shot peened for super

durability. 3-4 Clutches are face milled

and have longer lead in ramps for more

(OEM 35665-36)

(OEM 35440-38)

**BUSHING SECOND & THIRD GEAR** Fits 1938 thru 1979 (OEM 35322-38).



231445 Bushing 2nd/3rd gear



Fits 1936-1964 Big Twins

781276 Parkerized black

**781274** Chrome

**781275** Cad plated

Fits 1965 thru early 1977 Big Twin 781277 Chrome **781278** Zinc plated





#### **COUNTER SHAFT THRUST WASHERS FOR BIG TWIN 4 SPEED**

233468 Counter shaft thrust washer low and second gear (OEM 35811-36)

233474 Thrust washer, fits low and reserve gears from 1936 thru 1986 (OEM 35812-36)



Colony

#### STUDS FOR 4 SPEED TRANSMISSION HOUSING

High grade steel replacement studs for all 4 Speed transmissions from 1936-1984. These studs are available in stock replacement and oversizes. Sold in packs

231610 Standard size 1937 thru early 1947 3/8" UNF x 7/16" UNC (OEM 34722-36)

231611 Standard size late 1948 thru 1984, oversize for earler models, 3/8" UNF X 3/8" UNC (OEM 34723-47)

231612 Super Oversize 3/8" UNF x 1/2" UNC (OEM 34724-36)



Fits late 1977-1986 4-speed Big Twin including 4-speed Softail 781279 Chrome **781280** Zinc plated



**BUSHING SHIFTER SHAFT** Fits 1952 thru 1976 (OEM 34430-36) 231465 Bushing shifter shaft



**BUSHING SHIFT SHAFT** Fits 1941 thru 1979 (0EM 34435-52) 231429 Bushing shift shaft



#### **COUNTER SHAFT THRUST WASHER 4 SPEED**

Thrust washers for counter shaft kick-start side. Fits all Big Twin 4 Speed transmission 1937 thru 1986. Available in assortment pack with 7 sizes, for perfect adjustment of counter shaft end-play.

233460 Thrust washer set, 7 pieces (OEM 35875-36)



## **COLONY TRANSMISSION MOUNT KITS**

Complete transmission mounting hardware kits are a faithful reproduction of the OEM bolts, nuts, washers and other items. Kits do not include studs.



2 YEARS WARRANTY

**GEAR SHIFTER COVER FOR BIG TWIN** Replacement gear shifter cover. Fits all Big Twins 1952 thru 1979 (0EM 34551-52). 301757 Gear shifter cover

09-019

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OIL, CHEMICALS & TOOLS

EXHAUST

06 Intake

07 FNGINE

TRANSMISSION

10 FINAL DRIVE

14 HANDLEBAR

FENDER & STRUTS

GAS TANK

OIL TANK, FILTER

FASTENERS

21 MIRROR

ALPHABETICAL



Colony

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#### **COLONY DRAIN PLUG**

Exact duplicate of the early style 1/2-13 threaded hex head OEM 707 drain plug as used on Sportster transmission, motor case and oil tank and 1937-1968 Big Twin transmission. Comes complete with brass gasket.

**781260** Chrome **781261** Cad plated



Clutch side, fits late 1976 thru

231059 Oversize +.005"

231450 Standard size (OEM 36048-76A)

#### MAIN DRIVE GEAR BUSHINGS

Available in stock replacement and, for those who want more, in a CNC machined Jims quality (OEM 35094-65).

**231421** Stock replacement, 1965-1986 (OEM 35094-65)

721534 Made by Jims USA



## ANDREWS

## ANDREWS 1ST GEAR SETS FOR 4 SPEED TRANSMISSIONS

Andrews offers these gear sets in three different gear ratio's. A stock replacement 3.00 ratio set, a 2.60 and a 2.44 ratio set. The 2.44 ratio set is the best choice for Superglides and other lighter bikes with stock motor or transmission sprockets. The 2.60 ratio gear set works best with Electra Glides and other heavy bikes. Also applicable for light bikes with larger transmission sprockets. When installing thenon-stock gear sets in 1980 thru 1984 FX models, a 21 tooth 2nd gear must be installed too.

**237271** 3.00 Ratio gear set (stock) **234710** 2.60 Ratio gear set **234709** 2.44 Ratio gear set



## **MANDREWS**

# ANDREWS STOCK 3RD GEAR (1.23 RATIO) Replacement for stock main 3rd a

Replacement for stock main 3rd and counter-shaft 3rd. The design of the drive slots on main-shaft gear has been upgraded to include lead-in ramps for quicker, more positive shifting.

**234715** Counter shaft cluster gear, loose roller type 1936 thru 1976 (0EM 35700-36 & 35700-69)

234716 Counter shaft cluster gear, caged roller type 1977 thru 1986 (OEM 35699-76)

**237273** Mainshaft 3rd gear 1936 thru 1958 (OEM 35306-36)

**237272** Mainshaft 3rd gear 1959 thru 1986 (OEM 35306-59)



#### BUSHING COUNTER SHAFT LOW/ SECOND GEAR

**231422** Fits counter shaft low and reverse gear 1936 to present (0EM 35789-36)

231423 Fits counter shaft low and second gear 1940 to present (OEM 35791-36)







## 2 YEARS WARRANTY

## RATCHET DUST COVER AND LEVER SET FOR BIG TWIN

Bright chrome plating dresses up these transmission lever and dust cover sets. Sets are available for FX 1974 to early 1979 and FL 1952 thru 1979. Includes mounting hardware.

**301684** Fits FX models (OEM 34447-74, 34555-74 and 1767W)

**301685** Fits FL models (0EM 34447-52, 34555-52 and 1767W)



# ANDREWS ANDREWS STOCK 2ND GEAR (1.82

RATIO)
Stock 2nd gear with face milled drive dogs for more positive 1-2 shifts. This is

dogs for more positive 1-2 shifts. This is a 21 tooth gear which fits 1941-1979. It will also fit later transmissions but requires one of the first gear sets, ZPNor ZPNto complete such a conversion (OEM 35751-36).

234712 Andrews stock 2nd gear



## **MANDREWS**

ANDREWS 1.35 CLOSE RATIO 3RD GEAR SET

GEAR SET 234713

(EARLY) For transmissions built before mid 1976, to serial number U-8958 (or lower) with loose needle bearings.

234714 (LATE) For transmissions built after mid 1976, from serial number U-8959 (or higher) with caged needle bearings. New design on drive slots includes lead: in ramps for quicker, more positive shifting (same as stock 3rd and 4th gears).



## BIG TWIN 4-SPEED COUNTER SHAFT BUSHINGS

Machined to exact specifications in the USA. Fits 4-speed and 3-speed with reverse Big Twin.

## Kick-starter side, fits 1937 thru early 1976

**231448** Standard size (0EM 36046-36) **231056** Oversize +.005"

#### Kick-starter side, fits late 1976 thru 1979

**231447** Standard size (OEM 36045-76) **231057** Oversize +.005"

## Clutch side, fits 1937 thru early 1976

**231449** Standard size (0EM 36048-36) **231058** Oversize +.005"





## ANDREWS COMBINATION 2.24 1ST-1.65 2ND GEAR SET

If you want peak RPM thru the quarter mile, this gear set will provide the super close ratio shifting to handle it. OK for street or drags with any size motor. Andrews brought this set back by popular demand.

234711 Gear Set



## MANDREW'S

#### **ANDREWS SHIFT FORKS**

One piece cold forged forks are more heavily made with wider sections for greater strength and durability. Fully heat treated and finished in black oxide, they are also stamped with the Andrews name so you know where they came from. A must for all transmission rebuilds.

**234721** Shift fork 1-2 (0EM 34159-36) **234722** Shift fork 3-4 (0EM 34158-36)





#### **S&S 5-SPEED TRANSMISSION CASES FOR 4-SPEED BIG TWINS**

cases are manufactured from 356-T6 and machined with state-of-the-art CNC equipment. This 4 to 5-speed case is designed for 4-speed Big Twin style frames with 1970 thru 1984 Shovelhead style drivelines and chain final drives. These cases also accept most OEM and aftermarket 5-speed bearings, seals and other parts designed for 1985 thru 1989 Big Twin style 5-speed transmissions. OEM trap door will require minor modification to fit this case.

All modifications are thoroughly explained in the accompanied instructions. The S&S 4 to 5 speed transmission case is not compatible with the factory H-D primary belt drive as used on 1980 thru 1983 FXSB Sturgis models. For applications that utilize an existing 4-speed drive line, a 1980 to early 1984 5-speed style chain-drive main shaft and 1980 to early 1984 style main drive gear must be used. These parts are compatible with the

OEM tapered inner diameter clutch hub as used on 4-speed Big-Twins. Basic case assemblies include the transmission case plus the shift lever adjustment screw, shifter shaft guide, and all studs and dowel pins required for assembly. To help insure a simple, trouble free installation, the studs and dowel pins are installed at S&S prior to shipment. The special, non-stock counter shaft bearing, inner primary bearing and mainshaft adapter spacer are not included, but must be ordered separately.

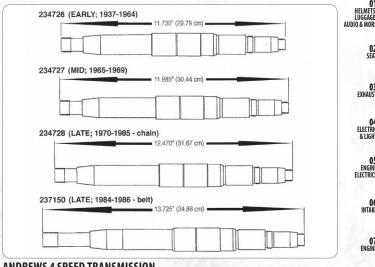
750610 Basic case assembly, fits 1970 thru 1989 Big Twin models

750628 Counter shaft bearing (S&S 56-3034)

750629 Counter shaft bearing (OEM 56-3034)

234941 Mainshaft adapter spacer (S&S 56-1068)

234942 Inner primary bearing



#### **ANDREWS 4 SPEED TRANSMISSION MAIN SHAFTS**

Replacement mainshafts for all versions of Big Twin transmissions. Made from aircraft alloy steel with heat treatment and finish grinding to ensure maximum durability.

Note: ZPN237150 In late 1984 FXST must use a ZPN233482 clutch hub kev.

234726 Fits 1937 thru 1964 models (OEM 35040-50)



EXHAUST

06 INTAKE

O7

TRANSMISSION

10 FINAL DRIVE

WHEELS &

14 HANDLEBAR

FRONT

FENDER & STRUTS

GAS TANK 8

OIL TANK, FILTER

FASTENERS

WINDSHIELD

OIL, CHEMICAL

234727 Fits 1965 thru 1969 models (OEM 35039-65)

234728 Fits 1970 thru early 1985 models (OEM 35039-70A)

237150 Fits late 1984 FXST and all 1985 thru 1986 belt drive models (OEM 35039-85)



#### **RATCHET TOP ASSEMBLY FOR 4 SPEED TRANSMISSIONS**

The ratchet top is an OEM reproduction for foot shift models available. Fits all 4 Speed Big Twin transmissions 1952 thru early 1979.

301758 Reproduction ratchet top lid (OEM 34803-59)



Completely assembled perfect reproductions of the rotary top as used on late 1979 thru 1986 4-speed Big Twins. Shifter arm and grease fitting have a chrome finish, all other parts have a natural finish.

781052 Fits late 1979 thru 1984 FL & FLH, 1984 thru 1985 FXST and 1980 thru 1986 FXWG (OEM 33158-80)

781053 Fits late 1979 thru 1986 4-speed FX models, except FXWG (0EM 33183-80)



## ANDREWS **ANDREW STOCK MAIN DRIVE GEARS**

All late 4th gears now have 0-rings for better oil sealing. These replacement 4th gears are made with wider drive slots and steeper lead-in ramps for more positive 3-4 shifting and less wear and tear for long life. The O-ring groove addition is a design up-date for all chain drive 1977-1986 4th gears.

234717 (EARLY) Thru 1976 (OEM 35065-65)

234718 (LATE) 1977-1986 (OEM 35067-77 and 35067-84)



## ANDREWS

#### ANDREWS TRANSMISSION COUNTER-SHAFTS

counter-shafts Replacement transmissions thru 1985. Made from aircraft alloy steel with heat treatment and finish grinding for a maximum durability.

**234723** Fits 1941-early 1976 (OEM 35614-65)

234724 Fits late 1976 thru 1979 models (OEM 35614-76)

234725 Fits 1980 thru 1985 models (OEM 35614-80)





#### **BIG TWIN 4-SPEED SHIFTER CAM**

Accurate reproduction from the 1973-up style 1-down 3-up shifter cam suitable for 1952-1978 ratchet top transmissions. Fits 1952-1978 FL & 1971-1978 FX.

782127 Shifter cam (0EM 34008-52A, 34019-73)

ALPHABETICAL

www.zodiac.nl 09-021

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## COMPLETE 4-SPEED BIG TWIN RATCHET TOPS

Complete and ready-to-install top covers can be used on all 1941-1979 4-Speed Big Twin transmissions with foot shift.



**768021** 1952-1958 FL style natural aluminum ratchet top for use without neutral switch





## TRANSMISSION TOP COVER SCREW KIT FOR 4-SPEED BIG TWIN

Kit contains all screws to mount the transmission top cover on 4-speed Big Twin models. Made in the USA by Colony.

Fits 1936 thru 1955 Big Twin 740051 Chrome, fillister head 781265 Cad plated, fillister head 781266 Parkerized black, fillister head



# COLONY 4-SPEED BIG TWIN TRANSMISSION SIDE COVER NUT

Exact duplicate of the OEM nuts and washers on all 4-speed and 3-speed plus reverse Big Twin thru 1984. Also includes nut for the clutch arm.

**781262** Chrome **781263** Cad plated **781264** Parkerized black

**KITS** 





## BILLET ALUMINUM TRANSMISSION DIPSTICK FOR BIG TWIN MODELS

Here's a dress-up item that lets you easily check your transmission oil level and adds a distinctive custom detail at the same time. A threaded dipstick is built into the transmission filler plug. Comes complete with 0-rings.

# Fits all Big Twin 4 Speed transmissions

323021 Clear anodized



**768018** 1965-1969 FL style natural aluminum ratchet top for use with neutral switch (OEM 34799-65)



Fits 1950-1953 Big Twin 781268 Chrome, fillister head 781269 Cad plated, fillister head

Fits 1956 thru 1964 Big Twin 740052 Chrome, fillister head 781267 Cad plated, fillister head



## TRANSMISSION FILLER PLUG FOR 4 SPEED BIG TWINS

Quality reproduction of the OEM transmission filler plugs, made by Colony.

Hex style, 7/8-18 thread, fits 1936 thru 1957 models (OEM 701) 762629 Chrome

**762639** Chrome **762630** Cad plated **762631** Parkerized





## 4 SPEED BIG TWIN TRANSMISSION MOUNTING PLATES

Exact reproduction of the transmission mounting plate on 1936 thru 1957 Big Twins.

**781180** Parkerized (OEM 47698-36) **781179** Chrome



**768020** 1965-1969 FL style chrome ratchet top for use with neutral switch (OEM 34799-65)



**768022** 1974-1979 FX style natural aluminum ratchet top for use with neutral switch (OEM 34799-74A)



**Fits 1965-1978 Big Twin 781270** Chrome, allen head **781271** Cad plated, allen head



**Fits 1979-1985 FL & FX 781272** Chrome, hex head **781273** Cad plated, hex head



Knurled style, 11/16-11 thread, fits 1958 thru 1980 models (OEM 37072-79) 762628 Polished 741795 Chrome



## Colony

## COLONY TRANSMISSION ADJUSTER SCREW SUPPORT STRAP

Exact duplicate of the transmission adjuster screw support bracket on 1936-1957 4-speed and 3-speed plus reverse Big Twin.

**781283** Chrome (OEM 47720-36) **781284** Cad plated (OEM 47720-36) **781285** Parkerized black

(OEM 47720-36)



Colony

#### **COLONY TRANSMISSION ADJUSTER SCREW**

Chrome plated transmission adjuster screw for 4-speed and 3-speed plus reverse Big Twin transmissions 1937 thru 1964.

231870 Fits 1937-1964 (OEM 34735-36)

ZODIA 2 YEARS WARRANTY

Chrome plated "U" shape transmission

adjusting kit. This transmission adjuster

was designed to aid in the accurate

alignment and adjustment of the

transmission main-shaft parallel to the

engine sprocket shaft, when an open

belt-drive or tin primary is installed.

Transmission is firmly held into place by

four jam units. Fits all 4 Speed Big Twin

transmissions 1958-1986 (except FXST).

032419 Transmission adjusting kit

"U" SHAPE TRANSMISSION

**ADJUSTING KIT** 





#### ADJUSTABLE TRANSMISSION PLATE **FOR 4-SPEED BIG TWIN**

The built in dual adjusters operate from the end of the 1/2" thick steel plate by counter bored socket head screws which allow accurate alignment of the main shaft and are ideal for open belt drive models. The three holes at the front fit various frames. Fits 4 speed Big Twin transmissions from 1979 thru 1986 with flat bottom cases and 1936 thru early 1978 cases if the sliders are milled off the bottom of the case.

**781054** Chrome 781055 Black



Fits 1986 thru 1999 Softail models **744127** Polished

Speed sensor hole plug and 0-ring **700822** Plug for speed sensor hole 700824 O-ring for speed sensor hole





#### S&S 5-SPEED TRANSMISSION CASES **FOR 4-SPEED BIG TWINS**

These cases are manufactured 356-T6 and machined with state-of-the-art CNC equipment. This 4 to 5-speed case is designed for 4-speed Big Twin style frames with 1970 thru 1984 Shovelhead style drivelines and chain final drives. These cases also accept most OEM and aftermarket 5-speed bearings, seals and other parts designed for 1985 thru 1989 Big Twin style 5-speed transmissions. OEM trap door will require minor modification to fit this case.

All modifications are thoroughly explained in the accompanied instructions. The S&S 4 to 5 speed transmission case is not compatible with the factory H-D primary belt drive as used on 1980 thru 1983 FXSB Sturgis models. For applications that utilize an existing 4-speed drive line, a 1980 to early 1984 5-speed style chain-drive main shaft and 1980 to early 1984 style main drive gear must be used. These parts are compatible with the OEM tapered inner diameter clutch hub as used on 4-speed Big-Twins. Basic case assemblies include the transmission case plus the shift lever adjustment screw, shifter shaft guide, and all studs and dowel pins required for assembly. To help insure a simple, trouble free installation, the studs and dowel pins are installed at S&S prior to shipment. The special, non-stock counter shaft bearing, inner primary bearing and mainshaft adapter spacer are not included, but must be

ordered separately. 750610 Basic case assembly, fits 1970 thru 1989 Big Twin models 750628 Counter shaft bearing (S&S

56-3034) 750629 Counter shaft bearing

(OEM 56-3034) 234941 Mainshaft adapter spacer (S&S

56-1068) 234942 Inner primary bearing



## **ALU-TEC BILLET ALUMINUM TRAP DOOR FOR 5 SPEED BIG TWIN**

out of solid aircraft quality aluminum. Economically priced but still strong enough for use in 100+ horsepower engines. Accept stock bearings, retaining rings and transmission end cover.

234202 Machined finish, 1980-1998

735003 Machined finish, 1999-2006 (OEM 35251-93C & 35252-93B)

gasket (OEM 35652-79B)

gasket (OEM 36801-87A)



# **TRANSMISSIONS**

CNC machined to the tightest tolerances

(OEM 35250-90B)

**396009** Trap door to transmission

396008 Trap door to clutch control cover



thru 1999 Softails are designed to be the strongest on the market with extra case thickness and full support gussets where needed. Cases are cast from A356 aluminum in CNC machined permanent molds and heat treated to T6 specifications and then fully machined on a state-of-the-art CNC horizontal machining center. Available in plain cast, polished, or black powder coated finish. Accepts electronic speed sensor. For those who do not want to use the electronic speedo sensor a plug and O-ring seal are available. Bearings, dowel pins and mounting studs are not included.

**HEAVY DUTY TRANSMISSION CASES** 

These transmission cases for 1986

Fits 1986 thru 1999 Softail models 744125 Plain cast aluminum



#### JIMS JIMS BILLET TRAP DOOR FOR 5 **SPEED BIG TWIN TRANSMISSION**

Manufactured out of a solid block of 7075-T651 aluminum for 100+ horse power engines. The bearing bores are held perpendicular to the mounting flange to approx. .0002". Trap door will accept early or late transmission end cover. Fits 1980-1998 5 Speed Big Twin models.

234096 Trap door, chrome



#### TRANSMISSION ADJUSTING KIT HARLEY BIG TWIN

Chrome plated adjusting kit, designed to fit 1936 thru 1964 transmission cases. Allows you to precisely adjust and secure the transmission. Can be used with stock or custom transmission case. Recommended when open belt-drive is installed (0EM 47720-36).

032332 Transmission adjusting kit



Fits 1986 thru 1999 Softail models 744126 Black powder coated

ALPHABETICAL

www.zodiac.nl 09-023 WHEELS

03 EXHAUST

04 ELECTRIC & LIGHT

06 Intake

07 FNGINE

TRANSMISSION

FINAL DRIVE

14 HANDLEBAR

FENDER & STRUTS

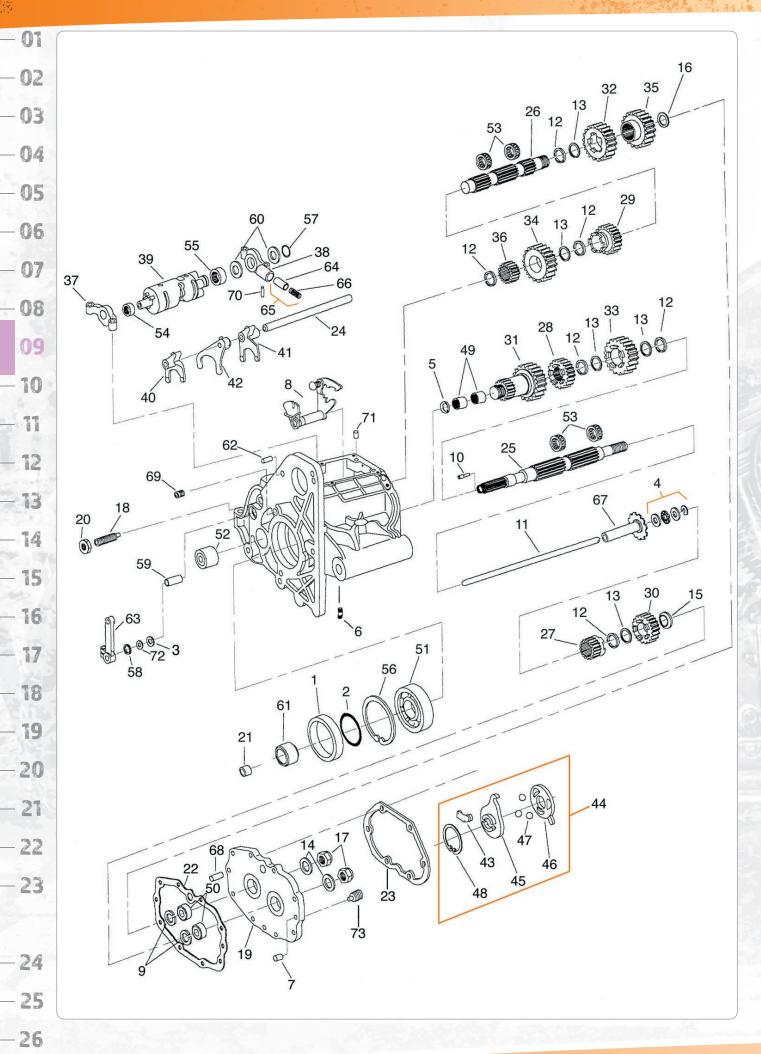
OIL TANK, FILTER

GAS TANK

FASTENERS

21 MIRROR

OIL, CHEMICAL



#### TRANSMISSION PARTS FOR 1979-1993 5 SPEED BIG TWINS

_					_				
Pos.	ZPN	Qty.	Description	OEM	Pos.	ZPN	Qty.	Description	OEM
1	022442	1	Oil seal, 1980-early 1984	12044A	31	234706	1	5th Gear main, chain drive, Andrews,	35029-79
1	700033	1	Oil seal, 1979-early 1984, Athena	12044A				1979-1983	
i	022468	1			31	234578	1	5th Gear main, chain drive, Jims,	35029-79
		<u> </u>	Oil seal, late 1984-1992	12050	31	2343/0	I		33029-79
1	700036	1	Oil seal, late 1984-1992, Athena	12050				1979-1983	
2	022450	1	Quad seal, 10-pack	11165	31	234707	1	5th Gear main, Andrews, late 1985-1990	35029-85A
2	700014	1	Quad seal, Athena, 10-pack	11165	31	234088	1	5th Gear main, Jims, late 1985-1990	35029-85A
		1							
3	022466	1	Oil seal	12045	31	234708	1	5th Gear main, Andrews, 1991-1993	35029-91A
3	748916	1	Oil seal, double lip, Cometic	12045	31	234089	1	5th Gear main, Jims, 1991-1993	35029-91A
3	638194	1	Oil seal, steel, James, 5-pack	12045	32	237071	1	1st Gear counter	35622-79C
		1							
3	748831	ı	Oil seal, double lip, Cometic, 5-pack	12045	32	232457	1	1st Gear counter, Andrews	35622-79C
4	144554	1	Pushrod bearing kit	37312-75	32	234047	1	1st Gear counter, Jims	35622-79C
5	700018	1	Oil seal, Athena, 5-pack	12013A	33	234702	1	3rd Gear main, Andrews	35027-79B
5		1		12013A				3rd Gear main, Jims	
	740391		Oil seal, James, 5-pack		33	234045	1		35027-79B
6	234537	5	Stud, 5-pack	11733A	34	234702	1	2nd Gear counter, Andrews	35027-79B
7	720210	1	Pin	634	34	234045	1	2nd Gear counter, Jims	35027-79B
	292308	1	Ratchet assembly	-	35	234703	1	4th Gear counter, Andrews	35625-79B
8		1					1		
9	233048	2	Retaining ring, 10-pack	11020	35	234042	1	4th Gear counter, Jims	35625-79B
9	231851	2	Retaining ring	35021-89	36	234705	1	5th Gear counter, Andrews	35626-79B
10	233448	1	Clutch pushrod left end	37090-84	36	234041	1	5th Gear counter, Jims	35626-79B
		1					1		
11	231863		Pushrod, left 1979-early 1984	37090-79	36	396021	l	5th Gear counter, Zodiac	35626-79B
11	231862	1	Pushrod, right 1979-early 1984	37089-79	37	237484	1	Pillow block w/bearing	33326-79A
11	231861	1	Pushrod, center 1979-early 1984	37088-79	37	756287	1	Pillow block w/bearing	33326-79A
		1					1		
11	233447		Pushrod, late 1984 Classics	37088-84	38	237485		Pillow block w/bearing	33332-79
11	233449	1	Pushrod, 1985-1989	37088-85	39	237895	1	Shifter drum, 1979-1997	33320-79D
11	233530	1	Pushrod, 1990-up	37088-90	39	758576	1	Shifter Drum, Dyna & Touring 1998-2000,	33320-98
	234094	6		11067	3,	,,,,,,,		Softail 1998-1999	33320 70
12			Retaining ring, Jims USA, 10-pack						
12	238674	6	Retaining ring, Eastern USA, 10-pack	11067	40	237898	1	Shifter fork, Eastern USA	34193-79E
13	234146	5	Thrust washer, Jims, 5-pack	6003	40	781117	1	Shifter fork, V-Twin Mfg.	34193-79E
13	234581	5	Thrust washer, Eastern, 5-pack	6003	41	237899	1	Shifter fork, Eastern USA	34195-79E
			, , , ,						
14	234147	2	Spacer, 10-pack	35076-79	41	781118	1	Shifter fork, V-Twin Mfg.	34195-79E
15	234148	1	Spacer, 5-pack	35064-79	42	237900	1	Shifter fork, Eastern USA	34191-79E
16	234197	1	Spacer, 5-pack	35629-79	42	781116	1	Shifter fork, V-Twin Mfg.	34191-79E
		•							
<u>17</u>	234198	2	Lock jam nut, 2-pack	35078-79	43	-	-	Cable coupling 1986-up	34920-86
18	144731	1	Adjusting screw, Genuine Zodiac	33119-79B	44	144121	1	Clutch release kit (pos. 43, 45 thru 48)	-
18	789392	1	Adjusting screw, V-Twin Mfg.	33119-79B	45	-	_	Inner ramp 1986-up	25452-87A
		1							
19	234202	1	Trap door	35250-90B	46	-	-	Outer ramp 1986-up	25453-87A
19	234096	1	Trap door, chrome, Jims	35250-90B	47	238183	3	Clutch ramp ball 1986-up	8873
20	234364	1	Jam nut, 10-pack	7515	48	238184	1	Retaining ring	10998
		1							8904
21	238889	1	Inner race, USA made, 1985-up	34091-85	49	239906	2	Needle bearing, 1980-1990	
22	740401	1	Gasket, trap door, 10-pack	35652-79B	49	239900	2	Needle bearing, 1991-up	35051-89A
23	740419	1	Gasket, end cover, 10-pack	36801-87B	50	239901	2	Ball bearing	8998
24	235891	1	Shift fork shaft, 1987-up	34088-87	51	239902	1	Ball bearing, late 1984	8996
		1					1		
25	234729	1	Main shaft, Andrews, 1980-1984	35042-79	51	721535	1	Ball bearing, 1980-early 1984	8978
25	234090	1	Main shaft, Jims, 1980-1984	35042-79	52	239904	1	Needle bearing	8977
25	234730	1	Main shaft, Andrews, late 1984-1989	35042-85	52	759904	1	Needle bearing, USA	8977
25							4		
	234091	1	Main shaft, Jims, late 1985-1989	35042-85	53	239905		Split needle bearing	8876A
25	234731	1	Main shaft, Andrews, 1990	35042-90	54	239907	1	Bearing	9115
25	234732	1	Main shaft, Andrews, 1991-up	35042-91	55	239908	1	Bearing	9114
25	234092	1	Main shaft, Jims. 1991-up	35042-91	56	710308	1	Retaining ring, late 1984-up	1161
		1					1		
25	237065	ı	Main shaft, Zodiac, 1991-up	35042-91	57	720149	ı	Retaining ring	11083
25	700836	1	Main shaft, 12mm extended, Zodiac,	-	58	720151	1	Retaining ring	11150
			1991-up		58	758424	1	Retaining ring, 10-pack	11150
25	700837	1	Main shaft, 25mm extended, Zodiac,			720153	1	Spacer	33114-79
25	/0003/	1		-	59		1		
			1991-up		60	234508	1	Thrust washer	33206-80
25	700915	1	Main shaft, 45mm extended, Zodiac,	_	61	720155	1	Spacer, late 1984-1993	33334-85
		-	1991-up		62	720157	1	Dowel pin	337
		_					1		
25	701122	1	Main shaft, 55mm extended, Zodiac,	-	63	292122	1	Eco Line shifter lever, 1985-up	33715-85A
			1991-up		63	741902	1	Shifter lever, 1985-up, USA made	33715-85A
26	237066	1	Counter shaft	35632-79	64	720159	1	Cam follower	34085-79A
		1					1	Cam follower kit /70 0 74	
26	234733	1	Counter shaft, Andrews	35632-79	65	720223	ı	Cam follower kit w/70 & 74	34085-79A
26	234093	<u>1</u>	Counter shaft, Jims	35632-79	66	720160	<u>1</u>	Spring	34089-79
27	237067	1	1st Gear main	35025-79B	67	370186	1	Oil slinger rod, 1990-up, Genuine Zodiac	37069-90
		1		35025-79B			1		
27	232456	1	1st Gear main, Andrews		67	789425	1	Oil slinger rod, 1990-up, V-Twin Mfg.	37069-90
27	234043	1	1st Gear main, Jims	35025-79B	68	720164	2	Dowel pin	375
28	234701	1	2nd Gear main, Andrews	35026-79C	69	720165	1	Set screw	3784
28	234044	1	2nd Gear main, Jims	35026-79C	70	720166	1	Roll pin	601
		1					1		
29	234701	I	3rd Gear counter, Andrews	35026-79C	71	720177	2	Pin	609
29	234044	1	3rd Gear counter, Jims	35026-79C	72	720176	1	Washer	6497HW
30	234704	1	4th Gear main, Andrews	35028-79B	73		1	Magnetic pipe plug	739A
		1			, ,	/EVI/U	•	magnetic pipe plug	, 3711
30	234046	1	4th Gear main, Jims	35028-79B					
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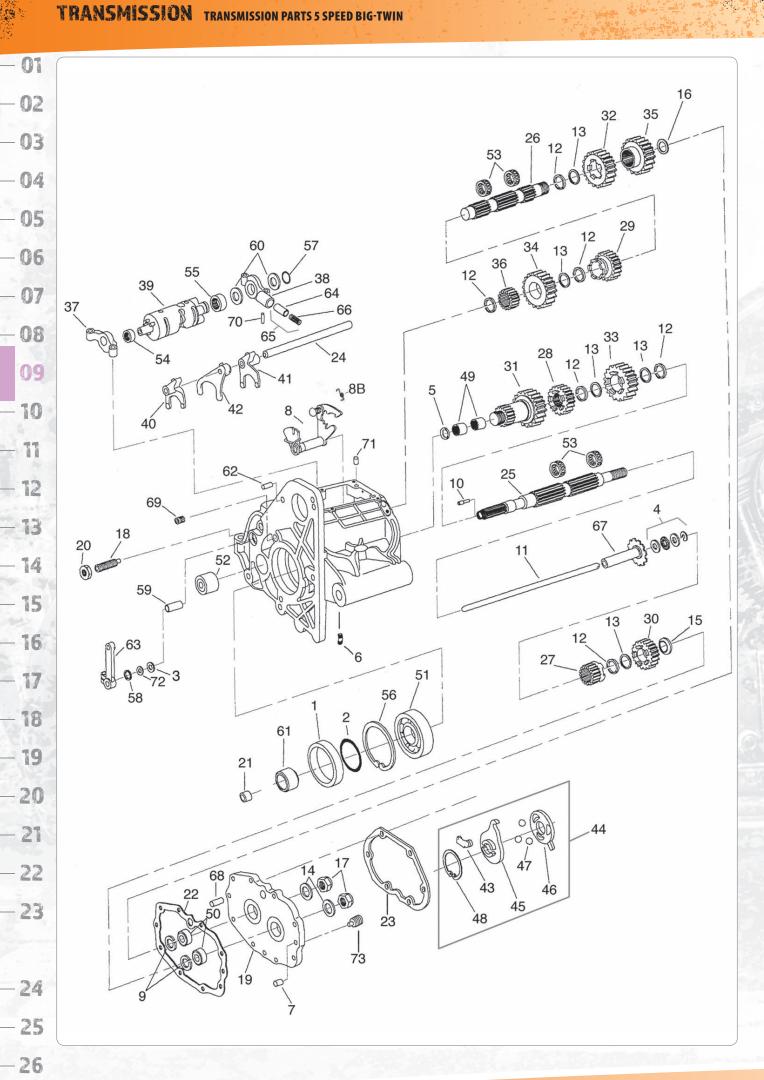
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#### TRANSMISSION PARTS FOR 1994-2006 5 SPEED BIG TWINS

Note 1: Fits 1994 thru 2000 Dyna, 1994 thru 2000 Touring & 1994 thru 1999 Softail

Pos.	ZPN	Qty.	Description	OEM
1	022054	1	Oil seal	12067A
1	234498	1	Oil seal, Genuine James	12067A
2	022450	1	Quad seal, 10 pack	11165
2	700014	_1	Quad seal, Athena, 10 pack	11165
3	022466	1	Oil seal, Genuine Zodiac	12045
3	748916	1	Oil seal, double lip, Cometic	12045
3	638194	1	Oil seal, metal, James, 5-pack	12045
3	748831	1	Oil seal, double lip, Cometic, 5-pack	12045
4	144554	1	Pushrod bearing kit	37312-75
5	724336	1	Oil seal	12035B
5	022331	1	Oil seal, 10 pack	12035B
5	700005	1	Heavy Duty oil seal, Athena, 5 pack	12035B
5	740395	1	Oil seal, James, 5 pack	12035B
<u>6</u>	234537	5	Stud, 5 pack	11733A
7	720210	1	Pin	634
8	292308	1	Ratchet assembly (Note 1)	2 1077 001
8B	758528	1	Return spring 2000-2006, 10-pack	34977-00A
8B	758529	1	Return spring 2000-2006	34977-00A
9	233048	2	Retaining ring, Jims USA, 10 pack	11020
9	781998	2	Retaining ring, Eastern USA, 10 pack	11020
9	231851	2	Retaining ring, 1980-1998	35021-89
9	756261	2	Retaining ring, 1999-up	35087-99
10	233448	1	Clutch pushrod left end	37090-84
11	233530	1	Pushrod	37088-90
11	700874	1	Pushrod 12mm extended	
11	396001	1	Pushrod, 25mm extended	
11	700921	1	Pushrod, 45mm extended	
11	701127	1	Pushrod, 55mm extended	11067
12	234094	6	Retaining ring, Jims USA, 10 pack	11067
12	238674	6	Retaining ring, Eastern USA, 10 pack	11067
<u>13</u>	234146	5	Thrust washer, Jims, 5 pack	6003
13	234581	5	Thrust washer, Eastern, 5 pack	6003
14 15	234147	2	Spacer, 10 pack	35076-79
16	234148 234197	<u>1</u> 1	Spacer, 5 pack	35064-79
10 17	234197	2	Spacer, 5 pack Lock jam nut, 2 pack	35629-79 35078-79
<u>17</u> 18	144731	1	Adjusting screw, Genuine Zodiac	33119-79B
18	789392	1	Adjusting screw, V-Twin Mfg.	33119-79B
19	234202	1	Trap door, 1980-1998	35250-90B
19	234096	1	Trap door, 1980-1998	35250-90B
19	735003	1	Trap door, 1999-2006	35250-900 35251-93C
20	234364	1	Jam nut, 10 pack	7515
<u>20</u> 21	238889	1	Inner race, USA	34091-85
22	740401	1	Gasket, trap door, 10 pack	35652-79B
23	740419	1	Gasket, end cover, 10 pack	36801-87B
<u>24</u>	235891	1	Shift fork shaft	34088-87
<u> </u>	237065	1	Main shaft	35042-91
<u>25</u> 25	234732	1	Main shaft, Andrews	35042-91
<u>25</u>	234092	1	Main shaft, Jims	35042-91
<u> </u>	700836	1	Main shaft, 12mm extended	33012 71
<u>25</u> 25	700837	1	Main shaft, 25mm extended	
<u> 25</u>	700915	1	Main shaft, 45mm extended	
<u>25</u> 25	701122	1	Main shaft, 55mm extended	
26	237066	1	Counter shaft	35632-79
<u>26</u>	234733	1	Counter shaft, Andrews	35632-79
26	234093	1	Counter shaft, Jims	35632-79
20 27	237067	1	1st Gear main, 18 Teeth	35032-79 35025-79B
<u>27</u> 27	232456	1	1st Gear main, Andrews	35025-79B
<u>27</u> 27	234043	1	1st Gear main, Andrews	35025-79B
2 <i>7</i> 28	237068	1	2nd Gear main, 27 Teeth	35025-796
<u> 20</u> 29	237068	1	3rd Gear counter, 27 Teeth	35026-94
<del>29</del> 30	237069	1	4th Gear main, 38 Teeth	35020-94
30 31	237070	1	5th Gear main, 41 Teeth	35028-94
			Jan Jean many in itelli	JJ027 7 1

Dan	70N	04	Desmintion	OFM
Pos.	ZPN	Qty.	<b>Description</b>	OEM
31	700838	1	5th Gear main, 12mm extended	
31	700839	1	5th Gear main, 25mm extended	
31	701131	1	5th Gear main, 55mm extended	
32	237071	1	1st Gear counter, 31 Teeth	35622-79C
32	232457	1	1st Gear counter, Andrews	35622-79C
32	234047	1	1st Gear counter, Jims	35622-79C
33	237072	1	3rd Gear main, 32 Teeth	35027-94
34	237072	1	2nd Gear counter, 32 Teeth	35027-94
35	237073	1	4th Gear counter, 25 Teeth	35625-94
36	237074	1	5th Gear counter, 22 Teeth	35626-94
37	237484	1	Pillow block w/bearing (Note 1)	33326-79A
37	756287	<del>1</del>	Pillow block w/bearing (Note 1)	33326-79A
38	237485	1	Pillow block w/bearing (Note 1)	33332-79
39	237895	1	Shifter drum, 1979-1997	33320-79D
		1		
39	758576	I	Shifter Drum, Dyna & Touring 1998-2000,	33320-98
	228000		Softail 1998-1999	24402 705
40	237898	1	Shifter fork, Midwest USA	34193-79E
40	781117	1	Shifter fork, V-Twin Mfg.	34193-79E
41	237899	1	Shifter fork, Midwest USA	34195-79E
41	781118	1	Shifter fork, V-Twin Mfg.	34195-79E
42	237900	1	Shifter fork, Midwest USA	34191-79E
42	781116	1	Shifter fork, V-Twin Mfg.	34191-79E
43	-	-	Cable coupling	34920-86
44	144121	1	Clutch release kit (pos. 43, 45 thru 48)	-
45	-	-	Inner ramp	25452-87A
46	-	-	Outer ramp	25453-87A
47	238183	3	Clutch ramp ball	8873
48	-	-	Retaining ring	10998
49	239900	2	Needle bearing	35051-89
50	239901	2	Ball bearing, 1980-1998	8998
50	700998	2	Ball bearing, 1999-2006	8992A
51	239902	1	Ball bearing	8996
52	239904	1	Needle bearing	8977
52	759904	1	Needle bearing, USA	8977
53	239905	4	Split needle bearing	8876A
54	239907	1	Bearing (Note 1)	9115
55	239908	1	Bearing (Note 1)	9114
56	710308	1	Retaining ring	11161
57	720149	1	Retaining ring (Note 1)	11083
58	720151	1	Retaining ring	11150
58	758424	1	Retaining ring, 10-pack	11150
59	720153	1	Spacer	33114-79
60	234508	1	Thrust washer, 5 pack (Note 1)	33206-80
61	720156	1	Spacer	33344-94
61	700873	1	Spacer, 12mm extended	33206-80
61	396003	1	25mm extension spacer, use together with	
•			stock spacer	
61	701139	1	Spacer, 55mm extended	
62	720157	1	Dowel pin	337
63	292122	1	Eco Line shifter lever	33715-85
63	741902	1	Shifter lever, USA made	337
64	720159	1	Cam follower (Note 1)	34085-79A
65	720223	1	Cam follower kit w/64, 66 & 70 (Note 1)	34085-79A
66	720160	1	Spring (Note 1)	34089-79
67	370186	1	Oil slinger rod, Genuine Zodiac	37069-90
67	789425	1	Oil slinger rod, V-Twin Mfg.	37069-90
68	720164	2	Dowel pin	375
69	720165	1	Set screw	3784
70	720166	1	Roll pin (Note 1)	601
<del>70</del> 71	720177	2	Pin (Note 1)	609
72	720177	1	Washer	6497HW
73	720178	1	Magnetic Pipe Plug	739A
,,	,201/0	'	magnetic ripe riag	חלני

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10 \_ Final drive

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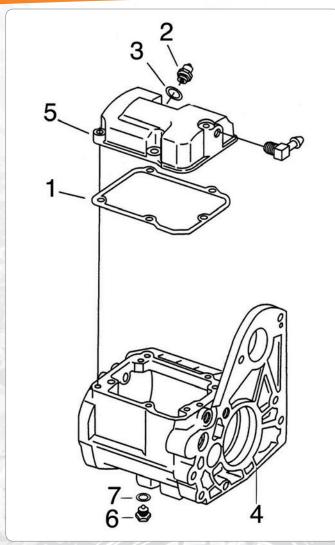
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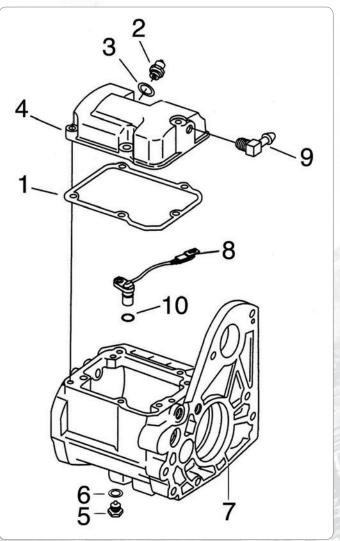
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**FXR TRANSMISSION HOUSINGS AND PARTS**Transmission housing and parts for most FXR models from 1987 thru 1994.

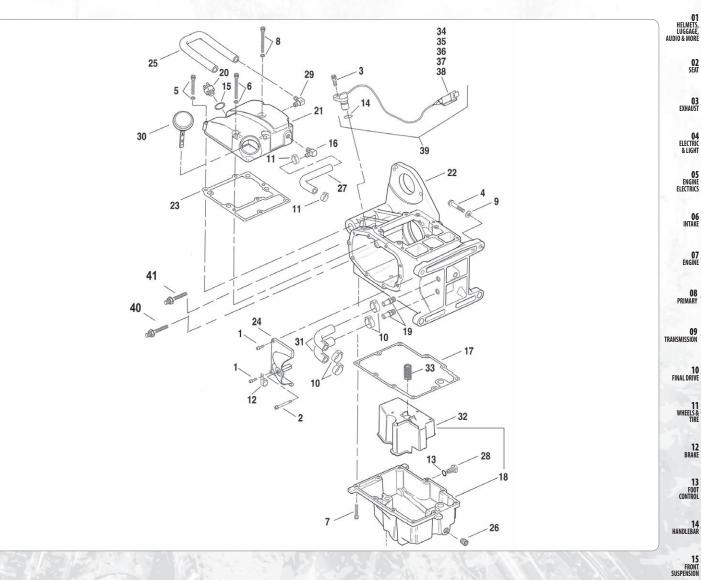
## All Quantities marked with \* are sold to dealers in 5, 10 or 25 packs

700291		Description	OEM	
700271	1*	Silicone beaded top cover gasket, Athena	34904-86B	
740393	1*	Top cover gasket, James		
721794	1	Neutral switch, Standard Motor Products	Notor Products 33900-59A	
231520	1	Neutral switch, Japanese import	-	
700269	1*	Washer, Athena	33043-80	
-	1	Transmission housing		
302091	1	Top cover	34468-86A	
747135	1	Drain plug	722A	
022456	1*	0-ring	11105	
700002	1*	O-ring, Athena	-	
	721794 231520 700269 - 302091 747135 022456	721794 1 231520 1 700269 1* - 1 302091 1 747135 1 022456 1*	721794         1         Neutral switch, Standard Motor Products           231520         1         Neutral switch, Japanese import           700269         1*         Washer, Athena           -         1         Transmission housing           302091         1         Top cover           747135         1         Drain plug           022456         1*         0-ring	



EVOLUTION SOFTAIL 5-SPEED TRANSMISSION HOUSINGS AND PARTS All Quantities marked with \* are sold to dealers in 5, 10 or 25 packs

Pos.	ZPN	Qty.	Description	OEM	
1	700291	1*	Silicone beaded top cover gasket, Athena	34904-86B	
	740393	1*	Top cover Gasket, James		
2	721794	1	Neutral switch, Standard Motor Products	33900-59A	
	231520	1	Neutral switch, Japanese import		
3	700269	1*	Washer, Athena	33043-80	
3 4 5	302091	1	Top cover	34468-86A	
5	747135	1	Drain plug	722A	
6	022456	1*	0-ring	11105	
	700002	1*	O-ring, Athena		
7	744125	1	Late style transmission housing, aluminum		
	744127	1	Late style transmission housing with		
			bearings, polished		
	744126	1	Late style transmission housing, black	_	
8	237509	1	Speed sensor 1996-1999	74437-96	
9	701281	1	Elbow, Genuine Zodiac	62375-57	
10	710491	1*	O-ring, Athena	11140	
			-		



Pos.	ZPN	Description	OEM
1.	742051	Hex head screw, 1/4-20x5/8", 10-pack	2941
2.	742559	Screw, 1/4-20x1 3/4", allen head, 10-pack	3480A
3.	742551	Screw, 1/4-20x5/8", allen head, 10-pack	3594
4.	-	Bolt, hex flange, 3/8-16x2"	3699A
5.	742555	Screw, 1/4-20x2 1/4", allen head, 10-pack	4717A
б.	750763	Screw with lockpatch, 1/4-20x1 1/4"	4740A
7.	742554	Screw, 1/4-20x1", allen head, 10-pack	4741A
8.	769010	Screw with lockpatch, 1/4-20x2 3/4"	4822A
9.	-	Washer, 13/32"x13/16"x7/64"	6448HB
10.	700989	Clamp, 50-pack	10157,
			10249
11.	700988	Clamp, 50-pack	10198
12.	-	Clamp	10223
13.	022456	O-ring, Zodiac, 10-pack	11105
13.	700002	O-ring, Athena, 10-pack	11105
14.	710491	O-ring, Athena, 10-pack	11140,
			11289
15.	720216	O-ring, James	11290
15.	231493	O-ring, Athena, 10-pack	11290
16.	742349	Elbow, 1/4NPTx.500"	16305-99,
			16334-02
17.	231635	Gasket, Silicon beaded, James, 10-pack	26072-99
17.	742419	Gasket, SteelCore, James	26072-99
18.	769000	Oil pan assembly, black	26087-99A
18.	769001	Oil pan assembly, plain	26085-99A
19.	701908	Fitting	26314-99
20.	722031	Neutral switch, 1999-2000	33902-98
20.	722032	Neutral switch, 2001-2005	33904-00
21.	710732	Cover, chrome	34469-99,
			34469-01
21.	-	Cover, polished	34478-99,
		•	37778-01 <sup>°</sup>
21.	-	Cover, black	34521-99,
			34521-01

Pos.	ZPN	Description	OEM
22.	769002	Housing, silver	34746-99,
			34746-01B
22.	769003	Housing, black	34747-99,
		<i>5</i>	34747-01B
23.	231016	Gasket, James, 5-pack	34917-99
23.	700102	Gasket, Athena, 10-pack	34917-99
24.	769004	Cover, silver	37177-99
24.	769005	Cover, black	37178-99
25.	-	Venthose	42533-91A,
			42533-99A
26.	769007	Pipe plug	45893-99
27.	-	Hose	45795-99
28.	720167	Magnetic plug	60348-65B,
		3 1 3	60328-98A
28.	747133	Magnetic plug	60348-65B,
		3 1 3	60328-98A
29.	701281	Fitting	62375-57A
30.	-	Dipstick, black	62851-99
30.	-	Dipstick, clear	62853-99
31.	-	Hose	62726-99
32.	769006	Baffle with spring #33	62826-99,
		. 3	62827-99,
			62826-02
33.	-	Spring	62828-99
34.	741507	Housing, pin	72103-94BK
35.	741508	Secondary lock	72143-94
36.	-	Receptacle	72163-94BK
37.	741538	Terminal, 10-pack	72190-94
38.	741542	Attachment clip	72199-94
39.	720179	Speed sensor	74420-94
40.	769008	Stud	16708-95
<del>11.</del>	769009	Stud	16709-95

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ENGINE ELECTRICS Intake

ENGINE PRIMARY

Transmission

FINAL DRIVE WHEELS & TIRE

Brake

FOOT CONTROL HANDLEBAR

> CHASSIS/ FRAME & SHOCKS FENDER & STRUTS

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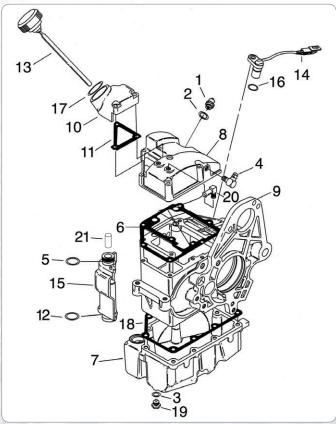
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**EVOLUTION DYNA 5-SPEED TRANSMISSION HOUSING AND PARTS** 

**Note:** Plug off the speed sensor hole in late style transmission housings with ZPN700822 if no sensor is required.

#### All Quantities marked with \* are sold to dealers in 5, 10 or 25 packs



#### Performance Machine.com

## PERFORMANCE MACHINE SCALLOP TRANSMISSION TOP COVER

PM billet aluminum top transmission covers for 2000 thru 2006 Softail and 2001 thru 2006 FLH and FLT series Touring models. Your choice of chrome, Black Contrast Cut that shows bare aluminum accents, Black Platinum Cut with polished accents or Black OPS, PM's proprietary two-tone black that combines textured

and gloss black that matches perfectly with the black wrinkle on engines and transmissions.

752336 Chrome 752337 Black Contrast Cut 752339 Black Platinum Cut 752338 Black OPS

Pos.	ZPN	Qty.	Description	OEM
1	721794	1	Neutral switch, Standard Motor	33900-59A
			Products	
	231520	1	Neutral switch, Japanese import	
2	700269	1*	Washer, Athena	33043-80
3	022456	1*	0-ring	11105
	700002	1*	O-ring, Athena	
4	701281	1	Elbow, Genuine Zodiac	62375-57
5	022404	1*	0-ring	11132
	700008	1*	O-ring, Athena	
6	700299	1*	Gasket, Athena	34917-90A
	740418	1*	Gasket, James	
7	756290	1	Oil pan, silver	26057-97
	756291	1	Oil pan, black	26074-90
В	_	-	Top cover	
9	-	1	Housing, natural aluminum	
	-	1	Housing, black	
10	-	-	Oil fill spout	
11	700382	1*	Oil fill spout gasket, Athena	62423-90A
	740427	1*	Oil fill spout gasket, James	
12	742499	1*	O-ring, James	62672-90
13	301993	1	Dipstick, engine oil, chrome	62679-90,
				62681-92 <i>A</i>
				62685-95A
14	720179	1	Speed sensor	74420-94
15	-	-	Dipstick cover	
16	710491	1*	O-ring, Athena	
17	238313	1*	0-ring, James	62673-90
18	700200	1*	Gasket, Athena	26072-90A
	740426	1*	Gasket, James	
19	720167	2	Drain plug kit	60348-65B
20	720175	1	Fitting elbow	63554-90
<u>21</u>	720174	1	Roll pin	631
	234572	1	Roll pin, dealer 25-pack	631





## TRANSMISSION TOP COVER FOR 1987 THRU 2006 BIG TWINS

Beautifully chrome plated die-cast top covers for 5 Speed transmissions as used on most 1987 thru 2006 Big Twin models. **302091** Fits 1987-1997 Softail,

1987-1994 FXR and 1987-1998 Touring (OEM 34468-86A)

**302230** Fits 1998-1999 Softail and 1998-2000 Touring (OEM 34468-98A chrome, 34464-98 polished, 34519-98 black, 34777-99 silver)

**302102** Fits 2000-2006 Softail and 2001-2006 Touring (0EM 34541-00). Also replaces polished cover 0EM 34549-01

**396010** Gasket for ZPN 302102 (0EM 34904-86D)





## ROLAND SANDS DESIGN TRANSMISSION TOP COVERS

Designed as an billet aluminum upgrade of the stock transmission top cover on 2000 thru 2006 Softails and 2001 thru 2006 FLH and FLT series models. Matching derby covers, inspection covers, points covers and rocker box covers can be found elsewhere in this catalog.

**751994** Black anodized Contrast Cut





#### **ZODIAC'S 5 SPEED BIG TWIN** TRANSMISSION GEARS & SHAFTS SET

High quality transmission gears and shafts set features 1994-2006 style "Low Noise" gears made from High Stress 20CrMnT gear steel. Gears and shafts are tempered and stress released to a core hardness of 35 to 45 Rockwell and a surface hardness of 58 to 60 Rockwell. All gears are lapped after hardening for a smooth tooth surface that guarantees a noiseless and trouble free transmission for many, many miles. Kit contains all gears, gear needle bearings, gear thrust washers, gear retaining rings, trapdoor side nuts, main shaft and counter shaft.

#### Fits 1990-2006 Touring, 1990-1994 FXR, 1990-2006 Softail and 1991-2005 Dyna

237075 Complete gears & shafts set



#### TRANSMISSION MOUNTING PLATES **FOR SOFTAIL MODELS**

An exact reproduction of the 5 Speed transmission mounting plate as used on all 5 Speed Softail models from 1987 thru 1999 (OEM 47698-86B). Will also fit our Wide-Tail Softail frame.

032418 Transmission mounting plate, chrome

734059 Transmission mounting plate, raw steel



#### SPEEDOMETER BLOCK OFF KITS

Made by James Gaskets from metal inserted black neoprene to plug off the speedometer cable or sensor hole in Big Twin 4 or 5-speed transmission. Plugs come complete with stainless steel screw and washer.

231674 Fits all Big Twin 4-speed transmissions 231675 Fits all Big Twin 5-speed

transmissions



HELMETS LUGGAGI

03 EXHAUST

04 ELECTRIC & LIGHT

ENGINE ELECTRICS

06 Intake

FNGINE

10 FINAL DRIVE

WHEELS &

12 Brake

14 HANDLEBAR

FRONT

FENDER & STRUTS

GAS TANK 8

FASTENERS

OIL, CHEMICAL

ALPHABETICAL

#### **TRANSMISSION BEARINGS FOR 5 SPEED BIG TWIN MODELS**

High quality replacement bearings for 5 Speed transmissions.

gear fits 1991 thru 2006 (OEM35051-89)

counter shaft, fits 1980 thru

present (OEM 8992A)

239902 Ball bearing transmission case

1980-2006, USA (OEM 8977)

present (OEM 8876A)

239907 Needle bearing shifter cam

239908 Needle bearing shifter cam support blocks right side, fits

234354 Inner race main shaft support bearing 1984 thru early 1985 Big Twin models

Big Twin models (OEM 9135)



## Colony

#### STUDS FOR SOFTAIL TRANSMISSION HOUSING

High grade steel replacement studs for all 4 and 5 Speed transmissions from 1984 thru 1999. Sold in packs of 5.

234537 3/8" UNF X 7/16" UNC, 1.30" long (OEM 11733A)



#### **MAIN & COUNTER SHAFT SPACER FOR 5 SPEED MODELS**

JIMS

American made transmission main and counter shaft spacer. Spacers fit between the transmission door and main or counter shaft 4th gear. This mainshaft spacer has a shoulder, the counter shaft spacer does not. Fits 5 Speed Big Twin transmissions 1980 thru 2006. Sold in 5 packs.

234148 Main shaft spacer (OEM 35064-79) 234197 Counter shaft spacer (OEM 35629-79)



#### **BUILDERS KITS**

build a transmission using your own stock Evolution-style transmission housing and covers. The Offset Builders Kits include all parts needed to offset the primary for a wider than stock swingarm.

701948 Transmission builders kit, 1990-1997 Touring, 1990-1994 FXR, 1991-1997 Dyna, 1990-1997

**701981** Transmission builders kit, 1998 Touring, 1998 Dyna, 1998

700948 Transmission builders kit, 25mm offset

45mm offset

701959 Transmission builders kit, 55mm offset



# Colony

#### **COLONY SOFTAIL TRANSMISSION** MOUNT KITS

Complete transmission mounting hardware kits are a faithful reproduction of the OEM bolts, nuts, washers and other items. Kits do not include studs.

Fits 1986-1999 Softail **781281** Chrome 781282 Zinc plated



## **MAIN SHAFT & COUNTER SHAFT JAM**

American made jam nuts to secure the main shaft and the counter shaft to the bearing.

Fits 5 and 6 speed Big Twin transmissions 1980-2009, May also be used for master cylinder and shock mounting on 1987-2003 Sportster models.

234198 Jam nuts, 3/4-16 UNF, 2 pack, Jims USA (0EM 35078-79)

Fits 6 speed transmissions on 2010-2017 Twin Cam and 2017 to present Milwaukee Eight **758415** Jam nuts, 2 pack (0EM 7340)

www.zodiac.nl



These Builders Kits contain all parts to

Softail, no offset

Softail, no offset

701941 Transmission builders kit,



OT

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#### JIMS MAIN DRIVE GEAR RETAINING RING

This retaining ring retains the main drive gear bearing in early style 5 Speed Big Twin transmission cases 1980 to early 1984. Sold in a pack of 10 (0EM 11057).

233049 Main drive gear Retaining rings



## JIMS

#### JIMS TRAP DOOR RETAINING RING

These American made retaining rings are sold in 10 packs. Use on 5 Speed Big Twin transmission 1980 to present and Sportster & Buell 1991 to present.

233048 Retaining ring, 10 pack (OEM 11020)



## JIMS

#### MAIN DRIVE GEAR RETAINING RING **FOR 5 SPEED BIG TWIN**

Retains main drive gear bearing in 5 Speed transmission case. USA made and fits 1980 to present Big Twin, sold each.

710308 Retaining ring



#### ADJUSTING ARM SCREW LOCK NUT

Lock nut to lock the adjusting screw after gear adjustment is set, fits 1980 to present 5 Speed Big Twin (OEM7515). Sold in a 10 pack.

234364 Adjusting bolt lock nut





#### SHIFTER CAM SUPPORT BLOCKS

Precision made OEM type shifter cam support blocks. Fits all 5 Speed Big Twins 1979 thru 2000, except 2000 Softail. 237484 Left (OEM 33326-79A)



#### JIMS 5 SPEED BIG TWIN TRANSMISSION GEARS, MAIN **SHAFTS AND COUNTER SHAFTS**

Zodiac offers the complete line of Jims 5 Speed Big Twin transmission gears, main shafts and counter shaft. It took Jims three years to complete the project of manufacturing gears. The process included the selection of material and more importantly, to write the heat treat specifications to insure the longevity of the product. The shifting dog on the gears is all C.N.C. (Computer Numerical Control) milled. The gear tooth itself is a spun gear. They are cut on a Koepfer Gear Hub, with 7 axis C.N.C. control. All the tooling for this project was custom designed. The inspection tooling alone is another C.N.C. Koepfer. This Koepfer checks the profile, lead, pitch measuring and run out. After all this was completed, Jims proceeded with vigorous testing and more lab work. Needless to say, that this was a big job. Available are several gears for 5 Speed Big Twin from 1980 thru 2006 as well as main shafts and counter shafts for the same models.



#### THRUST WASHER FOR 5 SPEED GEAR **BOXES**

Thrust washer for all 5 Speed Big Twin models 1980 thru 2006 and 5 Speed Sportster 1991 to present. Washers are .070" (1.78mm) thick for the best end play control.

234146 Thrust washer, Jims, 5 pack (OEM 6003)

234581 Thrust washer, Eastern, 5 pack (OEM 6003)



#### **CHROME BILLET SPEED SENSOR** COVER

ZODIAS 2 YEARS WARRANTY

Chrome plated billet aluminum cover to cover the black plastic speed sensor of the transmission. Fits 1995 to present Sportsters, all 1994 thru 1999 Evolution Big Twins and 1999 to present Twin Cams. 169228 Chrome speed sensor cove



#### **1ST. GEAR MAIN SHAFT**

JIMS

Ramping has been machined in, for cleaner and more positive shifting (OEM 35025-79B).

234043 1st Gear main, Jims



#### MAIN SHAFT AND COUNTER SHAFT **RETAINING RINGS**

Precision made retaining rings, used to keep the gears in place on the bearings.

#### Fits 5-Speed Big Twin transmissions 1980-2006 and **Sportster 5-Speed transmissions** 1991 to present

234094 Retaining ring, Jims USA, 10 pack (0EM 11067)

238674 Retaining ring, Eastern USA, 10-pack (OEM 11067)





## ZODIAS 2 YEARS WARRANTY

### TRANSMISSION RATCHET ASSEMBLY

direct replacement transmission shifter assembly. Provides swift sure shifting. Fits 5 Speed Big Twin transmissions in 1986-1999 Softail and FXR, 1991-2001 Dyna and 1986-2000 Touring. Includes shifter (OEM 34084-86A), pawl (OEM 35086-79), springs (OEM 34087-79A & 34083-79), centering plate (OEM 35068-79), pin (OEM 34082-79) and washer (OEM 6016), and retaining ring (OEM 11016).

292308 Transmission ratchet assembly, Genuine Zodiac, 2 Year Warranty

789396 Transmission ratchet assembly, V-Twin Mfg.



## SHIFTER ARM ADJUSTING SCREW

High quality replacement shifter arm adjusting screw for 1980-2006 5 Speed Big Twins. Also fits Screamin' Eagle and aftermarket 6-speed transmission for 1980-2006 models.

144731 Ratchet adjusting bolt, Genuine Zodiac (OEM 33119-79A)

789392 Ratchet adjusting bolt, V-Twin Mfg. (0EM 33119-79A)



# JIMS

#### **1ST. GEAR COUNTER SHAFT**

Ramping has been machined in, for cleaner and more positive shifting (OEM 35622-79C).

234047 1st Gear counter, Jims



#### **JIMS MAINSHAFT AND COUNTERSHAFT SPACER**

Mainshaft and countershaft spacer for 5 Speed Big Twins from 1980 thru 2006. Used between the ball bearing and the lock jam nuts. Sold in packs of 10 (OEM 35076-79).

234147 Spacer, 10 pack







#### 2ND. GEAR MAIN SHAFT AND THIRD **GEAR COUNTER SHAFT**

Use transmission two (OEM 35026-79C).

234044 2nd. Gear main shaft & 3rd. gear counter shaft



#### JIMS **3RD. GEAR MAIN SHAFT & SECOND GEAR COUNTER SHAFT**

Use transmission two per (OEM 35027-79B).

234045 3rd. Gear main shaft & 2nd. gear counter shaft





## **4TH. GEAR MAIN SHAFT**

Ramping has been machined in, for cleaner and more positive shifting (OEM 35028-79B).

234046 4th. Gear main shaft





## 4TH. GEAR COUNTER SHAFT

perfect replacement (OEM 35625-79B).

234042 4th Gear counter, Jims

gear



#### JIMS MAIN DRIVE GEAR, FIFTH GEAR **MAIN SHAFT**

Comes with American made bearing and seal installed, thus ready to go.



234578 Chain driven Big Twins 1979-1984 (OEM 35028-79)



234088 Big Twin 1985-1990 (OEM35029-85A). Must be used in combination with a main shaft that has a bearing diameter of 1.000".



234089 Big Twin 1991-2006 (OEM35029-91A). Must be used in combination with a 1991 to present main shaft that has bearing diameter of 25mm (0.9845")



#### **5TH. GEAR COUNTER SHAFT**

For use on Big Twin models 1980 thru 2006 with 5 Speed transmission (OEM 35626-79B).

234041 5th Gear counter, Jims



## JIMS

#### JIMS 5 SPEED MAIN SHAFTS

Available in three models to cover all 5 Speed Big Twin models from 1980 to present.

234090 [A.]Fits 1980 thru 1984, bearing diameter 1.000' (OEM 35042-79)

234091 [B.]Fits 1985 thru 1989, bearing diameter 1.000' (OEM 35042-85)

234092 [C.]Fits 1991 thru 2006, bearing diameter is .9845" (OEM 35042-91), must be used with 1991 thru 2006 main drive gear

5 Speed counter shaft Fits Big Twin models 1980 thru

234093 [D.] Counter shaft, Jims

stock replacement for the 17 tooth gear as found on 1980 thru 1993 5-speed Big Twin models.

EXHAUST

05 ENGINE ELECTRICS

06 INTAKE

07 FNGINE

TRANSMISSION

10 FINAL DRIVE

WHEELS &

14 Handlebar

FENDER & STRUTS

GAS TANK

OIL TANK, FILTER

FASTENERS

21 MIRROR

**22** Windshield

396021 Countershaft 5th gear (OEM 35626-79B)



#### **5 SPEED SHIFTER CAM BIG TWIN** Precision made replacement shifter cams.

Fits 1980 thru 1997 models, as well as most aftermarket transmissions 237895 Shifter drum, Genuine Zodiac (OEM OEM 33320-79A thru D)

Fits 1998-2000 Touring, 1998-2000 Dyna and 1998-1999 Softail

758576 Shifter drum, V-Twin Mfg. (OEM 33320-98)



#### JIMS 1ST. GEAR CLOSE RATIO SET

Makes first gear higher for lighter bikes and high performance motors, for more miles per hour in first gear. Ramping has been machined in, for cleaner and more positive shifting. This 2 piece gear set replaces both the first gear main shaft (OEM 35025-CR) as well as the as first gear counter shaft (OEM 35622-CR).

234048 Close ratio first gear set



## **5 SPEED SHIFTER FORKS 1980 THRU**

Precision made replacement shifter forks. Meets factory standards.

237900 Shifter fork 1st. & 2nd., Eastern USA (OEM 34191-79C thru E) 781116 Shifter fork 1st. & 2nd., V-Twin

Mfg. (0EM 34191-79C thru E)

USA (OEM 34193-79C thru E) 781117 Shifter fork 3rd. & 5th., V-Twin

237899 Shifter fork 4th., Eastern USA (0EM 34195-79C thru E)

781118 Shifter fork 4th., V-Twin Mfg. (OEM 34195-79C thru E)

781119 Set with all 3 shifter forks, V-Twin Mfg.





#### **ZODIAC COUNTERSHAFT 5TH GEAR FOR 1980 THRU 1993 BIG TWIN**

Zodiac transmission parts last longer, shift better and just plain run better. Made from stronger-than-stock alloy steel and machined to perfection within OEM specifications for a perfect fit and long wear. This countershaft 5th gear is



OIL, CHEMICAL

ALPHABETICAL

www.zodiac.nl 09-033

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#### ANDREWS 5 SPEED TRANSMISSION **GEARS FOR BIG TWINS**

The 5 Speed gear box has actually been around for a few years but the growing number of modifications has created a lot more interest in it. In addition to close ratio first gears, Andrews Products also makes replacement gears for 2nd., 3rd., 4th. and 5th. gear sets. As with the close first gears, all 5 Speed gears are made from high nickel alloy and heat treated and shot-peened to give maximum durability and strength. Also, where applicable, lead-in ramps have been machined into most gears to improve shifting and reduce wear on drive dogs and drive slots.

Note: If these gears are installed in 1994-2006 models, gears must installed in pairs (mainshaft & countershaft gear).





STOCK RATIO FIRST GEAR SET These 3.24 stock ratio gears fit 5 speed Big Twins 1980 thru 2006. Made from high nickel steel to insure the best quality. 232456 First gear mainshaft, 18 tooth

(OEM 32025-79B)

232457 First gear countershaft, 31 tooth (OEM 35622-79C)





**STOCK 4TH. GEARS** High nickel steel gears that feature lead-in ramps and shot peening.

234704 4th. Main-shaft gear (OEM 35028-79B)

234703 4th. Counter-shaft gear 1987 to present also replaces the gear and spacer used in all earlier 5 Speed transmissions (OEM 35625-79A)





STOCK MAIN DRIVE GEARS FOR **CHAIN DRIVE** High nickel steel parts with main-shaft gears made as one

piece for maximum strength. Main drive gear also haslead-in ramps for quick positive shifting. 234706 Main-shaft drive gear

STOCK MAIN DRIVE GEARS FOR BELT

maximum strength. Main drive

gears also have lead-in ramps for quick positive shifting.

234707 Main-shaft drive gear 1985 thru

1990 (OEM 35029-85)

234708 Main-shaft drive gear 1991 thru

2006 (OEM 35029-91A)

234705 Counter shaft drive gear

(OEM 35626-79B)

**DRIVE BIG TWINS** 

High nickel steel parts for

(OEM 35029-79)

234705 Counter shaft drive gear (OEM 35626-79B)



2.94 CLOSE RATIO 1ST. GEAR SET This 1st. gears provide true close ratio shifting into 2nd. At peak RPM, these gears add 5 MPH of usable speed to the 1st. gear. 234700 Andrews 1st gear set





STOCK 2ND. AND 3RD. GEARS High nickel steel parts with lead-in ramps for quicker, more positive shifting. All drive edges are shot peened for greater wear resistance.

234701 2nd. Main-shaft and 3rd counter-shaft gear (OEM 35026-79C)

234702 3rd. Main-shaft and 2nd counter-shaft gear (OEM 35027-79B)



#### **ANDREWS MAIN AND COUNTER SHAFTS FOR 5 SPEED BIG TWIN TRANSMISSIONS**

Replacement transmission main and counter shafts, made from high nickel steel with aircraft quality heat treatments.

234733 [A.] Counter shaft, fits all models 1984 to present (OEM 35632-79)

234729 [B.] Main shaft, fits 1981 thru 1984 models (OEM 35042-79) 234731 [C.] Main shaft, fits 1990 models

only (OEM 35042-90) 234730 [D.] Main shaft, fits 1985 thru

1989 models (OEM 35042-85)

234732 [E.] Main shaft, fits 1991 to present models (OEM 35042-



#### **CHROME PLATED TRANSMISSION** DIPSTICK

Comes complete with seal washer. Fits all 5 Speed transmissions in 1987 thru 1999 Big Twin and 1999 thru 2006 Twin Cam, except 2006 Dyna.

**741796** USA made by Colony (OEM 37075-87) 323034 Genuine Zodiac (OEM 37075-87)



#### **CUSTOM TRANSMISSION DIPSTICK**

Genuine Zodiac part with top quality show chrome finish. Features a knurled top to allow you to remove it from the transmission housing without tools.

323031 Fits 1987 thru 1999 Big Twin and all 1999 thru 2005 Dyna, 1999 thru 2006 Touring and 2000 thru 2006 Softail

323030 Fits 2006 thru 2017 Dyna, 2007 thru 2017 Softail and 2007 thru 2016 Touring



## **DIPSTICK FOR BIG TWIN MODELS**

Here's a dress-up item that lets you easily check your transmission oil level and adds a distinctive custom detail at the same time. A threaded dipstick is built into the transmission filler plug. Comes complete with 0-rings.

Fits Big Twin 5 Speed transmissions from 1980-1986 323003 Black dipstick top 323004 Blue dipstick top



Fits Big Twin 5 Speed transmission 1987 thru 2006 323010 All Chrome finished 323011 All clear anodized 323013 Black filler cap



## ZODIAS 2 YEARS WARRANTY **CHROME PLATED 6-SPEED**

TRANSMISSION DIPSTICK

Genuine Zodiac stock replacement. Has a top-quality chrome plated finish. Comes complete with seal washer. Fits 2006 thru 2017 Dyna, 2007 thru 2017 Softail and 2007 thru 2016 Touring.

**323033** Chrome plated transmission dipstick (OEM 37065-06)



Gear	Close	Chang	je Stock	Change
1st.	2.94	-	3.25	-
2nd.	2.21	25%	2.21	32%
3rd.	1.60	27%	1.60	27%
4th.	1.23	23%	1.23	23%
5th.	1.00	19%	1.00	19%



#### **JIMS 5 SPEED TRANSMISSION MASTER REBUILD KITS**

Complete rebuild kits for the 5 Speed Big Twin transmissions from 1980 thru 2006. We've combined Jim's top quality transmission parts with a James' gasket and seal kit to offer the best rebuilds kit possible. Each kit includes spacers, bearings, retaining rings, lock nuts, thrust washers, key and all necessary seals and gaskets to do the job.

239483 Fits 1980 thru early 1984 239484 Fits late 1984 thru 1990 239485 Fits 1991 thru 1999 741901 Fits 1999 thru 2006

operated clutch actuator requires an 11/16" bore master cylinder. We have OEM style and Custom Style clutch master cylinders available, check out our Handlebar Controls

**Note:** 2000 and later models require some extra parts for the conversion that must be ordered separately. These parts are available in a kit as well as individually.

#### **RSD Transmission conversion kits**

701804 For up to 300 rear tire **701802** For up to 330 rear tire

#### **RSD Transmission builders kits**

**701806** For up to 300 rear tire **701803** For up to 330 rear tire

#### Additional parts kit for 2000-up models

Complete kit, includes ZPN292308 Ratchet assembly, ZPN144731 Ratchet adjusting bolt, ZPN234364 Adjusting bolt lock nut, ZPN302230 Top cover, ZPN231520 Neutral switch, ZPN720153 Shifter shaft bushing/spacer. 701809 Additional kit for 2000 up Softail models

#### Clutch actuator/pulley covers

720375 RSD Pulley cover with cable operated clutch actuator, chrome 744129 RSD hydraulic operated clutch actuator/pulley cover, chrome **723470** RSD hydraulic operated clutch actuator/pulley cover, black



#### **ZODIAC'S 5-SPEED RIGHT SIDE DRIVE CONVERSION KITS**

The, what seems unlimited, growth of rear tire width has driven the Custom Bike Builders to the "Outer Limits" of offsetting primary drives in existing frames. The 55mm offset kit is really the limit of what is possible. To keep the balance in a bike that is converted to accept the 330 tire, it is better to leave the primary in its original position and move the final drive over to the right side. To date this required a complete Right Side Drive transmission, making the conversion quite expensive. When Zodiac started to develop a conversion kit to allow the use of 330 wide rear tire in a stock Twin Cam Softail frame they also looked for a more cost-effective solution. We came up with two solutions, the RSD conversion kit, that re-uses as many stock parts as possible, and the RSD builder's kit. The conversion kit just includes the parts that are needed to convert your stock 1994 or later transmission into a RSD transmission. Included are a main shaft, counter shaft with integrated fifth gear for improved strength, shifter drum and shifter forks, plus a new trap door that gives room for the main drive gear. We have completed the kit with the required hardware, new seals and gaskets and there it is, "The most economic Right Side Drive Conversion Kit". As we are aware that some people do not want to rebuild their transmission we also have a complete and ready to install "Transmission Builders Kit" available. Builder's kits have 1994 to present style "Low Noise" gears installed on the shafts and trap door. RSD transmission conversion kits are available for use up to 330 wide rear tires and can be used in stock and aftermarket transmission housings of the Evolution Softail, Evolution Dyna, Evolution FLH/FLT, Twin Cam Softail, Twin Cam Dyna and Twin Cam FLH/FLT. Kits come complete with a special transmission pulley. All RSD conversion and builders kits use a special RSD clutch actuator/pulley cover, which is separately available. Clutch actuators are available in hydraulic or cable operated. The cable operated clutch actuator works with stock Big Twin clutch cable, the hydraulic



#### TPD RIGHT SIDE DRIVE TRANSMISSION SUPPORTS

www.zodiac.nl

To avoid unwanted load on the cast transmission housing, the transmission trap door on TPD Right Side Drive conversions and complete transmissions is designed in such a way it can also be supported by the swing arm pivot. These support brackets are included in our PSD wide tire conversion kits. For those who order just a RSD transmission conversion our RSD wide tire conversion kits. For those who order just a RSD transmission conversion or complete RSD transmission we have these support kits separately available. The support bracket for Evolution Softail style frames must be welded in place, the support bracket for Twin Cam Softail style frames bolts to the swing arm pivot. Kits include raw steel brackets and hardware.

## RSD support kit for TPD transmissions and TPD conversion kits

**722577** RSD frame support kit, fits 1989 thru 1999 Softail and Softail style frames 722578 RSD frame support kit, fits 2000 thru 2006 Softail and Softail style frames

09-035

EXHAUST

05 ENGINE ELECTRICS

06 Intake

FNGINE

TRANSMISSION

FINAL DRIVE

WHEELS

14 Handlebar

FENDER & STRUTS

GAS TANK 8

FASTENERS

OIL, CHEMICAL

ALPHABETICAL



#### **ZODIAC'S 6 SPEED CONVERSION FOR SOFTAIL AND DYNA 5 SPEED TRANSMISSIONS**

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The biggest disadvantage of the stock 5 Speed transmission might be the 1 to 1 gear ratio in fifth gear, resulting in high engine RPM when cruising at high speed. O.K, you can reduce this by changing the final drive ratio, but this will also reduce acceleration. With the new Zodiac Six speed you will have the 1 to 1 gear ratio in 5th gear but 1 to 0, 86 ratio in 6th, reducing engine speed with as much as 14%. There are other 6 Speed conversions on the market, but not as economically priced nor have the quality in engineering and CAD/CAM design as the Zodiac Six. These precision parts are CNC manufactured by one of the worlds leading automotive transmission factories. All gears have a smooth tooth surface that guarantees a noiseless and trouble free transmission for tens of thousands of miles.

The Zodiac Six fits all 5 Speed Dyna transmissions from 1991 thru 1998, and Softail transmissions from 1986 thru 2006 when used in combination with a 1990 to present clutch. Available as a conversion kit, a builders kit and as a complete transmission. The Conversion Kit contains main shaft, counter shaft and 6th gear combination, shifter drum, a pair of pillow blocks, complete shifter drum lock mechanism, right hand side center shifter fork, auxiliary shifter fork with shift axle and shifter shaft support, shift locking system, clutch rod, Billet aluminum trap door with bearing lock plate, main shaft 1st, 3rd, 4th and 6th gear, counter shaft 1st, 3rd, and 4th gear, trap door speedo plug with 0-ring, and all required hardware, as well as comprehensive instructions how to install the Overdrive Conversion Kit into a Softail transmission, re-using some parts of your own transmission. When you do not want to re-use these parts or when you have a pre-1990 transmission you may want to order one of our Builders Kits. Builder's kits are also available in 25, 45mm or 55mm offset. The offset kits come complete with all parts to offset the primary, such as spacers, crankshaft extension and crankshaft extension nut. Except for the transmission housing with seals and bearing, the end cover with clutch mechanism, the top cover nor any part bolted to the outside, the builders kit contains all parts to build a complete new transmission. For those starting from scratch we also have complete and ready-to-install 6 Speed transmissions available. These can be used with or without electronic speedo pick up as they come with a billet aluminum plug to plug off the pick up hole in the trap door when using a front or rear wheel driven speedo.

#### What the difference is:

- Gears from 1st thru 5th speed are exactly the same width as stock gears
- Gears and shafts made from High Stress 20CrMnT gear steel
- Gears and shafts tempered and stress released to a core hardness of 35 to 45 Rockwell and a surface hardness of 58 to 60 Rockwell
- Six speed counter shaft gear is a one-piece construction with the shaft
- Fat Billet Aluminum trap door that enables the installation of the extra pair of gears
- Precision machined shifter drum with oversized needle bearing
- State of the art shift locking mechanism for precise and positive shifting
- Un-compromised price to quality ratio
- Also available with 25mm, 45mm or 55mm extended main shaft for offset applications
- 5 year or 100, 000 KM warranty on material failure

#### All gaskets, seals, and o-rings are the same as for stock 5 Speed transmissions

6 Speed conversion kit, fits 1994-2006 Softail and 1994-1998 Dyna

700852 Six Speed Conversion Kit

700943 Six Speed Conversion kit complete with 45mm primary offset kit

6 Speed Builders kit, fits 1990-2006 Softail and 1991-1998 Dyna. Offset kits include all required primary offset parts

700853 6 Speed kit 26

700946 6 Speed kit with 25mm offset

700947 6 Speed kit with 45mm offset 701843 6 Speed kit with 55mm offset

Note 1: 2000 and later Softail models require some extra parts for the conversion that must be ordered separately. These parts are available in a kit as well as individually.

Note 2: Must be used with an electronic speedometer adjuster/calibrator when used with an OEM or other non-adjustable electronic speedo.

#### Additional kit for 2000-up Softail 6 Speed conversion kit

701809 Additional kit for 2000 up Softail models

#### Individual parts for additional kit for 2000 up 6 Speed conversion kit

292308 Transmission ratchet assembly, Genuine Zodiac, 2 Year Warranty

144731 Ratchet adjusting bolt, Genuine Zodiac (OEM 33119-79A)

789392 Ratchet adjusting bolt, V-Twin Mfg. (OEM 33119-79A)

234364 Adjusting bolt lock nut

**302230** Top Cover

231520 Neutral switch

**720153** Spacer

#### **Individual parts for Zodiac 6 Speed transmissions**

700813 Main shaft

700932 25mm Extended main shaft

700933 45mm Extended main shaft

701132 55mm Extended main shaft

700816 Main shaft 1st gear

**237068** 1st. Gear main shaft (OEM 35025-79B)

700818 Main shaft 3rd gear

700817 Main shaft 4th gear

237070 Main shaft 5th gear (OEM 35029-94)
700839 25mm Extended main shaft 5th gear. Also used for 45mm offset kits in conjunction with a 3/4" offset drive pulley

701131 55mm Extended main shaft 5th gear

193036 3/4" offset 32 tooth drive pulley

396003 25mm Extended pulley spacer

701139 55mm extended pulley spacer

700815 6th gear main shaft

700814 Counter shaft with integrated 6th gear

700819 1st gear counter shaft

237072 2nd Gear counter shaft (OEM 35027-94)

700821 Counter shaft 3rd gear

700820 Counter shaft 4th gear **237074** Counter shaft 5th Gear (OEM 35626-94)

700829 Shim, main shaft right side

239905 Split cage needle bearing main & counter

234094 Retaining ring, Jims USA, 10 pack (0EM 11067)

239900 Needle bearing main drive gear

724336 Main drive seal (0EM 12035B)

022331 Main drive seal, 10-pack (OEM 12035B)

234146 Thrust washer, Jims, 5 pack (0EM 6003)

**234581** Thrust washer, Eastern, 5 pack (OEM 6003)

**735020** Trapdoor with bearings & bearing plate

735021 Trap door bearing plate

**700823** Trap door bearing plate screw, each (2 required)

700998 Replacement bearing (each) (OEM8992A)

239901 Bearing, mainshaft left (OEM 8998)

**720178** Trap door pipe plug (OEM 739A)

700822 Plug for speed sensor hole

700824 O-ring for speed sensor hole plug

735022 Auxiliary shifter shaft support

**700806** Auxiliary shifter shaft axle

700803 Auxiliary shifter fork

700804 Shifter fork

720376 Shifter fork 2nd mainshaft

741767 Shifter fork, Auxiliary shifter fork, Shifter fork 2nd mainshaft & Shifter fork 3rd mainshaft

701278 Shifter drum

701279 Pillow block, left

701280 Pillow block, right

**720177** Dowel pin, right side pillow block

700809 Clutch rod, bearing side

233530 Clutch push rod center (0EM 37088-90)

396001 25mm Extended clutch push rod

700921 45mm extended clutch push rod

701127 Pushrod, 55mm extended

144554 Pushrod bearing kit

**292308** Transmission ratchet assembly, Genuine Zodiac, 2 Year Warranty

720151 Retaining ring, ratchet (0EM 11150) 720176 Washer, ratchet (0EM 6497HW)

235891 Shift fork shaft (OEM 34088-87)

Replacement parts for TPD 6-speed conversion kits supplied before 2004 The first series of our 6-speed conversions have the auxiliary shifter shaft for the 6th gear fitted with two bolts to the inside of the trap door. Listed parts can not be used in late conversion kits.

**700808** Shift locking system with right side pillow block

237484 Pillow block, left

700998 Replacement bearing (each) (0EM8992A)

735021 Trap door bearing plate

237898 Shifter fork 3rd. & 5th., Eastern USA (0EM 34193-79C thru E)

237900 Shifter fork 1st. & 2nd., Eastern USA (0EM 34191-79C thru E)







#### JIMS REBUILD KIT FOR 2006-UP 6-SPEED TRANSMISSIONS

Very complete kits with every bearing, race, retaining ring, nut, lock ring, gasket and seal you need to completely overhaul a late style 6-speed transmission.

736102 Fits 2006-2017 Dyna 736103 Fits 2007 to present Softail

736101 Fits 2007 to present Touring and Trike



#### "LARGE BEARING" TRAP DOOR FOR 5 SPEED & 6 SPEED BIG TWIN **TRANSMISSIONS**

These extra Heavy Duty trap doors are made exclusively for Zodiac. They feature extra large diameter bearings to withstand the extra load that comes with high-torque and high performance engines. Also recommended for sidecar use. Extends transmission gear and bearing life. Trap doors are CNC machined from solid billet aluminum and come with bearings installed. As they are a bolt-on replacement for the OEM trap door, installation does not require any further modification. Available for Big Twin 5 Speed transmission 1988 thru 2006, including Twin Cam models, as well as for Zodiac 6 Speed overdrive transmissions.

735003 Fits 5 Speed Big Twin transmissions 1988-2006

735020 Fits Zodiac 6 Speed transmission

700998 Replacement bearing (each) (OEM8992A)



#### **6 SPEED TRAP DOOR FOR DYNA** MODELS

CNC machined from billet aluminum. Features exhaust mounting hole for easy mounting of Dyna type exhaust systems. Uses OEM style bearings and special bearing mount plate (not included). Fits Zodiac 6 Speed transmissions.

735002 Dyna style trap door for Zodiac 6 Speed transmissions



#### **VENT HOSE BARB FITTING**

OEM style vent hose barb fitting as found on the transmission top cover of most 2006-2017 6-speed Twin Cam.

758413 Straight barb fitting (OEM 62365-06)

#### PARTS FOR OEM 6-SPEED "CRUISE DRIVE" TRANSMISSIONS

Stock replacement parts for the OEM "Cruise Drive" transmissions as used in 2006 to present Dyna, 2007 to present Softail and 2007 to present Touring models.

702001 [A.] Needle bearing main drive gear, 2 needed (OEM 8042)

**701957** [B.] Retaining ring for the main drive gear needle bearing, each (OEM 10991)

701978 [B.] Retaining ring for the main drive gear needle bearing, 10-pack (OEM 10991)

756281 [C.]Trap door bearing, Jims USA, 2 needed, sold each (OEM 8970)

758427 [C.]Trap door bearing, Eastern USA, 2 needed, sold each (OEM 8970)

756313 [C.] Trap door bearing, 2 needed, sold each (OEM 8970A)

756261 [D.]Retaining ring trap door bearing, dealer 10-pack (OEM 35038-99A)

**747138** [E.]Drain plug with 0-ring (OEM 60328-98B)

231778 [F.] Mainshaft bearing (0EM 9231)

**732899** [G.]Main drive dual row gear ball bearing (OEM 8967)

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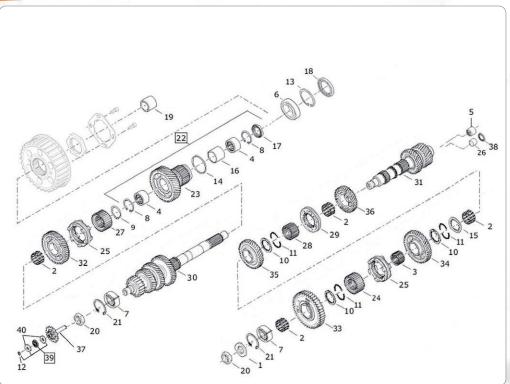
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2006 TO PRESENT 6-SPEED TRANSMISSION GEARS AND SHAFTS
The 6-speed transmission, often refered to as "Cruise Drive" was introduced in 2006 on Dyna models and since 2007 common on all Dyna, Softail, Touring and Trike models. Unless differently indicated parts are sold each. When more than one of each part is used in one transmission required quantities are indicated between parentheses, for example (2).

Application

120				
Pos.	ZPN	0EM	Description	Application
1	-	5837A	Spacer	All
2	758378	8026K	Needle bearing, set of 4	All
3	758414	8041	Needle bearing	All
4	702001	8042A	Needle bearing (2)	All
5	758377	8963	Needle bearing	All
6	732899	8967	Bearing	All
7	756281	8970	Bearing, Jims USA, (2)	All
7	758427	8970	Bearing, Eastern USA, (2)	All
7	756313	8970A	Bearing (2)	All
8	701957	10991A	Retaining ring (2), Midwest USA	All
8	701978	10991A	Retaining ring (2), Midwest USA, 10-pack	All
9	758426	11061	Retaining ring, Midwest USA	2006-2017
9	758379	11061	Retaining ring, Midwest USA, 10-pack	2006-2017
9	758420	12200144	Retaining ring	2018-up
10	758380	11081A	Lock ring, Midwest USA, set of 3	All
11	758381	11082A	Securing segment, Midwest USA, set of 6	All
12	233445	11096	Retaining ring, Bender Cycle, 10-pack	All
13	710308	11161	Retaining ring, Jims USA	All
13	758417	11161	Retaining ring, Eastern USA	All
13	758416	11161	Retaining ring, Eastern USA, 5-pack	All
14	231941	11201	O-ring, Genuine James, 10-pack	All
14	758423	11201	O-ring, Eastern USA, 10-pack	All
15	758382	11207A	Washer, internal spline, Midwest USA, 5 pack	All
15	758527	11207A	Washer, internal spline, Midwest USA	All
16	758383	11599A	Bearing spacer, Midwest USA	All
17	758421	12074	Oil seal, Eastern USA	All
17	231954	12074	Oil seal, Genuine James	All
17	758422	12074	Oil seal, Eastern USA, 5-pack	All
18	758419	12077	Oil seal, Eastern USA	All
18	231957	12077	Oil seal, Genuine James, 5-pack	All
18	758418	12077	Oil seal, Eastern USA, 5-pack	All
19	723106	34091-06	Bearing, inner race, Cruise Speed	2006-2007
19	723107	34091-08	Bearing, inner race, Cruise Speed	2008-up
20	234198	35078-79	Nut, set of 2, Jims USA	2006-2009

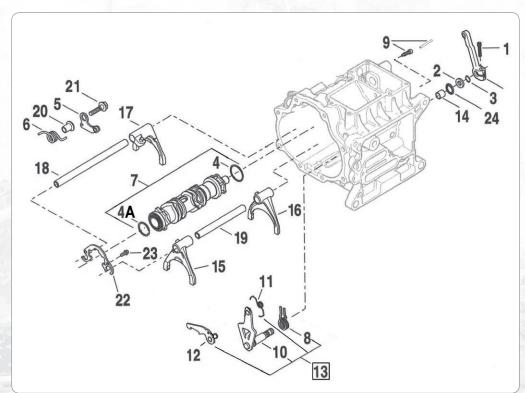
. 03.		V = 111	Description	Application
20	758415	7340	Nut, set of 2	2010-up
21	758425	35087-99A	Retaining ring, Eastern USA (2), each	All
21	756261	35087-99A	Retaining ring, Eastern USA (2), All 10-pack	
22	758525	35122-06A	Gear assembly, driven output	All
23	758394	35123-06	Gear, driven output	All
23	701961	-	Gear, driven output, 25mm extended	All
24	758395	35124-06	Guide hub, dog ring	All
25	758396	35126-06	Dog ring, lugged (2)	All
26	-	35186-06	Sleeve	All
27	758398	35201-06	Guide hub, dog ring	2006-2009
27	758399	35201-10	Guide hub, dog ring	2010-2017
27	758392	35000178	Guide hub, dog ring	2018-up
28	758400	35202-06	Guide hub, dog ring	All
29	758401	35204-06	Dog ring, pocketed	All
30	758406	35467-06C	Input shaft kit with 34091-08, 12200144 and 35000178	All
30	701960	_	Input shaft, 25mm extended	All
31	-	35470-06	Counter shaft assembly	2006-2017
31	758524	35600094	Counter shaft assembly	2018-up
32	758407	35801-06	Fifth input gear	2006-2009
32	758408	35801-10	Fifth input gear	2010-2017
32	758393	35000179	Fifth input gear	2018-up
33	758434	35805-06, 35600103	Countershaft first gear	All
34	758410	35807-06	Countershaft second gear	All
35	758411	35811-06	Countershaft third gear	All
36	758412	35814-06	Countershaft fourth gear	All
37	370186	37069-90	Oil slinger assembly, Genuine Zodiac	Dyna, Softail
37	789425	37069-90	Oil slinger assembly, V-Twin Mfg.	Dyna, Softail
38	027657	37101-84B	Oil seal, Genuine Zodiac	AÍI
38	748849	37101-84B	Oil seal, Cometic	All
38	748850	37101-84B	Oil seal, Cometic, 5-pack	All
38	742457	37101-84B	Oil seal, Genuine James, 5-pack	All
39	144554	37312-75	Bearing kit, Bender Cycle USA	All
40	232160	37313-80	Thrust washer (2), Midwest USA, 5-pack	All

**Description** 

ZPN

Pos.

**OEM** 





# 2006 TO PRESENT 6-SPEED TRANSMISSION SHIFTER PARTS All parts from the shifter mechanism In

the 6-speed transmission as introduced on the 2006 Dyna models and used from 2007 onwards on all Dyna, Softail, Touring and Trike models. Unless differently indicated all parts are sold each. When you need more than one of an item thi is indicated between parenthesis, for example (2).

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Pos.	ZPN	OEM	Description	Application
1	-	856A	Screw, 5/16-24 X 1 socket head,	All
			Grade 8	
2	-	6497HW	Washer	All
3	720151	11150	Retaining ring, Eastern USA	All
3	758424	11150	Retaining ring, Eastern USA,	All
			10-pack	
4	758541	11389	Shift cam retaining ring	All
4	758371	11389	Shift cam retaining ring, 10-pack	All
4A	758542	11575	Shift cam retaining ring	All
4A	758372	11575	Shift cam retaining ring, 10-pack	All
5	-	33387-06	Detent arm	2006 Dyna
5 5 6	-	33409-06B	Detent arm	All 2007-up
	758374	33389-06	Detent spring	All
6	758373	33389-06	Detent spring, 10-pack	All
6	-	33389-07	Detent spring	All
7	-	35228-06	Shift cam	2006 Dyna
7	-	33413-06A	Shift cam	2007-2016
7	-	33900172	Shift cam	2017-up
8	758428	34064-00C	1 3,	All
•	751013	24064 006	Eastern USA	All
8	751013	34064-00C		All
_	754046	24162.02	Eastern USA, 10-pack	2006 D
9	751016	34163-02	Pin, shift stop	2006 Dyna
9	-	35082-07	Centering screw	All 2007-up
10	-	34980-06	Ratchet only	All
11	-	34987-06	Ratchet lever spring	All
12	-	34991-06	Ratchet arm only	All
13	758375	35081-06	Shift mechanism, with	All
			34064-00C, 34980-06, 34987-06, & 34991-06	

Pos.	ZPN	OEM	Description	Application	WHEELS & -
14	-	35186-06	Sleeve	All	W 1000
15	758397	35187-06	Shift fork, 1-2	All	12
16	758402	35210-06	Shift fork, 3-4	All	BRAKE
17	758403	35217-06	Shift fork, 5-6	All	
18	758404	35222-06	Shift fork shaft, 5-6	All	13
19	758405	35223-06	Shift fork shaft 1-2 & 3-4	All	FOOT - CONTROL
20	-	35243-06	Sleeve	All	
21	-	35244-06	Screw, detent	All	14
21 22	758376	35249-06	Shift cam lock plate	All	HANDLEBAR "
23	-	35259-06	Screw, shift drum support (2)	All	1-0
24	027657	37101-84B, 11000101	Oil seal, Genuine Zodiac	All	15 FRONT - SUSPENSION
24	748849		Oil seal, Cometic	All	16
24	748850		Oil seal, Cometic, 5-pack	All	CHASSIS/ FRAME & SHOCKS
24	742457		Oil seal, Genuine James, 5-pack	All	17 FENDER - & STRUTS
25	758532	33849-97	Shifter lever, chrome	All 2006-2016, 2017 Dyna, 2017 Softail	18 Gas tank & - Instrument
25	-	33900175	Shifter lever	2017-up Touring & Trike, 2018-up Softail	01L TANK, FILTER - & LINE -

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#### **ARLEN NESS**

#### ARLEN NESS 10-GAUGE TRANSMISSION TOP COVER

Made from 6061-T6 Forged Billet Aluminum. Fits 2006 to present Dyna, 2007 to present Softail and 2007 to present Touring.

**A03852** Chrome **A03853** Black

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## 2 YEARS WARRANTY

### TRANSMISSION TOP COVER FOR 6-SPEED

Perfect reproduction of the OEM transmission top cover as fitted on all 2006 thru 2017 Dyna's, all 2007 thru 2017 Softails and all 2007 thru 2016 Touring models. Available in chrome plated or with a perfect black finish. Replaces OEM 34469-06B, 34521-06B, 34528-06B & 37143-07A.

**302224** Chrome **302225** Black



#### **KEN'S FACTORY TRANSMISSION TOP COVER**

Billet aluminum transmission top covers, CNC machined in Japan by Ken's Factory. Available in a polished or black anodized finish with clear accents. Bolt-on for all 2006 Dyna, 2007 thru 2017 Softail and 20017 thru 2016 Touring. Fitment on 2006 thru 2008 models will require the use of a 2009 to present vent rubber.

**747355** Polished

**747356** Black anodized with clear accents



## ZODIAC'S REBUILD KIT FOR 2006UP TWIN CAM & MILWAUKEE EIGHT TRANSMISSIONS

Very complete kit with every bearing, race, retaining ring, nut and lock ring you need to completely overhaul a late style 6-speed transmission. Just order the gasket & seal kit for your year and model separately.

758526 Transmission rebuild kit

#### **Gasket & seal kits**

**742443** Fits 2006-2017 Dyna & 2007-2017 Softail, Genuine James **742444** Fits 2007-2016 Touring & 2009-2016 Trike, Genuine James **748821** Fits 2007-2016 Touring & 2009-2016 Trike, Cometic



#### PM TRANSMISSION TOP COVERS

Billet aluminum top transmission covers made by Performance Machine in the USA are a direct replacement for the stock cover. Beautiful chrome plated or Black Contrast Cut, which shows machined bare aluminum accents. When you want these accents polished you order the Platinum Cut version. Black OPS is a gloss black on top of a contrasting textured black that is a perfect match with Harley's black wrinkle finish found on engines and transmissions.

### Fits 2006 thru 2017 Dyna, 2007 thru 2017 Softail and 2007 thru 2016 Touring models

752332 Scallop design, Chrome

752333 Scallop design, Black Contrast Cut

752335 Scallop design, Black Platinum Cut

752334 Scallop design, Black OPS



757076 Formula design, Black Contrast Cut





757255 Formula design, Chrome 757254 Formula design, Black Contrast Cut





#### **PM DRIVELINE TRANSMISSION COVER**

Another great product to add to Performance Machine's Driveline series covers. Contrast Cut is black with raw machined parts, Platinum Cut is black with polished machined parts. Black OPS is a mix of gloss and textured black which compliments the OEM black finish of your engine and transmission.

### Fits 2007 to present Softail, 2007 to present Touring and 2006 to present **Dyna 756876** Contrast Cut

756877 Patinum Cut

**756878** Chrome

756879 Black OPS (Gloss/textured black mix)

### Fits 2000 thru 2006 Softail and 2001 thru 2006 Touring

756880 Contrast Cut





#### RSD TRANSMISSION TOP COVER

Roland Sands designed these covers with his signature radius ribbing as a direct replacement for the stock top transmission cover on 2006 thru 2017 Dyna, 2007 thru 2017 Softail and 2007 thru 2016 Touring models. Billet aluminum with black or chrome finish, all featuring a laser etched RSD logo. Covers come complete with chrome hardware and gasket.

740913 Black 740914 Chrome HELMETS LUGGAGE

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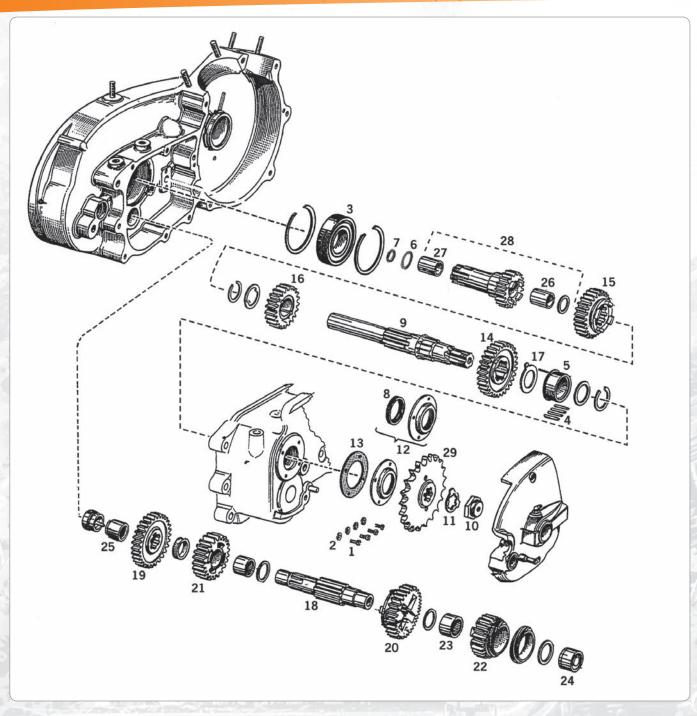
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**TRANSMISSION PARTS FOR 4-SPEED SPORTSTER**Transmission parts for 4-speed Sportsters from 1954 thru 1990. Zodiac gears and shaft are made from top quality alloy steel, machined with perfection within OEM specifications for a perfect fit, long wear and are stronger than stock. Andrews gears and shafts are shot peened for maximum durability.

Quantities marked with \* are sold to dealers in 5, 10 or 25-packs

### TRANSMISSION PARTS FOR 4 SPEED SPORTSTER TRANSMISSION

	ZPN	Description	Qty.	OEM
1.	231828	Lock plate screw, fits 1961 thru early 1984	4*	2660
2.	723064	Lockwasher, fits 1979 thruearly 1984	1*	7069
3.	231800	Bearing main shaft, fits 1954 thru 1990	1	9025A
D . "		Late Canada and Asia		
<u>Roll(</u> 4.	<u>ers main :</u> 234642	shaft, fits 1954 thru early 1984 Standard size, stock replacement, set of 23	1	9095
<del>4.</del> 4.	710305	Oversize + 0004" 100 pack lims USA	23*	9093
<del>4.</del> 4.	234643	Oversize +.0004", 100-pack, Jims-USA Oversize +.0004", stock replacement, set	1	9096
₹.	237073	of 23	'	9090
4.	710306	Oversize +.0008", 100-pack, Jims-USA	23*	9097
4.	234644	Oversize +.0008", stock replacement, set	1	9097
		of 23		
5.	231803	Main shaft bearing race, loose roller type,	1	35105-52
		fits 1954 thru early 1984		
5.	231804	Main shaft bearing race, loose roller type,	1	35105-78
		fits 1954 thru early 1984 +.005"		0445
5.	710307	Bearing race, caged roller type, fits late	1	9118
_		1980-1990	4	25044.04
5.	782675	Case bushing, caged roller type, fits late	1	35041-84
-	702/7/	1980-1990	1	
5.	782676	Case bushing for caged roller bearing, .002"	1	-
5.	782677	oversize Case bushing for caged roller bearing, .005"	1	
٦.	702077	oversize	1	_
6.	234539	Clutch gear o-ring, fits 1957 thru 1966 and	1*	11103
٠.	234337	1967 thru 1969 XLCH	'	11105
6.	231818	Clutch gear o-ring, fits 1967 thru 1970	1*	11119
7.	022359	Clutch gear seal, Zodiac, fits 1967 thru 1970	1	12021
7.	700022	Clutch gear seal, Athena, fits 1967 thru	1*	12021
		1970		
7.	700327	Clutch gear seal, Athena, fits 1956 thru	1*	37531-56
		1966		
8.	022467	Main shaft oil seal, Zodiac, fits late 1984	1	12049
0	700035	thru 1990	1*	12040
8.	700035	Main shaft oil seal, Athena, fits late 1984	1*	12049
0	022329	thru 1990 Main shaft oil seal, Zodiac, fits 1954 thru	1	35151-52
8.	UZZ3Z9	1984	ı	33131-32
8.	700306	Main shaft oil seal, Athena, fits 1954 thru	1*	35151-52
J.	700300	1984	1	22   5   5
8.	237162	Main shaft, Andrews, fits 1956 thru 1969	1	35044-56
9.	237163	Main shaft, Andrews, fits 1971 thru 1984	1	35046-71
10.	231845	Sprocket nut, fits 1971 thru 1984	<del>1</del>	35047-71
10.	781115	Sprocket nut, fits 1984 thru 1990	1	7855W
11.	292028	Lock washer main shaft, fits 1954 thru 1984	1*	35050-52
	231247	Oil seal and retainer kit, fits 1952 thru 1983	1	35150-52
13.	700308	Main shaft seal gasket, Athena, fits 1954	1*	35169-52
_		thru 1984		
14.	231805	Main shaft first gear 27 tooth, Zodiac, fits	1	35277-52
		1954 thru 1990		
14.	237167	Main shaft first gear 27 tooth, Andrews, fits	1	35277-52
		1954 thru 1990		
	231806	Main shaft second gear 23 tooth, Zodiac,	1	35296-56

	ZPN	Description	Qty.	OEM
15.	237165	fits 1956 thru 1990		35296-56
16.	231807	Main shaft third gear 20 tooth, Zodiac, fits 1956 thru 1990		35305-56
16.	237169	Main shaft third gear 20 tooth, Andrews, fits 1956 thru 1990	1	35305-56
17.	233513	Thrust washers main shaft, fits late 1984 thru 1990	1*	35384-84
		fits 1958 thru early 1984, may be used		
		dels when used in conjunction with a 1	954 th	ıru 1984
		r and thrust washers		
	231808	Countershaft, Zodiac	1	35613-58
-	237161	Countershaft, Andrews	1	35613-58
19.	237176	Counter shaft drive gear 27 tooth, Andrews, fits 1958 thru 1986		35695-58
20.	237170	Counter shaft third gear 23 tooth, Andrews, fits 1954 thru 1990	1	35709-54/
21.	237166	Counter shaft second gear 20 tooth, Andrews, fits 1958 thru 1990	1	35750-58
<b>22.</b>	237168	Counter shaft first gear 17 tooth, Andrews, fits 1973 thru 1984, may be used late 1984 thru 1990 models when used in conjunction with a 1954 thru 1984 style countershaft and thrust washers		
23.	231798	Bushing counter shaft low gear, fits 1954 thru 1972	1	35787-52
24.	231809	Needle bearing counter shaft, closed, fits 1954 thru 1990	1	35960-54
25.	231458	Needle bearing counter shaft, open end, fits 1954 thru 1990	1	35961-52
26.	231458	Bearing clutch gear, fits 1954 thru 1990	1	35961-52
27.	231458	Bearing clutch gear, fits 1986 thru 1990	1	35961-52
28.		Clutch gear main shaft 17 tooth, fits 1967 thru 1970	1	37448-67
28.	237177	Clutch gear main shaft 17 tooth, fits 1971 thru early 1979	1	37448-71
28.	237175	Clutch gear main shaft 17 tooth, fits late 1979 thru 1984	1	37448-79
28.	749638	Clutch gear main shaft 17 tooth, fits late 1984 thru 1986	1	37448-84
29.		See sprocket section		

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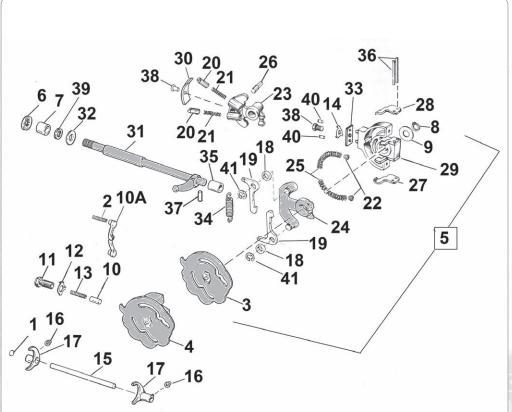
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#### SHIFTER PARTS FOR 1952-1956 K & 1957-1990 SPORTSTER

Replacement parts for the shifter mechanism in 1952-1956 K, KH, KHK and KK, 1957-1985 Ironhead and 1986-1990 Evolution Sportster. As always, we show OEM part numbers for reference only. The actual OEM part might have been slightly different or could have included a bushing, washer or retaining ring where the replacement is just the main part. Replacements however can be used for the years as indicated. Except where indicated differently all parts are sold each. Required quantities are indicated between parenthesis, for example like (2).

Pos.	ZPN	Description	OEM
1	234323	Plug, 1954-1976, 10-pack	16825-48
2	234322	Spring, late 1984-1990, 10-pack	29980-84
3	-	Shifter cam, 1977 XLCR	34002-77
3 3 3	-	Shifter cam assembly, 1977 XLCR	34005-77
3	-	Shifter cam assembly, 1952-1976	34009-52
4	-	Shifter cam assembly, 1977-1990 except 1977 XLCR	34009-75A
4	234324	Shifter cam, 1952-1976	34012-52C
4	234325	Shifter cam, 1977-1990	34012-75B
5	234326	Shifter cam kit, 1961-1978	34016-77
6	022326	Oil seal, Genuine Zodiac	34035-52
6	700273	Oil seal, Athena, 5-pack	34035-52
7	234327	Bushing, set of two, 1952-1974	34037-52
8	789223	Retaining ring, 10-pack	34040-52
9	234328	Thrust washer, 1952-1976, 5-pack	34060-52
9	789234	Thrust washer, 1977-1990	35336-74
9	789233	Thrust washer, 1977-1990, 5-pack	35336-74
10	789236	Shifter cam follower, 1952-early 1984	34062-52
10A	234329	Shifter cam follower, late 1984-1990	34063-84B
11	234330	Retainer	34065-52
12	234331	Lock, 10-pack	34067-52
13	768096	Spring	34068-52A
13	768005	Spring, 10-pack	34068-52A
14	234332	Lock, 1955-1990, 10-pack	34069-71
15	234333	Shaft, 1952-early 1984	34141-52A
15	234334	Shaft, late 1984-1990	34141-84A
16	234335	Roller (2), 10-pack	34168-52
17	191405	Shifter fork, steel, (2)	34291-52C
17	191410	Shifter fork, steel, 0.005" longer	34296-84
17	191408	Shifter fork, steel, 0.01" longer	34294-84
17	-	Shifter fork, 0.02" longer	34292-72A
17	-	Shifter fork, 0.005" shorter	34297-84
17	191411	Shifter fork, steel, 0.01" shorter	34295-84
17	191407	Shifter fork, steel, 0.02" shorter	34293-72A
18	789226	Spacer (2), 1972-1990	34461-72
18	789225	Spacer (2), 1972-1990, 5-pack	34461-72
19	789227	Shifter pawl, set of two, 1972-1990	34476-72

Pos.	ZPN	Description	OEM
20	768008	Shifter pawl set, left & right, 1954-1971	34477-53 +
			34478-53
21	768099	Spring, set of two, 1954-1971	34482-53
21	768010	Spring (2), 1954-1971, 10-pack	34482-53
22	234336	Plug (2), 10-pack	34485-52
23	-	Pawl carrier assembly, 1954-1971	34489-52A
24	789228	Pawl carrier, 1972-1990	34494-74C
25	768098	Spring, set of two, 1954-early 1978, 1979-1990	34500-52A
25	768013	Spring (2), 1954-early 1978, 1979-1990, 10-pack	34500-52A
25	-	Spring (2), late 1978	34500-78
26	234320	Pin, 1954-1971, 10-pack	34503-52
27	-	Lower lifter arm	34506-52A
28	234337	Upper lifter arm	34507-52A
29	234338	Support, 1977-1990	34514-75A
30	-	Retainer, 1954-1971	34525-54,
			34525-70
31	234313	Shaft for shifter arm without splines, 1954-1974	34628-54
	234314	Shaft for splined shifter arm, 1954-1974	34628-54A
	234317	Shaft, left shifting 1975-1976	34627-75
	234315	Shaft, 1975-1985	34628-75
	234316	Shaft, 1986-1990	34628-86
32	234339	Thrust washer, 1977-1990, 5-pack	35404-74
33	234340	Shim, 1966-1990, 10-pack	35891-66
34	234341	Spring, 1972-1990	37222-52
35	234343	Bushing, 1977-1990	40520-63
36	-	Pawl lifter arm pin (2)	350
37	-	Lever shaft pin, 1954-1974, early 1977	605
38	-	Screw, #6-32x7/16 Pozidriv flat head, 1961-1971	1608
38	742242	Bolt, 7/16-14x1", hex head, late 1984-1990,	3854
		5-pack	
38	742243	Bolt, 7/16-14x1 1/8", hex head, 1954-early 1984,	4621
		5-pack	
39	-	Washer, 1/2"x3/4"x1/32"	6807W
40	-	Cam support pin (2), 1986-1990	350
40	234321	Cam support pin (2), 1954-1985	9260
41	231762	Retaining ring (2), 1972-1990, 10-pack	11036



#### **TAB WASHERS**

10

Tab washers, 10 pack

Zodiac offers a complete assortment of commonly used tab washers in a virtually unbreakable assortment tray. Tray contains 120 pieces tab washers (10 each type). All individual tab washers are listed below in a shop supply 10 pack.

233551 Assortment tray with 120 pcs tab washers

12

11

**099024** [1.]Pivot bolt, rear swingarm

(OEM 47513-58)

292075 [2.] Main-shaft at bearing 4

292028 [3.] Transmission sprocket

231834 [4.]Pinion/sprocket shaft Sportster (OEM 7044) **144455** [5.]Clutch hub Big Twin

(OEM 37503-41)

290225 [6.] Starter clutch Big Twin

(OEM 33396-39)

(OEM 33362-52)

290262 [8.] Shifter fork Big Twin 4

292014 [9.] Starter gear Big Twin 4 Speed (OEM 33082-16)

292026 [10.] Transmission sprocket 4

290228 [7.] Kick-start shaft Sportster

Speed (OEM 34180-33)

Speed (OEM 35216-36)

thru 1984 (OEM 37533-52A)

292029 [11.] Clutch hub Sportster 1954

(OEM 45717-63)

292176 [12.] Stem nut FL

Speed (OEM 35050-40)

Sportster (0EM 35050-52)



#### **SHIFT FORKS FOR 4 SPEED** SPORTSTER MODELS

High quality steel shifter forks. These forks are forged from high grade forging steel and induction hardened to exceed the OEM specifications. Available in a wide range of sizes. Fits all K models and 4 Speed Sportster models including the 4 Speed Evolution models from 1952 thru

Standard shift forks 191405 Standard (OEM 34291-52C)

**Under sized shift forks** 191411 - .005" (OEM 34297-84) 191407 - .020" (0EM 34293-72A)

Over sized shift forks **191410** + .005" (OEM 34296-84) **191408** + .010" (0EM 34294-84)



#### STOCK 1ST GEARS

237167 Main shaft first gear 27 tooth, Andrews, fits 1954 thru 1990 (OEM 35277-52A)

237168 Counter shaft first gear 17 tooth, Andrews. Fits 1973 thru 1984, may be used late 1984 thru 1990 models when used in conjunction with a 1954 thru 1984 style countershaft and thrust washers



#### **ANDREWS SPORTSTER 4 SPEED** TRANSMISSION SHAFTS

**These Andrews transmission shafts** are stock replacement parts for 4 Speed Sportsters. These shafts are made of super alloy material for maximum strength and durability on this most critical part. Now available for most models from 1956 thru 1990.

237163 [A.] Main shaft 1971 thru mid 1984 (OEM 35046-71)

237162 [B.] Main shaft 1956 thru 1969 kick-start (0EM 35044-56)

237161 [C.] Counter shaft 1956 thru mid 1984 models (OEM 35613-58)

237106 [D.] Main shaft mid 1984 thru 1990 alternator (OEM 35036-84A)



### **STOCK 2ND GEARS**

237165 2nd. Main (23T) (0EM35296-56 & 35296-56A)

237166 2nd. Counter (20T) (0EM35750-58 & 35750-58A)



### ANDREWS

#### **ANDREWS SPORTSTER 4 SPEED** TRANSMISSION GEARS

These gears will fit Sportster 4 Speed transmissions made from 1956 thru 1990. All gears are made from high nickel alloy steel which is heat treated and shot peened for maximum durability. With proper shot peening, the wear resistance of drive edges and slots is greatly improved.

### WIDE AND CLOSE RATIO GEAR SETS FOR 4 SPEED SPORTSTER **TRANSMISSIONS**

The wide ratio 1st. gear set changes 1st. from 2.52 ratio to 2.68 for more low end torque with 21T or 22T trans sprockets. "C" ratio main drive gears will provide true close ratio shifting on a 4 Speed Sportster. For comparison we list all gear ratios.

"W"-1 is Wide ratio 1st. plus stock main drive (27/17 teeth)

"W"-2 is Wide ratio 1st. plus "C" ratio main drive (26/18 teeth)



### STOCK 3RD GEARS

237169 3rd. Main (20T) (0EM35305-56 & 35305-56A)

237170 3rd. Counter (23T) (OEM35709-54A & 35709-54B)



237164 Wide ratio 1st late gear set

shaft ZPN237161 is used.



#### **STOCK MAIN DRIVE AND COUNTER SHAFT GEAR**

237177 Late clutch gear 1971 thru 1978 models (OEM 37448-71)

237175 Late clutch gear 1979 thru mid 1984 models (OEM 37448-79)

237176 Counter shaft gear 1971 thru mid 1984 (27T) (OEM 35695-58)



**ANDREWS "C" RATIO GEAR SETS (18T** & 26T)

Note: 4 Speed Sportsters 1987 and up all have "C" ratio main drive gears as stock parts.

237173 1971 Thru 1978 models 237172 1979 Thru mid 1984 models **237171** Mid 1984 to present models

Stock	"W"-1	"W"-2	"W"
2.52	2.68	2.44	2.29
1.83	1.83	1.66	1.66
1.38	1.38	1.26	1.26
1.00	1.00	1.00	1.00
	2.52 1.83 1.38	2.52 2.68 1.83 1.83 1.38 1.38	1.83     1.83     1.66       1.38     1.38     1.26

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09-045

EXHAUST

HELMETS LUGGAGI

ELECTRIC & LIGHT

06 Intake O7

TRANSMISSION

10 FINAL DRIVE WHEELS &

14 HANDLEBAR

FRONT

FENDER & STRUTS GAS TANK

OIL TANK, FILTEI & LIN

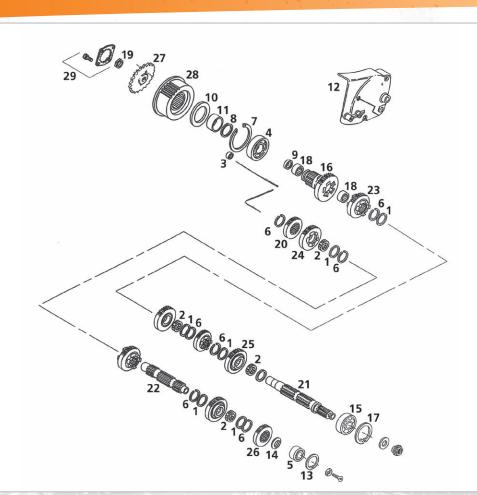
FASTENERS

21 MIRROR

OIL, CHEMICALS & TOOLS

- 01

- 07



### TRANSMISSION PARTS FOR 1991 THRU 2005 SPORTSTER

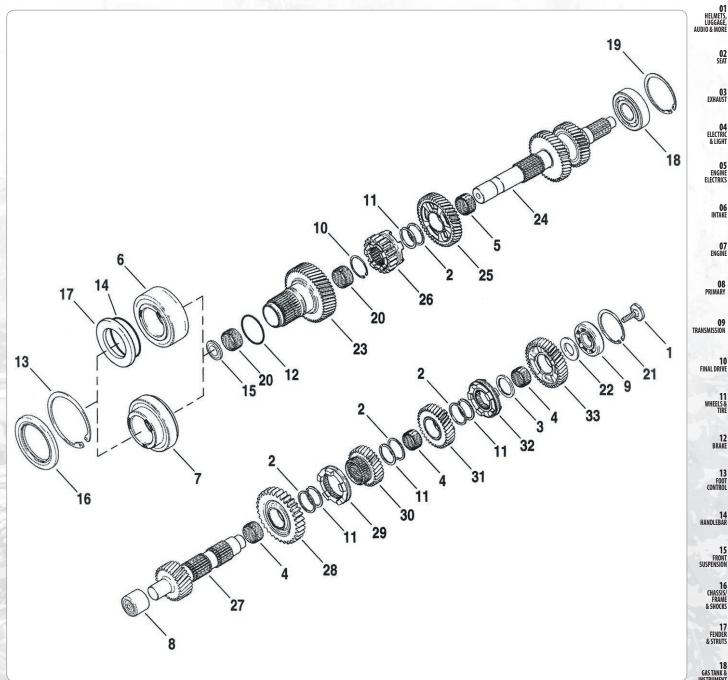
Gears, shafts, bearings and all other parts to rebuild the transmission on 1991 thru 2005 Sportster models. Gears and shafts are made by Andrews. All parts listed fit 1991 thru 2005 models, unless otherwise specified.

**Note:** Gears are the 1991 thru 1993 type with coarse teeth. These can also be used in 1994 thru 2005 models when you also replace the corresponding gear on the other shaft. Although noisier as the 1994 thru 2005 high-contact gears this will give you a much stronger transmission.

Quantities marked with \* are sold to dealers in 5, 10 or 25-packs

79	2.74		74/3	//
Pos.	ZPN	Description	Qty.	OEM
1.	234146	Thrust washer, Jims	6*	6003
1.	234581	Thrust washer, Eastern	6*	6003
2.	239905	Split cage needle bearing main & counter	4	8876A
3.	239904	Needle bearing countershaft closed	1	8977
3.	759904	Needle bearing countershaft closed, USA	1	8977
4.	239902	Mainshaft case bearing	1	8996A
5.	239901	Bearing countershaft	1	8998
6.	234094	Mainshaft and countershaft clip, Jims USA, 10-pack	7*	11067
6.	238674	Mainshaft and countershaft clip, Eastern USA, 10-pack	7*	11067
7.	710308	Main drive Gear retaining ring	1	11161
8.	022450	O-ring seal mainshaft bearing	1*	11165
8.	700014	O-ring seal mainshaft bearing, Athena	1*	11165
9.	231677	Main drive gear oil seal	1*	12030
10.	022468	Oil seal main drive gear, fits 1991 thru 1993	1	12050
10.	700036	Oil seal main drive gear, Athena, fits 1991 thru 1993	1	12050
10.	022054	Oil seal main drive gear, fits 1994 thru 2005	1	12067A
10.	234498	Oil seal main drive gear, fits 1994 thru 2005, Genuine James	1	12067A
11.	720155	Spacer transmission Pulley, fits 1991 thru 1993	1	33334-85
11.	720156	Spacer transmission Pulley, fits 1994 thru 2005	!	33344-94
12.	302191	Sprocket cover, polished, fits 2004 thru 2005	1	34911-04
12.	302190	Sprocket cover, chrome, fits 2004 thru 2005	1	34932-04

Pos.	ZPN	Description	Qty.	OEM
12.	301811	Sprocket cover, polished, fits 1991 thru 2003	1	34911-91
12.	301810	Sprocket cover, chrome, fits 1991 thru 2003	1	34932-96
13.	231851	Circlip bearing countershaft	1	35021-89
14.	710865	Spacer countershaft, fits 1991 thru 2003	1*	35022-89A
15.	740471	Bearing mainshaft	1	35030-89A
16.	237154	Gear 5th mainshaft, fits 1991 thru 1993	1	35034-89A
<b>17.</b>	756259	Retaining ring	1	35038-89A
18.	239900	Needle bearing main drive Gear	1	35051-89
19.	231055	Transmission Sprocket nut, fits 1993 thru 2005	1	35211-91
20.	237155	Gear 5th countershaft, fits 1991 thru 1993	1	35633-89
21.	237159	Mainshaft, Andrews	1	35640-89
22.	237160	Countershaft, Andrews	1	35641-89
23.	237152	Gear 2nd main, 3rd countershaft, fits 1991 thru 1993	1	35771-89
24.	237153	Gear 3rd main, 2nd countershaft, fits 1991 thru 1993	1	35772-89
25.	237157	Gear 4th mainshaft, fits 1991 thru 1993	1	35773-89
26.	237158	Gear 4th countershaft, fits 1991 thru 1993	1	35775-89
27.	191365	Sprocket 21 tooth, for chain drive	1	37709-89
28.	753529	Pulley 29 tooth, XL 1200, fits 1991 thru 2003	1	40202-91B
28.	700491	Pulley 27 tooth, XL 883, fits 1991 thru 2003	1	40285-91B
29.	191384	Drive Pulley installation kit, fits 1993 thru 2005	1	35211-91



## TRANSMISSION PARTS FOR 2006 TO PRESENT SPORTSTER AND AIR COOLED

### Quantities marked with \* are sold to dealers in 5, 10 or 25-packs

Pos.	ZPN	Description	Qty.	OEM	Pos.	ZPN	Description	Qty.	OEM
1	756275	Screw, countershaft	1*	3990	15	231677	Seal	1*	12030
2	234146	Thrust washer, Jims	4*	6003	16	231954	Oil seal	1	12074
2	234581	Thrust washer, Eastern	4*	6003	17	756253	Transmission sprocket spacer, 2008 to	1*	33354-08
3	756276	Transmission spacer	1*	6021			present XR		
4	756277	Needle bearing	3*	8862	18	740471	Bearing	1	32030-89A
5	756278	Split cage needle bearing	1	8884	19	756259	Retaining ring	1*	35038-89A
6	756279	Tapered double row needle bearing, XR	1	8956	20	239900	Needle bearing	2	35051-89A
		models			21	756261	Retaining ring	1*	35087-99A
7	756283	Double row bearing, XL & Buell	1	8964	22	756262	Spacer	1	35107-06
8	756280	Needle bearing, closed end	1	8966	23	756263	Main drive gear assy, XL and Buell	1	35159-06
9	756281	Ball bearing, Jims USA	1*	8970	23	756274	Main drive gear assy, XR models	1	35234-08
	758427	Ball bearing, Eastern USA	1*	8970	24	756264	Main shaft	1	35163-06
	756313	Ball bearing	1*	8970A	25	756265	Main shaft 4th gear	1	35165-06
10	756250	Retaining ring	1*	10984	26	756266	Main shaft 1st gear	1	35167-06
11	234094	Retaining ring, Jims USA, 10-pack	4*	11067	27	756267	Countershaft	1	35172-06
	238674	Retaining ring, Eastern USA, 10-pack	4*	11067	28	756268	Countershaft 1st gear	1	135174-06
12	756251	O-ring, main drive gear	1*	11113	29	756269	Dog ring	1	35190-06
13	710308	Retaining ring	1	11161	30	756270	Countershaft 4th gear	1	35191-06
14	756252	O-ring, XR models	1*	11631	31	756271	Countershaft 3rd gear	1	35193-06
		-			32	756272	Dog ring	1	35196-06
					33	756273	Countershaft 2nd gear	1	35197-06

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EXHAUST ELECTRIC & LIGHT

ENGINE ELECTRICS

Intake

ENGINE

PRIMARY Transmission

FINAL DRIVE

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OIL TANK, FILTER & LINE

FASTENERS MIRROR

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### ANDREWS

#### ANDREWS GEARS AND SHAFTS FOR 1991 THRU 2005 SPORTSTER

The 5-speed Sportster transmission has seen many changes over the years. Most gears for 1991 thru 1993 models can also be used in 1994 thru 2005 models when installed with the same speed gear on the opposite shaft. Andrews gears and shafts are made from high nickel alloy, heat treated and shot-peened to give maximum durability and strength. Also, where applicable, lead-in ramps have been machined into most gears to improve shifting and reduce wear on drive dogs and drive slots.



#### STOCK 4TH. GEARS

237157 4th. Main gear, fits 1991 thru 1993 (OEM 35773-89), Will fit 1994 thru 2003 when installed in conjunction with ZPN 237158 gear

**237158** 4th. Counter gear, fits 1991 thru 1993 (OEM 35775-89). Will fit 1994 thru 2003 when installed in conjunction with ZPN 237157 gear



#### **GEARS AND SHAFT SET FOR SPORTSTER**

Complete set of gears and shafts from Andrews. Comes with 2.61 to 1 close-ratio first gear set. Fits all 1991 thru 2003 Sportster and Buell 5-speed models.

232549 Andrews gears and shafts set





#### **5 SPEED SPORTSTER & BUELL SUPER CLOSE RATIO GEARS**

These gears are designed by Andrews for drags and road racing as application on longer length tracks need very close ratio shifting through all 5 gears. Andrews "Y" gear sets will put more usable torque at higher RPM's. Each set includes new 2nd., and 4th. main shaft gears and counter shaft gears with the ratios listed in the table below. "Y" gears will fit all 1991 thru 2003 5 Speed **Sportster and Buell gearboxes** with no modifications. Like the S gears, all "Y" gears are made from aircraft quality, high nickel alloy steel and the shot-peened for maximum strength and durability.

700590 "Y" ratio 1st. gear set **700591** "Y" ratio 2nd. gear set **700592** "Y" ratio 3rd. gear set **700593** "Y" ratio 4th. gear set





2.61 CLOSE RATIO FIRST GEAR SET Provides true close ratio shifting into 2nd. Plus 7 mph of usable first gear. For high performance use (set of 2 gears).

237156 Gear set, fits 1991 thru 2003



#### TRANSMISSION SHAFTS

237159 Main shaft, fits 1991 thru 2005 (OEM 35640-89)

237160 Counter shaft, fits 1991 thru 2005 (OEM 35641-89)



#### **STOCK MAIN DRIVE GEARS**

237154 Main drive 5th gear, fits 1991 thru 1993 (OEM 35034-89). Will fit 1994 thru 2005 when installed in conjunction with ZPN 237155 counter shaft gear

**237155** Counter 5th drive gear, fits 1991 thru 1993 (OEM 35633-89). Will fit 1994 thru 2005 when installed in conjunction with ZPN 237154 counter shaft gear



### **RATIO GEARS**

Andrews "S" ratio gear sets are a distinct advantage for Performance and modified street bikes. "S" ratio gears give closer ratio shifts through 1st. and 2nd. gear. Each set includes a new main shaft gear and a new counter shaft gear with the ratios listed in the table at the bottom of this page. "S" gears will fit all 1991-2003 5 **Speed Sportster and Buell** gearboxes with no modifications. Gears are made from aircraft quality, high nickel alloy steel and then shot-peened for maximum strength and durability. See ratio comparison table.

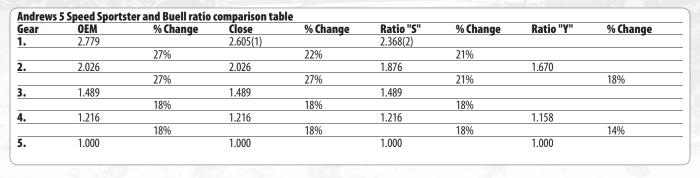
**700488** "S" ratio 1st. gear set **700489** "S" ratio 2nd. gear set

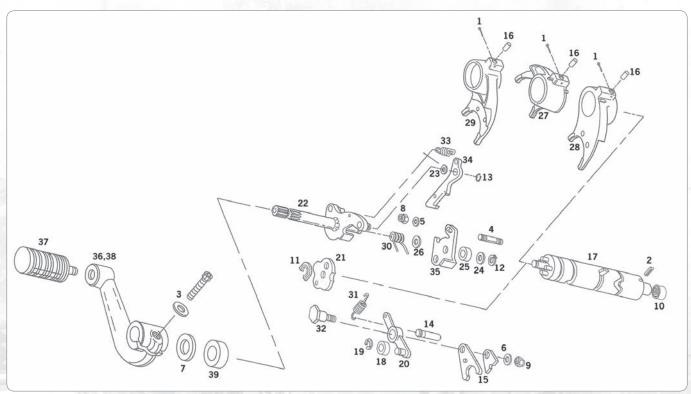
CIAAALII CAALIII
STOCK 2ND. AND 3RD. GEARS
237152 2nd Main/3rd counter

fits 1991 thru 1993 (0EM 35771-89). Will fit 1994

thru 2005 when installed in conjunction with ZPN 237153 gear

237153 3rd. Main/2nd. counter, fits 1991 thru 1993 (0EM 35772-89). Will fit 1994 thru 2005 when installed in conjunction with ZPN 237152





SHIFTER PARTS FOR 1991 THRU 2003 SPORTSTER

All parts listed fit 1991 thru 2003 models, unless otherwise specified.

Pos.	ZPN	Description	Qty	OEM
1.	751003	Cotter pin shifter fork, 100-pack	3*	518
2.	720166	Roll pin shifter drum	3	601
3.	750688	Allen bolt 1/4-20 x 1" with washer, 4-pack	5	4741A
4.	751004	Stud baseplate	1*	5226B
5.	236070	Washer detent arm screw, fits 1991 thru	1	6016
		2001		
6.	-	Washer	1	6099
7.	751005	Seal washer	1*	7019
8.	751006	Locknut baseplate	1*	7683
9.	751007	Locknut detent arm	1*	7710W
10.	740465	Bearing, shifter drum, 2001 thru 2003	1	9151
11.	750980	Retaining ring detent plate, Bender Cycle	1	11019
11.	781999	Retaining ring detent plate, Eastern USA	1	11019
12.	750706	Retaining ring shifter shaft	1*	11031
13.	750981	Retaining ring shifter pawl	1	11185
14.	740468	Grooved pin, 2001 thru 2003	1	24530-90
15.	750982	Shifter plate kit	1	33178-90B
16.	760999	Roller shifter fork	1	33319-90
16.	750983	Roller shifter fork, dealer 10-pack	1*	33319-90
17.	751008	Shifter Drum	1	33634-91A
18.	750985	Roller detent arm	5	33652-90
19.	750986	Retaining ring detent arm	1*	33653-90
20.	750987	Detent arm	1	33655-90

Pos.	ZPN	Description	Qty	OEM
21.	750988	Detent plate	1	33656-90A
22.	234318	Shifter shaft, V-Twin Mfg.	1	34015-91
23.	750990	Spacer shifter pawl	1	34073-91
24.	750991	Washer retainer bushing	1*	34075-89
25.	750992	Bushing shifter shaft	2	34076-89
26.	750993	Washer spring shifter shaft	1*	34077-91
27.	750994	Shifter fork 1st and 2nd gear	1	34142-89C
28.	750995	Shifter fork 3rd and 5th gear	1	34144-89C
29.	750996	Shifter fork 4th gear	1	34147-89C
30.	750997	Torsion spring shifter shaft	1*	34481-91A
31.	750998	Spring detent arm	1*	34483-90
32.	750999	Screw detent arm	1*	34486-90
33.	751000	Spring shifter pawl	2	34491-91
34.	751001	Shifter pawl	1	34492-91
35.	751002	Base plate shifter	1	34560-91
36.	292083	Shift lever	1	34615-94
<b>37.</b>	357005	Shifter peg, short stud black rubber	1	34611-65
<b>37.</b>	361049	Shifter peg, iso style	1	34611-65
<b>37.</b>	362021	O-ring shifter peg	1	34611-65
<b>37.</b>	362038	Shiftpeg with chrome end	1	34611-65
38.	292083	Shift lever 1994-2003	1	34606-90
39.	027657	Shifter shaft oil seal	1	37101-84
Quan	tities mar	ked with * are sold to dealers in 5, 10	or 25	-packs

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O1 HELMETS, LUGGAGE, AUDIO & MORE O2 SEAT

> 03 \_ Exhaust

04 ELECTRIC — & LIGHT 05 ENGINE — ELECTRICS

07 \_ ENGINE

06 Intake

PRIMARY

09
TRANSMISSION

RANSMISSION

10 \_
FINAL DRIVE

WHEELS & — TIRE

> 12 \_ BRAKE

14 HANDLEBAR - 15 FRONT - SUSPENSION

16 CHASSIS/ FRAME & SHOCKS

FENDER -& STRUTS -B GAS TANK & -INSTRUMENT -

19 OIL TANK, FILTER -& LINE

FASTENERS -

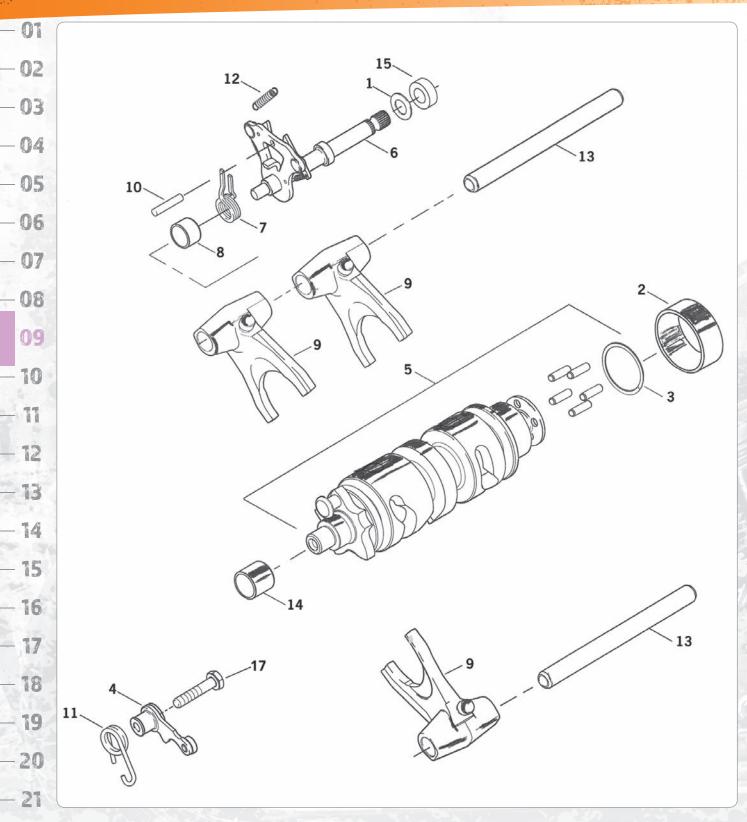
WINDSHIELD \_

OIL, CHEMICALS — & TOOLS

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#### SHIFTER PARTS FOR 2004 TO PRESENT SPORTSTER & AIR COOLED BUELL

Pos.	ZPN	Description	OEM	Pos.	ZPN	Description	OEM
1	751005	Seal washer, 2004 thru 2005, 25-pack	7019	9	751015	Shifter fork, 2004 thru 2005 (3)	34144-02
2	737014	Bushing	9187	9	756256	Shifter fork, 2006 to present (2)	34157-06
3	751009	Retaining ring, shifter cam	11360	9A	756257	Shifter fork, 2006 to present	34162-06
4	751010	Ratchet arm, 2004 thru 2005	33540-02A	10	751016	Centering pin	34163-02
4	756254	Ratchet arm assy, 2006 to present	33540-06	11	751017	Detent spring, 2004 thru 2005	34483-02
5	750984	Shifter drum, 2004 thru 2005	33634-02A	11	756258	Detent spring, 2006 to present	34483-06
5	756255	Shifter drum, 2006 to present	33641-06	12	751018	Shift lever spring, 10-pack	34491-02A
6	751012	Inner shifter arm, 2004 thru 2005	34014-02B	13	751019	Shifter fork shaft (2)	34981-02A
6	756282	Inner shifter arm, 2006 to present	34014-06A	14	751020	Bushing	34982-02
6	234319	Inner shifter arm, 2006 to present, V-Twin Mfg.	34014-06A	15	027657	Oil seal, shifter shaft, 2004 thru 2005	37101-84
7	751013	Shift return spring	34064-00C	16	740440	Oil seal, shifter shaft, 2006 to present, 5-pack	37107-06
8	751014	Bushing, 5-pack	34076-02A	17	236071	Screw, 1/4-20x1 1/2" Grade 8	3997A

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#### KICKSTARTER KITS FOR SPORTSTER

Complete kicker kits with all required hardware, transmission counter shaft, kicker arm, kicker pedal and sprocket cover. Due to the wide variety of stock and aftermarket exhausts it can happen that the starter pedal interferes with your exhaust system. Does not fit with mid mount controls.

#### Fits 1991 thru 2003 Sportster 781199 With raw aluminum sprocket

781200 With chrome sprocket cover

cover



#### **KICK-STARTER SPRING STUD**

Fits all 4 Speed Big Twins 1936 thru 1985 and most aftermarket kickstarter kits.

**781172** Parkerized, 1936 thru 1958 style, V-Twin Mfg. (OEM 33090-36)

**781171** Cad plated, 1936 thru 1958 style, V-Twin Mfg. (OEM 33090-36)

781170 Chrome, 1936 thru 1958 style, V-Twin Mfg. (0EM 33090-36)

292013 Chrome, 1959 thru 1985 style. Internal threaded #10-24 to fit spring cover ZPN 301190 (OEM 33150-59, 33151-80) on all 1936 thru 1985 Big Twins, Genuine Zodiac (OEM 33152-59)



#### KICKSTART KIT AND REPLACEMENT PARTS FOR BIG-TWINS

This kit is designed to add a kick-starter to all 4 Speed Big Twins 1936 thru 1986. Kit includes chrome plated reinforced kick cover, gears, clutches, stops, springs, and all hardware needed. Does not include kick arm and pedal to give you the option to install the arm and pedal of your choice.

292100 Kickstart kit complete (OEM 33055-78A)

292103 Kickstart kit without kick cover

#### **Replacement parts**

292070 [A.]Chrome kick cover (OEM 33277-36A)

292010 [A.] Polished kick cover (OEM 33277-36A)

290224 [B.]Bumper-plate 1936 thru 1977 (OEM 33353-36)

290298 [B.]Bumper-plate 1978 thru 1984 (OEM 33553-78)

290230 [C.]Bumper-plate screw (OEM 1864B)

290223 [D.]Oil deflector (OEM 33429-39)

**290227** [E.] Spring starter clutch (OEM 33391-36)

292017 [F.] Starter gear main-shaft 16T (0EM 33430-50)

292038 [F.] Starter gear main-shaft 14T (0EM 33430-59)

789450 [F.]Starter gear main-shaft 14T, V-Twin Mfg. (0EM 33430-59)

292007 [G.] Starter clutch (OEM 33381-39)

290225 [H.] Tab washer, starter clutch, 10 Pack (OEM 33396-39)

292015 [I.] Nut, starter clutch (OEM 7911)

292011 [J.] Key, starter clutch, 10 pack (OEM 33393-50)

292003 [K.]Starter shaft (0EM 33096-54B)

**292013** [L.]Chrome, 1959 thru 1985 style. Internal threaded #10-24 to fit spring cover ZPN 301190 (OEM 33150-59, 33151-80) on all 1936 thru 1985 Big Twins, Genuine Zodiac (OEM 33152-59)

292016 [M.]Thrust washer, starter shaft (OEM 33080-36)

292012 [N.]Gear, starter shaft (OEM 33350-36)

292014 [0.]Fits 1937-1979, 10 Pack (0EM 2080-16 & 33082-16)

290231 [P.] Nut, starter shaft (OEM 7977)

291222 [0.]Chrome spring, starter shaft (0EM 33085-36)

290232 [R.]Gasket (OEM 2132-36 & 33295-36)



#### **BIG TWIN KICK STARTER SPRING** 1936 thru 1984 Big

Twins (OEM 33085-36).

291222 Chrome, Genuine Zodiac 781173 Black painted, V-Twin Mfg. 781174 Parkerized, V-Twin Mfg.



#### **OIL DEFLECTOR WITH SCREWS FOR BIG TWIN**

Fits all Big Twin kick-start models 1941 thru 1984.

**290291** Fits 1980-1984 (OEM 33429-80)

290223 Fits 1941-1979 (OEM 2149-39 & 33429-39)



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12 Brake

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GAS TANK 8

FASTENERS

21 MIRROR

### **COVERS FOR 4-SPEED BIG TWIN**

These S&S/Flathead Power reproduction covers are as close to original as you can get without actually stealing one from a factory museum bike! Externally authentic to the smallest detail, yet improved with new technology inside! Boss imperfections in the casting have been meticulously duplicated to represent the casting capabilities of the era, but that's where S&S has drawn the line. These covers are cast in 356-T6 aluminum, and 100% CNC machined to achieve the quality standards S&S is known for. The inside of the cover is an all-new design. Additional material has been added around the kicker boss for strength and stability. A single bushing used for complete oiling. A stealthy modern small diameter seal is hidden after assembly. No more outer dry bearing seizures!

#### **Features and benefits**

- Authentic detailing in cover casting
- Updates and improvements eliminate problems of original covers
- Utilizes your stock hardware and filler plug, gasket included
- Heavy duty kicker boss with single bushing

#### There are three different covers available

- The G6 cover duplicates the external shape for 1940 thru 1947. The G6 cover has a stamped in part number just as the original. The G6 date code stands for June of 1946.
- The J7 cover is authentic external for 1948 thru 1950. This J7 cover has a raised cast-on part number that was authentic from 1948 thru 1950. The J7 date code stands for October of 1947.
- The 00 cover has no part number or date code. It was created with the custom application in mind where authenticity isn't a must or polishing or other finished is desired.

752133 "G6" Date Code, as stock on 1940 thru 1947 Big Twins

**752132** "J7" Date Code, as stock 1948 thru 1950 Big Twins

752134 "00" Date Code, fits all 1940 thru 1950 Big Twins

OIL, CHEMICAL & TOO!

ALPHABETICAL

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#### **KICK-START SPRING COVER**

Fits over the kick-start spring on FL models 1941 thru 1969. Complete with mounting screw, has Show-Chrome finish (OEM 33150-59).

301190 Kick start sping cover



#### **HEAVY-DUTY KICK-START KIT FOR BIG TWINS**

This superb kick-start kit features an extra Heavy-Duty die-cast thick wall chrome kick cover with counter bored mounting holes for additional strength, chrome starter crank with early black rubber kick-start pedal and everything to add a kick-starter to the 1936 thru 1986 electric start four speed transmission. A must when your Big Twin is converted with a Big Bore/Stroker kit.

Note: May require modification of exhaust to allow proper fit.

290310 Heavy-Duty Kick-Start kit for Big Twins





#### AMERICAN MADE BIG TWIN KICK STARTER SHAFTS

These kick-start shafts are made from aircraft quality steel and are the toughest ones available on the market. They are sold in an extra strong stock replacement version and a 1" longer version for extra kick-arm to pipes clearance when Custom Exhaust systems are used. Fits 1936 and later 4 Speed models (OEM 33096-54B).

235843 Stock replacement 235845 Extra long version (1" longer)



### Colony

#### TRANSMISSION KICKER COVER STUD KIT FOR 4-SPEED BIG TWIN

Kit contains all 4 long (0EM 24818-52) and 9 short (0EM 33298-65) studs to mount the kicker cover on 4-speed Big Twin models. Parkerized finish. Made in the USA by Colony.

740049 Fits 1936 thru 1984 Big Twin transmission





#### **EXTRA HEAVY-DUTY KICK-START COVER FOR BIG TWINS**

This extra Heavy-Duty, thick wall, die cast cover fits all 4 Speed trans-missions 1936 and later. Features die cast construction, thicker wall counter bored mounting holes for additional strength and functional looks. chrome finish (OEM 33277-36A).

292077 Kick-start cover



#### V-TWIN TRANSMISSION COVER FOR **4-SPEED WITH ELECTRIC START**

Replacement end cover for electric start models can also be used when converting a kick start 4-speed transmission into electric start only. Comes with bushings pre-installed.

Fits 1936-1984 Big Twin 4-speed transmissions. Stock on 1978-1985 electric start FX models and 1970-1984 FL & FLH (OEM 33276-70)

789418 Chrome clutch control cover for electric start 4-speed Big Twin 789419 Polished clutch control cover for electric start 4-speed Big Twin





#### STARTER RATCHET AND GEAR KIT

Replaces starter gear kit on 1971 thru 1979 Sportster models with kick-start (OEM 33379-71A, 33432-73, 8216 & 37753-76)

292050 Starter ratchet



### Colony

#### TRANSMISSION SIDE COVER NUT KIT **FOR 4-SPEED BIG TWIN**

Kit contains all 10 nuts in Acorn style and 10 spring washers for the transmission side cover and clutch arm on 1936 thru 1984 4-speed Big Twin models. All parts are chrome plated to perfection. Made in the USA by Colony.

740048 Acorn nut kit for 4-speed Big Twin transmissions



#### **KICK-START SHAFT BUSHING KIT FOR BIG TWIN**

Fits all FL, FLH, FX 4 Speed 1941-1985. Kit contains two bushings and oil seal (OEM 33288-37).

290315 Kick-start shaft bushing kit







#### **KICKER SHAFT BUSHINGS & SEAL**

This High Quality kicker shaft bushings & seal kit is made in the USA by Precision Machining. Kit consists of two bushings and seal. Available with standard outside diameter (.9355") as well +.005" oversize bushings. Will fit all kick-start 4 Speed Big Twins from 1937 thru 1984 (OEM 33288-37).

234892 Kick shaft bushing kit, Standard 234894 Kick shaft bushing kit, +.005" Oversize



#### **BUSHING FOR BIG TWIN STARTER GEAR**

Main shaft starter gear bushing, fits all kick-start Big Twin (4 Speed) 1950-1985 (OEM 33438-50).

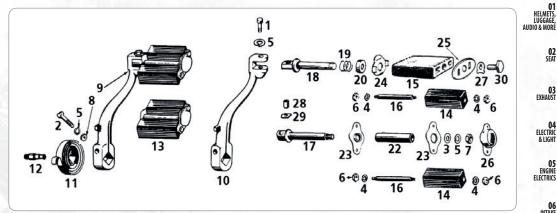
231575 Bushing for Big Twin Starter



**KICK-START BUSHING SET FOR** 

Sold in pairs fits 1954-1979 kicker models (OEM 33099-52A). 292172 Kickstart bushing

**SPORTSTER** 



#### **STARTER PARTS FOR 45CI MODELS**

Pos.	ZPN	Description	OEM
	-	Pedal pin bolt, 1917-1941	4336
	238945	Kit with Pos. 1, 5, 28, & 29, parkerized, Colony	
2	-	Starter clamp bolt, hex head, 1929-1943 Solo, 1932-1959 Servicar and 1926-1934	4370
		Singles, 3/8-24x1 9/16"	
	238943	Kit with Pos. 2, 5 & 8, Parkerized, Colony	
	238944	Kit with Pos. 2, 5 & 8, Chrome, Colony	
	-	Starter clamp bolt, D-head 1944-1952 & 1942 WLA	33078-44
	238941	Kit with Pos. 2, 5 & 8, 1944-1952 & 1942 WLA, Parkerized, Colony	33078-44
	238942	Kit with Pos. 2, 5 & 8, 1944-1952 & 1942 WLA, Chrome, Colony	33078-44
3	-	Pedal axle washer, 3/8"x13/16"x1/16"	6395
4	-	Washer, #10-21/64"x3/64"	7021
5	-	Lock washer, 3/8"x5/8"x1/16"	7045
5	-	Pedal rod nut, #10-24x1/8"x5/16"	7620
,	743987	Starter pedal axle nut, 3/8"-24x1/4"x9/16"	7789
3	-	Crank bolt nut, 3/8"-24x5/16"x9/16", 1941-1952, 1953-1954 Servicar	7800
9	-	Starter crank and pedal assembly, 1941-1962 Solo's	33052-41
10	238948	Starter crank only, 1941-1962 Solo's, black, Samwel	33059-41
	238949	Starter crank only, 1941-1962 Solo's, chrome, Samwel	33059-41
11	291223	Starter crank spring, 1941-1963, 1953-1963 Servicar	33084-41
12	239878	Starter crank spring stud, 1941-1963 Solo, 1953-1963 Servicar, cad plated, Colony	33088-41
	239879	Starter crank spring stud, 1941-1963 Solo, 1953-1963 Servicar, parkerized, Colony	33088-41
	239880	Starter crank spring stud, 1941-1963 Solo, 1953-1963 Servicar, chrome, Colony	33088-41
13	358033	Starter pedal, 1929-1962	33175-16
14	_	Starter pedal rubber	33182-17
15	-	Starter pedal block, late 1945-1954, red	33183-45
	_	Starter pedal block, late 1945-1954, yellow	33184-45
16	-	Pedal rubber rod, 1929-1954	33190-17
17	_	Pedal axle, 1929-1962	33192-16
	238946	Pedal axle kit with Pos. 17, 22 (Cad plated), 3, 5 & 7, Colony	
	238947	Pedal axle kit with Pos. 17, 22 (Parkerized), 3, 5 & 7, Colony	
18	-	Starter pedal axle, late 1945-1954	33193-45
19	-	Starter pedal axle spring, late 1945-1954	33195-45
20	-	Starter pedal axle spring retainer, late 1945-1954	33197-45
21	_	Starter pedal axle lock ring (not shown)	33199-45
22	-	Pedal axle cover 1929-1962	33201-17
23	-	Pedal end plate 1929-1962	33203-17
24	_	Starter pedal end plate, 1929-1962	33204-45
25	_	Outer starter pedal end plate, 1947-1954	33205-46
6	_	Pedal end cover 1929-1962	33210-29
27	_	Starter pedal axle lock washer	33211-46
28	-	Pedal pin bushing	33213-31
29	_	Pedal pin washer	33215-30
30	_	Starter pedal bolt	33216-46

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**PRO-MAX KICK STARTER KIT** 

These newly designed kick starter kits feature a beefy starter shaft and come pre-assembled. They are easy to install as they just replace the clutch control cover and bolt straight onto the stock transmission trap door. Starter housings are CNC machined billet aluminum and have a chrome finish. Kits come complete with a heavy duty kick starter arm, chrome return spring, old style rubber kicker pedal, chrome hardware, gasket, clutch release mechanism and chrome dipstick. Available for most 5 speed Big Twin and Twin Cam, as well as for our TPD and Eco Line 6-speed transmissions. Also fits many other aftermarket 6-speed transmissions.

**Note 1:** Kick starter arm may interfere with the rear exhaust header and/or floorboards on some models, but offset kick starter arms are available.

**Note 2:** Installation on 1980 thru 1986 Big Twin requires the use of an 1987 thru 2006 style clutch cable

**302233** Fits 1980 thru 2006 5-speed Big Twin and Twin Cam **302231** Fits TPD and Eco Line 6 speed transmissions

**Replacement parts** 

**302710** Main shaft gear/nut

302707 Spring, internal

**291222** [Q.]Chrome spring, starter shaft (OEM 33085-36)

302706 Kicker main gear

307402 Kicker crank gear

396008 Cover gasket (OEM 36801-79)

302719 Replacement throwout shaft



starter kit gives you those great looks of a vintage, kick-starter operated bike, but when operated it will engage your electric starter by means of a hidden electric switch. Consequently this kick starter kit gives you that Old School look and feeling without the effort of old style kick starters. Another great advantage is that the cover features a hydraulic clutch release mechanism. Hydraulic operation of the clutch is much easier than cable operated. The kit is very easy to install and comes beautifully chrome plated. It is CNC made from 6061-T6 aluminum and includes kick starter arm and pedal as shown in the picture. A hydraulic handlebar master cylinder and hydraulic line must be ordered separately. On some models the separate purchase of a kick starter arm ZPN290312 or ZPN290313 is needed to clear for the exhaust system. When the stock clutch control is fitted with hex head or serrated allen head screws you will also need new allen head screws. Kit fits all left side drive 5 and 6 speed Big Twin transmissions from 1986 thru 2006, except 2006 Dyna.

**302194** Chrome simulated kick starter kit with hydraulic clutch release.

**053137** Optional stock style clutch master cylinder

**233332** Chrome 1/4-20x2 1/4" allen head screws, 10-pack

**302183** Rebuild kit for clutch slave cylinder

**144129** Rebuild kit for clutch master cylinder, 11/16"





### KICK STARTER ARM FOR EARLY BIG

Perfect copy from the kick starter arm as found on 1937 thru 1954 OHV and Side Valve Big Twins.

**781149** Chrome (OEM 33063-36A) **781150** Black (OEM 33063-36A)



#### KICK STARTER

Chrome kick starter fits 1977 thru 1984 FX, FXE, FXEF and 1977 thru 1980 FXS and FXB. Swings at base to clear original equipment exhaust, will also work with most aftermarket exhaust systems. Available with stock-style round rubber or rotating oval rubber.

**290313** Kick starter with round rubber (0EM 33057-77 & 33074-77)

**290312** Kick starter with oval rubber **358032** Round kick starter pedal rubber (OEM 33189-63)



### "MAGNUM" CHROME KICK STARTER ARM

This Heavy-Duty kicker arm is 1" longer-than-stock and made from forged steel which is highly polished and then beautifully chrome plated. The extra length provides greater leverage for added kicking power.

290294 Kick starter arm



## "STRAIGHT" KICK ARM FOR FL

Chrome plated early style "straight" kick-start arm. Sits closer to the chassis and was fitted as original equipment on FL models 1954 thru 1969 and FX models 1971 thru 1972. This kick arm will not clear most aftermarket exhaust systems, but will work with original equipment exhaust systems (0EM 33068-54).

292037 Straight kickarm







STARTER RATCHET AND GEAR
This kit un-dates the early

This kit up-dates the early style clutch gear set up on 1957 thru 1970 XL-XLH-XLCH models, to the improved late style. Includes starter ratchet, starter gear, spacer bushing, rivets and spacer (0EM 33379-57 & 33432-73 & 8215 & 37754-74) (Kit 0EM 33400-74).

292040 Starter ratchet and gear





#### CHROME PLATED KICK ARM

Chrome-plated drop forged kick arm. Fits all models Big Twin and Sportster 1936 to present (OEM 33057-72).

292020 Kickstarter arm



#### **KICK-START SHAFT AND WASHERS FOR SPORTSTER**

Replacement kick-start shaft and parts, fits Sportster models 1957 thru 1976.

292002 Kick-start shaft (OEM 33094-57A)

290228 Lock-washer starter gear nut 10 pk (0EM 33362-52)

290229 Thrust washer starter gear (OEM 33110-54)

231799 Kick-start shaft shims .007", 10 pack (0EM 6802)





#### KICK PEDAL WITH CHROME END

Fits all pre-1977 style kick arms. Has beautiful show chrome finish. One piece forged construction with black rubber. 362062 Kickpedal





Classic style kick pedal fits all pre-1977 model kick-starters. Gives you a large, easier to operate kick pedal

(OEM 33175-16). 358033 Bicycle style Kick



HELMETS, LUGGAGE, AUDIO & MORE

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FRONT

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GAS TANK &

01L TANK, FILTER & LINE

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### **FLAT O-RING KICK-START PEDAL**

Show-Chromed kick-start pedal, fitspre-1977 models arms (OEM 33175-16A).

362022 Kick-start pedal **022341** O-ring flat kickpedal



#### STARTER PEDAL FOR 45CI WR MODEL

Exact duplicate of the starter pedal as found on WR models. Comes complete with bolt set. Pedal has a parkerized finish.

238921 WR starter pedal (OEM 2091-16S)









#### **KICK-START PEDAL OLD STYLE**

Rubber kick-start pedal. Fits all models 1936-1977, includes bushing and spring clip (OEM 33175-16A).

358004 Kickstart pedal 358017 Kickstart pedal rubber



#### **ALL METAL BICYCLE STYLE KICKER** PEDAL

Bicycle style kicker pedals feature a strong steel core for years of trouble free operation. Pedals are made of brass and available with a chrome or polished finish. Both versions come complete with a spring clip and bronze bushing.

361603 Brass kicker pedal with steel core

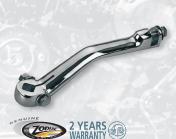
**361602** Chrome brass kicker pedal with steel core



#### STREAMLINER FLAT KICK-START **PEDAL**

This beautiful kick-start pedal will add that extra class on your customized motorcycle and is an addition to our extensive line of Streamliner foot pegs, grips and shift peg. Fits all pre 1977 model kicker arms.

361091 Streamliner kick pedal



#### **EXTRA HEAVY-DUTY KICK-START ARM**

This "beefed-up" Heavy-Duty kick arm is made from forged steel which is highly polished and then beautiful chrome plated. Designed for use with large cubic engines. Fits Big Twin and Sportster models.

292102 Kickstart arm



#### **O-RING KICK-START PEDAL**

Chrome kick-start pedal, machined from solid steel. Fits pre-1977 kicker arms. Also fits FX and XL passenger pegs.

362023 Kick-start pedal 022343 O-rings small, fit shift and kickpedal



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### 2 YEARS WARRANTY

**CHROME PLATED TRANSMISSION SIDE COVER** Die-cast transmission side cover. The chrome finish adds a highlight to the right side of the 5 Speed transmission on 1987 thru 2006 Softails, 1987 thru 2006 FLT and FLHT

models and 1990 thru 2005 Dyna Glides. 302129 Smooth transmission side cover (OEM 37081-87A, 37105-87A, 37115-90A)



#### KEN'S FACTORY HYDRAULIC CLUTCH COVER

These hydraulic clutch end covers are made in Japan by Ken's Factory from billet aluminum with a polished or black anodized finish. Designed for use with a 11/16" bore clutch master cylinder for a smooth clutch operation with minimal effort. Fits all 2006 thru 2017 Dyna, 2007-2017 Softail, 2007-2016 Touring, except those with the stock or Screamin' Eagle hydraulic clutch control.

747358 Black anodized with clear accents



## 2 YEARS WARRANTY

#### **CHROME PLATED FINNED TRANSMISSION SIDE** COVER

Die-cast transmission side covers. These finned covers feature a beautiful chrome plated finish and will highlight the side of the 5 Speed transmission on all 1987 thru 1999 Big Twins, and 1999 thru 2006 Twin Cam (except 2006 Dyna)

**302092** Fits Softail 1987 thru 2006, FLT & FLHT models 1987 thru 2006, and Dyna Glide 1990 thru 2005 (OEM 37081-87A, 37105-87A, 37115-90A)

302093 Fits FXR models 1987 thru 1994 (OEM 37103-87A, 37109-87A)



#### RIVERA'S HYDRAULIC CLUTCH TRANSMISSION **END-COVER**

USA made cover, manufactured from 356-T6 billet aluminum. This transmission end-cover converts any 5 Speed mechanical clutch to smooth hydraulic function. Adjust the clutch once and forget it. No more cable to stretch, break or requiring continuous regular adjustment. Hand effort at the clutch lever is also reduced. This hydraulic clutch unit comes completely assembled with a precision fitted piston and seal. Available show polished or show chromed. For use with Ness or GMA handlebar mounted master cylinders. Fits all 1987 thru 2006 Big Twin and Twin Cam models (except 2006 Dyna).

700530 Polished **700531** Show chrome





#### PRO-ONE HYDRAULIC "CLUTCHUATOR" CLUTCH **ACTUATOR**

The Clutchuator is the ideal set-up for the ultimate in smooth pull and release action. The beefy design strengthens the transmission end support while providing a Custom look. The Clutchuator installs with the stock bolts and accepts the stock oil plug/dipstick. It is fully rebuildable using OEM Harley parts. Precision CNC machined from billet aluminum with a smooth chrome finish. Comes complete with 10mm banjo bolt, banjo washers and bleeder screw. Available in Smooth and Ball Milled Millennium design and fit 1987 thru 2006 5-Speed

710874 Smooth Millennium style 710875 Ball Milled Millennium style



#### CHROME BILLET HYDRAULIC CLUTCH ACTUATORS

These chrome plated clutch actuators are machined from billet Aluminum. Designed to be used in combination with 11/16" bore hydraulic clutch master cylinder. Fits all 1987 thru 2006 Big Twin models with 5 or 6 speed transmissions, except 2006 Dyna models. Bleeder screw and oil dipstick are included. Also included: banjo bolt, banjo washer to fit 3/8" banjos, and Allen head screws to install the actuator. Banjos and hydraulic lines are sold separately. Available in Smooth and Ball Milled version.

**302181** Smooth 302182 Ball Milled

**Replacement parts** 345361 Piston

345362 Piston seal kit





#### **ROLAND SANDS DESIGN CLUTCH RELEASE COVER**

Nostalgia design clutch control cover, fits all 1987 thru 1999 Big Twin and 1999 thru 2006 Twin Cam with 5-speed transmission.

756763 RSD Nostalgia Clutch cover CCut 5spd





#### PM HYDRAULIC CLUTCH HOUSING

The PM hydraulic clutch housing is unequalled in design, and finishes the total appearance of the right side of the motorcycle. The PM Clutch slave cylinder is perfectly matched to the bore size of the PM Contour Master Cylinder for optimal clutch action. One piece billet construction includes oil-dipstick. Most styles are available in chrome, black Contrast Cut that shows bare machined aluminum cuts, black Platinum Cut that shows bare polished aluminum cuts, or PM's proprietary two-tone Black OPS that matches perfectly with Harleys stock black engine finish.

## Fits all 1987 thru 2006 Big Twin and Twin Cam models (except 2006 Dyna), also works with aftermarket 6-speed transmissions

722140 Smooth design, polished
722141 Fluted design, polished
756394 Fluted design, chrome
752306 Scallop design, chrome
752307 Scallop design, Contrast Cut

**752309** Scallop design, Platinum Cut **752308** Scallop design, Black OPS

#### Fits all 2006 thru 2017 Dyna, 2007 thru 2017 Softail and 2007 thru 2016 Touring models, except those with the stock or Screamin' Eagle hydraulic clutch control

**756788** Drive design, Contrast Cut **756789** Drive design, chrome

756790 Drive Design, two-tone textured black OPS

 Fluted design, polished Fluted design, black anodized Scallop design, chrome Scallop design, Contrast Cut

**752300** Scallop design, Black OPS **757064** Formula design, chrome

### Replaces the stock hydraulic clutch slave cylinder cover on 2014 thru 2015 Touring, except Road King

**756791** Drive design, Contrast Cut **756792** Drive design, chrome

756793 Drive Design, two-tone textured black OPS

**757066** Formula design, chrome **757067** Formula design, Contrast Cut

#### **Rebuild kits**

757098 Fits all PM clutch slave cylinders



#### PM CABLE CLUTCH RELEASE COVER

Beautiful replacement for the stock clutch release cover that is fitted to the right side of your transmission. Available in chrome, black Contrast Cut that shows bare machined aluminum cuts, black Platinum Cut that shows bare polished aluminum cuts, or Performance Machine's proprietary two-tone Black OPS that matches perfectly with Harley's stock black engine finish.



### Fits all 1987 thru 2006 Big Twin and Twin Cam models (except 2006 Dyna)

**752310** Scallop design, Chrome **752311** Scallop design, Contrast Cut **752313** Scallop design, Platinum Cut

752312 Scallop design, two-tone textured Black OPS



## Fits all 2006 to present Dyna, all 2007 to present Softail and Touring, except those with the stock or Screamin' Eagle hydraulic clutch control

**752302** Scallop design, Chrome **752303** Scallop design, Contrast Cut

752305 Scallop design, Platinum Cut

752304 Scallop design, two-tone textured Black OPS

**756786** Drive design, Chrome **756785** Drive design, Contrast Cut

**756787** Drive design, two-tone textured Black OPS



#### Formula

Fits all 2006 to present Dyna, all 2007 to present Softail and Touring, except those with the stock or Screamin' Eagle hydraulic clutch control 757063 Formula design, Contrast Cut

UGGAGE, D & MORE

O2 SEAT

O3 EXHAUST -

ENGINE ELECTRICS

> 07 \_ Engine

06 Intake

PRIMARY

09

TRANSMISSION

10 FINAL DRIVE

> VHEELS & -Tire

13 FOOT CONTROL

HANDLEBAR

16 CHASSIS/ FRAME & SHOCKS

FENDER -& STRUTS

18
GAS TANK & -

19 OIL TANK, FILTER -& LINE

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#### **ARLEN NESS**

**ARLEN NESS 10-GAUGE TRANSMISSION SIDE COVERS** 

Stylish billet aluminum clutch release covers as only Arlen Ness can design them. Come complete with gaskets and hardware.

Cable style, fits 2006 thru 2017 Dyna, 2007 thru 2017 Softail and 2007 thru 2016 Touring except 2014 and later fairing equipped models A03812 Chrome A03813 Black





#### **ROLAND SANDS DESIGN CLARITY CLUTCH CABLE COVER**

RSD's Clarity Cable Clutch Cover is designed as a direct replacement for OEM cable clutch covers. Allows use of your stock, cable actuated clutch while completing the flow of the Clarity cover line. The Clarity window allows a view of the internal working components of your clutch actuation components and transmission. CNC machined from billet aluminum with a specialty coating on the polycarbonate window that does not allow oil and grease to adhere, protects the surface from yellowing, marring or breakage. Easy bolt-on installation, hardware included.

Fits all 1987 thru 2006 Big Twin and Twin Cam with 5-speed transmission 756389 Chrome 756390 Black OPS

Fits 2006-2017 Dyna, 2007-2017 Softail and 2007-2016 Touring 756385 Contrast Cut 756386 Chrome 756387 Black OPS



Hydraulic style, fits over the stock hydraulic clutch slave cylinder on 2014 thru 2016 Touring except Road Kings

**A03822** Chrome **A03823** Black

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### **CLUTCH RELEASE COVER FOR 6-SPEED**

Perfect reproduction of the OEM clutch release cover as fitted on the right side of the transmission on all 2006-2017 Dyna, 2007-2017 Softail, 2007-2016 Touring with cable clutch. Available in chrome plated or with a perfect black finish. Replaces OEM 37116-06, 37129-06 & 37135-06.

**302226** Chrome **302227** Black