Dealer No. _____

SECTION

JIMS®
555 DAWSON DRIVE
CAMARILLO, CA 93012
WWW.JIMSUSA.COM

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Phone 805-482-6913 JIMS Fax 805-482-9224

JIMS® COMPLETE TWIN CAM®
135" RACE ENGINES

FEATURES & OPTIONS:

- ONE YEAR FACTORY WARRANTY
- CUSTOMIZING OPTIONS
- "EVOLUTION® MOUNT" TWIN CAM
- NIGHT TRAIN® ENGINE COVER SET
- DIAMOND CUT CYLINDER HEADS

JIMS U.S.A.®

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

RACE ONLY

JIMS® COMPLETE TWIN CAM® 135" RACE ENGINES

JIMS 135" TWIN CAM RACE ENGINE

The NEW 135" engine has new performance features never before offered. This engine comes with a new 4-5/8" stroke and has a bore diameter of 4-5/16". JIMS R&D Team continually adds updated improvements as product becomes available. JIMS has added the new Hi Volume Screamin Eagle oil pump to further enhance the performance of this engine beyond the standard O.E.M. pump. Throw in a brand new JIMS Billet Cam Support Plate, to accommodate the new pump which utilizes Harley-Davidson's hydraulic cam chain tensioner, and finish it off with the latest in high-performance "JIMS Powerglide™II" Tappets. Also new for the 135" are the new Screamin Eagle 266 cams (.658 Lift). Cylinder heads are CNC ported and are developed to flow effortlessly. Heads come with JIMS Roller Rocker Arms and billet support plates. As always, power delivery is as smooth off the bottom end as stock, with a wide power-band of roll-on punch. These enhancements, plus 136HP* and 135ft-lbs of torque, take the 135" to an unmatched level of performance and reliability. All are available through authorized Harley-Davidson dealerships. For more details see JIMS No. 1208-1355 owners manual. For more information contact your local H-D® dealer or visit our web-site at www.jimsusa.com.

NOTE: *Oil or cylinder coolers are recommended on all performance engines. See page 14 for "JIMS Forceflow" cylinder cooler.*

JIMS Assembled Race Engines are now backed by a **1 year warranty.**

HIGH PERFORMANCE COMPONENTS INCLUDES

- Screamin' Eagle® Adjustable Pushrods
- ARP® Cylinder Studs
- JIMS Forged Pistons
- JIMS Pressed & Welded Flywheel Assembly
- H-D Hydraulic Cam Chain Tensioner
- Screamin' Eagle Valve Springs
- JIMS Cylinders
- Black High Lift Rocker Covers
- Forged Rocker Support Plates
- ARP Case Bolts
- JIMS Billet Cam Support Plate
- JIMS Roller Rockers Arms
- JIMS Powerglide™II
- CNC Ported Heads
- SE 266 Cam
- SE High Flow Oil Pump
- JIMS Fat Tube Pushrod Covers
- JIMS Engine Cases
- Timken Bearing

135" TWIN CAM ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
2608-3530	Black	07-Pres. Touring & 06-Pres. Dyna
2608-3535	Silver	07-Pres. Touring & 06-Pres. Dyna
2208-3530	Black	99-06 Touring & 99-05 Dyna
2208-3535	Silver	99-06 Touring & 99-05 Dyna

135" TWIN CAM RACE KIT SPECIFICATIONS

- Horsepower: 136
- Torque: 135
- Bore: 4 5/16" (4.313")
- Stroke: 4 5/8"
- Compression: 10.67:1
- Cam Lift: .658"
- Intake Valve: 2.120"
- Case Material: A356-T1
- Connecting Rods: 4340
- Recommended Octane: 91

*Horsepower and Torque performance measured at the rear wheel with a Dynojet® Dynamometer. Your results may vary based on E.F.I. Induction (Non-carbureted), camshaft and exhaust combination. This is not a street legal engine.

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

JIMS® COMPLETE TWIN CAM® 131" RACE ENGINES

JIMS 131" TWIN CAM RACE ENGINE

The 131" features the same stroke as the JIMS 120" at 4 1/2", but carries a larger bore diameter of 4 5/16". JIMS R&D Team has added many new features to further enhance the performance of this engine. First, to feed air to the 131", CNC Ported Heads were developed that flow air effortlessly. Next, we upgraded the oil pump to the high flow design found in all current production Harley-Davidson® Twin Cam Engines. Throw in a brand new JIMS Billet Cam Support Plate, which utilizes Harley-Davidson's new hydraulic cam chain tensioner, and finish it off with the latest in high-performance tappets, JIMS Powerglide™II. As always, power delivery is as smooth off the bottom as stock, with a wide power-band of roll-on punch. These enhancements, plus 130HP* and 135ft-lbs of torque, take the 131" to an unmatched level of performance and reliability. All are available through authorized Harley-Davidson® dealerships. For more information contact your local H-D® dealer or visit our web-site at www.jimsusa.com.

NOTE: *Oil or cylinder coolers are recommended on all performance engines.* *See page 14 for "JIMS Forceflow" cylinder cooler.*

JIMS Assembled Race Engines are now backed by a **1 year warranty.**

HIGH PERFORMANCE COMPONENTS INCLUDE

- Screamin' Eagle® Adjustable Pushrods
- ARP® Cylinder Studs
- JIMS Forged Pistons
- JIMS Pressed & Welded Flywheel Assembly
- H-D Hydraulic Cam Chain Tensioner
- Screamin' Eagle Valve Springs
- JIMS Cylinders
- Timken Bearing
- JIMS Billet Cam Support Plate
- JIMS Roller Rockers
- JIMS Powerglide II Tappets
- CNC Ported Heads
- Screamin' Eagle Cams
- H-D High Flow Oil Pump
- JIMS Engine Cases

131" TWIN CAM ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
1308-3530	Black	1999-2006 Touring and 1999-2005 Dyna®
1708-3530	Black	2007-Later Touring 2006-Later Dyna
1308-3535	Silver	1999-2006 Touring and 1999-2005 Dyna
1708-3535	Silver	2007-Later Touring 2006-Later Dyna
1508-3530	Black	2000-2006 Softail
1508-3535	Silver	2000-2006 Softail
2108-3530	Black	2007-Later Softail
2108-3535	Silver	2007-Later Softail

131" TWIN CAM RACE KIT SPECIFICATIONS

- Horsepower: 130
- Torque: 135
- Bore: 4 5/16" (4.313")
- Stroke: 4.500"
- Compression: 10.5:1
- Cam Lift: .658"
- Intake Valve: 2.120"
- Case Material: A356-T1
- Connecting Rods: 4340
- Recommended Octane: 91

*Horsepower and Torque performance measured at the rear wheel with a Dynojet® Dynamometer. Your results may vary based on E.F.I. Induction (Non-carbureted), camshaft and exhaust combination. This is not a street legal engine.

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

JIMS® COMPLETE TWIN CAM® 120" RACE ENGINES

JIMS 120" TWIN CAM RACE ENGINES

Delivering 125 HP* and 121 ft-lbs of torque is just the beginning. JIMS thick-walled cases offer unmatched strength and can support a bore size of up to 4.800. This engine features pressed flywheels, forged pistons, Screamin' Eagle® valve springs, forged 4340 steel connecting rods and the latest in high performance tappets, JIMS Powerglide™II. From the ground up, this engine has everything needed to stop the competition in its tracks, and the track is what this engine was designed for. Since 2004, JIMS has set the standard in High-Performance Twin Cam Racing Engines, and we are just getting started!. ***NOTE:*** *Oil or cylinder coolers are recommended on all performance engines. See page 14 for "JIMS Forceflow" cylinder cooler.*

HIGH PERFORMANCE COMPONENTS INCLUDE

- Screamin' Eagle Adjustable Pushrods
- JIMS Roller Rockers
- JIMS Powerglide II Tappets
- JIMS Pressed & Welded Flywheel Assembly
- JIMS Cylinder
- Timken Bearing
- ARP® Cylinder Studs
- JIMS Forged Pistons
- Screamin' Eagle Cams
- Screamin' Eagle Valve Springs
- JIMS Engine Cases

125 HP
121 TQ
RACE ONLY!

120" TWIN CAM RACE KIT SPECIFICATIONS

- Horsepower: 125
- Torque: 121
- Bore Size: 4.125"
- Stroke: 4.500"
- Compression: 10:1
- Cam Lift: .658"
- Intake Valve: 2.120"
- Case Material: A356-T1
- Connecting Rods: 4340
- Recommended Octane: 91

Softail®

RACE ONLY

Touring & Dyna®

RACE ONLY

120" TWIN CAM ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
1408-3530	Black	2000-2006 Softail
1408-3535	Silver	2000-2006 Softail
2008-3530	Black	2007-Later Softail
2008-3535	Silver	2007-Later Softail

120" TWIN CAM ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
1208-3530	Black	1999-2006 Touring and 1999-2005 Dyna
1608-3530	Black	2007-Later Touring 2006-Present Dyna
1208-3535	Silver	1999-2006 Touring and 1999-2005 Dyna
1608-3535	Silver	2007-Later Touring 2006-Present Dyna

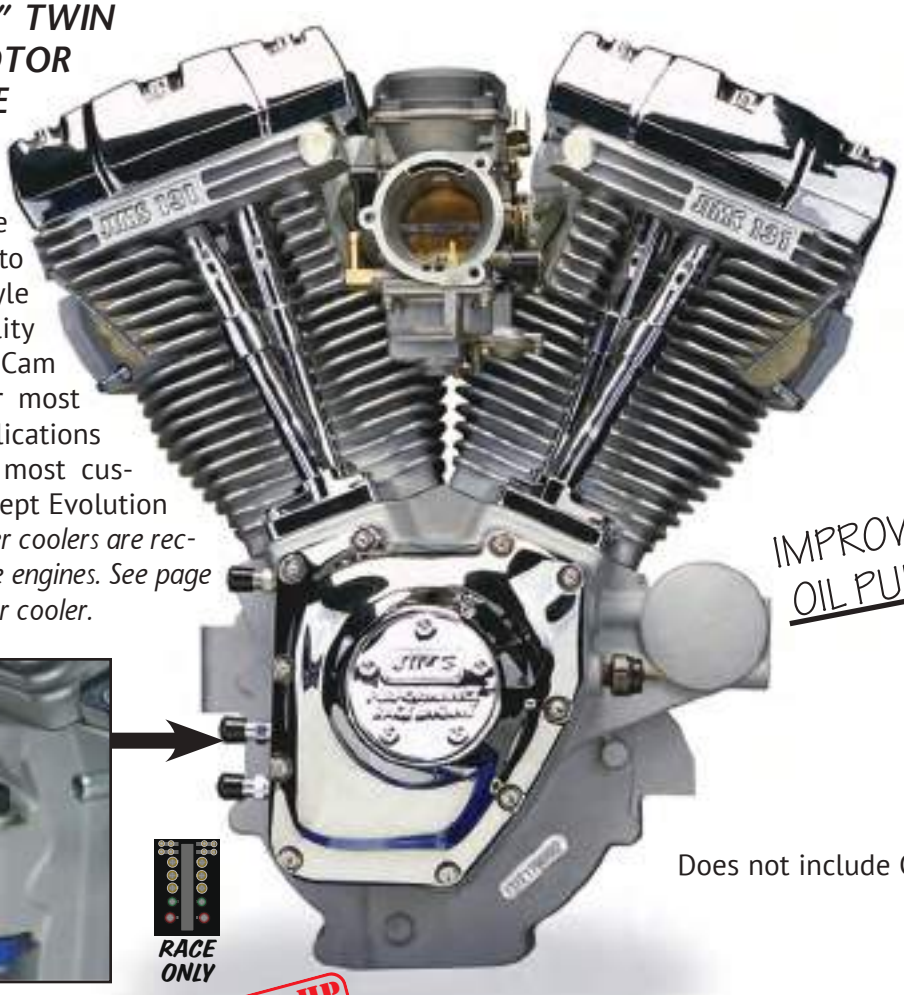
*Horsepower and Torque performance measured at the rear wheel with a Dynojet® Dynamometer. Your results may vary based on E.F.I. Induction (Non-carbureted), camshaft and exhaust combination. This is not a street legal engine.

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

JIMS® COMPLETE TWIN CAM® 135", 131" & 120" WITH EVOLUTION® MOTOR MOUNT

JIMS 135", 131" & 120" TWIN CAM EVOLUTION MOTOR MOUNT RACE ENGINE

JIMS R&D Department has developed 135", 131" & 120" Twin Cam Race Engines that bolt directly into Evolution motor mount style frames. Now the reliability and performance of Twin Cam technology is available for most OEM Harley-Davidson® applications back to 1991, as well as most custom frames designed to accept Evolution engines. ***NOTE:*** *Oil or cylinder coolers are recommended on all performance engines. See page 14 for "JIMS Forceflow" cylinder cooler.*



EVO MOUNT

RACE ONLY

Does not include Carb

135" TWIN CAM RACE KIT SPECIFICATIONS

- Horsepower: 136
- Torque: 135
- Bore Size: 4 5/16"
- Stroke: 4 5/8"
- Compression: 10.67:1
- Cam Lift: .658"
- Intake Valve: 2.120"
- Case Material: A356-T1
- Connecting Rods: 4340
- Recommended Octane: 91

136 HP 135 TQ RACE ONLY!

135" TWIN CAM® ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
2808-3530	Black	1991-98 Touring and Dyna®, 1991-99 Softail®*
2808-3535	Silver	1991-98 Touring and Dyna®, 1991-99 Softail®*

*135" Engines come with upgraded features see page 8 for details.

131" TWIN CAM RACE KIT SPECIFICATIONS

- Horsepower: 130
- Torque: 135
- Bore Size: 4.313"
- Stroke: 4.500"
- Compression: 10.5:1
- Cam Lift: .658"
- Intake Valve: 2.120"
- Case Material: A356-T1
- Connecting Rods: 4340
- Recommended Octane: 91

130 HP 135 TQ RACE ONLY!

131" TWIN CAM® ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
1908-3530	Black	1991-98 Touring and Dyna®, 1991-99 Softail®
1908-3535	Silver	1991-98 Touring and Dyna, 1991-99 Softail

120" TWIN CAM RACE KIT SPECIFICATIONS

- Horsepower: 125
- Torque: 121
- Bore Size: 4.125"
- Stroke: 4.500"
- Compression: 10:1
- Cam Lift: .658"
- Intake Valve: 2.120"
- Case Material: A356-T1
- Connecting Rods: 4340
- Recommended Octane: 91

125 HP 121 TQ RACE ONLY!

120" TWIN CAM® ENGINE WITHOUT CARB / IGNITION

Part No.	Color	Description
1808-3530	Black	1991-98 Touring and Dyna, 1991-99 Softail
1808-3535	Silver	1991-98 Touring and Dyna, 1991-99 Softail

*Horsepower and Torque performance measured at the rear wheel with a Dynojet® Dynamometer. Your results may vary based on E.F.I. Induction (Non-carbureted), camshaft and exhaust combination. This is not a street legal engine.

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

CUSTOM ENGINE PROGRAM

CUSTOM LETTERING IN LOGO PAD

It's your engine, so let everyone know! JIMS® is now offering CNC custom lettering on the cylinder heads. Just one of the many options that JIMS is offering to help you build your own custom engine. Choose up to eight letters per cylinder head.

No.1000-0001 - *Use on 120", 131"or 135" Twin Cam® Engines.*

DIAMOND CUT CYLINDERS AND HEADS

This patented diamond look is created by making hundreds of cuts in the outer edge of the cooling fins. These cuts make the motor look fantastic because the cuts are placed at the perfect angle to reflect light. It is that reflection of light that makes them sparkle and shine.

No.1000-0002 - *Use on 120" or 131" Twin Cam Engines.*

NIGHT TRAIN® ENGINE COVER SET

Going for that blacked out look? Now you can order your engine with these covers installed by JIMS. These covers are OEM Harley-Davidson® covers that have been clearanced for roller rocker arms. Rest assured that the color match is perfect. Along with that comes the quality, fit, and finish that is Harley-Davidson.

No.1000-0003 - *Use on all Twin Cams using Roller Rocker Arms.*

10.5:1 JIMS COMPRESSION HOP-UP

Looking for that extra edge? Here is one way to gain power over the 120" stock configuration. Increasing compression is just one way of many that will increase horsepower in the JIMS 120". Developed, tested and proven during 131" development and now an option for all 120" engines.

No.1000-0012 - *Use on JIMS Heads. Use on all JIMS 120" Twin Cam Engines.*

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

DO YOU HAVE A 120" AND WISH YOU HAD A 131"?

RACE ONLY

JIMS® 131" BIG BORE KIT...

An easy solution to convert your JIMS 120" into a 131". These kits are designed to work with an existing JIMS 120" Race Engine. The kit includes a set of 4 5/16" JIMS cylinders and a set of 4 5/16" JIMS pistons. These are the same cylinders and pistons used in the JIMS 131" race engine. Since the 131" engine was based on the same stroke as the 120", other parts, including the flywheel assembly, cams, etc... can still be used. With simple case boring - and this kit - your 120" can be converted into the awesome 131" engine. Kit includes head and base gaskets and a center case bolt.
With proper induction, exhaust and head modifications, this Big Bore kit will easily match the power output of the JIMS 131" race engine. This kit offers a great cost alternative for the customer that has already purchased a JIMS 120" engine. *See instruction sheet No.1308-1350 on JIMS website.* Use JIMS case bore tool No.1400 on page 168.

No.1000-0010 - *JIMS 131 Big Bore Kit (Black) Use on all 1999 to present Alpha's JIMS 120" Twin Cam® Engines*
No.1000-0011 - *JIMS 131 Big Bore Kit (Silver) Use on all 1999 to present Alpha's JIMS 120" Twin Cam® Engines*
No.1000-0012 - *JIMS 131 Big Bore Kit (Silver) Use on all 1999 to present Softail JIMS 120" Twin Cam® Engines*
No.1000-0013 - *JIMS 131 Big Bore Kit (Black) Use on all 1999 to present Softail JIMS 120" Twin Cam® Engines*

JIMS® TWIN CAM CARBURATED RACE ENGINE IGNITION

This is the perfect match up for your 120", 131" or 135" performance race engine. JIMS R&D department developed this program to give you instant acceleration off the line and smooth and even transition through the gears. This unit has the OEM style plug connector and is easy to install. This product is not included with engines. Order separately.

No.2344 - *Use on all 1999 to 2003 Alpha 120", 131" or 135" carbureted engines. Use on all 2000 to 2003 Beta 120", 131" or 135" carbureted engines.*

See your local authorized Harley-Davidson dealer and build your custom engine today.
For more information contact your local H-D® dealer or visit our web-site at www.jimsusa.com

AVAILABLE ONLY THROUGH AUTHORIZED H-D® DEALERS

THE JIMS FORCEFLOW CYLINDER HEAD COOLER

This smooth streamline design will keep your Twin Cam® and Milwaukee-Eight®running cooler on those hot July summer days in stop and go traffic. JIMS® R & D department has come up with a serious way to drop your head temperature by as much as 100 degrees. Although this mounts in the horn area JIMS has designed a horn relocater hidden inside the fan housing. The fan can be installed to be turned on and off manually or it can be regulated by a thermostat controlled sensor that monitors head temperature and activates the fan when engine temperature rises. This kit is highly recommended for performance motors to help extend engine life. Complete kit includes high powered fan, housing, horn, hardware and all wiring, along with detailed instructions. *For more details see No. 5400-IS instructions.*

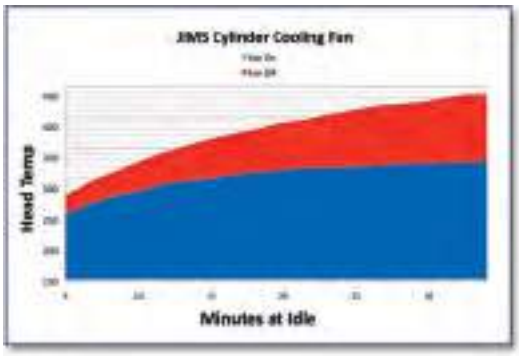
USE ON 99-2017 TWIN CAM TOURING MODELS

No. **5400** - *Twin Cam Polished Cylinder Head Fan kit.*
No. **5462** - *Twin Cam Chrome Cylinder Head Fan kit.*
No. **5401** - *Twin Cam Black Cylinder Head Fan kit.*
No. **5402** - *Silver Cylinder Head Fan kit.*
No. **5447** - *JIMS Race Engine Hardware Mounting kit.*
(Will fit some other models with fabrication)

USE ON 2017 - PRESENT MILWAUEE-EIGHT TOURING

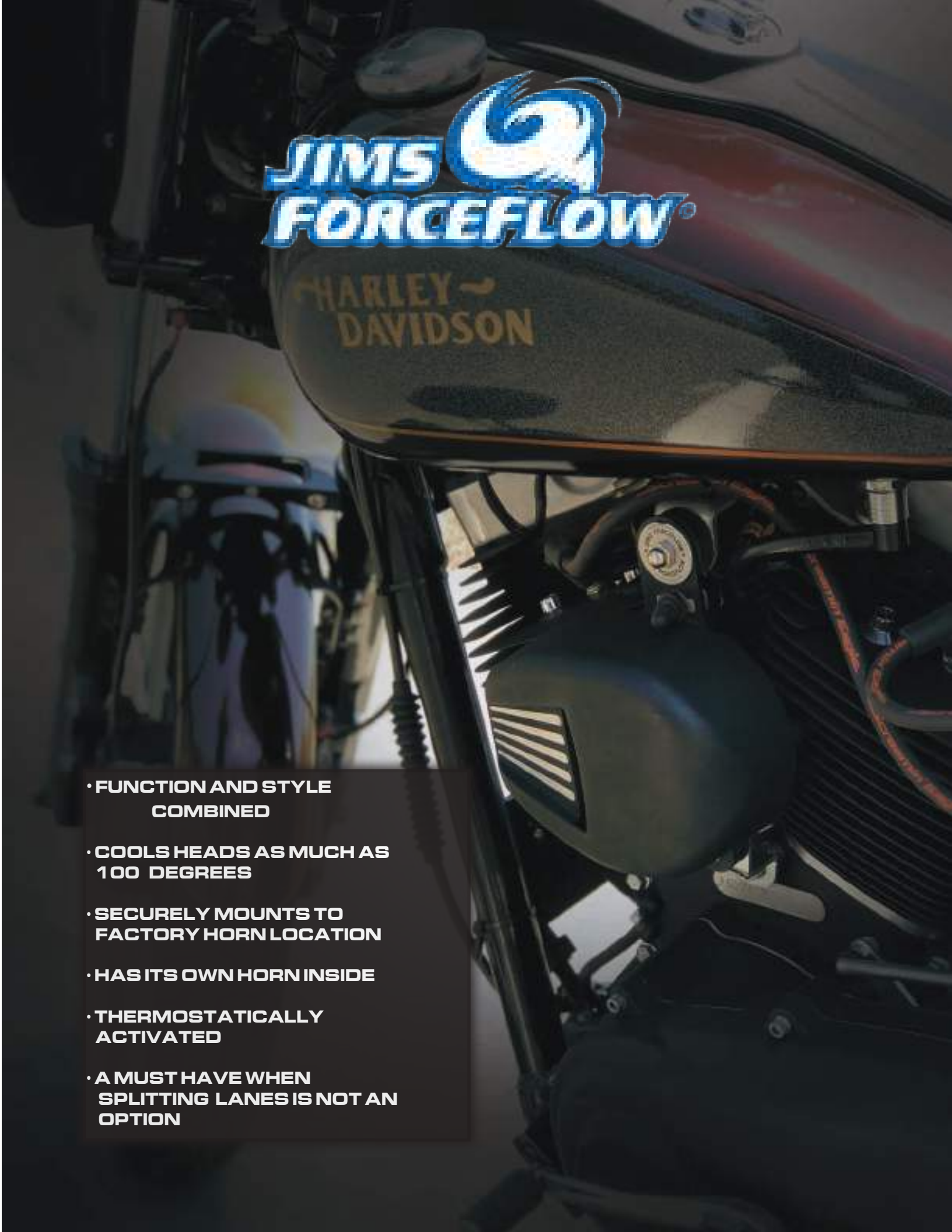
No. **5468** - *Milwaukee-Eight Black Head Fan kit.*
No. **5469** - *Milwaukee-Eight Chrome Head Fan Kit*

NEW



It's common knowledge that heat is one of an engines worst enemies. In developing the JIMS cylinder head cooler, JIMS had to sacrifice a few motors for the cause. We tested worse case scenario by letting engines idle in the sun for over a half hour each while recording cylinder head temperatures minute by minute. Above represents the average temperature reduction of all testing combined. The JIMS Cylinder Head Cooler will help an engine operate and stabilize at lower temperatures.

This solid model view shows the fan housing with high velocity fan and supplied relocated mini horn.



- FUNCTION AND STYLE COMBINED
- COOLS HEADS AS MUCH AS 100 DEGREES
- SECURELY MOUNTS TO FACTORY HORN LOCATION
- HAS ITS OWN HORN INSIDE
- THERMOSTATICALLY ACTIVATED
- A MUST HAVE WHEN SPLITTING LANES IS NOT AN OPTION

RACE FLOW AIR CLEANER BACKING PLATE KIT

JIMS RACE FLOW AIR CLEANER BACKING PLATE KIT NOW AVAILABLE IN CHROME OR BLACK. ALSO AVAILABLE FOR STOCK APPLICATIONS

JIMS Race Flow Air Cleaner Chrome Backing Plate Kit was developed in response to the growing popularity of the JIMS Race Flow Breather Kits. The backing plate is now offered for most H-D Delphi throttle bodies, and most H-D CV carburetors. From the ground up JIMS made no compromise and machined our backing plate out of solid 6061 T-6 billet aluminum with built in spacers (breather mounts). These backing plates can be installed in minutes and boast the ultimate in strength and rigidity. As an additional benefit we have added o-ring grooves which eliminate the time consuming shimming and oil leaks found in other backing plates. By bolting on the supplied air filter, gaskets, o-rings, and hardware you get a built in crankcase head breather system that helps control oil carry over. This gives you an advanced air breather ported system, and with some simple installation you are bolting on increased airflow! Air cleaner covers equivalent to O.E.M. H-D® No. 29121-07 which also can be used. The Race Flow Breather Kit now ships in Dealer Packaging for added sales exposure. *For more details see No.5275-IS instructions.*

USE WITH JIMS PART NO. 1170 FORK SPRING TOOL!

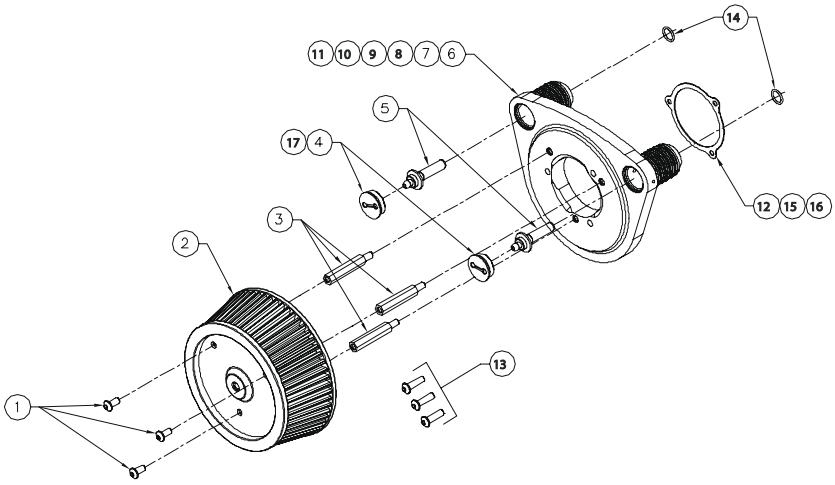
No. 5275 Black - No. 5286 Chrome — *Use on JIMS® 53mm, 58mm, & 62mm Elliptical Throttle Bodies and Screamin' Eagle Pro Super Bore 51mm CV Carburetor No. 27928-07.*

No. 5276 Black - No. 5287 Chrome — *Use on all 2008- 2015 stock H-D throttle body – electronic throttle (fly by wire) also fits Screamin' Eagle Pro High Flow 58mm EFI throttle Screamin' Eagle Pro High Flow 58mm EFI throttle body No.27713-08 and Screamin' Eagle Pro High Flow 58mm EFI throttle body – cable operated throttle No.27639-07.*

No. 5285 Black - No. 5288 Chrome — *Fits 00 to 2015 Softail, 99 - 07 Touring (except 99 - 01 EFI models), also fits 08 - present Dyna models equipped with accessory air cleaners. Fits EFI models and carbureted models with orginal equipment CV, Screamin Eagle CV (except CV 51mm Super Bore), and Flatslide carburetors. Also fits 06 - 09 CVO Electra Glide, 09 CVO and Road King, 09 CVO Road Glide, 08 - 09 CVO Springer and 09 CVO Dyna models with separate purchase of Air Cleaner Cover H-D P/N 29121-07 or accessory air cleaner cover. Stock on 05 15th Anniversary FLSTF, 05 - 07 CVO Softail, 07 - 08 CVO Dyna, and 07 CVO Road King models.*

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	3	SCREW, 1/4-20 X 1/2", BHCS, BLK, AIR ELEMENT	8090
2	1	AIR ELEMENT (H-D® #29244-08 OR K&N #HD-0818)	5277
3	3	STANDOFF, FILTER	5279
4	2	PLUG, BLACK BACKING PLATE	5278-1
5	2	BOLT, BREATHER, VENTED	5283
6	1	BACKING PLATE, BLACK, JIMS EFI	5281-1 & 5280-1
7	1	BACKING PLATE, BLACK, HD EFI	5282-1 & 5280-1
8	1	BACKING PLATE, BLACK, STOCK DELPHI EFI	5284-1 & 5280-1
9	1	BACKING PLATE ASSY, CHROME, JIMS EFI	5289
10	1	BACKING PLATE ASSY, CHROME, 58MM EFI BY WIRE	5290
11	1	BACKING PLATE ASSY, CHROME, STOCK DELPHI	5291
12	1	GASKET, BACKING PLATE, JIMS EFI	876
13	3	SCREW, 1/4-20 X 1 1/4", BHCS, BLK, BACKING PLATE	2166
14	2	O-RING, BREATHER STANDOFF	874
15	1	GASKET, BACKING PLATE, HD 58MM BY WIRE EFI	875
16	1	GASKET, BACKING PLATE, FOR STOCK DELPHI	884
17	2	PLUG, CHROME, BACKING PLATE	5275-2
18	1	INSTRUCTION SHEET	5275-IS



ALPHA TWIN CAM STROKER KITS

JIMS® RECOMMENDS:
JIMS® Engine Gasket Kit
JIMS® Compression Releases
Performance Heads
Performance Induction System
Performance Exhaust
Performance Ignition
JIMS® Oiling Jets (Supplied)
Performance Cam
JIMS® Roller Rocker Arms
JIMS® Adjustable Pushrods
JIMS® Performance Tappets
JIMS® EFI Spacer Kit
JIMS® Case Boring Tool

RACE ONLY

113" TWIN CAM® FXD, FL, STROKER KITS W/VHR™ *

(5.018 Cylinder Length)

PART NO.	APPLICATION	STROKE	BORE	FLYWHEEL DIA.	COMPRESSION RATIO	CYLINDER FINISH
No.**1943**	*Use on Alpha 2006-present FXD or Alpha 2007-present FL*	4 1/2"	4" STD	8 1/4"	9.94:1(Stock Heads)**	Wrinkle Black
No.**1944**		4 1/2"	4" STD	8 1/4"	9.94:1(Stock Heads)**	Silver
No.**1937**	*Use on Alpha 1999-05 FXD or Alpha 1999-06 FL*	4 1/2"	4" STD	8 1/4"	9.94:1(Stock Heads)**	Wrinkle Black
No.**1938**		4 1/2"	4" STD	8 1/4"	9.94:1(Stock Heads)**	Silver

116" TWIN CAM® FXD, FL, STROKER KITS W/VHR™ *

(5.018 Cylinder Length)

PART NO.	APPLICATION	STROKE	BORE	FLYWHEEL DIA.	COMPRESSION RATIO	CYLINDER FINISH
No.**1945**	*Use on Alpha 2006-present FXD or Alpha 2007-present FL*	4 5/8"	4" STD	8 1/4"	10.19:1(Stock Heads)**	Wrinkle Black
No.**1946**		4 5/8"	4" STD	8 1/4"	10.19:1(Stock Heads)**	Silver
No.**1941**	*Use on Alpha 1999-05 FXD or Alpha 1999-06 FL*	4 5/8"	4" STD	8 1/4"	10.19:1(Stock Heads)**	Wrinkle Black
No.**1942**		4 5/8"	4" STD	8 1/4"	10.19:1(Stock Heads)**	Silver

JIMS® now offers both early and late Twin Cam® 116" and 113" flywheel sets. These Alpha flywheel assemblies were designed to be installed in a stock engine case by boring the cases to accommodate 4" bore cylinders. Use a JIMS® case bore tool to perform the bore modification to your case. See catalog page 168. JIMS® has joined performance and reliability together with the development of the Twin Cam® Stroker assemblies. JIMS® 3-piece Twin Cam® flywheel assemblies feature an integral pinion shaft and sprocket shaft for maximum stability and resistance to flywheel distortion. Each kit ships pre-balanced and is assembled with a press-fit, OEM proven crank pin is combined with the JIMS® bullet proof H-beam 4140 forged machined connecting rods. Flywheel assemblies use forged blanks instead of conventional billet material for improved strength. JIMS® cylinders are manufactured from aerospace quality cast aluminum and steel. Now with VHR™ (Vertical Horizontal Ribbing) technology, cylinder casting to cylinder sleeve adhesion is effectively and uniformly locked throughout the entire cylinder casting. This VHR™ technology, combined with proprietary cylinder body geometry, equalizes the cylinder top to bottom (for optimum cylinder concentricity) when placed under torque load. Stroker cylinders are enhanced with eleven equally spaced fins improving the total fin pack surface area by 25%. Cylinders seamlessly blends into existing OEM components. From the precise base surface and fin pack alignments, exact OEM finish and hidden cast seams, JIMS® cylinders are designed to increase the durability and longevity of your performance engine. Kits come with a compete set of JIMS® premium dished forged pistons, and a pair of piston oiling jets and complete instructions to install this stroker kit. *For more details see No.1932-IS instructions.*

NOTES: *1.Must order 113" or 116" gasket sets and EFI spacer kit separately. See page 24.*

***2. Compression ratio based on 85.9cc head with .040" head gasket and 9.5cc piston dish at zero deck height. Case machining required for 4" cylinders.*

3. For proper installation of JIMS stroker kits on 2003 and later cases, JIMS® strongly recommends you convert the left crankshaft bearing to the H-D® 9028 Timken. Use JIMS® No.959 Timken Conversion Kit to perform this operation.

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

TWIN CAM® BETA STROKER KITS

These Beta flywheel assemblies were designed to be installed in a stock engine case by boring the cases to accommodate 4" bore cylinders. Use a JIMS® case bore tool to perform the bore modification to your case. See catalog page 168. JIMS® cylinders are designed to blend into the stock appearance of the motor and are available in either silver or black powder coat wrinkle finish. Kits come with a compete set of JIMS® premium dished forged pistons, piston oiling jets, and complete instructions to install this kit. Gaskets must be ordered separately. See catalog page 24. *For more details see No.1932-IS instructions.*

RACE ONLY

113" TWIN CAM® SOFTAIL STROKER KITS

PART NO.	APPLICATION	STROKE	BORE	FLYWHEEL DIA.	COMPRESSION RATIO	CYLINDER FINISH
No.**1957**	*Use on Beta Softails 2000-06*	4 1/2"	4" STD	8 1/4"	9.94:1(Stock Heads)**	Wrinkle Black
No.**1958**	*Use on Beta Softails 2000-06*	4 1/2"	4" STD	8 1/4"	9.94:1(Stock Heads)**	Silver

116" TWIN CAM® SOFTAIL STROKER KITS

PART NO.	APPLICATION	STROKE	BORE	FLYWHEEL DIA.	COMPRESSION RATIO	CYLINDER FINISH
No.**1959**	*Use on Beta Softails 2000-06*	4 5/8"	4" STD	8 1/4"	10.19:1(Stock Heads)**	Wrinkle Black
No.**1960**	*Use on Beta Softails 2000-06*	4 5/8"	4" STD	8 1/4"	10.19:1(Stock Heads)**	Silver

NOTES:

1: Must order 113" or 116" gasket sets and EFI spacer kit separately. (See page 24.)

***2: Compression ratio based on 85.9cc head with .040" head gasket and 9.5cc piston dish at zero deck height. Case machining required for 4" cylinders.*

3. For proper installation of JIMS stroker kits on 2003 and later cases, JIMS® strongly recommends you convert the left crankshaft bearing to the H-D® 9028 Timken. Use JIMS® No.959 Timken Conversion Kit to perform this operation. See page 179.

JIMS® RECOMMENDS:
JIMS® Engine Gasket Kit
JIMS® Compression Releases
Performance Heads
Performance Induction System
Performance Exhaust
Performance Ignition
JIMS® Oiling Jets (Supplied)
Performance Cam
JIMS® Rocker Arms
JIMS® Adjustable Pushrods
JIMS® Performance Tappets
JIMS® EFI Spacer Kit
JIMS® Case Boring Tool

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

TWIN CAM® ALPHA & BETA STROKER FLYWHEEL ASSEMBLIES

TWIN CAM® ALPHA & BETA

JIMS® now offers both early or late Twin Cam® Alpha flywheel sets and early Beta's. These Alpha or Beta flywheel assemblies were designed to be installed in a stock engine case by boring the cases to accommodate 4" to 4-1/8" bore cylinders. Use a JIMS® case bore tool to perform the bore modification to your case. See catalog page 168. JIMS® 3-piece Twin Cam® flywheel assemblies feature an integral pinion shaft and sprocket shaft for maximum stability and resistance to flywheel distortion. Each kit ships assembled with a press-fit. The OEM proven crank pin is combined with JIMS® bullet proof H-beam 4140 forged machined connecting rods. Flywheel assemblies use forged blanks instead of conventional billet material for improved strength.

NOTE: *When increasing to a larger bore size and stroke, JIMS® highly recommends on the 2003 to present Twin Cam® models that you convert the left crankcase bearing to the more durable H-D® No. 9028 Timken® bearing. Use JIMS® Timken® conversion tool No.959 to perform this operation. For more details see No.959-IS instructions and catalog page 179.*

BALANCING INFORMATION

To maintain JIMS® balance factor for the smoothest engine performance possible, you will need to install a 2 piston set having a total weight, including all rings, wrist pin and wrist pin keepers. Use pistons weighing between 1125g to 1145g when building with the following flywheel parts numbers: 1881, 1882, & 1886, for 4-1/2" stroke. Use a 2 piston set weighing between 1125g to 1135g when building with the following flywheel parts numbers, 1883, 1884, & 1888, for 4-5/8" stroke.

TWIN CAM® ALPHA STROKER FLYWHEEL ASSEMBLIES (WITHOUT PISTONS)

PART NO.	APPLICATION	STROKE	WRIST PIN BUSHING	FLYWHEEL DIA.
No.**1881**	*Use on Alpha 2006-present FXD or Alpha 2007- present FL.*	4 1/2"	0.927" I.D.	8 1/4"
No.**1882**	*Use on Alpha 1999-05 FXD or Alpha 1999-06 FL.*	4 1/2"	0.927" I.D.	8 1/4"
No.**1883**	*Use on Alpha 2006- present FXD or Alpha 2007- present FL.*	4 5/8"	0.927" I.D.	8 1/4"
No.**1884**	*Use on Alpha 1999-05 FXD or Alpha 1999-06 FL.*	4 5/8"	0.927" I.D.	8 1/4"

TWIN CAM® BETA STROKER FLYWHEEL ASSEMBLIES (WITHOUT PISTONS)

PART NO.	APPLICATION	STROKE	WRIST PIN BUSHING	FLYWHEEL DIA.
No.**1886**	*Use on Beta Softail® 2000-06*	4 1/2"	0.927" I.D.	8 1/4"
No.**1888**	*Use on Beta Softail® 2000-06*	4 5/8"	0.927" I.D.	8 1/4"

TWIN CAM RODS & CRANK PIN WELD SERVICE

JIMS® CONNECTING RODS

PRODUCED FROM FORGED 4340 AEROSPACE QUALITY STEEL

JIMS® Connecting Rods start out as forged aerospace quality 4340 Chromoly steel blanks, then the rods are CNC machined on our high tech mills. Each rod is heat treated, magnafluxed and shot peened, then inspected. From there, each rod goes back into the CNC mill to bore both the rod race and wrist pin bushing bores to within .0003" of each other. A 32 bore finish is achieved for the best possible bushing and race adhesion. The wrist pin bushing oiling hole has been optimized for utilizing lubrication of wrist pins, and an increase in the strength. JIMS® chooses "H-Beam" rods for stability and strength, for both drag racing and any street application, over the standard "I-beam" rods. Although we realize that "H-beam" rods are very difficult and time consuming to manufacture, JIMS® believes that it is well worth the extra effort. Each rod set has JIMS® wrist pin bushings installed and are sized for .927" pins. Rod race to be sized by engine builder. JIMS® "H-beam" rods are available in two different lengths of centerline dimensions that are: 7.667"or 7.600". Rod races must be finished sized. *For more details see No.4015-IS instructions.*

No.4017 - *Use on Twin Cam®, 7.600" length.*

No.4015 - *Use on Twin Cam®, 7.667" length.*

JIMS® RACE WELD FLYWHEEL SERVICE

Squeezing all the horsepower out of your Twin Cam® is relatively easy to do as JIMS® and other reliable performance companies have been perfecting it for years. Getting all that power to the pavement is "sometimes" a completely different story. This is just one of the reason's JIMS® has built a track record for one of the strongest lower end assemblies available (flywheels, crankpins, nuts and connecting rods). Taking it one step further, we now offer a Race Proven flywheel adherement service - RACE WELD. We all know a stock clutch and or other components will not live for long periods of time in extreme high horsepower racing conditions, that is, if you can get the power to the track (controlled traction). For this same reason, JIMS® uses the latest developments in: aerospace steel, state of the art machining, heat-treating and precision assembly to create one of the industries strongest lower ends (The JIMS® Flywheel Assembly). For some engine's, experienced racers and extreme riders will benefit from using this new flywheel adhering technique (welding). So for you racers out there (you know who you are) that are looking for the flywheel assembly that can hold up under extreme conditions - look to JIMS® new RACE WELD service. All welding is done after flywheels have been precision assembled and trued. Each assembly is held in such a way that no arcing of bearings can take place. The entire assembly is covered in a way that the only open area is the four places that are welded. In doing this, we eliminate any chance of foreign material contaminating the assembly. For the ultimate in flywheel retention, choose the JIMS® new RACE WELD Service.

RACE ONLY

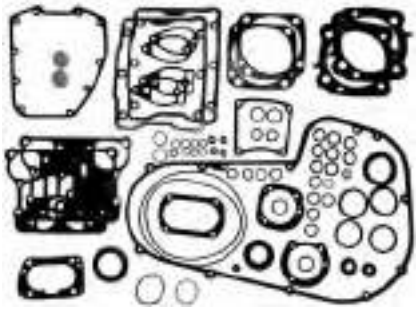
No.1880 - *Available service for use on JIMS® new assembled flywheels only.*


SHOEI
HIRO
JIMS
performance


JIMS
YOKOHAMA
PineValley
HRD
HIROKOISO
REVOLUTION

Photo By Taka Masui

REQUIRED COMPONENTS FOR "ALPHA" & "BETA" STROKER KITS



Stroker Kits **DO NOT** include gaskets. Please refer to recommended Part No. when ordering your new JIMS® gasket kit.

GASKET KITS FOR JIMS® TWIN CAM® STROKER KITS

Complete engine and primary gasket kits for JIMS® 4" bore 113" & 116" Stroker Kits, & 100" Big Bore Kits. Includes .040" Head Gasket, .020" Base Gasket.

No.**871** - *2007-present FL'S. (4" Bore)*

No.**872** - *2007-present FXST. (4" Bore)*

No.**870** - *2006-present Dyna. (4" Bore)*

No.**858** - *2000-06 Softail & 1999-05 Dyna. (4" Bore)*

No.**859** - *1999-06 FL Models. (4" Bore)*

No.**857** - *4" Head & Base gasket kit only.*

No.**873** - *4.125" Head & Base gasket kit only.*

Note: *Base gasket is not an o-ring style gasket.*

ELECTRONIC FUEL INJECTED MANIFOLD SPACER KITS

(Head to Manifold Spacer) Use with Stroker Kits when fitting standard width manifolds and using taller cylinders. Also use with JIMS® 113" or 116" Stroker's using +0.100" taller cylinders. Spacers kits will increase the distance (wider) between the heads by 0.080", allows the use of standard width manifolds such as the standard Harley® EFI, Screamin' Eagle®, S&S® or other stock width manifolds having standard size intake ports. *For more details see No.721-IS instructions.*

No.**720** - *Use on all 2006-pres. Twin Cam® models, having a intake port size of 1.80".*

No.**725** - *Use on all stock Big Twins manifolds, 1990-Pres. (NON-CVO's) having a intake port size of 1.640".*

No.**721** - *Use on all 2006-pres. Twin Cam® models, having a intake port size of 1.640" to 1.740".*

EXTENDED MANIFOLD & FLANGES ACCESSORIES

113" or 116" stroker kits require a special extended manifold. JIMS® recommends using a Mikuni® carburetor. However, you can use a stock CV, Screamin' Eagle® CV, or an S&S® "G"carburetor.

NOTE: *These manifolds are designed to fit on heads with a 1.640" intake port size only.*

CARBURETED

No.**700** - ***(Manifold)*** *Use with Mikuni® Carburetor, Stock CV Carburetor, or Screamin' Eagle CV Carburetor. (Use with No.703 or No.701)*

No.**702** - ***(Manifold)*** *Use with S&S Super "G" Carburetor. Includes aluminum spacer. Customer must use his bakelite spacer*

No.**703** - ***(Flange)*** *for use with Part No.700 40mm CV, or a 42mm Mikuni.*

No.**701** - ***(Flange)*** *for use with Part No.700 44mm CV, or a 45mm Mikuni.*

JIMS TOP CENTER CASE BOLT AND SPOT FACER TOOL

Added insurance when building a big bore Twin Cam™ engine. Have you seen a center right case bolt thread that has become compromised from a larger cylinder spigot bore diameter? Now you can get back all the necessary case bolt retention by installing one of JIMS Through Bolt Kits No.1457. This tool is needed to spot face the right case so the bolt head will seat flat on the case surface. *For more details see No.1458-IS instructions.*

Use on All Twin Cam™ 1999 to present.

No.**1458** - *Case Bolt Spot Facer Tool.*
No.**1457** - *Center Through Bolt Kit.*

(1/4 - 20 x 4.75")

10mm COMPRESSION RELEASE VALVES

These release valves make starting your engine effortless by venting cylinder compression with just the push of a button. JIMS® has found these to be indispensable when used with JIMS® Stroker Kits. Simply drill and tap each cylinder head and thread in the self-sealing release valves. *For more details see No.727K-IS instructions.*

No.**727K** - *Use on all Big Twin, Sportsters and Buells.*

NOTE: *Install JIMS® Compression Release Valves with JIMS® Installation Tool No.1169 for Twin Cam®, or use JIMS® Tapping Tool No.1169-1 for all other engines. See page 140.*

STROKER PISTON OILING JET KIT

JIMS® Twin Cam® piston oiling jets are designed with an additional .150" clearance compared to stock OEM jets. For use on longer stroked engines, always check clearances during assembly. *For more details see No.1905-IS instructions.*

No.1905 - *Use on all performance Twin Cam® engines H-D® and JIMS® 1999-present.*

TWIN CAM® TIMKEN® CASE BEARING CONVERSION TOOL

When increasing to a larger bore size and stroke, JIMS highly recommends for 2003 to present Twin Cam models you convert the left crankcase bearing to the more durable H-D® No. 9028 Timken® bearing, using JIMS Timken conversion tool No.959. *For more details see No.959-IS instructions.* See page 179.

No.**959** - *Use on Twin Cam® engines 2003-present. Order Timken® bearings separately. For replacement insert sleeves see No.956.*

CASE BORING TOOLS

The new JIMS® case boring tool takes all the guess work out of boring T/C motor cases, will accept JIMS® 4" bore cylinders, for the JIMS® 100" Big Bore kits, 113" and 116" F/W cylinder kits. This tool is designed to be used in a heavy duty 15" drill press. *For more details see No.1177-IS instructions.* See page 164.

No.**1408** - *Use on all Twin Cam® models, A or B, 1999-present.*

No.**1409** - *Use on EVO, Big Twin 1984-99.*

DAYTONA TWIN TEC IGNITION MODULES

PLUG IN 12 PIN IGNITION MODULE

These carbureted Daytona Twin Tec adjustable module's, features are:

* • Wide timing advance adjustment range that accommodates stock to highly modified engines.
- Digitally set RPM limit (steps from 3,000 to 9,900 RPM).
- Full support for J1850 data bus used for communications with instrument cluster and turn signal / security module (TSM/TSSM).
- Compatible with aftermarket tachometers.
- Built – in data logging. Stores last 30 minutes of engine operation.
- Extensive diagnostics and compatibility with H-D scan tool.
- Optional UBS interface and software for custom programming and data analysis.
- Billet housing with a 12 pin connector.
- Easy plug in installation with instructions.

No. **2228** - *Use on carbureted 2004-2006 Twin Cam and Sportster. Also for 2004-2007 American Iron Horse motorcycles.*

USB CABLE INTERFACE

* This accessory interfaces with all Daytona Twin Tech engine ignition controls. Windows compatible software allows the UPC to program a custom advance curve for precise dyno tuning. Includes all required adapters for Models 1005 -1007, TC88, TC88A ignitions, and TCFI/VRF1 fuel injection systems.

No. **2231** - *Use on JIMS No. 2228, 2229, or 2230 modules and TCFI/VRF1 fuel injection systems.*

PLUG IN DUAL 12 PIN IGNITION MODULE

These carbureted Daytona Twin Tec adjustable module's, features are:

* • Wide range of timing advance adjustment that accommodates stock to highly modified engines.
- Digitally set RPM limit (100 RPM steps).
- Selectable multi – spark mode for quick starting and smooth cruise.
- Coil outputs protected against short circuits.
- Optional UBS interface and software for programming custom advance curve.
- Billet housing with two 12 pin connectors.
- Supports all sensors including theft/security module.
- Easy plug in installation with instructions.

No. **2229** - *Use on 1999 -2003 carbureted Twin Cam models.*

EXTERNAL PLUG IGNITION MODULE

These carbureted Daytona Twin Tec adjustable module's, features are:

* • Wide range timing advance adjustment accommodates stock to highly modified engines.
- Digitally set RPM limit (100 RPM steps).
- Selectable multi – spark mode for quick starting and smooth cruise.
- Coil outputs protected against short circuits.
- Optional UBS interface and software for programming custom advance curve.
- Billet housing with a 8 pin connector.
- Easy plug in installation with instructions.

No. **2230** - *Use on 1994 - 1999 later Evolution Big Twins.*

* **Note: For any technical support on the modules contact: Daytona Twin Tech 1-386-304-0700.**

REPLACEMENT FORGED ALUMINUM PISTON

JIMS® pistons represent an advancement in piston design and function. These pistons now incorporate the latest oil control technology with 3mm oiling control ring grooves, and advanced piston skirt design. By reducing the oil control ring to a 3mm thickness there is less internal friction, which reduces heat, and creates more power. The piston skirts have also been optimized to take full advantage of piston support without incurring more friction. The rear piston's, non thrust face portion, receives a radial notch to clear the full skirt of the front piston. This design gives the front piston more support while still allowing proper piston-to-piston clearance. Replacement pistons retain original design piston notching.

COMPRESSION HEIGHT CLEARANCE

The compression height (C.H.) is measured from the centerline of the wrist pin to the piston deck (the top outer most edge of the piston w/out dome). A minimum piston-to-head clearance of .040" should be maintained when using steel connection rods. To determine this clearance, combine the compression height with a compressed cylinder base gasket's thickness.

VALVE POCKET DEPTH

Though dependent on several factors, JIMS® recommends that valve pocket clearance be kept to a .060" clearance for both intake and exhaust valves. ***Note:*** *Always check valve clearance with clay and fully solid tappets before turning engine over.*

COMPRESSION RATIOS

Unless otherwise specified, all compression ratios are based on stock heads, cylinder, and stroke. Refer to your equipment manufacturer's literature for specifications.

TWIN CAM® PISTONS

JIMS® Twin Cam® piston sets are CNC machined from aerospace quality, forged 2618 aluminum alloy. Each kit includes directional pistons, precision ground wrist pins, rings, and clips. *For more details see No.1606-IS instructions.*

TWIN CAM® BIG BORE FLAT TOP PISTONS

BIG BORE TWIN CAM® 100" SERIES II

Use on 1999-present. Requires 4" bore cylinders and boring of case.

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R
No.**1603**	*4" std*	*4"*	*.927"*	*No.1491*	*9.56:1**

**Compression ratios are approximate.*

TWIN CAM® DISHED STROKER PISTONS

STROKER TWIN CAM® 113" & 116" SERIES I

Requires JIMS® 4.5" or 4.625" Twin Cam® Stroker Kit Assemblies

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R
No.**1620**	*4"+ .005*	*4.5/4.625*	*.827"*	*No.1428*	*10.19:1**

**Compression ratios are approximate.*

STROKER TWIN CAM® DISHED 113" SERIES II

Requires JIMS® 4.5" Twin Cam® Stroker Kit Assemblies

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R
No.**1607**	*4" std*	*4.5/4.625*	*.927"*	*No.1491*	*10.19:1***
No.**1607B**	*4"+ .010*	*4.5/4.625*	*.927"*	*No.1493*	*10.19:1***

**Compression ratios are approximate.*

STROKER TWIN CAM® DISHED 116" SERIES II

Requires JIMS® 4.625" Twin Cam® Stroker Kit Assemblies

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R
No.**1608**	*4" std*	*4.5/4.625*	*.927"*	*No.1491*	*10.19:1***
No.**1608A**	*4"+ .005*	*4.5/4.625*	*.927"*	*No.1492*	*10.19:1***
No.**1608B**	*4"+ .010*	*4.5/4.625*	*.927"*	*No.1493*	*10.19:1***

TWIN CAM® WRIST PIN CLIP SETS

No.**1602K** - *Replacement wrist pin clips for .827" wrist pins. Use on JIMS® Series I 100" piston set No.1620.*

No.**1604K** - *Replacement wrist pin clips for .927" wrist pins. Use on piston set No's. 1603, 1607, 1607B, 1608, 1608A and 1608B.*

***Compression ratios based on 85.9cc head with .040" head gas ket and 9.5cc piston dish at zero deck height.*

** Compression ratios are approximate.*

TWIN CAM® PISTON SPECS.	COMPRESSION HEIGHT	COMPLETE WEIGHT
1603	1.270"	1148g
1620	1.125"	1058g
1607	1.188"	1140g
1607B	1.188"	1142g
1608	1.125"	1115g
1608A	1.125"	1116g
1608B	1.125"	1118g

TWIN CAM® PISTON SPECS.	COMPRESSION HEIGHT	COMPLETE WEIGHT
1611	1.199"	1145g
1613	1.199"	1149g
1614	1.27"	1171g
1615	1.175"	1149g
1616	1.0825"	1148g
1617	1.125"	1143g
1618	1.125"	1145g

Phone 805-482-6913 JIMS Fax 805-482-9224

EVOLUTION® PISTONS

JIMS® forged 2618 aluminum pistons add unquestioned reliability to stock and performance Evolution® engines. Each set includes pistons, rings, wrist pins, and wrist pin clips. The 106" kit is listed as *While Supplies Last*, please call in for special reduced pricing.

For more details see No.1530-IS instructions.

Recommended JIMS® Tools for Piston, Rings and Wrist Pins, Wrist Pin Clips, and Wrist Pin Bushings:

Twin Cam®

No.**951** - *Torque Plates*

No.**1051** - *Connecting Rod Bushing Tool*

No.**1726-3** - *Wrist Pin Bushing Reamer Tool*

No.**1276** - *Wrist Pin Remover & Installer Tool*

No.**1235** - *Piston Ring Expander Tool*

No.**1236** - *Piston Ring Compressor Tool*

No.**1765** - *Piston Ring Groove Cleaner Tool*

No.**1284** - *Rod Holder Tool*

No.**1164** - *Piston Support Plate Tool*

No.**1148** - *Rod Alignment Tool*

EVOLUTION

No.**1073** - *Torque Plates*

No.**1726-1** - *Wrist Pin Bushing Reamer Tool*

No.**1235** - *Piston Ring Expander Tool*

No.**1236** - *Piston Ring Compressor Tool*

No.**34623-83** - *Piston Pin Keeper Tool*

No.**1172** - *Wrist Pin Clip Remover & Installer Tool*

No.**1765** - *Piston Ring Groove Cleaner Tool*

No.**1284** - *Rod Holder Tool*

No.**1164** - *Piston Support Plate Tool*

No.**1010** - *Rod Alignment Tool*

Refer to the "Tool Section" of catalog for more details.

EVO 80" DOMED PISTONS

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R	COMP. HEIGHT	TOTAL PISTON SET WEIGHT
No.**1555**	3.5" STD.	4.25"	.792"	No.1461	10:1	1.375"	924g
No.**1555A**	3.5"+.005	4.25"	.792"	No.1462	10:1	1.375"	928g
No.**1555B**	3.5"+.010	4.25"	.792"	No.1463	10:1	1.375"	931g

EVO 87" FLAT TOP PISTONS

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R	COMP. HEIGHT	TOTAL PISTON SET WEIGHT
No.**1558**	3.5" STD.	4.50"	.792"	No.1461	10:1	1.250"	898g
No.**1558A**	3.5"+.005	4.50"	.792"	No.1462	10:1	1.250"	902g
No.**1558B**	3.5"+.010	4.50"	.792"	No.1463	10:1	1.250"	908g

EVO 89" FLAT TOP PISTONS

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R	COMP. HEIGHT	TOTAL PISTON SET WEIGHT
No.**1561**	3.5" STD	4.625"	.792"	No.1461	9.25:1	1.188"	882g
No.**1561B**	3.5"+.010	4.625"	.792"	No.1463	9.25:1	1.188"	906g

EVO 96" FLAT TOP PISTONS

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R	COMP. HEIGHT	TOTAL PISTON SET WEIGHT
No.**1576**	3.625" STD	4.625"	.792"	No.1467	9.75:1	1.200"	898g
No.**1576A**	3.625"+.005	4.625"	.792"	No.1468	9.75:1	1.200"	942g
No.**1576B**	3.625"+.010	4.625"	.792"	No.1469	9.75:1	1.200"	947g

WHILE SUPPLIES LAST

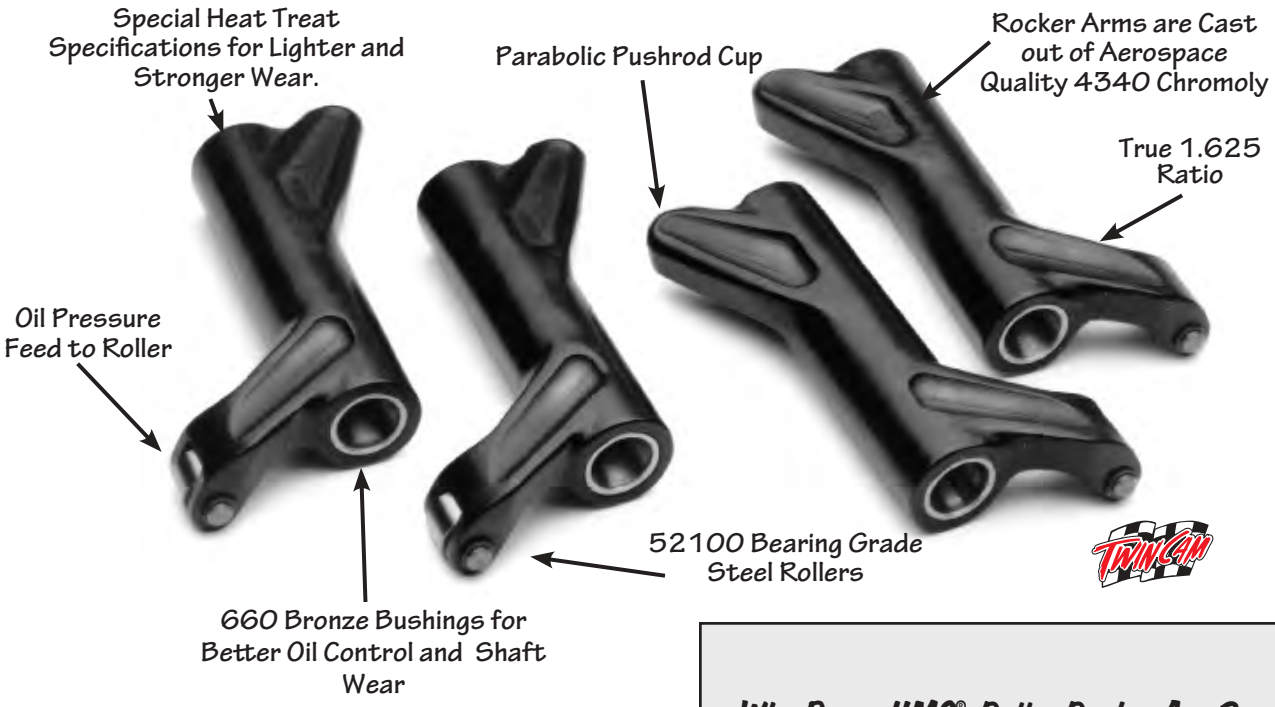
EVO 106" FLAT TOP PISTONS

PART NO.	BORE	STROKE	PIN O.D.	RINGS	C/R	COMP. HEIGHT	TOTAL PISTON SET WEIGHT
No.**1584B**	3.812"+.010	1.625"	.792"	No.1477	10:1	1.200"	1033g

EVO WRIST PIN CLIP SETS

No.**1599K** - *Replacement wrist pin clips, 4-pack for all piston sets below.*

JIMS® STREET OR STRIP PERFORMANCE QUALITY
ROLLER ROCKER ARMS



Here at JIMS® we're always researching and developing ways to improve existing product, as in our roller rocker arms. JIMS® Roller Rocker Arms are made from aerospace quality 4340 steel. This is the "King" of the hardening grade of constructional alloy steels. Due to a richer alloy content, 4340 possesses much deeper concentration of hardening than the 4100 series. This advantage is realized principally where high strength is required in heavy sections. In addition, an unusually high concentration of hardening ensures maximum toughness and ductility at the desired strength level. The fatigue-tensile ratio makes this grade of alloy steel ideal for highly stressed parts. It maintains its strength, ductility, and toughness at relatively high temperatures. It has remarkable non-distorting properties for an alloy steel, with an overall increase in strength and a decrease of flex. We machine the rockers on the newest horizontal CNC mills available. The new rockers are heat treated and assembled with JIMS® 660 Bronze Bushing, bearing steel roller and axle. The combination of these high quality materials along with our precision machining standards result in the best roller rocker arms available.

Why Buy a JIMS® Roller Rocker Arm?

- Produced from aerospace quality 4340 chromoly steel
- Features a segmented parabolic pushrod cup, which reduces friction at pushrod end and also puts the load on the outer perimeter of pushrod ends
- Features full oiling of the roller tip, valve springs and pushrod tip
- 52100 bearing steel roller tip for the longest possible life
- 660 bronze bushing for the best wear resistance and oil control, fit to H-D® specifications
- Reduces friction, heat, and wear in all valve train components from stock to strip
- Heat treated by JIMS® special technique to provide you with the strongest and lightest roller rocker arms
- A true 1.625 rocker arm ratio, with improved rocker geometry
- Quieter, smoother valve train... The JIMS® Way!

ROLLER ROCKERS - STOCK RATIO 1.625

The best just got a whole lot better!...JIMS® Roller Rockers are designed to reduce friction in the valve train and provide more horsepower with less heat in the top end. Cast from 4340 chromoly steel and heat treated, JIMS® Roller Rockers feature a 660 bronze bushing fit to .0007"-.0012", for the best wear resistance and oil control, along with a roller tip made from bearing grade material which reduces valve guide wear and valve tip galling. Other features include a segmented parabolic pushrod cup which reduces friction at pushrod ends and also puts the load on the outer perimeter of pushrod ends. Designed to work in conjunction with other JIMS® valve train components. Use JIMS® No.17611-83 Rocker Arm Shafts, or equivalent. These Rocker Arms replace H-D® No's 17360-83A & 17375-83A. *For more details see No.1045-IS instructions.*

NOTE: *Twin Cam® rocker boxes require clearancing of the webbing on the valve side.*

No.**1045RR** - *Use on all Big Twin 1984-present and aftermarket engines.*
Use on Sportster® 1986-present.
Use on Buell® 1987-present, except 1125R.

RACE ONLY

ROCKER ARM SET - 1.745 RATIO

JIMS® Roller Rocker Arms in a 1.745 rocker ratio. Made with the same high standards as JIMS® 1.625 stock ratio roller rockers. JIMS® 1.745 ratio rockers are designed to work with JIMS® other valve train components and function with JIMS® total valve train system. Cast from 4340 chromoly and then heat treated for maximum strength. Designed to be used with JIMS® No.17611-83 Rocker Arm Shafts or equivalent. For a custom valve train set up where a super high lift is required, using a small lift cam, this 1.745 ratio rocker allows the engine builder to achieve more lift at the valve. *For more details see No.1731-IS instructions.*

NOTE: *These rockers are not a bolt-in roller rocker. They are designed to be installed by the most advanced engine builder. Modification to the heads and rocker boxes may be necessary to install these rockers.*

No.**1731** - *Use on Big Twin 1984-present and aftermarket engines.*
Use on Sportster® 1986-present.
Use on Buell® 1987-present, except 1125R.

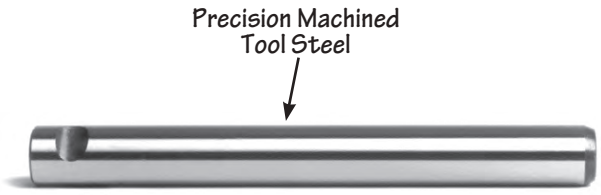
NOTE: *Engine builder still has the responsibility of checking and confirming the operating clearance when installing any of JIMS® products.*

SHOVELHEAD ROLLER ROCKERS - RATIO 1.50

Complete Valve Train Kit on Page 65

By popular demand, JIMS® introduces Roller Rocker Arms for Shovelheads (cast from 4340 chromoly steel and heat treated.) Designed to reduce friction in the valve train, providing more horsepower and less heat in the top end. JIMS® Roller Rockers feature a 660 bronze bushing fit to .0007" - .0012" for the best wear resistance and oil control, along with a roller tip made from bearing grade material to reduce valve guide wear and valve tip galling. Other features include a segmented parabolic pushrod cup which reduces friction at pushrod ends and also puts the load on the outer perimeter of pushrod ends, with full oil pressure at pushrod tip. Designed to work in conjunction with other JIMS® valve train components. Use JIMS® No.17611-66B Rocker Arm Shafts, or equivalent. These Rocker Arms replace H-D® No's 17630-66A & 17375-66A. *For more details see No.1732-IS instructions.*

No.**1732** - *Use on Big Twin 1966-1984, and aftermarket engines.*



ROCKER SHAFT

Std. O.D. is .554". This rocker shaft replaces H-D® No.17611-83 and S & S® No.90-4006

No.**17611-83 -** *Use on Big Twin 1984-present. (Note: Fits Twin Cam® 96", and after-market engines). Use on Sportster® 1986-present. Use on Buell® 1987-present, except 1125R.*

SHOVELHEAD ROCKER SHAFT

Std. O.D. on big end is .937", smaller end is .434". This rocker shaft replaces H-D® No.17611-66B.

No.**17611-66B -** *Use on Big Twin 1966-84.*
(Not for use with Ram Jet Rocker Seals)

IRONHEAD SPORTSTER® ROCKER SHAFT

Std. O.D. on big end is .937", smaller end is .434". This rocker shaft replaces H-D® No.17435-57B.

No.**17435-57B -** *Use on Sportster® 1957-85.*

RACE APPLICATION ONLY ROCKER SHAFT

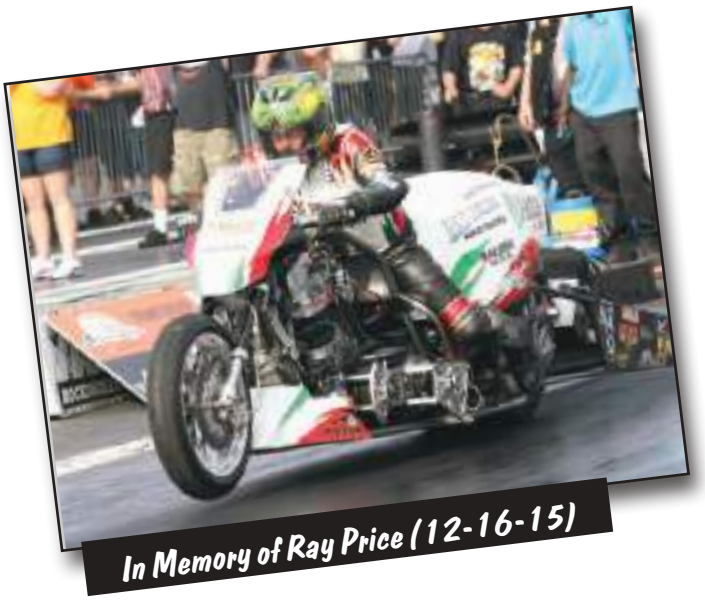
Grease hole fitting thread size is 1/4"-28.

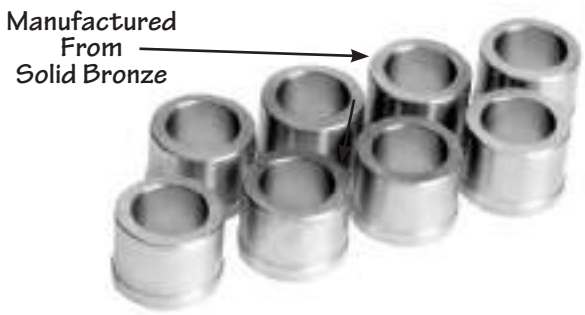
No.**17611-83H -** *Has grease hole in one end. Designed for race bikes using a dry top end.*

CHROME EVO OR TWIN CAM® HEADBOLT KIT

These precision manufactured headbolt sets come with a 12 point domed top. They have a 170,000 minimum PSI tensile strength and are made from an aerospace quality moly steel. They have a special heat treating process to retain maximum strength for this application. Use JIMS® tool No.2392 Headbolt Torque Gauge to assist the builder when torquing headbolts. Do not overtorque headbolts. Follow manufacturers torque specifications when installing headbolts. Set has 4 - 3 3/16" and 4 - 1 7/8" long bolts.

No.**1160** - *Use on 1992-present Big Twins, Twin Cam®.*
Use on 1993-present Sportster® & Buell®, except 1125R.





CUSTOM ROCKER ARM BUSHING

These bushings are manufactured from solid billet bearing bronze bar stock. For repairing roller rockers that use Torrington® Roller Bearings. Remove bearing with JIMS® Tool No.95760-57. Press in new bushings using JIMS® Tool No. 2357, and line ream to H-D® specification using JIMS® Tool No.94804-57. Works in Crane® Rocker Arms with approximately .785" inside diameter. **Sold only in packs of 8.** Ream to fit. O.D. is .790".

For EVO, use JIMS® Rocker Arm Shafts No.17611-83, or equivalent. For Shovelheads, use JIMS® No.17611-66B.

No.**17428-CCK -** *Use for custom applications.*

EARLY ROCKER ARM BUSHING

These bushings are manufactured from solid billet bearing bronze bar stock. I.D. .547". **Sold in packs of 8.** Ream to fit. Use JIMS® tool No.95760-57 for removal, No.2357 for installing and No. 94804-57 for reaming. This bushing replaces H-D® No. 17428-57.

No.**17428-57K -** *Use on Big Twin 1966-84.*
Use on Sportster® 1957-85.

LATE MODEL ROCKER ARM BUSHING

These bushings are manufactured from solid billet bearing bronze bar stock. **Sold in packs of 8.** Same as 17428-57 – less mill slot (not to be used on Shovels or Ironhead Sportsters.) I.D. is .555". Intended for hone only. Install bushings with JIMS® Tool No.2357. I.D after press fit approx. .552"-.553"

No.**17428-83K -** *Use on all Big Twin 1984-present. (Note: Fits all Twin Cam®, and aftermarket engines).*
Use on Sportster®1986-present.
Use on Buell®1987-present, except 1125R.

ROCKER ARM ROLLER

These rollers are manufactured from aerospace bearing steel. Use on all JIMS® Roller Rocker Arms as a replacement roller. **Sold in packs of 4.**

No.**2178K -** *Replacement roller.*

ROCKER ARM AXLE

These rollers are manufactured from aerospace bearing steel. Use on all JIMS® Roller Rocker Arms as a replacement axle. **Sold in packs of 4.**

No.**2179K -** *Replacement axle.*

ROCKER ARM LOCK RING

State of the art lock rings, will hold up to 2000 p.s.i. Use on all of JIMS® Roller Rocker Arms as a replacement lock ring. **Sold in packs of 8.**

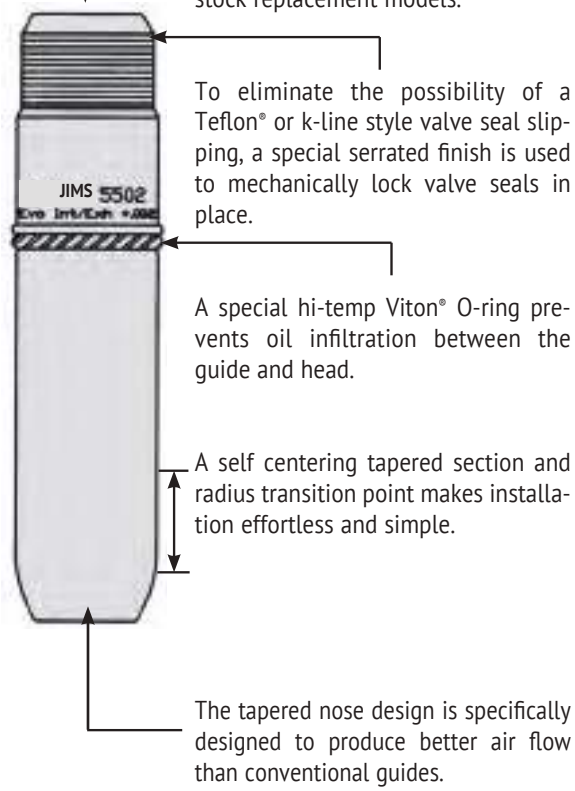
No.**2180K -** *Replacement lock ring.*

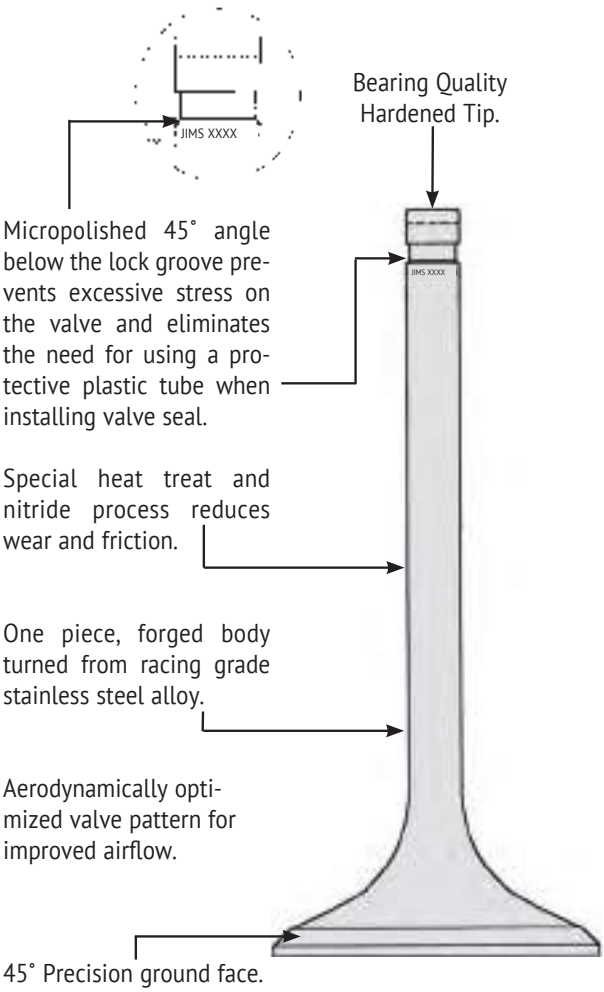
PRECISION VALVES FROM JIMS®

These valves are made from the highest grade, one piece, stainless steel and heat treated forgings. Each valve has a bearing quality hardened tip at the end of the stem to prevent premature wear with high-lift applications. This special design includes a polished 45 degree lead below the lock ring groove to prevent seal damage. Each valve is then nitrided with a special process and the stem is centerless ground to a micro finish for longer life.

PRECISION GUIDES FROM JIMS®

Valve guides are made from both manganese bronze or Micrograin Cast Iron. Both incorporate a special high temp Viton O-ring seal. This seal will prevent any oil from passing between the guide and the head. Guides also incorporate a smooth lead in self-aligning radius for the best possible alignment during installation. The nose is also designed with a tapered guide that will give an increase in air flow. At the top of the guide, there is a specially designed super grip finish that will keep teflon or k-line style seals in place. We have also shortened the top of the guides for high lift cams to clear all valve spring collars. With Manganese Bronze Alloy, intake guides can be fit to .0008" and exhaust guides can be fit to .0012" or more depending on application - when used with JIMS® valves only.





JIMS® BLACK NITRIDE PERFORMANCE VALVES

JIMS® completes the quest for the ultimate valve train system with the addition of these high-performance valves. Designed to withstand extreme racing conditions, these valves are constructed from a forged one piece racing grade stainless steel alloy, and specially heat-treated for superior wear resistance. A special micropolished 45˚ angle just below the lock groove prevents excessive stress on the valve, and makes valve seal installation easier.

TWIN CAM/EVO BLACK NITRIDE PRO VALVES

(Use on 1984-present EVO Big Twin, and 1999-04 Twin Cam® engines, and most aftermarket performance heads.)

PART NO.	VALVE TYPE	HEAD DIA.	OVERALL LENGTH	STEM DIA.	PROFILE
No.**1310B**	*Exhaust*	*1.570"*	*4.525"*	*.3106"*	*Dished Head*
No.**1312**	*Intake*	*1.940"*	*4.440"*	*.3108"*	*Dished Head*
No.**1313**	*Intake*	*2.020"*	*4.490"*	*.3108"*	*Dished Head (+.050")*

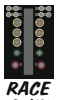
EVO SPORTSTER® 883cc - 1200cc CONVERSION BLACK NITRIDE PRO VALVES

These valves are designed to convert 1986 to present EVO Sportsters 883cc - 1200cc dimensions. ***NOTE:*** *Valve seats must be machined larger and deeper to accommodate the larger valves.*

PART NO.	VALVE TYPE	HEAD DIA.	OVERALL LENGTH	STEM DIA.	PROFILE
No.**1314**	*Exhaust*	*1.480"*	*4.640"*	*.3106"*	*Dished Head*
No.**1315**	*Intake*	*1.720"*	*4.560"*	*.3108"*	*Dished Head*

JIMS® HEAVY DUTY STAINLESS STEEL PANHEAD REPLACEMENT VALVES

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



PANHEAD VALVES

PART NO.	VALVE TYPE	APPLICATION	HEAD DIA.
No.**1320**	*Exhaust*	*Use on Panhead 1948-65*	*1.750"*
No.**1320**	*Intake*	*Use on Panhead 1948-65*	*1.750"*

NOTE: *Engine builder still has the responsibility of checking and confirming the operating clearance when installing any of JIMS® products.*

Shaun Schnathorst

Tony Ruggierro

SIZING THE GUIDE, THE JIMS® WAY!

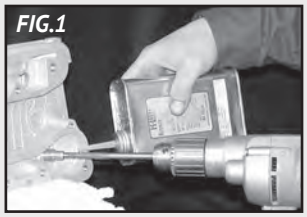


FIG.1

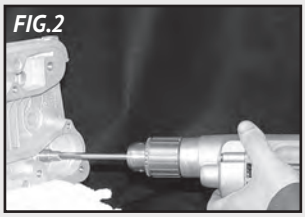


FIG.2

JIMS® Manganese-Bronze valve guide reaming instructions

HIGH SPEED STEEL & SOLID CARBIDE VALVE GUIDE REAMERS

These unique reamers feature a 2" long pilot for perfect alignment with the valve guide while reaming. With these reamers you can expect to ream a valve guide to exact dimensions without any taper in just a few seconds.

A. Install the cylinder head in a vise. Protect the cylinder head with a clean towel or rag, as pictured.

B. Insert the reamer pilot in the guide and lubricate with a good quality cutting oil like K-Line Bronze Reamer Lube. **(Fig.1)**

C. Ream at 100-200 RPM with a slow feed rate. Let the reamer do the work and do not force the reamer. **(Fig.2)**

D. After reaming all the way through, pull the reamer out with-out stopping the rotation. (DO NOT reverse rotation!)

E. Clean the chips off the reamer and you're ready for the next valve guide.

PART NO.	DIAMETER	DESCRIPTION	APPLICATIONS
No.**1133**	*7mm*	*High Speed Steel*	*Twin Cam 2005 to present (except CVO T/C) Buell, Sportster 2004 to present.*
No.**1153**	*.3410"*	*Solid Carbide Reamer*	*Evo/ T/C /Sportster/Buell*
No.**1156**	*.3782"*	*Solid Carbide Reamer*	*Pan/Shovel w/ JIMS Valves*

JIMS® VALVE SEATS

These valve seats are made from heat and wear resistant high quality steel alloy. Each seat is manufactured with a radius edge for easy installation. These seats will resist intense valve pounding and effectively dissipate heat for consistent valve sealing. These valve seats will increase in hardness during engine break-in period. See the charts below for sizes.

EVO & TWIN CAM® OVERSIZED VALVE SEATS
(Machining required)

PART NO.	APPLICATION	VALVE TYPE	O.D.	I.D.	THICKNESS
No.**1342**	EVO 1340 & Twin Cam®	Exhaust	1.757"	1.410"	.430"
No.**1343**	EVO 1340 & Twin Cam®	Intake	2.008"	1.610"	.440"
No.**1344**	EVO 1340 & Twin Cam®	Intake	2.021"	1.590"	.420"

SHOVELHEAD REPLACEMENT VALVE SEATS
(No Machining required)

PART NO.	APPLICATION	VALVE TYPE	O.D.	I.D.	THICKNESS
No.**1340**	Stock Replacement	Exhaust	1.944"	1.570"	.400"
No.**1341**	Stock Replacement	Intake	2.135"	1.750"	.400"

SHOVELHEAD/PANHEAD OVERSIZED VALVE SEATS
(Machining required)

PART NO.	APPLICATION	VALVE TYPE	O.D.	I.D.	THICKNESS
No.**1340**	Panhead Engines	Exhaust	1.944"	1.570"	.400"
No.**1341**	Panhead Engines	Oversize Intake	2.135"	1.750"	.400"
No.**1344**	Shovel / Panhead 1200cc & 1340cc	Intake	2.021"	1.590"	.420"
No.**1346**	Shovel / Panhead 1200cc & 1340cc	Exhaust	2.163"	1.750"	.455"

SPORTSTER® OVERSIZED VALVE SEATS
(Machining required)

PART NO.	APPLICATION	VALVE TYPE	O.D.	I.D.	THICKNESS
No.**1347**	Evolution® Sportster® 883 & 1100cc & 1200cc	Exhaust	1.630"	1.180"	.385"
No.**1348**	Evolution® Sportster® 883 & 1100cc & 1200cc	Intake	1.880"	1.439"	.410"
No.**1342A**	Ironhead Sportster®	Exhaust	1.757"	1.371"	.315"
No.**1357**	Ironhead Sportster®	Intake	2.068"	1.750"	.315"

UNIVERSAL VALVE SEATS
(Machining required)

Part No.	Application	Valve Type	O.D.	I.D.	Thickness
No.**1358S**	Universal Repair Seat	Both	1.820"	1.375"	.450"

BEEHIVE VALVE SPRING KITS

KITS INCLUDE SPRINGS, COLLARS, RETAINERS AND KEEPERS

The advantages of these performance spring kits are as follows:

- ***Higher RPM Capability***
- ***Increased Revving Capability and Valve Control***
- ***No Rocker Box Clearance Issues***
- ***Engineered to Maximize "Harmonic Resistance"***
- ***Handles Spring Harmonics Throughout a Wide RPM Band***
- ***Reduces Noise***
- ***Runs Cooler***

JIMS® PERFORMANCE "BEEHIVE STYLE" VALVE SPRING KITS

These "Beehive Style" Valve Spring Kits are the newest in valve spring technology for your Twin Cam® or Sportster®. These are the top choice when installing high lift cams and made from the highest quality materials available. Valve spring retainers available in either chromoly or titanium. JIMS® No.1383 or 1384 are for street applications using OEM 7mm valves, guides and H-D® No.18094-02A seals or equivalent. JIMS® No.1385 is for race applications with larger 5/16" valve stems. All component piece sets are available on 42 and 43 pages. All JIMS® springs are magnafluxed to insure quality.

PART NO.	YEAR & APPLICATION	DESCRIPTION	SPRING O.D.	I.D. CHECKING HEIGHT	PRESSURE AT OPEN HEIGHT	PRESSURE AT BIND HEIGHT	COIL BIND	RETAINERS	SPRING NO.
1383	*2005 to present Twin Cam® 2004 to present Sportster® & Buell®*	*Good street and performance spring to .600" lift*	*1.095" / 1.445"*	*.650" / 1.00"*	*Lbs. 155 In. - 1.880"*	*Lbs. 167 In. - 1.850"*	*1.230"*	*Chromoly*	*#1300*
1384	*2005 to present Twin Cam® 2004 to present Sportster® & Buell®*	*Good street or race performance spring to .600" lift*	*1.095" / 1.445"*	*.650" / 1.00"*	*Lbs. 155 In. - 1.880"*	*Lbs. 166 In. - 1.850"*	*1.230"*	*Titanium*	*#1300*
1385	*84-99 Evo, 99-04 Twin Cam® 86-03 Sportster® & Buell Except 1125R*	*Good street or race performance spring to .690" lift*	*1.185" / 1.589"*	*.731" / 1.135"*	*Lbs. 179 In. - 1.190"*	*Lbs. 193 In. - 1.850"*	*1.190"*	*Titanium*	*#1301*

NOTE: *Please see the following pages for individual"Beehive Style" valve springs, retainers and locks.*

NOTE: *Use to remove and replace valves and conical valve springs. See page 141.*

NOTE: *Engine builder still has the responsibility of checking and confirming the operating clearance when installing any of JIMS® products.*

JIMS® CONICAL VALVE SPRING COMPRESSOR TOOL

Add this collar to your JIMS® valve spring compressor tool No.96600-36B to remove and replace valves and conical (Bee Hive) H-D® No.18245-02 springs, a must-have tool for safe valve work.

No.**988** - Use on all '05 to present Twin Cam®, (except SE models). Use on all '04 - present XL's & Buell® Twins, except 1125R.

VALVE SPRING KITS

JIMS® SPRING KITS FOR EVO AND TWIN CAM 88® "A & B" MOTORS

Spring kits from JIMS® are made from the highest grade materials such as chromoly and titanium. JIMS® spring kits incorporate an interference double spring design with a damper. The damper keeps the inner and outer spring coils from locking together while controlling power robbing harmonics in the spring. JIMS® High Performance Valve Spring Kits are engineered for maximum performance in severe applications such as high compression and big inch race and street motors. Spring Kits come in a variety of ranges and include locks, retainers and spring seats, or **sold separately in sets.** Spring Kits are **sold in sets for one engine.** All JIMS® springs are magnafluxed to insure quality.

PART NO.	APPLICATION	DESCRIPTION	YEAR	O.D.	I.D. CHECKING HEIGHT	PRESSURE AT OPEN HEIGHT	PRESSURE AT BIND HEIGHT	COIL BIND	RETAINERS	SPRING NO.
1350K	*Evo Big Twin Twin Cam 88®*	*Good street & performance spring to .600" lift*	*1984-04 or *HP*	*1.460"*	*.700"*	*Lbs.-160 In.-1.850"*	*Lbs.-440 In.-1.250"*	*1.200"*	*Chromoly*	*#1356*
1351K	*Evo Big Twin Twin Cam 88®*	*Good street & performance spring to .600" lift*	*1984-04 or *HP*	*1.460"*	*.700"*	*Lbs.-160 In.-1.850"*	*Lbs.-440 In.-1.250"*	*1.200"*	*Titanium*	*#1356*
1352K	*Evo Big Twin Twin Cam 88®*	*Super springs, excellent street & performance spring up to .675" lift*	*1984-04 or *HP*	*1.510"*	*.745"*	*Lbs.-184 In.-1.850"*	*Lbs.-422 In.-1.280"*	*1.080"*	*Chromoly*	*#1349*
1353K	*Evo Big Twin Twin Cam 88®*	*Super springs, excellent street & performance spring up to .675" lift*	*1984-04 or *HP*	*1.510"*	*.745"*	*Lbs.-184 In.-1.850"*	*Lbs.-422 In.-1.280"*	*1.080"*	*Titanium*	*#1349*
1354K	*Evo Big Twin Twin Cam 88®*	*For race applications up to .675" lift*	*1984-04 or *HP*	*1.540"*	*.725"*	*Lbs.-195 In.-1.900"*	*Lbs.-.515 In.-1.250"*	*1.175"*	*Titanium*	*#1359*
1355K	*Evo Big Twin Twin Cam 88®*	*For race applications up to .700" lift*	*1984-04 or *HP*	*1.550"*	*.710"*	*Lbs.-230 In.-1.875"*	*Lbs.-700 In.-1.200"*	*1.100"*	*Titanium*	*#1360*

* May also be used on High Performance Heads

NOTE: *Engine builder still has the responsibility of checking and confirming the operating clearance when installing any of JIMS® products.*

PERFORMANCE VALVE SPRING SETS

A Spring is a Spring. Right? Wrong! All Springs are not equal. Valve Springs perform the job of returning the valve to its seat hundreds of thousands of times in the most severe conditions. JIMS® Springs are made from the highest grade materials, heat treated to the highest industry standards, then torture tested on the street and the track to ensure not only consistent quality, but unmatched performance as well.

JIMS Spring Kits incorporate an interference double Spring design with a damper. The damper keeps the inner and outer Spring coils from locking together, while controlling power robbing harmonics in the Spring.

PART NO.	DESCRIPTION	APPLICATION	SEAT LOAD	OPEN LOAD	COIL BIND	RATE LBS / IN
No.**1356**	*1.460 Double Spring w/damper*	*1984-04 EVO/Twin Cam®***	*125@1.800*	*275@1.300*	*1.150"*	*300*
No.**1359**	*1.540 Double Spring w/damper*	*1984-04 EVO/Twin Cam®***	*195@1.900*	*515@1.250*	*1.175"*	*492*
No.**1360**	*1.550 Double Spring w/damper*	*1984-04 EVO/Twin Cam®***	*230@1.875*	*700@1.200*	*1.100"*	*696*
No.**1349**	*1.510 Double Spring w/damper*	*1984-04 EVO/Twin Cam®***	*184@1.85*	*422@1.280*	*1.080"*	*425*
No.**1300**	*1.095/1.445 Beehive Spring*	*2005 to pres. Twin Cam®*** *2004 to pres. XL & Buell®*	*167@1.85*	*377@1.280*	*1.230"*	*370*
No.**1301**	*1.185/1.589 Beehive Spring*	*2005 to pres. Twin Cam®*** *2004 to pres. XL & Buell®*	*193@1.85*	*373@1.240*	*1.150"*	*293*

** May also be used on High Performance Heads

EVO & TWIN CAM® SPRING SEATS

JIMS® Spring Seats are custom machined to provide positive location in the Spring pocket to prevent the Spring from "dancing" around on the cylinder head which can create harmful harmonics and excessive wear. Made from Chromoly to JIMS® highest standards.

SPRING SEATS ARE SOLD IN SETS OF 4 FOR ONE ENGINE

PART NO.	DESCRIPTION	APPLICATION	THICKNESS	I.D.	O.D.
No.**1377**	*Spring Seat (Set of 4)*	*EVO & Twin Cam® 1984-04***	*.080"*	*.585"*	*1.500"*
No.**1309**	*Spring Seat (Set of 4)*	*2005 to present Twin Cam®*** *2004 to present XL & Buell®*	*.060"*	*.585"*	*1.550"*
No.**1317**	*Spring Seat (Set of 4)*	*2005 to present Twin Cam®*** *2004 to present XL & Buell®*	*.060"*	*.570"*	*1.590"*

** May also be used on High Performance Heads

NOTE: *Engine builder still has the responsibility of checking and confirming the operating clearance when installing any of JIMS® products.*

VALVE SPRING-RETAINERS (TITANIUM)

JIMS® Titanium Upper Spring Collars fit all Evolution® Big Twins. They are stronger than stock retainers and 50% lighter. The reduced weight of our Titanium Retainer allows you to use less Spring pressure to do the same work. Less weight and Spring pressure allows the motor to rev quicker and create more horsepower.

MADE WITH THE FINEST TITANIUM AVAILABLE AND MACHINED ON A C.N.C. LATHE.

PART NO.	DESCRIPTION	APPLICATION	LOCK ANGLE	STEM SIZE	SPRING DIAMETER
No.**1372**	*Titanium, Double Springs*	*1984-04 EVO & Twin Cam®*	*10°*	*All*	*1.437-1.500"*
No.**1373**	*Titanium, Double Springs*	*1984-04 EVO & Twin Cam®*	*10°*	*All*	*1.500-1.550"*
No.**1374**	*Chromoly, Double Springs*	*1984-04 EVO & Twin Cam®*	*10°*	*All*	*1.437-1.500"*
No.**1375**	*Chromoly, Double Springs*	*1984-04 EVO & Twin Cam®*	*10°*	*All*	*1.500-1.550"*
No.**1307**	*Titanium, Beehive Style*	*2005 to present Twin Cam® & 2004 to present XL & Buell®*	*10°*	*7mm*	*1.095-1.445"*
No.**1308**	*Titanium, Beehive Style*	*2005 to present Twin Cam® & 2004 to present XL & Buell®*	*10°*	*.310*	*1.185-1.589"*
No.**1302**	*Chromoly, Beehive Style*	*2005 to present Twin Cam® & 2004 to present XL & Buell®*	*7°*	*7mm*	*1.095-1.445"*

VALVE LOCKS

Quality valve locks are essential for any performance spring kit. JIMS® Super Valve Locks are made from the highest grade materials and are heat treated to JIMS® strict standards. Made for all models, Big Twin and Sportster®, 7mm, 3/8", and 5/16". JIMS® Super Valve Locks feature the time proven 7 or 10 degree lock angle and are made to fit our stronger than stock, super light weight titanium spring retainers, or any retainer with 7 or 10 degree lock angles. Available with or without lash cap recess clearance.

PART NO.	DESCRIPTION	YEAR	MODEL	ENGINE	LOCK ANGLE	STEM SIZE
No.**1368**	*Super Locks w/lash cap recess*	*1948-84*	*Big Twin*	*Pan/Shovel*	*10°*	*3/8"*
No.**1369**	*+.050 inst. Hgt. w/o recess*	*1957-85*	*XL Exhaust*	*Sportster®*	*10°*	*3/8"*
No.**1370**	*Super Locks w/o lash cap recess* *Big Twins* *Sportster*	 *1984-04* *1986-03*	*Big Twin* *Big Twin* *XL Exhaust* *XL Intake 1957-85*	*Evo Big Twin* *Twin Cam 88®* *Evo Sportster®* *Ironhead Sportster®*	*10°*	*5/16"*
No.**1371**	*Super Locks w/lash cap recess* *Big Twins* *Sportster*	 *1984-04* *1986-03*	*Big Twin* *Big Twin* *XL Exhaust* *XL Intake 1957-85*	*Evo Big Twin* *Twin Cam 88®* *Evo Sportster®* *Ironhead Sportster®*	*10°*	*5/16"*
No.**1376**	*Super Locks w/lash cap recess*	*2005-present* *2004-present*	*Big Twin* *Sportster®* *Buell®*	*Twin Cam®* *EVO* *EVO*	*7°*	*7mm*

PUSHROD COVERS & ACCESSORIES

BILLET TWIN CAM OR EVO PUSHROD COVER SET

These "A Cut Above" billet pushrod covers are styled to give you a clean and smooth look. They feature a unique clip that looks like a complete tube while retaining the simple push-pull spring type function. Will work on any length cylinders utilizing spacer kits that are available below. ***NOTE:*** *Will not fit JIMS stroker kit cylinders. For more details see No.3001-IS instructions.*

Black

TWIN CAM

No.**3000** - *Bright dipped anodized.*
No.**3003** - *Black anodized.*
No.**3004** - *Chrome.*
No.**3005** - *Polished.*

EVOLUTION

No.**3002** - *Chrome.*
No.**3001** - *Polished.*

PUSHROD COVER CLIP INSTALLING AND REMOVER TOOL

First thought...
why would I need this tool, when I've been installing and removing OEM style pushrod covers for years with just a screw driver? Made from black delrin, this tool will NOT marr or slip – and will install the clip professionally with just one hand in seconds! It's a luxury tool you will appreciate for years to come. *For more details see No.917-IS instructions.*

No. **917** - *Use on all V-Twins that use pushrod clips.*

PUSHROD COVER SPACERS

JIMS® spacers are used to space up the pushrod covers above when taller than stock cylinders are used. Available in four sizes.

No.**1093SP4K** - *.275 Thick - Pack of 4.*
No.**1093SP3K** - *.225 Thick - Pack of 4.*
No.**1093SP2K** - *.200 Thick - Pack of 4.*
No.**1093SP1K** - *.155 Thick - Pack of 4.*

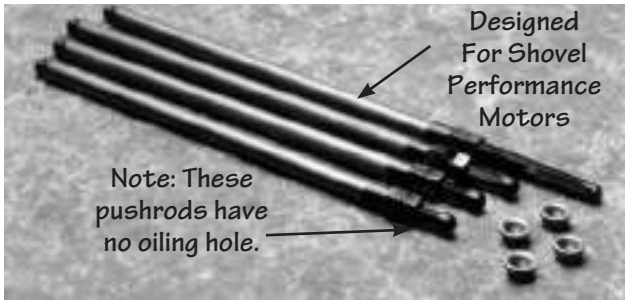
PRO-LITE WORKSAVERS ALL TWIN CAM®

JIMS® adjustable pushrods for Twin Cam® are strong, light, and made from aerospace quality heat treated aluminum with heat treated steel ends. No disassembly of top end, or removal of the Cam is required. These are the lightest pushrods on the market today, weighing in at about 70 grams. *For more details see No.2416-IS instructions.*

No.**2416** - *Use on all Twin Cam®. Pushrods have 24 threads per inch, with 3/8" balls on both ends.*

NOTE: *When using Twin Cam® Pushrod set No.2416 you will need to use (4) H-D® No.17938-83 lower pushrod covers and (4) H-D® No.17634-99 pushrod spring cover keepers.*

8



"POWERGLIDE™" UPGRADE KIT

Now all of you Shovelhead owners, using JIMS® "Powerglide™" Tappets (.731" diameter only), can upgrade to the latest design improvements. Use on stock or performance applications. Kit comes with four new 3/8" diameter pushrod seats, to make the "Powerglide™" 5/8" shorter and four new Pro-Lite Worksavers Shovelhead Pushrods with no hole. Complete instruction sheet included. *(for more details see Instruction Sheet 2400-IS)*

No.**2400** - *Use on all Shovelheads and aftermarket engines using JIMS® "Powerglide™" Shovelhead Tappets No.2459-1, 2460-1, and 2461-1 with shovel top ends* (.731" diameter only.) *Pushrods have 24 threads per inch, and 3/8" ball on both ends.*

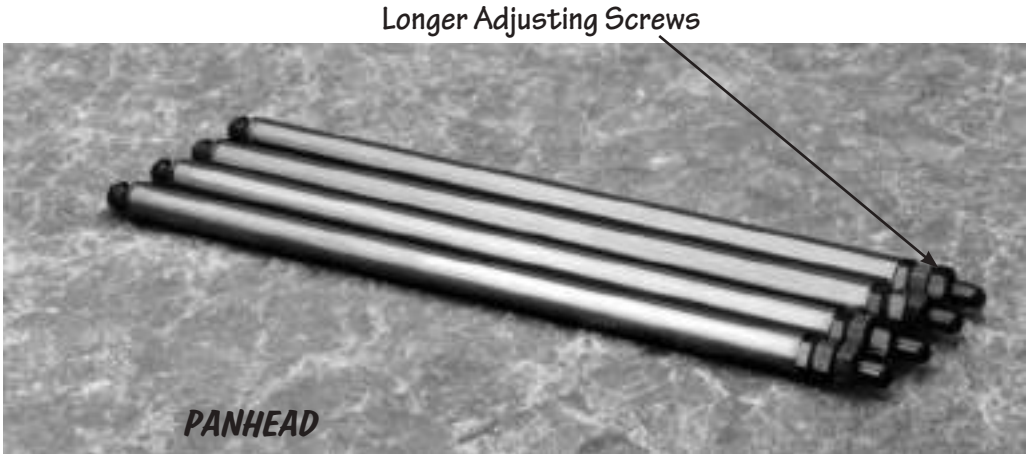
PRO-LITE WORKSAVERS EVO PUSHRODS

JIMS® Adjustable Pushrods, for Big Twins, are strong, light and made from aerospace quality heat treated aluminum, with heat treated steel ends. No dis- assembly of the top end, or removal of the cam is required. These are the lightest pushrods on the market today, weighing in at about 73 grams. These pushrods replace H-D® No.'s 17921-83, 17924-83, 17927-83, 17930-83 and S & S® No.93-5076. Will work with .200" taller cylinder. *(for more details see Instruction Sheet 2380-IS)*

No.**2380** - *Use on all Evo single cam only Big Twin 1984-99. Pushrods have 24 threads per inch, with 3/8" balls on both ends. (**NOTE:** Fits aftermarket engines.)*

NOTE: *All of JIMS® pushrods eliminate the need to disassemble the top end or remove the rocker arms to change tappets, tappet blocks, pushrod cover seals, and cams.*

NOTE: *Engine builder still has the responsibility of checking and confirming the operating clearance when installing any of JIMS® products.*



SLIM-JIMS® ALUMINUM PANHEAD PUSHRODS

Made from aerospace quality aluminum tubing and heat treated steel ends. These lightweight pushrods provide maximum durability and long life. No disassembly of the top end or removal of the cam is required. JIMS® pushrods replace the stock steel rods and still retain the stock hydraulic unit. Combine these pushrods with JIMS® No.2459-1 "Powerglide™" Tappets for increased performance and reliability. Slim-JIMS® are extremely light and strong. These pushrods replace H-D® No.17905-53B and S & S® No.93-5050.

No.**2404 -** *Use on Big Twin 1953-65. Pushrods have 32 threads per inch, with a 7/16" ball rocker end and a 1/4" ball tappet end. (**NOTE:** Also fits aftermarket engines.)*

SLIM-JIMS® ALUMINUM SHOVELHEAD PUSHRODS

Made from aerospace quality aluminum tubing and heat treated steel ends. These lightweight pushrods provide maximum durability and long life. No disassembly of the top end, or removal of the cam, is required. JIMS® pushrods replace the stock steel rods and still retain the stock hydraulic unit. Combine these pushrods with JIMS® No.2459-1 "Powerglide™" Tappets for increased performance and reliability. Slim-JIMS® are extremely light and strong. These pushrods replace H-D® No.17904-66 and S & S® No.93-5060.

No.**2369 -** *Use on Big Twin 1966-84. Pushrods have 32 threads per inch, with a 3/8" ball rocker end and a 1/4" ball tappet end. (**NOTE:** Also fits aftermarket engines.)*

JIMS EVOLUTION CAM SHAFTS

JIMS Evo cam shafts were designed to work in a variety of engine combinations. All have a special lobe designed to maintain as wide a power band as possible with a ramp designed to cut down on noise. All of JIMS cams come with a new inner cam bearing No. 9058 (Torrington).

NOTE: *All cams fit 1984-1999 Evo's and all come with a 2.7364" size cam gear. It's Equivalent to a stock H-D red gear and is acceptable to use an existing stock gear for original fitment or use JIMS No. 24043-78 pinion gear for a matched set. Cams can be ordered with or without cam gear. See JIMS catalog for all cam tools.*

NO.1361G - BOLT IN HYDRAULIC (WITH INNER CAM BEARING)
NO.1361 - WITHOUT CAM GEAR

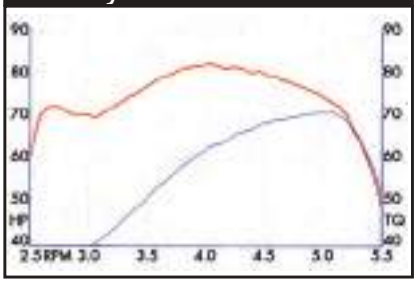
Bolt in Cam with a broad useable torque band that comes on early and pulls throughout the 2000-6000 R.P.M. range.

RACE ONLY

	Open/Close	Duration	Valve Lift	Lobe Center	Rocker Ratio	Lobe Separation Angle
Intake	16.0/38.0	234.0	net.308 / .500	101.0	1.625:1	104.5
Exhaust	50.0/14.0	244.0	net.308 / .500	108.0	1.625:1	

No.1361G & No.1361 - *Use on 1984-1999 Evo Models.*

Dyno Chart No. 1361



NO.1362G - PERFORMANCE HYDRAULIC (WITH INNER CAM BEARING)
NO.1362 - WITHOUT CAM GEAR

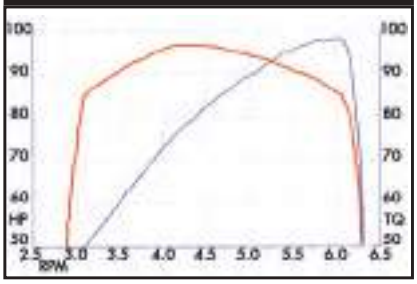
89" to 113" C.I.D. engines, 9.75:1 compression for better and stronger valve springs are a must. Torque comes on strong at low R.P.M and stays almost linear throughout entire R.P.M. range. Excellent top end power at 3000 to 6000 + R.P.M.

RACE ONLY

	Open/Close	Duration	Valve Lift	Lobe Center	Rocker Ratio	Lobe Separation Angle
Intake	24.0/50.0	254.0	net.348 / .565	103.0	1.625:1	105.0
Exhaust	56.0/22.0	258.0	net.348 / .565	107.0	1.625:1	

No.1362G & No.1362 - *Use on 1984-1999 Evo Models.*

Dyno Chart No. 1362



NO.1363G - HIGH PERFORMANCE (WITH INNER CAM BEARING)
NO.1363 - WITHOUT CAM GEAR

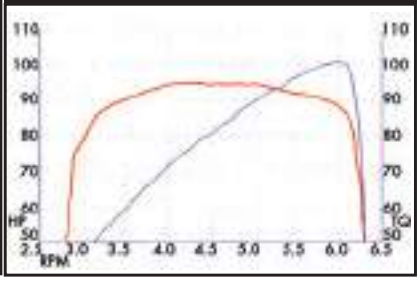
93" to 120" C.I.D. engines, high compression and ported heads are a must. Same characteristics as the No.1362, but with more top end power potential at 2,800-6,000+ RPM.

RACE ONLY

	Open/Close	Duration	Valve Lift	Lobe Center	Rocker Ratio	Lobe Separation Angle
Intake	28.0/56.0	264.0	net.369 / .600	104.0	1.625:1	108.0
Exhaust	68.0/24.0	272.0	net.369 / .600	112.0	1.625:1	

No.1363G & No.1363 - *Use on 1984-1999 Evo Models.*

Dyno Chart No. 1363



NO.1364G - STREET / STRIP (WITH INNER CAM BEARING)
NO.1364 - WITHOUT CAM GEAR

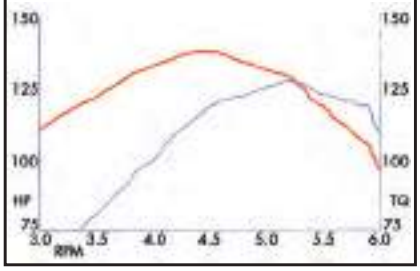
Full race cam for EVO Big Twin

RACE ONLY

	Open/Close	Duration	Valve Lift	Lobe Center	Rocker Ratio	Lobe Separation Angle
Intake	31.0/59.0	270.0	net.406 / .660	104.0	1.625:1	109.0
Exhaust	72.0/24.0	276.0	net.406 / .660	114.0	1.625:1	

No.1364G & No.1364 - *Use on 1984-1999 Evo Models.*

Dyno Chart No. 1364



POWERGLIDE™ TAPPET INFORMATION

HYDRAULIC TAPPET ADJUSTMENT

Install tappets per H-D® Service Manual.

- If the pushrods you are using are adjustable, proceed as follows:
- With the Powerglide™ tappet installed, start with the front tappet at the lowest point on the cam and extend the pushrod to zero lash (no up and down play, but has a light spin).
- Extend the pushrod adjuster 15 wrench flats if pushrods have 24 threads per inch, 17 wrench flats if push-rods have 28 threads per inch, 18 wrench flats if pushrods have 32 threads per inch, 21 wrench flats if pushrods have 36 threads per inch, 24 wrench flats if pushrods have 40 threads per inch and 30 wrench flats if pushrod has 52 threads per inch. Tighten lock nut. ***NOTE:*** *Popular pushrod adjustments below.* **Refer to individual lifter instruction sheet for adjustment information.**

PUSHROD ADJUSTMENTS-FOR REFERENCE ONLY!
NOTE: *Use the instructions that came with your tappets*

Threads per inch	Wrench flats	Total travel distance	Distance per turn	Distance per flats
24	15	.1042”	.0417”	.0069”
28	17	.1011”	.0357”	.0059”
32	18	.0937”	.0313”	.0052”
36	21	.0965”	.0275”	.0045”
40	24	.100”	.025”	.0042”
52	30	.0962”	.0192”	.0032”

POPULAR PUSHRODS MANUFACTURES THREADS PER INCH

JIMS® Pro-lite	*24*	*No.s 2380, 2400*
Slim JIMS	*32*	*No.s 2404, 2369*
Andrews	*28*	
Andrews	*32*	
Crane	*28*	*New Time Savers*
Crane	*24*	*Old Time Savers*
Crane	*32*	
H-D®	*32*	
S&S®	*32*	
Screamin Egl.	*32*	
Rivera	*40*	*Taper Lite*
Rev Tech	*36*	

IMPORTANT NOTE: *This adjustment will make the pushrod tight, which will bleed the hydraulic lifter. It can take 5-15 minutes, or longer, to bleed off. It is very important that the engine is not rotated while pushrods are tight. The pushrod will spin with your fingers after the tappet has bled off.*

- Recheck lock nut, close covers and install clips.
- Repeat exact procedure on rear set.
- Turn motor over several times until oil pumps into the Powerglide™ tappets, and the oil light goes out, or until oil is returning to the oil tank.
- These tappets will work best in JIMS® Tappet Blocks with a running clearance of .0007” to .0012”.
- JIMS® Powerglide™ Tappets can also be run in H-D® blocks, with excellent performance results.
- JIMS® Powerglide™ Tappets are assembled with a small amount of oil to ease in the adjustment.

FOUR POSSIBLE REASONS THAT MAY KEEP NEW HYDRAULIC UNITS FROM WORKING PROPERLY

IMPROPER FIT • MECHANICAL • CONTAMINATION OF OIL SUPPLY • LOW OIL SUPPLY

1. IMPROPER FIT

a) Not likely, each unit goes through two separate dimensional tests. The fit is checked twice, to within .00015” to .0002”.

b) Second, a hydraulic bleed down test is performed dry, then with 5 weight oil.

2. MECHANICAL

a) Not adjusted properly. Re-adjust per tappet instruction sheet. For tappet No’s. 2456-1 and 2459-1, the hydraulic unit itself needs to be at .100” ± .010” below snap ring. For No.1029-53B tappet and block kit, the hydraulic unit itself needs to be .050” ± .010” below the snap ring. Some Shovel models from 1978-80 have tappet blocks with oil drain holes positioned too low. If running a higher lift cam than

stock, and sometimes even stock, these blocks will allow oil pressure to bleed off from the tappets. This is most common in the front tappet block.

b) Any one of the following will cause a valve train to become noisy; a bent pushrod, loose valve guides, a broken valve spring, a valve hitting a piston, a valve hitting a valve, a loose rocker bushing, a rocker tip wearing at the valve stem, and a lifter roller hitting the tappet block will all cause a noisy valve train.

c) Gear lash: If you did not change the cam at the time you installed new hydraulic units and had no gear lash, but a slight whine when motor was cold, it is safe to say you are OK in this area.

d) Broken hydraulic valve spring which is not allowing valve to seal. If this is the case the hydraulic unit will not hold oil pressure. We have not seen this situation on any of JIMS® hydraulic units.

To check this, hold pushrod with your hand (with lifter on the heel of cam valve shut) and push down on pushrod. Hydraulic unit will feel spongy. Do not mistake this for no oil getting to tappet. If all tappets are spongy, this indicates there is no oil. If just one tappet is spongy that has been re-adjusted, but will not pump up, replace the tappet.

3. CONTAMINATION OF OIL

a) With contamination of oil, the hydraulic unit may work for a minute and then become noisy. Most of the time it is more than one hydraulic unit that will be contaminated to the point of being stuck in the downward position.

b) Re-adjust per instruction sheet. If hydraulic unit will not come back up to the top of snap ring, replace hydraulic unit and wash out the entire oil system.

4. OIL PRESSURE AT NORMAL OPERATING TEMPERATURE, AT ABOUT 2000 RPM, SHOULD BE 12-35p.s.i..

a) Check lifter filter screen (Big Twin).

b) Make sure you are getting oil to the lifters. Install oil pressure gauge for top end oil.

c) Lifter to tappet block clearance is best at .0007”-.0012”.

d) Lifters work best with 20-50w motorcycle oil.

e) If lifters are quiet when cold or at a low RPM range and become noisy as RPM is increased, there is either not enough oil pressure, or too much clearance from lifter to block bore (Refer to “c”).

f) To isolate a possible noisy hydraulic lifter, start with a cool motor and the lifter you think is making the noise. With the lifter on the heel of cam, valve shut, adjust the pushrod so lifter unit is all the way compressed down. This is very important! This adjustment will make the pushrod tight which will bleed down the hydraulic lifter. It will sometimes take five minutes, or longer, to bleed down. Do not rotate engine while pushrods are tight. Go to the point where the pushrod will spin with your fingers. Adjust down a little more until pushrod becomes tight (so you can just barely turn with your fingers). Start bike. If it is quiet, then you have found the lifter that was not working properly. If it is still noisy, continue with the next lifter until you have located the the noisy one. Readjust per instruction sheet, or replace lifter.

THE FOLLOWING IS SOMETIMES MISTAKEN FOR NOISY TAPPETS:

1. *The most common being the clearance between cam gear and pinion gear (referred to as gear lash). If you did not change the cam at the time of installing this kit and had no gear lash but a slight whine when motor was cold, it is safe to say you are OK in this area.*
2. *Rocker arm end play at .004” to .010” is good.*
3. *Oil pressure at normal operating temperature about 2000 RPM should be 12-35 p.s.i. on Big Twin models, and 10-17 p.s.i. at 2500 RPM on Sportster® models.*
4. *Check valve to guide clearance.*
5. *Some Cams with fast ramps.*

POWERGLIDE™ STEADY ROLL TAPPETS

It is no secret to us at JIMS® (and to top engine builders) that performance V-Twin engines require more valve lift than stock designs. This increases the load on the tappet roller, which can lead to failure. Tappet roller failure is a catastrophic and expensive failure. Broken needle bearings allow the tappet roller to deform, causing cam lobe damage. Pieces of the hard bearings, as well as debris from the cam can easily contaminate other parts, such as cam plates, bearings, oil pumps, and other tappets ultimately resulting in a complete rebuild. To remedy this, we have replaced the needle bearings with a special bronze alloy bushing, resulting in increased reliability and longevity. No longer do you need to worry about needle bearings and debris damaging the engine in the event of a failure. In addition to this, JIMS has invested in new machinery that controls the hydraulic unit fitment tolerance within .00015". This new failsafe design means that even if the bushing wears out, it will be retained in the tappet assembly. The new Powerglide Steady Roll Tappets are available for use on all Milwaukee Eights®, Twin Cams, Sportster 2000-present, and Buell® 2000-present (except 1125R.) Also, on 1984-present EVO, 1986-1990 XL & 1987-1990 Buell®. *For more details see No. 1827-IS instructions.*

Milwaukee Eight - *Use on 2017-present Milwaukee Eight® engine, both Touring & Softail.*

Twin Cam - *Use on 1999-2016 Twin Cam, 2000-present Sportster & Buell®.*

No. **1827** - *(.8420" O.D.)*
No. **1828** - *(+.002" O.D.)*
No. **1829** - *(+.010" O.D.)*

Evolution - *Use on 1984-present Evo, 1986-1990 XL & 1987-1990 Buell®.*

No. **1824** - *(.8425" O.D.)*
No. **1825** - *(+ .002" O.D.)*
No. **1826** - *(+ .005" O.D.)*


Mike, Garry & Jim at Old Faithful

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

Phone 805-482-6913 JIMS Fax 805-482-9224

BIG AXLE "POWERGLIDE™ II" HYDRAULIC TAPPETS FOR ALL TWIN CAM® PERFORMANCE AND STOCK CAMS

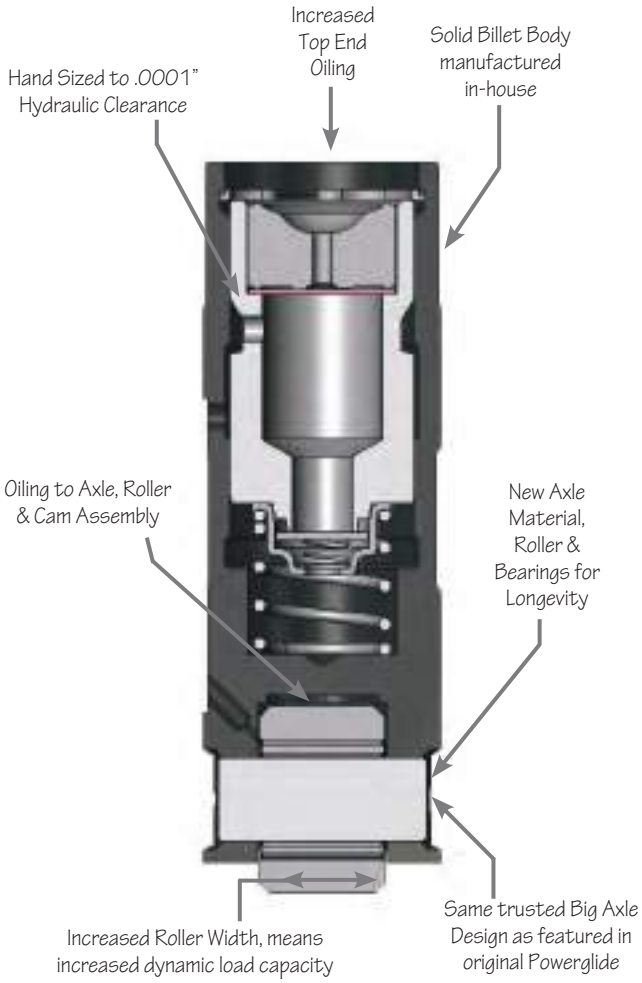
(SEE INSTRUCTION SHEET FOR COMPREHENSIVE TAPPET ADJUSTMENTS)

POWERGLIDE™ II

JIMS® has been manufacturing tappets for over 30 years, and is the only aftermarket manufacturer that manufactures all our tappets in house.

This lifter has developed into the motorcycle's industries most popular performance tappet for Twin Cam. They have a proven track record to back them up. This tappet has undergone extensive development to increase its load, lubrication, hydraulic and life capacities. The Powerglide® II, has all the advantages of it's predecessor - billet body, superior hydraulic unit, roller perpendicularity held to .0002", hand-honed hydraulic unit cavity, and now includes the following advantages:

- The total dynamic load capacities have been increased over 30% straight across the board.
- The lubrication capacities for the hydraulic unit and valve train (top end) have increased 10%.
- The lubrication capacities for the roller, cams, and cam bearings have increased 100%. (Increased cooling) *For more details see No.1807-IS instructions.* ***This tappet replaces and surpasses H-D® No.18538-99B or JIMS® No.1806 Powerglide.***



TWIN CAM® POWERGLIDE™ II TAPPET

No.**1807** - *Use on all Twin Cams 1999-present, also Sporster® and Buell® 2000 to present. Standard O.D. is .8420".*

No.**1808** - *Oversize +.001".*

No.**1809** - *Oversize +.0015".*

No.**1810** - *Oversize +.005".*

No.**1811** - *Oversize +.010" (Note: For this tappet see JIMS Twin Cam case saver tappet reamer tool on the right.*

IMPORTANT NOTE: *Preliminary tappet adjustment will make the pushrod tight. You must wait 5-15 minutes or longer to fully bleed off the hydraulic tappet (Tappets come pre-oiled). It is very important that the engine is not rotated while pushrods are tight. The pushrod will spin with your fingers after the tappet has bled off. Never turn the engine over if the tappet will not spin with your fingers after adjustments were made.*

† *If counter adjusting is more than 3-5 wrench flats in either direction please call JIMS® for further advice.*

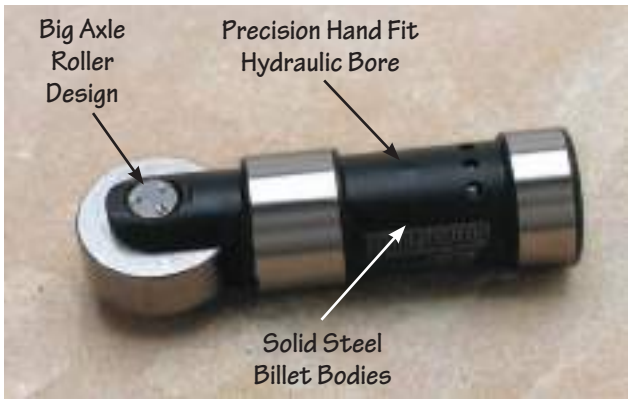
Part No. 789 (See Page 160

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

THE "HYDROSOLID"

IS IT HYDRAULIC? OR IS IT SOLID?

This amazing tappet has broken the barriers of previous tappet designs. This tappet performs like a hydraulic tappet from start up to about 5500 RPM, and then turns into a solid from 5600 RPM to your set RPM rev limiter. At the same time it becomes a solid, it also adds about 3-6 more usable horsepower. What this all comes down to is that about the time your springs start to surge and go into harmonic distortion and the tappet rollers start lifting off the back side of the cam, you can be at ease knowing that your JIMS® Hydrosolid Tappet will not pump up, allowing your valves to hit. Must use with adjustable pushrods.



BIG TWIN HYDROSOLID TAPPET

This tappet replaces and surpasses H-D® No.1852386 and S&S® No.33-5341. *For more details see No.1800-IS instructions.*

Total Hydraulic Movement: 0.050"

No.**1800 -** *Use on Big Twin 1984-99, Sportster® 1986-90 and Buell® 1987-90. Standard O.D. .8425".*

No.**1800-2 -** *Oversize +.002".*

No.**1800-5 -** *Oversize +.005".*

***IMPORTANT NOTE:** Preliminary tappet adjustment will make the pushrod tight. You must wait 5-15 minutes or longer to fully bleed off the hydraulic tappet (Tappets come pre-oiled). It is very important that the engine is not rotated while pushrods are tight. The pushrod will spin with your fingers after the tappet has bled off. Never turn the engine over if the tappet will not spin with your fingers after adjustments were made.*

TWIN CAM® HYDROSOLID™ II TAPPET

This tappet replaces and surpasses H-D® No.18538-99. Use with JIMS® No.1043 billet lifter covers.
For more details see No.1820-IS instructions.

Total Hydraulic Movement: 0.050"

No.**1820 -** *Use on All Twin Cam®, standard O.D. is .8420".*
Use on Sportster® 2000-present.
Use on Buell® 2000-present, except 1125R.

No.**1821 -** *Oversize +.001".*

No.**1822 -** *Oversize +.0015".*

SPORTSTER® HYDROSOLID TAPPET

This tappet replaces and surpasses H-D® No.18529-89. Std. O.D. is .9035".
For more details see No.1803-IS instructions.

Total Hydraulic Movement: 0.050"

No.**1803** - *Use on all 1991-99 XL & Buell.*

JIMS BIG AXLE "POWERGLIDE™" HYDRAULIC TAPPETS FOR EVO PERFORMANCE AND STOCK CAMS

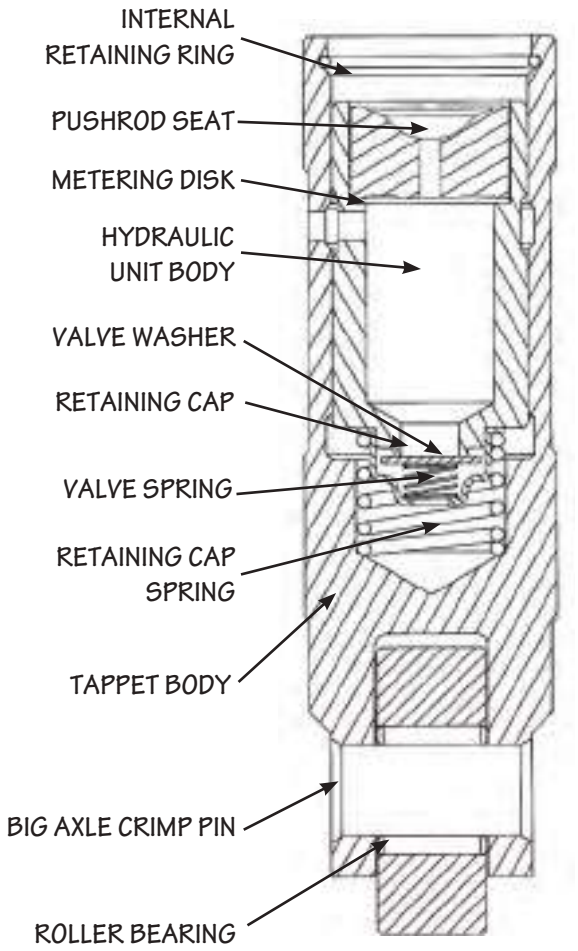
(WILL ALSO WORK WITH SOLID STYLE CAMS)

The title tells the whole story. Power is what you are after when you've installed a high performance hydraulic cam in your EVO motor.

To get full power, you must have zero valve lash, and eliminate collapsing of the hydraulic tappet as found in stock hydraulic units. This is referred to as the shock absorber syndrome. Failing to open the full amount as the cam is designed to do, results in power loss.

"Powerglide™" eliminates the shock absorber action. "Powerglide™" is as close to a solid tappet as possible and is still able to compensate for heat expansion. Glide is what you get when hand matching hydraulic components to a running fit of .0002". For this reason "Powerglide™" tappets have a microfinished bore for the hydraulic unit to glide over. "Powerglide™" tappets are right at home in H-D®tappet blocks, unlike other performance tappets that require special tappet blocks. These tappets will run in cast iron or aluminum tappet blocks. JIMS® recommends fitting the tappets to the blocks with a clearance of .0007" to .0012". For worn out tappet blocks JIMS® is proud to offer +.002",+.005" and some .010" oversize tappets.

MADE FROM BILLET BEARING STEEL EVO HYDRAULIC TAPPET



THE POWERGLIDE™ ADVANTAGE

1. *Longest valve train engine life.*
2. *Produced from billet bearing steel. The same high quality steel our shafts and crank pins are made from.*
3. *The best made JIMS® big axle roller.*
4. *The ultimate in hydraulic control system, performs better under both the lower and the higher RPM limits, and high spring pressures.*
5. *A true centerline for roller life and exact cam timing.*
6. *State of the art pushrod seat, machined with the same segmented parabolic cup as the JIMS® roller rockers. Helps eliminate pushrod whip.*
7. *Engineered on a state of the art CAD System, and machined in some of the world's most accurate precision computer controlled machinery.*
8. *Hand fit hydraulic unit to a running fit of .0002", with ultra precision air gauging system.*
9. *All hydraulic units are tested 100% for function under a simulated pressure test fixture.*
10. *The best warranty policy in the industry.*

"Powerglide™" tappets are capable of the highest RPM a Harley® can safely turn (about 8025 RPM) at a valve lift of .700", with the right valve springs, valves, cam, oil, etc. We recommend using with JIMS® tappet blocks No.1094. It is not necessary to use a limiting travel washer in "Powerglide™" tappets. For ALL OUT performance use a Hydrosolid tappet.

BIG TWIN EVO XL TAPPETS

BIG AXLE POWERGLIDE™ BIG TWIN HYDRAULIC TAPPET

Standard O.D. is .8425". Individual tappet weighs 149 grams. This tappet replaces and surpasses H-D® No. 18523-86 and S&S® No.33-5341. *For more details see No.2272-IS instructions.*

No.**2456-1 -** *Use on Big Twin Single Cam only 1984-99, aftermarket engines.*
Use on Sportster® 1986-90.
Use on Buell® 1987-90.

No.**2457-1 -** *Oversize +.002".*

No.**2458-1 -** *Oversize +.005".*

BIG TWIN HYDROSOLID TAPPET

This tappet replaces and surpasses H-D® No.18523-86 and S&S® No.33-5341. *For more details see No.1800-IS instructions.*

Total Hydraulic Movement: 0.050"

No.**1800 -** *Use on Big Twin 1984-99, Sportster® 1986-90 and Buell® 1987-90. Standard O.D. .8425".*

No.**1800-2 -** *Oversize +.002".*

No.**1800-5 -** *Oversize +.005".*

BIG AXLE SOLID TAPPET

Must use adjustable pushrod. Std O.D. is .8425". Individual tappet weighs 109 grams.

No.**2465-1 -** *Use on Big Twin Single Cam only 1984-present, aftermarket engines.*
Use on Sportster® 1986-90.
Use on Buell® 1987-90.

No.**2466-1 -** *Oversize +.002".*

No.**2467-1 -** *Oversize +.005".*

JIMS TAPPET PUMP AND TEST STAND

Having issues getting your tappets to pump up or not sure if you have an oiling problem? Isolate the issue by using the new JIMS tappet pump and test stand. Fits standard size Twin Cam or Evolution lifters. For more information see part No. 765 and No. 766 on page 129.

STOP TAPPET NOISE FOREVER WITH "POWERGLIDE™" HYDRAULIC TAPPETS FOR PAN AND SHOVEL PERFORMANCE CAMS
(WILL ALSO WORK WITH SOLID STYLE CAMS)

Now you can have the same hydraulic function as EVO's. Are stock hydraulic units wearing you down? Are you installing solid tappets just so you will know what adjustment your tappets are set at? STOP! You need the "Powerglide™" solution. At about 30% cost savings and about 85% more stability, these tappets are perfect in Panhead and Shovelhead tappet blocks. Use with H-D® Part No.18600-53 (front) and No.18610-53 (rear). Will also work in any tappet block and case having oil passages to tappet blocks pre EVO. These tappets will accommodate a .550" lift or more without modification depending on the cam base circle size when using JIMS® tappet blocks No.1095. If using stock H-D® tappet blocks, check for roller to block clearances. Use with H-D® No.17904-66 or JIMS® No.2369 Pushrods for Shovelhead. For Panhead, use H-D® No.17905-53B or JIMS® No.2404 pushrods.

BILLET STEEL PERFORMANCE POWERGLIDE™ HYDRAULIC TAPPET FOR PANS AND SHOVELS

POWERGLIDE™ PAN AND SHOVEL HYDRAULIC TAPPET

For more details see No.2275-IS instructions.

Std. O.D. is .731".

No.**2459-1** - *Use on Big Twin 1953-84, aftermarket engines. See Instructions No.2275-IS.*
No.**2460-1** - *Oversize +.002".*
No.**2461-1** - *Oversize +.005".*

NOTE: *Surpasses and replaces H-D® No.18522-53 tappet and H-D® No.17920-53A hydraulic unit. We recommend using with JIMS® tappet blocks No.1095. Standard outer diameter is .731" (Caution: some H-D® blocks 1978-84 have oil drain hole location problems with some high lift cams).*

NOTE: *These pushrods have no oiling hole.*

"POWERGLIDE™" UPGRADE KIT

Now all of you Shovel motor riders, using JIMS® "Powerglide™" Tappets No.2459-1, can upgrade to the latest design improvements. Use on stock or performance applications. Kit comes with four new 3/8" diameter pushrod seats to make the Powerglide™ 5/8" shorter, and four new Pro-Lite Worksavers® Shovel Pushrods (no hole) with complete instruction sheet. For use with above tappets 2459-1 when used with pushrod seats. *For more details see No.2400-IS instructions.*

No.**2400** - *Use on all Shovel Big Twins using JIMS® "Powerglide™" 2459-1, 2460-1, 2461-1. Shovelhead Tappets with shovel top ends. 24 threads per inch.*

SHOVEL , PAN, & KNUCKLE TAPPETS

HYDRAULIC TAPPET

Superceded by 18522-53. Standard. O.D. is .731". Weighs 89 grams

No.**2462-1 -** *Use on Big Twin 1953-84, aftermarket engines.*
No.**2463-1 -** *Oversize +.002".*
No.**2464-1 -** *Oversize +.005".*

> ***NOTE:*** *For use with No.2370 Hydraulic unit - (Pictured right).*
> *For solid tappets use No.2474-1 (See below).*

SOLID ADJUSTABLE TAPPET

Superceded by 18492-48. Standard. O.D. is .731". Weighs 86 grams. 9/32"-32 thread.

No.**2474-1 -** *Use on Big Twin 1948-84, aftermarket engines. Use with JIMS® tappet blocks No.1095 or No.1095C.*
No.**2475-1 -** *Oversize +.002".*
No.**2476-1 -** *Oversize +.005".*

PAN & SHOVEL HYDRAULIC UNIT FOR STOCK HYDRAULICS

Crane® Pan and Shovel stock hydraulic unit. Use with Tappet No.18522-53. For pushrods on Shovelheads, use JIMS® No. 2369. For Panheads, use JIMS® No.2404 with a 5/16" rocker ball end, (***NOTE:*** *designed for stock hydraulic style cams and valve springs at stock RPM of about 5500 max*). For the best hydraulics, use 2459-1. Hydraulic unit weighs 38 grams.

No.**2370 -** *Use on Big Twin 1953-84, aftermarket engines.*

KNUCKLEHEAD SOLID ADJUSTABLE TAPPET

Use on 1936-47 H-D® Knucklehead and aftermarket engines. Standard O.D. is .731". 9/32"- 32 thread.

No.**2607 -** *Use on 1936-47, Exhaust,*
No.**2608 -** *Use on 1936-47, Exhaust +.005".*
No.**2609 -** *Use on 1936-47, Intake.*
No.**2610 -** *Use on 1936-47, Intake +.005".*

> ***NOTE:*** *For solid adjustable tappets above - Adjusters and nuts sold separately, see page 57.*

JIMS 4340 CHROMOLY STEEL PUSHRODS AND SOLID ADJUSTABLE TAPPET KIT FOR SHOVELHEAD

Despite advancements in hydraulic lifters, solids are still the way to go for maximum power. Most engine builders agree that solid lifters can withstand more aggressive cam profiles and higher RPM. Just because your engine is an older Shovelhead design doesn't mean you have to settle for anything less than the best. JIMS® is proud to now offer a top quality 4340 chromoly steel pushrod and adjustable solid lifter kit for Shovelhead Engines.

No. 5525 – *Use on 1966-1984 Shovelhead engines.*

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

"POWERGLIDE™" HYDRAULIC TAPPETS FOR SPORTSTER® AND BUELL® PERFORMANCE AND STOCK CAMS

BILLET STEEL POWERGLIDE II™ HYDRAULIC TAPPETS FOR SPORTSTER® AND BUELL®

NOTE: *This tappet replaces and surpasses H-D® No.18538-99B. For more details see No.1807-IS instructions.*

No.**1807 -** *Use on Sportster® 2000-present. Use on Buell® 2000 to 2009. Use on Twin Cam®, standard O.D. is .8420".*
No.**1808 -** *Oversize +.001".*
No.**1809 -** *Oversize +.0015".*
No.**1810 -** *Oversize +.005".*
No.**1811 -** *Oversize +.010".*

"Powerglide™" tappets are capable of the highest RPM a Harley® can safely turn at a valve lift of .700" with the right valve springs, valves, cam, oil, etc. It is not necessary to use a limiting travel washer in "Powerglide™" tappets.

BILLET STEEL POWERGLIDE™ HYDRAULIC TAPPETS FOR SPORTSTER® AND BUELL®

Designed for high performance motors. Standard O.D. is .9035". Clearanced for about .700" lift cams, however, you must still check lifter travel for performance cams. Individual tappet weighs 143 grams. *For more details see No.2273-IS instructions.*

No.**18526-PG -** *Use on Sportster® & Buell® 1991-99.*
No.**18526-PG1 -** *Oversize +.001".*
No.**18526-PG2 -** *Oversize +.002".*
No.**18526-PG5 -** *Oversize +.005".*

BIG AXLE POWERGLIDE™ HYDRAULIC TAPPETS FOR SPORTSTER® AND BUELL®

Standard O.D. is .8425". Individual tappet weighs 149 grams. This tappet replaces and surpasses H-D® No.19523-86 and S&S® No.33-5341. *For more details see No.2272-IS instructions.*

NOTE: *Fits aftermarket engines.*

No.**2456-1 -** *Use on Sportster® 1986-90, Buell® 87-90.*
No.**2457-1 -** *Oversize +.002".*
No.**2458-1 -** *Oversize +.005".*

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

4340 CHROMOLY STEEL SCREW, WITH OIL HOLE, TO FEED TOP END. SOLID ADJUSTABLE TAPPETS FOR SPORTSTER® AND BUELL®

Solid adjustable. Standard O.D. is .9035". Use non adjustable pushrods. (Clearanced for about .700" lift cams, however, you must still check lifter travel for performance cams.) Individual tappet weighs 146 grams.

No.**18526-89SA -** *Use on Sportster® & Buell® 1991-99.*

No.**18526-89SA1 -** *Oversize +.001"*
No.**18526-89SA5 -** *Oversize +.005"*
WHILE SUPPLIES LAST

SOLID TAPPET

Must use adjustable pushrod. Standard O.D. is .8425". Individual tappet weighs 109 grams.

NOTE: *Fits aftermarket motors.*

No.**2465-1 -** *Use on Sportster® 1986-90, Buell® 87-90.*
No.**2466-1 -** *Oversize +.002".*
No.**2467-1 -** *Oversize +.005".*

SPORTSTER® HYDROSOLID™ II TAPPET

This tappet replaces and surpasses H-D® No.18538-99. Use with JIMS®No.1043 billet lifter covers. *For more details see No.1820-IS instructions.* Standard O.D. is .8420".

Total Hydraulic Movement: 0.050"

No.**1820 -** *Use on Sportster® 2000 to present. Use on Buell® 2000-2009, except 1125R.*
No.**1821 -** *Oversize +.001".*
No.**1822 -** *Oversize +.0015".*

4340 CHROMOLY STEEL SCREW, WITH OIL HOLE, TO FEED TOP END HYDROSOLID TAPPETS FOR SPORTSTER® AND BUELL®

Standard O.D. is .9035". This tappet replaces and surpasses H-D® No.18529-89.

For more details see No.1803-IS instructions.

No.**1803 -** *Use on Sportster® & Buell® 1991-99.*

SOLID ADJUSTABLE TAPPET

Standard Solid Tappet. Standard O.D. is .731" 9/32"-32 thread. The 9/32"-32 thread adjuster screws and nuts must be purchase separately.

No.**2471-1 -** *Use on Sportster® 1957-85.*
No.**2472-1 -** *Oversize +.002".*
No.**2473-1 -** *Oversize +.005".*

SIDE VALVE TAPPET & HARDWARE

NOTE: *These rollers are intended for use on all small axle tappets. The Big Axle tappet rollers cannot be rebuilt.*

TAPPET ROLLERS

Made from 52100 bearing material, with 4340 chromoly axle.

No.**18534-29A** - *Use on all models 1929-84.*

No.**18534-CP** - *4340 chromoly axle only.*

Caution: This axle must be crimped at 6000 psi minimum, with a radius crimping anvil.

TAPPET SCREW

Sold in a pack of 4. 3/8" ball end. 9/32"-32 thread.

No.**18555-36K** - *Use on Big Twin tappet No.18492-48. Use on all JIMS® or any adjustable tappet having 9/32"-32 thread.*

TAPPET SCREW

Sold in a pack of 4. 5/16" ball end. 9/32"-32 thread.

No.**18554-57K** - *Use on Sportster® tappet No. 18508-52B. Use on all JIMS® or any adjustable tappet having 9/32"-32 thread.*

TAPPET SCREW NUTS

Use on tappet screws. **Sold in a pack of 4.** 9/32"-32 thread.

No.**18570-38K** - *Use on all JIMS® or any adjustable tappet having 9/32"-32 thread.*

#myjims Submition From @panhead_jim

TAPPET SCREW

Sold in a pack of 4. 9/32"-32 thread.

No.**18556-40K** - *Use on "K" models 1952-53. Use on Sidevalves 1915-73.*

Use on all JIMS® or any adjustable tappet having 9/32"-32 thread.

TAPPET BLOCK & COVER KITS

JIMS® BILLET TAPPET COVERS FOR TWIN CAM® "A" OR "B"

These are the ultimate in high tech tappet covers with extra smooth lines. These covers are CNC machined from billet 6061-T6 and utilize the best chroming procedures available to guarantee the precision tolerances that JIMS® is known for. Covers comes with gaskets and chrome hardware. Replaces H-D® No.25369-01.

CNC milled from 6061T billet aluminum.

CHROME No.**1043 -** *(Chrome set) Use on all Twin Cam® 1999-Present.*

No.**6031 -** *Polished*

No.**6030 -** *Black Anodized*

JIMS HANDCRAFTED BILLET WELDED TAPPET COVERS

These new Twin Cam billet handcrafted tappet covers come with the latest look, RawCut & Welded. They come to you plated with a Bright Dipped or Black Anodized finish. These covers have a handcrafted look, combined with clean precision cut machining and add in some welded accents make these pieces the latest in style. See other Handcrafted items to match up with on page 68. Screws & gasket included.

No.6032 - *Use to replace any Twin Cam OEM.No 25369-01 tappet cover, Alpha or Beta. Bright dipped anodized.*

No.6033 - *Black anodized.*

PAN & SHOVEL BILLET 7075-T651 TAPPET BLOCKS

These blocks replace and surpass H-D® No.'s 18603-80A and 18610-76A. Made from 7075-T651 billet aerospace quality aluminum, these beautiful highly polished Pan and Shovel tappet blocks are the perfect way to upgrade your earlier Big Twin. With no compromises, these extra strong tappet blocks are machined to the centerline of the cam and hold ±.002". The bores are held perpendicular to the flange to ±.0002". Pushrod cover pockets are machined to accept early style corks or later quad seals. Pushrod cover angles have been optimized for a leak tight seal. Designed to accommodate .550" lift at the valves. Blocks can be cleared for a higher lift cam with simple modification; see "Index" for tappet block clearancing. For use on 1953-Early 1976, use 1/4"-24 screws (JIMS® No.2406). For use on Late 1976-84, use 1/4"-20 screws (JIMS® No.1205). We recommend using JIMS® tappets No.'s 2459-1 & 2462-1. (H-D No.18522-53) or JIMS No.2474-1 (H-D No.18492-48). *For more details see No.1095-IS instructions.*

No.**1095 -** *Polished, Use on Pan and Shovel - Big Twins 1953-84. Includes 1-front block, 1-rear block and gaskets. See "Screw Applications" on next page.*

CHROME No.**1095C -** *Chrome, Use on Pan and Shovel - Big Twins 1953-84. Includes 1-front block, 1-rear block and gaskets. See "Screw Applications" on page 61.*

SEE JIMSUSA.COM FOR DETAILED INSTRUCTIONS

Phone 805-482-6913 JIMS Fax 805-482-9224

EVO TAPPET BLOCK KITS

EVO BILLET 7075-T651 TAPPET BLOCKS

These blocks replace and surpass numbers 18542-83A and 18540-83A. Billet EVO Tappet Blocks are designed to accommodate a gross valve lift of .655" at the valves. This is about .350" at the tappets, leaving a clearance of .035" roller to block freeplay. Will clear most small base circle cams having a lift of .600" or more. We recommend using with JIMS® Tappets No.2456-1. Any cam over .655" lift needs to be checked and should have .035" to .045" roller to block clearance. ***NOTE:*** *If using a cam with a higher lift, a simple modification to tappet blocks is all that is needed. For more details see No.1094-IS instructions.*

Caution: You still need to follow cam manufacturers guidelines. Use JIMS® EVO tappet block alignment tool No.33443-84.

No. **1094 -** *Billet Polished Tappet Block Kit - Use on Big Twin single cam only 1984-1999, includes gaskets.*

No. **1094-K -** *Billet Polished Tappet Block Kit - Use on Big Twin single cam only 1984-1999, includes gaskets & chrome screws.*

BIG BORE EVO TAPPET BLOCK KIT

Use this kit on all Big Bore cases that have the cam case area moved out 1/4"-3/8". Supplied with our performance hydrosolids. *For more details see No.1800 & No.1094-IS instructions.*

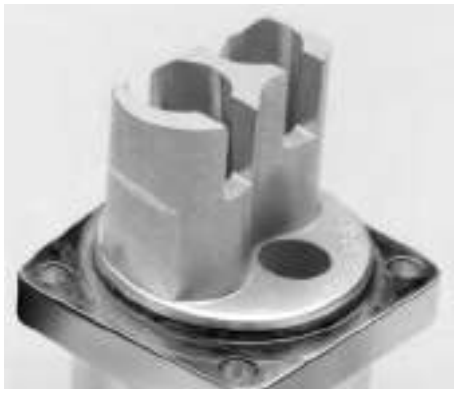
CHROME No. **1092K** - *Use on all aftermarket Big Bore crankcases, chromed, with gaskets and screws.*

BIG BORE EVO TAPPET BLOCKS

Same as our No.1094 Tappet Blocks, but with corrected pushrod cover angles for Big Bore Cases that have cam case areas that are moved out up to 1/4"-3/8". *For more details see No.1094-IS instructions.*

No. **1092C** - *Use on all aftermarket Big Bore crankcases, chromed, with gaskets.* CHROME

STOP TAPPET NOISE FOREVER!



KIT COMES WITH:

- FRONT & REAR TAPPET BLOCKS
- "POWERGLIDE™ " TAPPETS
- JIMS® TAPPET BLOCK GASKETS
- CHROME TAPPET BLOCK SCREWS

EVO BILLET & POLISHED 7075-T651 TAPPET BLOCK KIT WITH THE BIG AXLE "POWERGLIDE™" TAPPETS

This kit replaces and supercedes black wrinkle tappet block numbers 18622-85A, 18623-85A, and Plain tappet blocks No.'s 18540-86A and 18542-83A. Designed to accommodate a gross valve lift of .655" at the valves, leaving a clearance of .035" roller to block free play (Please note: If using a cam with a higher lift, a simple modification is all that is needed). These blocks will clear most small base circle cams having a lift of .655" or more.

JIMS® EVO Tappet Block Kit was produced to improve the stock tappet and tappet block area. Made from billet 7075-T651 aluminum with a tensile strength 3 times stronger than cast aluminum tappet blocks. These tappet blocks are machined to the center line of the cam and hold ± .002". Also, the bores are held perpendicular to the mounting flange to ± .0002".

Add the precision quality of JIMS® Tappet and you can't buy a better tappet block kit for your bike (Gaskets and chrome screws included).

For the ultimate in valve train technology and stability, add JIMS® Roller Rocker Arms (20 grams lighter than stock) and JIMS® Billet Cam Cover. Use with any EVO Big Twin adjustable pushrods. Use JIMS® EVO tappet block alignment tool No.33443-84 to align tappet block. *For more details see No.2276 and 1094-IS instructions.*

No. **2418 -** *Polished blocks, with screws and gaskets use on Big Twin single cam only, 1984-99.*

DRAG RACING VERSION

BILLET 7075-T651 SPORTSTER® RACING TAPPET GUIDE

This is a RACING version of our best Sportster® tappet guide. This performance part is for special applications ONLY! (Tappet guide has no oil grooves or pushrod tube cover bores) These blocks are designed to accommodate a lift of about .800" at valve, or about .500" lift at cam. *For more details see No.2367-IS instructions.* **Sold in a set of 4.**

No.**18607-57AR** - *Racing Version. Special application, no oil grooves or pushrod tube cover bores.*

SPORTSTER® BILLET POLISHED OR CHROME 7075-T651 TAPPET GUIDE

Made from the strongest aluminum alloy available, 7075-T651, and precision machined from billet stock with Helical style oil grooves for better lubrication. Use with JIMS® tappets No.2471-1. *For more details see No.18607-IS instructions.*

No.**18607-57A** - *Polished, Use on Sportster® 1957-85.*

CHROME No.**18607-57AC** - *Chrome, Use on Sportster® 1957-85.*

REMOVE OLD TAPPET GUIDE WITH JIMS® TOOL NO.95724-57, TAPPET GUIDE PULLER.

CHROME

12 PT. CHROME SCREWS

Use on Big Twin tappet blocks. Designed for EVO, late Shovels. **Sold in a set of 8.**

1/4"-20. All screws are 7/8" long.

No.**1205** - *Use on Big Twin single cam only Late 1976-99 (1/4"-20 thread). These screws replace and surpass H-D® No.3770.*

No.**2406** - *Use on Big Twin 1953-Early 1976 (1/4"-24 thread). For use on late style tappet blocks that have no counter bore for screw.*

BLACK GASKET FOR TAPPET BLOCK

These are the highest quality gaskets available for use on Harley-Davidsons®. Our tests have shown these gaskets to be the best for alignment, and the best to take the torque evenly for excellent tappet block alignment. **Sold in a pack of 10.**

No.**2358K** - *Front gasket. Use on Big Twin single cam only 1948-99. Pack of 10. These gaskets replace and surpass H-D® No.18634-48B.*

No.**2359K** - *Rear gasket. Use on Big Twin single cam only 1948-99. Pack of 10. These gaskets replace and surpass H-D® No.18633-48C.*

PAN & SHOVEL TAPPET BLOCK KITS

KIT COMES WITH:

- **FRONT & REAR TAPPET BLOCKS**
- **"POWERGLIDE™ " TAPPETS**
- **JIMS® TAPPET BLOCK GASKETS**

PAN AND SHOVEL "POWERGLIDE™" BILLET 7075-T651 TAPPET BLOCK KIT

- .765" diameter tappets not interchangeable with stock diameter (.731") tappets or blocks.
- Pan and Shovel "Powerglide™" Tappet Block Kits are capable of the highest RPM a Harley® can safely turn, at a valve lift of .700" with the right valve springs, valves, cam, oil, etc.
- Pan and Shovel motors can have all the hydraulic benefits of the late EVO style hydraulic system by installing JIMS® Shovel "Powerglide™" Hydraulic Tappets.
- These kits will eliminate the total oil loss of the stock hydraulic units, No.17920-53A.
- Billet Pan and Shovel Tappet Blocks with "Powerglide™" Hydraulic Tappets. Total Hydraulic Lift: 0.100".
- Comes complete with instructions.
- Tappet block gaskets included.

These tappet blocks replace and surpass lifter block No's. 18603-80A, 18610-76A and tappet No.'s. 18522-53A. Fits Pan and Shovel Big Twins 1953 through 1984. Use 1/4"-20 screws, JIMS® No.1205, from late 1976 through 1984. Use 1/4"-24 screws, JIMS® No.2406, from 1953 through early 1976. These blocks are designed to accommodate a gross valve lift of .550" at the valves, leaving a clearance of .035" roller to block freeplay (Please note, if using a cam with a higher lift, a simple modification is all that is needed). See page 160 for tappet block clearancing. Use with JIMS® pushrod No.2369 for Shovelheads, or No.2404 for Panheads, or equivalent. Blocks can be cleared for higher cam lift.

All JIMS® Billet Polished Tappet Blocks are made from 7075-T651 aluminum with a tensile strength of 83,000 psi, which is double the amount of 6061-T6 aluminum and almost triple the amount of cast aluminum tappet blocks. These tappet blocks are machined to the center line of the cam and hold to ±.002". Also, the bores are held perpendicular to the mounting flange to ±.0002". (Use quad seals for the best oil sealants possible.) *For more details see No.2274-IS instructions.*

No.**1029-53B -** *Polished, with gaskets fits Pan 1953-65 & Shovel Big Twins 1966-84.*

No.**1029-53C -** *Chrome, with gaskets fits Pan 1953-65 & Shovel Big Twins 1966-84.*

REPLACEMENT TAPPETS

No.**1029ACAB** - *Standard replacement tappet*

No.**1029ACAB2** - *.002" Oversize replacement tappet*

No.**1029ACAB5** - *.005" Oversize replacement tappet*

SUPER "POWERGLIDE™" TAPPET BLOCK KIT

JIMS® has designed and engineered a complete block kit for shovel motors, whether stock or performance application. This kit has an upgraded pushrod seat at a 3/8" diameter and a 5/8" lower seat. Lowering the pushrod seat will help reduce the severe tappet pushrod angle, making JIMS® kit as close to an EVO tappet as possible. Kit comes with four Tappets with new pushrod seats, 7075-T651 tappet blocks polished, four Pro-Lite Worksavers® Shovel (No hole) pushrods, and two tappet block gaskets These have a .765" diameter tappet with a total Hydraulic Lift of 0.100". *For more details see No.2411-IS instructions.*

No.**2411** - *Polished, use on all Big Twins 1966-1984 (all Shovelheads).*

No.**2411C** - *Chromed, use on all Big Twins 1966-1984 (all Shovelheads).*

Replacement tappets for above kits; No.2411 and No.2411C, sold each:

No.**1029AP** - *Standard*

No.**1029AP2** - *+.002 Oversized.*

No.**1029AP5** - *+.005 Oversized.*

PERFORMANCE "POWERGLIDE™" KIT (SHOVELHEAD)

JIMS® lowered the rod seat and increased the pushrod seat diameter to 3/8" making this tappet as close to an Evo as possible. Kit comes with 4 JIMS® Powerglide™ Tappets, standard O.D. of .731, and a set of Pro-Lite Worksavers® Shovel (No hole) Pushrods. These tappets will fit in JIMS® Shovelhead Tappet Blocks, No. 1095, or stock tappet blocks. See No.2428-IS instruction sheet. Total Hydraulic Lift: 0.100". *For more details see No.2428-IS instructions.*

No.**2428** - *Use on Big Twin Shovelhead 1966-1984.*

No.**2428-5** - *Use on .005 oversize on Big Twin Shovelhead 1966-1984.*

SHOVEL TAPPET BLOCK KITS

KIT COMES WITH:

- ***FRONT & REAR TAPPET BLOCKS***
- ***"POWERGLIDE™" TAPPETS***
- ***JIMS® TAPPET BLOCK GASKETS***
- ***JIMS® PUSHROD SET WITH OIL HOLE***
- ***JIMS® ROLLER ROCKER ARM SET***

REPLACEMENT TAPPETS FOR THE BELOW KITS; No.1046 & No.1046P, sold each:

No.**1029AP** - *Standard replacement*
No.**1029AP2** - *.002" Oversize replacement*
No.**1029AP5** - *.005" Oversize replacement*

MAKE YOUR SHOVEL COME ALIVE WITH JIMS® POWERGLIDE TAPPETS

With this kit installed in either a big 106 inch shovel or in a stock 74 inch daily rider – you will now have all the same high performance hydraulic tappet function as JIMS® high performance hydraulic tappet for EVO or Twin Cams.

Run the biggest cam you can find for a shovel to help squeeze out all the horsepower you have put in your shovel; with the right valves, valve springs, pistons and oil. No longer will the oil you have been trying to get to your rockers, through outside oil lines, be lost at the clearance around the rocker shaft to the rocker cover. With all four rocker shafts (new or used) having this clearance the amount of oil going to the rockers will be greatly reduced.

With these components; POWERGLIDE tappets, roller rocker arms, billet tappet blocks, adjustable pushrods, gaskets and plugs, you will have a valve train system that works without any maintenance. No longer will valve adjustments be needed every 2,000 miles as before with other hydraulic or solid tappets.

POWERGLIDE TAPPETS: These use the same hydraulic unit as JIMS® EVO and Twin-Cam tappets, they can be run against valve springs having over 800 lbs. of spring pressure (valve open) with cams having as much as .700" valve lift, axle roller installed within .0002" of parallelism to the body. The body is ground to better then a 16 finish and straight and round with in .0002". Also uses a low pushrod cup, having an optimized metering oil channel.

ROLLER ROCKER ARMS: The ratio of 1.5:1 gives the valves far less roller tip push then any other shovel rocker being manufactured. Combining the above with 660 bronze bushings, line honed to .0007" fits to the rocker shaft. Roller tip and it's axle made from tool steel with pressurized oil hole, that will help lubricate not only the roller tip but also removes 35% more heat from the valve springs. Also a pushrod seat design (segmented parabolic) that will increase pushrod life by 35%, which now is lubricated with pressurized oil from the pushrods 3/8" ball end.

TAPPET BLOCKS: Blocks have been machined to the precision tolerances JIMS® is notorious for. All bores have been machined straight to the centerline of the cam thus increasing tappet and cam life. We've also designed the most advanced oil drains to help remove all the oil being returned from the heads to the return side of the oil pump. Included with all this precision machining we've added the best chroming process in the industry.

PUSHRODS: Adjustable pushrods with 24 threads per inch for ease of adjustment including stainless steel locking nuts to help hold adjusting screw tight. Light and straight with an oil hole through both the pushrod ball ends similar to EVO and Twin Cams. With the above JIMS® powerglide tappets, JIMS® roller rockers and these pushrods, you will be able to remove your top end oil lines and plug them off with supplied plugs.

Now with all this installed to your valve train, your new top end oiling system will be updated to JIMS® top end oiling system, being the same as EVO and Twin Cams.

How it all works, oil that is pumped through the powerglide tappets, through each pushrod, thru each rocker.

For more details see No.1046-IS instructions.

CHROME No.**1046** - (Chrome) *Use on single cam only Big Twin 1966-84. (**NOTE:** Includes aftermarket engines.) (Use quad seals for the best possible oil sealant.)*

No.**1046P** - (Polished) *Use on single cam only Big Twin 1966-84. (**NOTE:** Includes aftermarket engines.) (Use quad seals for the best possible oil sealant.)*

DAMAGE CONTROL SYSTEM, & FRONT HEAD MOTOR MOUNT

DAMAGE CONTROL ENGINE FAILURE DETECTION SYSTEM

JIMS engine failure detection system provides an early warning of catastrophic engine failure. Using state of the art technology, our new system monitors the presence of ferrous metal debris in the engine oil through a sensor in the drain plug. When particulates in the oil reach a level that could indicate impending trouble, the LED warning light in the handlebar clamp illuminates. Although not capable of predicting every mechanical failure, our JIMS device, made in the USA, provides additional protection against engine repairs that could cost 50 times as much as the device itself. An easy to install wiring harness is included, and no cutting or splicing is required. Available for both 1 ¼" and 1" handlebars, in black or chrome. *For more details see No. 2051-IS instructions.*

Use on Milwaukee Eight® 2017-present Touring Models,1993-2016 Touring Models and 1991-2016 Dyna® Models.

1" Handlebar
No. 2053 - *Black DC Kit*
No. 2054 - *Chrome DC Kit*

1 1/4" Handlebar
No. 2051 - *Black DC Kit*
No. 2052 - *Chrome DC Kit*

AN EXAMPLE OF A TEST DAMAGE CONTROL DRAIN PLUG THAT PREDICTED AN ENGINE FAILURE!

Our brother, Garry Hughes, had this idea about creating a product to help predict an engine failure long before it turned into an expensive catastrophe. Garry sketched his ideas on a napkin before he passed. Jim, and JIMS, wanted to turn his idea into a reality. JIMS is committed to donating a portion of proceeds to Cancer Research.

BILLET FRONT HEAD MOTOR MOUNT

This new "A Cut Above™" billet engine mount has a more pleasing appearance and is stronger than an O.E.M. mount. The material is premium grade 6061T6 aluminum with optional chrome, polished, or black anodized finish. This mount comes with two chrome washers and allen screws for mounting to the head. An optional chrome heim joint link hardware kit is available with chrome screws and washer. Order link kit separately, No.1444, as shown below.
Front mounts are available for 2008 and later H-D® Touring Models or the same models using a JIMS® 120", 131", or 135" engine. Simple to install. Instructions included.
For more details see No.1437-IS instructions.

Billet engine head mount with chrome stabilizer link with hardware for 2008 to present touring models:
No.1437 - *For chrome*
No.1438 - *For polished*
No.1439 - *For black anodized*

Billet engine head mount with hardware for 2008 to present touring models.
JIMS 120", 131", or 135" engines.
No.1440 - For chrome
No.1441 - For polished
No.1442 - For black anodized

CHROME HEIM JOINT LINK

This link kit includes a chrome plated heim joint assembly with chrome mounting hardware.
For more details see No. 1437-IS instructions.

No.1444 - *Use on any JIMS Billet front Head Motor Mount, No.1437 through No. 1442, or 2008 to present touring models.*

WELDED CAM COVER, TAPPET BLOCKS, & TRANS SIDE COVER

JIMS HANDCRAFTED COVERS

Picture this...Just over a year ago, Jim walking through a custom car show, downtown Ventura, CA. A hand-crafted oil pan with skilled welds catches his eye. One year later, JIMS® has integrated a precision machined set of covers to outfit your late model HD with this latest new look - RawCut & Welded. Plating is a Bright Dipped Anodized. These are the same precision machined billet covers you would expect from JIMS - just hand welded. When combined with JIMS tappet covers, and a JIMS pushrod tube cover set these new JIMS covers will update your bike to a tough new handcrafted look. Screws & gasket included.

No. 2300 - *Use on 2001 to present Twin Cam models. Bright Dipped Anodized.*

No. 2301 - *Black Anodized.*

Black

NEW BILLET TWIN CAM OR EVO PUSHROD COVER SET

These "A Cut Above" billet pushrod covers are styled to give you a clean and smooth look. They feature a unique clip that looks like a complete tube while retaining the simple push-pull spring type function. Will work on any length cylinders utilizing spacer kits that are available below. ***NOTE:*** *Will not fit JIMS stroker kit cylinders. For more details see No.3001-IS instructions.*

Black

TWIN CAM

WHILE SUPPLIES LAST No.3000 - *Bright Dipped Anodized.*

WHILE SUPPLIES LAST No.3003 - *Black Anodized.*

WHILE SUPPLIES LAST No.3004 - *Chrome.*

WHILE SUPPLIES LAST No.3005 - *Polished.*

EVOLUTION

WHILE SUPPLIES LAST No.3002 - *Chrome.*

WHILE SUPPLIES LAST No.3001 - *Polished.*

JIMS HANDCRAFTED BILLET WELDED TAPPET COVERS

These new Twin Cam billet handcrafted tappet covers come with the latest look, RawCut & Welded. They come to you plated with a Bright Dipped or Black Anodized finish. These covers have a handcrafted look, combined with clean precision cut machining, and add in some welded accents to make these pieces the latest in style. Screws & gasket included. Use to replace any TC OEM.No 25369-01 tappet cover.

Black

WHILE SUPPLIES LAST No. 6032 - *Alpha or Beta Bright Dipped Anodized.*

WHILE SUPPLIES LAST No. 6033 - *Black Anodized.*

JIMS HANDCRAFTED TRANSMISSION SIDE COVER

These new billet transmission side covers come with the latest look, RawCut & Welded. They come to you plated with a Bright Dipped or Black Anodized finish. The cover has a handcrafted look, combined with a clean precision cut fin pack, and add in some welded accents making these pieces the latest in style. Order a JIMS Cam cover No. 2300 to match up with and you'll be No. 1. Screws & gasket included.

Black

WHILE SUPPLIES LAST No. 2395 - *Use on all 2006 to present H-D Cruise Drive 6-speed transmissions. Bright Dipped Anodized.*

WHILE SUPPLIES LAST No. 2396 - *Black Anodized.*

WHILE SUPPLIES LAST No. 2394 - *Use on all 1987 to 2006 Big Twin 5-Speed transmissions and aftermarket 6-speeds with a minor hardware change. (Not for FXR with controls.) Bright Dipped Anodized.*

WHILE SUPPLIES LAST No. 2398 - *Black Anodized.*

BIKE POCKET & HEAT SINK CAM COVER

JIMS BIKE POCKET

This new creative "A Cut Above" product will give your cam cover a new distinctive smooth look along with a "Bike Pocket" to hide your keys, registration, insurance paper work or your little black book. This cover easily attaches to any 2001 and later H-D Big Twin Cam cover. Just twist the outer cover for easy access. Now you can hide stuff on your motorcycle. For more details see No. 6038-IS instructions. ***NOTE:*** *For use on any 2001 to present Big Twin Cam cover with a original style OEM, nose and timing cover.*

SMOOTH STYLE
No. 6038 - *Chrome*
No. 6039 - *Polished*
No. 6040 - *Black anodized*

BOLT CIRCLE PATTERN
No. 6050 - *Chrome*
No. 6051 - *Polished*
No. 6052 - *Black anodized*

WARNING: *Do not place any items inside the Bike Pocket that can be effected by extreme heat to avoid damage, fire, or explosion. Do not try to handle the outer cover until the motorcycle has cooled off for at least an hour. Always wear heat proof gloves if not sure before handling.*

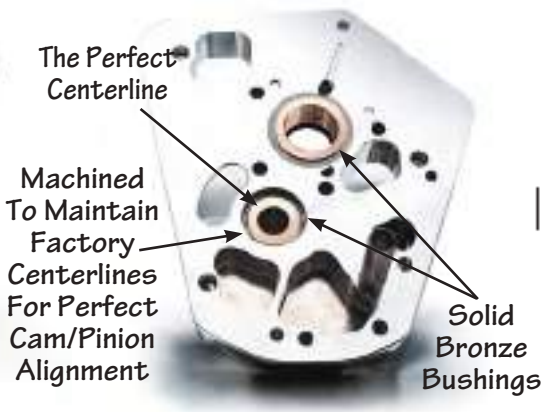
JIMS CAM COVER HEAT SINK

Not all engines maintain the same operating temperature. Big displacement, combustion chambers, cams, exhaust, spark, fuel, etc... can all increase operating temperatures. Introducing the patent pending JIMS Cam Cover Heat Sink. One of our calibration associates, Cornerstone Metrology (www.cornerstonemetrology.com) set out to prove that a fin pack design integrated into a stock cam cover could help reduce cam cover heat. When riding, this design uses outside air to help reduce cam cover temperatures up to 10 degrees. After adding a little JIMS DNA, you have a patent pending, American made cam cover insert not only looks cool, but helps reduce cam chest temperatures. These Heat Sink inserts are completely machined out of solid 6061 aluminum, and are offered either in Chrome Plate, or RawCut black. Installation uses existing timing cover hardware and only takes minutes. *For more details see No. 2311-IS instructions*

No. 2303 - *Black & RawCut – Use on 2001 to present Twin Cam models.*
No. 2311 - *Chrome - Use on 2001 to present Twin Cam models.*

EVO CAM COVERS

"A CUT ABOVE™" POLISHED OR CHROME BILLET CAM COVERS



BACKSIDE OF JIMS® CAM COVER
73-92 STYLE COVER

POINTS COVER AND CAM COVER BASE GASKET INCLUDED

Made from 7075-T651 aluminum with a tensile strength of 83,000 PSI, which is double the amount of 6061-T6 aluminum and almost triple the amount of cast cam covers. This cam cover is positioned precisely to the centerline of the cam bushing and pinion bushing. In fact, this cam cover is within .0002" of where the factory intended it to be.

Why hold centerline that close, or why even care about centerline in a cam cover? We at JIMS® are concerned with the life of your motor. For this reason, we are helping you to achieve longer life for your valve train components, consisting of your cam, tappets and your tappet blocks.

Your camshaft must lie on the best possible foundation. The foundation we are concerned with is the centerline of the camshaft. If the camshaft is tilted off in any direction much more than the running clearance at each end of the camshaft, this will affect the way the tappet rollers ride on the cam lobe. If they are not riding flat, but on one edge of the roller, it could possibly shorten the life of your valve train. The camshaft is supported at both ends, while the inner cam bearing is a given. This means, the bearing is not going to move unless you do a lot of machining. Your cam cover must be right to the case centerline for the longest possible tappet and cam life. For early 73 to 92 cam covers see 25258-IS instructions or for late 93-99 use 25254-IS for more details.

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	1	CAM COVER OUTER - REP. 25258-80AC	2412
1	1	CAM COVER OUTER - CHROME	2521
2	1	BASE PLATE - EARLY	2522
2	1	BASE PLATE - EARLY CHROME	2524
2	1	BASE PLATE - LATE	2518
2	1	BASE PLATE - LATE CHROME	2525
4	1	SEAL CAM - USE ON 1970-PRESENT REP. H-D® NO.83162-51 (SINGLE CAM)	2169
5	1	O-RING SMALL	2170
6	1	O-RING LARGE	2171
7	2	SOCKET HEAD CAP SCREW LONG 1-1/2"	2027
8	8	SOCKET HEAD CAP SCREW SHORT 1-1/8"	2028

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CAM COVERS WHILE SUPPLIES LAST

No.**25258-80A** - *Polished - Use on Big Twin single cam only 1973-92. (**NOTE:** Includes aftermarket engines.)*

CHROME No.**2413** - *Chrome - Use on Big Twin single cam only 1973-92. (**NOTE:** Includes aftermarket engines.)*

No.**25254-93A** - *Polished - Use on Big Twin single cam only 1993-99. (**NOTE:** Includes aftermarket engines.)*

CHROME No.**2414** - *Chrome - Use on Big Twin single cam only 1993-99. (**NOTE:** Includes aftermarket engines.)*

INNER CAM BEARINGS EARLY TWIN CAM®

These American made bearings are a must for any cam change or service. To remove bearings from case use JIMS® No.1279 Cam Bearing Remover Tool. To install bearings use JIMS® Tool No.787. Doing service in this area will require other JIMS® tools as listed: No.1277 - Cam Shaft Remover and Installer; No.1285 - Cam / Crank Sprocket Lock; No.1283 - Cam Chain Tensioner Tool, and No.1280 - Outer Cam Bearing Puller (optional). **Sold in a pack of 2.**

No.**9198K** - *Use on 1999 - 2006 FLH. Use on 2000 - 2006 FXST. Use on 1999 -2005 FXD.*

MID TWIN CAM OUTER CAM BEARING KIT

These are quality bearings that meet or exceed factory OEM specifications H-D® No.8983 and 8990A. Use JIMS® tool No.1280 to pull bearing from front cam. To pull rear-bearing use JIMS® No.963 your bearing race puller wedge attachment. To install and remove camshafts use JIMS® No. 1277.

No.**8150** - *Use on mid 2000 - 2006 FLH & FXST. Use on mid 2000 - 2005 FXD.*

INNER CAM BEARING SPORTSTER®

American made by Torrington®. For the best results install bearing with JIMS® Cam Bearing Installation JIMS® Tool No.97273-60. To remove bearing use JIMS® Tool 95760-XL.

No.**9057** - *Use on Sportster® 1957-1990, Use on Buell® 1987-1990.*
*(**NOTE:** Includes aftermarket engines.)*

INNER CAM BEARINGS LATE TWIN CAM®

These American made bearings are a must for any cam change or service. To remove bearings from case use JIMS® No.993 Cam Bearing Remover Tool. To install bearings use JIMS® Tool No.787. Doing service in this area will require other JIMS® Tools as listed: 2 - No.33443-84 - Pump Alignment Screws; No.1285- Cam/Crank Sprocket Lock; No.994 and No.990- Cam Assembly Tools. **Sold in a pack of 2.**

No.**8991K** - *Use on 2006 - Present FXD. Use on 2007 - Present FXST and FL.*

EARLY TWIN CAM® OUTER CAM BEARINGS

These are quality bearings that meet or exceed factory OEM specifications. Replaces H-D® No.8890. **Sold in pairs**.

No.**8990K** - *Use on Twin Cam 88® 1999 - mid 2000.*

INNER CAM BEARING BIG TWIN

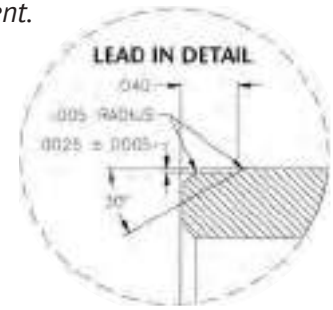
This is the original and only cam bearing to use in your Big Twin. American made by Torrington®. Don't trust any other Cam Bearing. For the best results, install bearing with JIMS® Cam Bearing Installation Tool No.2188. To remove Cam Bearing use JIMS® No.95760-TB Cam Bearing Puller. To remove cam cover use JIMS® Tool No.2243.

No.**9058** - *Use on Big Twin 1958-99 single cam only.*
*(**NOTE:** Includes aftermarket engines.)*

NOTE: *JIMS No. 1005 Removes Bushing*

CNC MACHINED BUSHINGS

All of JIMS® bushings are made from solid bronze bar stock, Mil Spec 11553C12. Each bushing is machined in one operation that holds the concentricity to less than .0002". Also, each bushing has a lead in, for ease of installment.



CAM BUSHING, IN CAM COVER

Big Twin Standard O.D. is 1.2015". Standard I.D. is 1.000". Use JIMS® line reamer No.1023-70. Install with JIMS® No.1012-70TB.

No.**25581-70** - *Use on Big Twin 1970-99 single cam only. (**NOTE:** Includes aftermarket engines.)*

No.**25581-705** - *Oversize +.005"*

No.**25581-80AB** - *Smaller I.D. is .9875". Use to repair out of center line cam cover.*

CAM BUSHING, IN RIGHT CASE

Standard O.D. is 1.0035". Install with JIMS® No.1011-36TB.

No.**25597-36** - *Use on Big Twin 1936-57.*

No.**25597-365** - *Oversize +.005"*

CAM BUSHING REAR INTAKE

Sportster® - Standard O.D. is 1.3775".

No.**25588-57** - *Use on Sportster® 1957-90. Use on Buell® 1987-90*

No.**25588-575** - *Oversize +.005".*

CAM BUSHING, IN CAM COVER

Standard O.D. is 1.0035". Install with JIMS® No.1011-36TB, remove with JIMS® No.2281.

No.**25581-36** - *Use on O.H.V. Big Twin 1936-69. (**NOTE:** Includes aftermarket engines.)*

CAM BUSHING

Sportster®, Buell®, 45", and Sidevalves. Standard O.D. is .9405". Install with JIMS® No.1017-37TB.

No.**25586-37** - *Use on Sportster®1954-present. Use on Buell® 1987-present. Use on 45" 1937-73. Use on 74" and 80" Sidevalves1937-48. (**NOTE:** Includes aftermarket engines.)*

No.**25586-375** - *Oversize +.005"*

STAKING PIN FOR STAKING BUSHINGS

Use on all bushings. These pins hold bushing in place. Use with JIMS® bushing installers drilling jigs. **Sold in a pack of 10.** Replaces H-D®No.275.

No.**2201K** - *(**NOTE:** Includes aftermarket engines.)*

PINION BUSHING

PINION SHAFT BUSHING

Standard O.D. is 1.0035".

Use JIMS® line reamer No.94805-57. Use the hole side of this bushing for motors 1954-72, for side feed oiling pinion shafts. Use the slotted side of this bushing for motors 1973-92 for end oiling pinion shafts. Remove with JIMS® No.95760-TP, Install with JIMS® No.1013-54TB.

No.**25582-54/73** - *Use on Big Twin 1954-92.*
*(**NOTE:** Includes aftermarket engines.)*

No.**25582-54/735** - *Oversize +.005"*

PINION SHAFT BUSHING SMALL I.D.

Use JIMS® line reamer No.94805-57. I.D. is .5455". Must mill oil groove on side or drill hole. Use to repair out of centerline cam covers. Remove with JIMS® No.95760-TP.

No.**25582-80AB** - *Use on Big Twin 1973-92.*
*(**NOTE:** Includes aftermarket engines.)*

PINION SHAFT CAM COVER BUSHING

End oiling. Standard O.D. is 1.0035". Use JIMS® line reamer No.94805-57. Remove with 95760-TP.

No.**25582-93** - *Use on Big Twin 1993-99 single cam only.*
*(**NOTE:** Includes aftermarket engines.)*

No.**25582-935** - *Oversize +.005"*

PINION SHAFT BUSHING

Standard O.D. is .8775".

No.**25593-57** - *Use on Sportster® 1957-76.*

PINION SHAFT BUSHING

Standard O.D. is .815".

No.**25593-74** - *Use on Sportster® 1977-present.*
Use on Buell® 1987-present.
*(**NOTE:** Includes aftermarket engines.)*

PINION SHAFT BUSHING

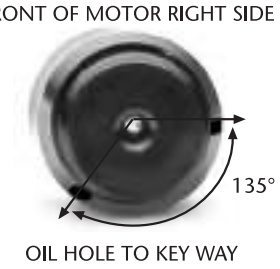
Standard O.D. is 1.0015". Install with JIMS® No.1018-37TB.

No.**25582-36** - *Use on Big Twin 1936-53.*

No.**25582-365** - *Oversize +.005"*

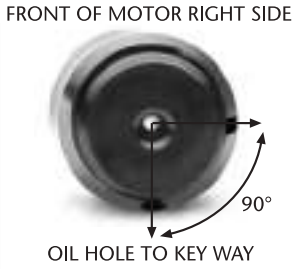
IDLER AND CIRCUIT BREAKER GEAR BUSHING

No.**25785-30A** - *Use on Big Twin 1932-69, and all Sidevalves 1930-73.*
*(**NOTE:** Includes aftermarket engines.)*



BIG TWIN 1937-EARLY 1981

CRANK PINS



BIG TWIN LATE 1981-PRESENT SINGLE CAM ONLY

All crank pins are precision manufactured here in Camarillo, California. We start with a special order of steel from an American foundry, then saw, turn, mill, and grind all on numerical controlled machines. From sawing to the final phase of machining, each part is thoroughly inspected and after heat treating, all threads go through a special process to make them withstand greater torque stress. On crank pins, approximately 50% more torque can be applied. All flywheel shafts are ground to a 16 micron finish or better unless otherwise specified. All ground diameters are concentric to within .0003" or less, in order to simplify all phases of flywheel truing and rebuilding. We strongly recommend using JIMS® high performance nuts in combination with our crank pins.

EARLY BIG TWIN MODELS - COMPLETE CRANK PIN KITS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/ Application	Oiling Holes 2	Oiling Holes 3	O.D.	Crank Pin	Kit Includes: Crank Pin Nuts	Woodruff Key
2429	Big Twin 1941-Early 81	X		1.2490"	1-23961-412	2-23966-54A	1-2186 (H-D® No.23985-18)
2430	Big Twin 1941-Early 81		X	1.2490"	1-23961-413	2-23966-54A	1-2186 (H-D® No.23985-18)
2438	Big Twin 1941-Early 81	X		1.2490"	1-23961-41 1"-20 threads	*2-23969-83	1-2186 (H-D® No.23985-18)
***CAUTION! On pre-1956 models, check nut to case clearances.**							

LATE BIG TWIN MODELS - COMPLETE CRANK PIN KITS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/ Application	Oiling Holes 2	Oiling Holes 3	O.D.	Crank Pin	Kit Includes: Crank Pin Nuts	Woodruff Key
2431	Big Twin single cam Late 1981-99	X		1.2495"	1-23961-80A2	2- 23969-83	1-2187 (H-D® No.11218)
2432	Big Twin single cam Late 1981-99		X	1.2495"	1-23961-80A3	2- 23969-83	1-2187 (H-D® No.11218)

CRANK PINS

EARLY BIG TWIN MODEL CRANK PINS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/Application	Oiling Holes 1	2	3	O.D.	Use with Nut	Use with Key
 **23961-411**	Big Twin 1941-Early 81	X			1.2490"	23966-54A	2186K
 **23961-412**	Big Twin 1941-Early 81		X		1.2490"	23966-54A	2186K
 **23961-413**	Big Twin 1941-Early 81			X	1.2490"	23966-54A	2186K
 **23962-40**	Big Twin 1937-52, O.H.V., 74" and 80" Sidevalves	X			1.250"	23966-36	2186K

SPECIAL DESIGNS - EARLY BIG TWIN MODEL CRANK PINS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/Application	Oiling Holes 1	2	3	O.D.	Use with Nut	Use with Key
 **23961-41S**	Big Twin 1941-Early 81			X	1.2490"	23966-54A	2186K
Special 180 degree oiling design that better lubricates your bearing diameter.							
 **23961-41ST3**	Big Twin 1941-Early 81			X	1.2490"	23966-54A	2186K
For the engine builder that likes less rod end play. This crank pin is ground .025" shorter from taper to taper.							

LATE BIG TWIN MODEL CRANK PINS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/Application	Oiling Holes 2	3	O.D.	Use with Nut	Use with Key
 **23961-80A2**	Big Twin single cam only Late 1981-99	X		1.2495"	23969-83	2187K
 **23961-80A3**	Big Twin single cam only Late 1981-99		X	1.2495"	23969-83	2187K
 **23974-873**	Big Twin single cam only Late 1981-99		X	1.2505" (Oversize +.001")	23969-83	2187K
 **23975-873**	Big Twin single cam only Late 1981-99		X	1.2515" (Oversize +.002")	23969-83	2187K

SPECIAL DESIGN - LATE BIG TWIN MODEL CRANK PINS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/Application	Oiling Holes	O.D.	Use with Nut	Use with Key
 23961-80AS	Big Twin 1981-99	3 Hole 180 Degree	1.2495"	23969-83	2187K
	Special 180 degree oiling design that better lubricates your bearing diameter.				

45" SPORTSTER & BUELL® MODEL CRANK PINS
INCLUDES AFTERMARKET FLYWHEELS

Part No.	Year/Application	Oiling Holes 1	2	3	O.D.	Use with Nut	Use with Key
 23960-29	45" Models 1937-73	X			1.00"		2186K
 23960-54	Sportster 1954-81			X	1.250"	23967-54A	2186K
 23960-80A3	Sportster Late 1981-99 Buell 1987-99			X	1.250"	23901-81	2187K

HARLEY DAVIDSON 1915-1936 CRANKPIN

Replaces H-D® No.'s 348-15 and 348-30.
Standard O.D. is 1.000" - Threads is 13/16"-18.

No.**348-15** - *Use on 1915-36 61", 74" F, J, JD, VC,*

INDIAN SHAFTS DRIVE SHAFT

No.**41043** - *Use on 1933-48 Indian Chief.*

CRANK PIN

No.**43067** - *Use on 1933-53 Indian Chief.*
Use on 1933-42 Indian Sportscout.

INDIAN NUTS PINION AND DRIVE SHAFT NUT

No.**D180** - *Use on 1933-53 Indian Chief.*
Use on 1928-42 Indian Sportscout.

Phone 805-482-6913 JIMS Fax 805-482-9224

JIMS® NUTS - THE ULTIMATE HOLDING POWER

In an increasing demand for quality and durability with crank pin, sprocket and pinion shaft nuts, we have been able to exceed our own high standards by maintaining the pitch diameter perpendicular to the face within .0002" (Which is 40% better than our previous .0005" tolerance!). Not only is this mandatory for pulling the shafts and crank pin straight into the flywheels, but it also ensures that both nut and flywheel faces are perfectly parallel, facilitating perfect contact. All of this translates into simplifying the truing process and maintaining essential flywheel integrity! All of our nuts are high performance CNC machined for uses ranging from stock motors, to top fuel and drag bike applications.

CRANK PIN NUTS

(NOTE: CRANK PIN NUTS ARE SOLD IN A PACK OF 2)

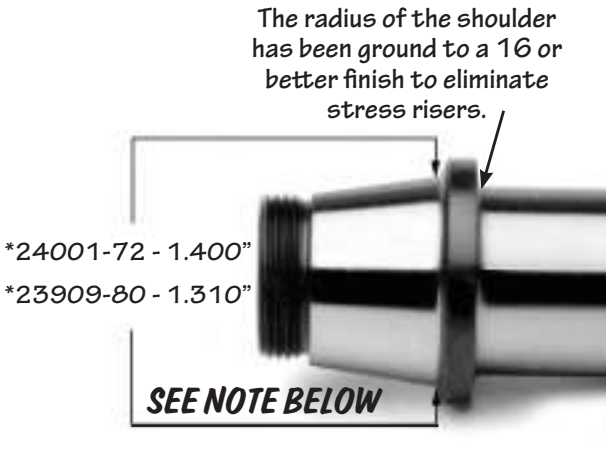
	Part No.	Year/Application	Thread and Tool
 BIG TWIN	23966-36	Big Twin 74" O.H.V. 1936-52 Big Twin 80" Sidevalves 1937-48	7/8"-18
	23966-54A pictured	Big Twin 1954-81	1"-18 (Use with JIMS® No.1029-TS socket.)
	23969-83	Big Twin Single Cam Only Late 1981-99	1"-20 (Use with JIMS® No.1030-TS socket.)
 SPORTSTER	23967-54A	Sportster 1954-Early 1981	1"-20
	23901-81 pictured	Sportster 1954-81 and 1981-99, Buell® 1987-99 stroker motors. (Check for clearances.)	1"-20 (Use with JIMS® No.1033-TS and JIMS® No. 1039-TS sockets.)

SPROCKET SHAFT NUTS

	Part No.	Year/Application	Thread	Sprocket Side	Flywheel Side
 BIG TWIN	24017-80 pictured	Big Twin - Use on JIMS® big tapered shafts. Use on all JIMS® 72" & 80" sprocket shafts. Check for rod clearance.	1-1/8"-16 (Use with JIMS® No.1032-TS socket.)		X
	24023-36	Big Twin 1930-70	3/4"-18		X
 BIG TWIN	24003-55 pictured	For belt drive & non-compensating sprockets. Use on 1955-06 FL, 1972-05, FX, FXR, FXD, 1984-06 FXST.	7/8"-14	X	

PINION SHAFT NUTS

	Part No.	Year/Application	Thread	Gear Side	Flywheel Side
 BIG TWIN	24023-36 pictured	Big Twin 1930-Early 81 pinion shaft	3/4"-18		X
	24016-80	Big Twin Late 1981-89	3/4"-20 (Use with JIMS® No.1031-TS socket.)		X
 BIG TWIN	24022-90	Big Twin 1990-92	5/8"-24 left hand thread. (Use with JIMS® No.94555-55A socket to remove and install pinion nut.)	X	
	24023-54 pictured	Big Twin 1954-89		X	



SPROCKET SHAFT HISTORY

To help with the identification of Big Twin sprocket shafts, JIMS® would like to provide you with a little history into the design of the sprocket shaft. From first conception to approximately 1954, H-D® used a 6 degree taper on the flywheel side. In 1956, there was a change to 8-1/2" degrees, with a major diameter of about 1.060" at the largest end of taper. 1955 had a special sprocket shaft and flywheel, at 8-1/2" degrees, without a bearing shoulder on the shaft.

The 8-1/2" degree x 1.060" taper lasted until 1972. It retained the 8-1/2" degree taper, but was increased in size to about 1.400" at the biggest part of the taper. This shaft also used a bigger nut, 1-1/8" -16, and the flywheels still used a nut locking plate and screw until early 1981.

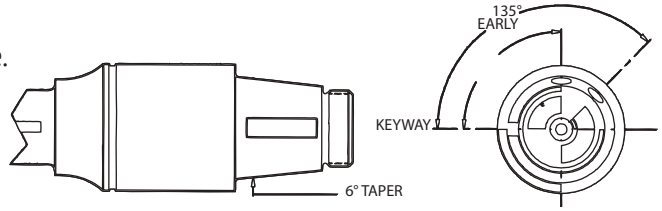
In late 1981 they became what H-D® called the "communized" taper, which is the old 6 degree, but with a size of about 1.310" at the largest part of taper. The flywheel side nut has the same thread at 1-1/8" -16, but the flywheels do not have a screw hole for a locking plate.

***NOTE:** *All (-72) and (-80) sprocket shafts will have one of the above diameters. You can also check flywheels for this diameter to determine the right sprocket shaft for your application.*

PINION SHAFT HISTORY

The first non-splined, (tapered with key) pinion shaft was introduced in 1954. Taper was 6 degrees on flywheel side. This remained the same until 1990 with the introduction of the integral shaft flywheels.

- 1954-72 Pinion shafts had the oil hole in flywheel and shaft, 135 degrees to the key (side oiler hole design).
- 1973 Was the first year of constant oil flow to the crank pin oil hole in flywheel and shaft, 135 degrees to the key (end oiler design).
- 1981-89 Pinion shaft was communized taper design. Oil hole in flywheel and shaft 90 degrees to the key (end oiler design).
- 1954 - Early 1981 has 3/4 - 18 thread on flywheel side.
- Late 1981-89 has 3/4 - 20 thread on flywheel side.



All sprocket and pinion shafts are precision manufactured here in Camarillo, California. We start with a special order of steel from an American foundry then saw, turn, mill, and grind all on numerically controlled machines. From sawing to the final phase of machining, each part is thoroughly inspected. After heat treating, all threads go through a special process to make them withstand greater torque stress. On big threaded sprocket shafts, approximately 50% more torque can be applied. All flywheel shafts are ground to a 16 micron finish or better unless otherwise specified. All ground diameters are concentric to within .0003" or less, to simplify all phases of flywheel truing and rebuilding. We strongly recommend using JIMS® high performance nuts.

THE FOLLOWING IS A QUOTE FROM THE HARLEY-DAVIDSON® SERVICE MANUAL

When truing the flywheels the number of blows required, and how hard they should be struck depends on how far shafts are out of true, and how tight nuts are drawn. Always remove the flywheels from the stand and strike the flywheel rim at 90° to the crank pin. Use only a soft metal mallet. Never strike wheels while in truing stand. This could result in a broken pinion shaft or other parts and tools.

SPROCKET SHAFTS

BIG TWIN SPROCKET SHAFTS

Part No.	Year/ Application	Product Details	Use with Nut Sprocket Side	Use with Nut Flywheel Side	Use with Key
24001-30	Big Twin 1930-54, also use on 74" and 80" Sidevalves 1937-48		JIMS® 24003-30	JIMS® 24023-36	JIMS® 2488
24001-56	Big Twin 1956-64	This shaft is 3.51" long from bearing shoulder to end of small thread. Taper is 8-1/2°.	JIMS® 24003-55	JIMS® 24023-36	JIMS® 2489
24001-65	Big Twin 1965-69	This shaft is 3.750" long from bearing shoulder to end of small thread. Taper is 8-1/2°.	JIMS® 24003-55	JIMS® 24023-36	JIMS® 2489
24001-70	Big Twin 1970-71	This shaft is 4.262" long from bearing shoulder to end of small thread. Taper is 8-1/2°.	JIMS® 24003-55	JIMS® 24023-36	JIMS® 2489
24001-72	Big Twin 1972-81. Sprocket shaft does not have keyway.	This shaft is 4.262" long from bearing shoulder to end of small thread. Taper is 8-1/2°. The biggest part of the taper is approximately 1.400".	JIMS® 24003-55	JIMS® 24017-80	N/A
23909-80	Big Twin Late 1981-Early 1985 for H-D® flywheels & all aftermarket flywheels, single cam only	Has keyway for aftermarket flywheels, 4.262" long from bearing shoulder to end of small thread. Taper is 6°. Biggest part of taper will be approximately 1.310" on all 80" Big Twin sprocket shafts.	JIMS® 24003-55	JIMS® 24017-80	JIMS® 2489


24001-30


23909-80


24001-70


24001-72


24001-56


24001-65

45" MODELS & SPORTSTER SPROCKET SHAFTS

	Part No.	Year/Application	Flywheels H.D.	Flywheels Others	Use with Nut Sprocket Side	Use with Nut Flywheel Side	Use with Key
	**24000-29**	45" Models 1929-73	X	X	H-D® 7991	H-D® 7974	JIMS® 2488
	**24000-57**	Sportster 1957-76	X	X	H-D® 40387-70	H-D® 8011	JIMS® 2488
	**24000-75**	Sportster 1977-Early 1981	X	X	H-D® 40387-70	H-D® 8011	JIMS® 2488
	**24000-80**	Sportster Late 1981-85	X	X	H-D® 40387-70	H-D® 23902-81	N/A

PINION SHAFTS

BIG TWIN PINION SHAFTS

Part No.	Year/ Application	Product Details	Oiling End	Oiling Side	Use with Key Pinion Gear Side	Use with Key Flywheel Side	Use with Nut Pinion Gear Side	Use with Nut Flywheel Side
24007-39	Big Twin 1939-53	Standard O.D. is 1.000" 24020-51 screw included	X			JIMS® 2488	N/A	JIMS® 24023-36
24006-54A	Big Twin 1954-57	Plug #2197 included	X		JIMS® 2480	JIMS® 2488	JIMS® 24023-54	JIMS® 24023-36
24006-58	Big Twin 1958-72	Plug #2197 included	X		JIMS® 2480	JIMS® 2488	JIMS® 24023-54	JIMS® 24023-36
24006-73	Big Twin 1973-81	Includes Aftermarket Engines	X		JIMS® 2480	JIMS® 2488	JIMS® 24023-54	JIMS® 24023-36
24006-80/83	Big Twin 1981-86	Metered oil screw jet included No.2196		X	2480 2483 Oil Pump	JIMS® 2187	JIMS® 24023-54	JIMS® 24016-80
24006-83L	Big Twin	John Harman's big bore engine case and other CAM offset cases like Delkron cases. Measures .370" longer.		X	2480 2483 Oil Pump	JIMS® 2187	JIMS® 24023-54	JIMS® 24016-80
24006-87	Big Twin 1987-99	Use with 1987-99 single cam pinion bearing. Metered oil screw jet included No.2196		X	JIMS® 2483	JIMS® 2187	JIMS® 24023-54	JIMS® 24016-80
2439	Big Twin	Special application (cam case offset 1/4"). Same as JIMS® No.2437, but 1/4" longer, includes metered oil screw jet No.2196. (See No.2437 for more information)		X	2480 2483 Oil Pump	JIMS® 2187	JIMS® 24023-54	JIMS® 24016-80
2437	Big Twin 1987-99	Same as JIMS® shaft No.24006-80/83 but has a longer bushing nose for use with H-D® 1993 cam cover and JIMS® cam cover No.25254-93A. Also has a larger oil pump drive key slot. Pinion shaft designed for use with aftermarket stroker flywheels. Use with JIMS® pinion gears and oil pump drive gear. Can also be used with JIMS® pinion bearing assembly, see index for bearing listings. Shaft includes a metered oil screw jet No.2196 installed.			JIMS® 2480 JIMS® 2483 Oil Pump	JIMS® 2187	JIMS® 24023-54	JIMS® 24016-80


24007-39


24006-54A


24006-58


24006-73


24006-80/83


24006-83L


24006-87


2439


2437

45", SPORTSTER, 74" AND 80" SIDE VALVE PINION SHAFTS

Part No.	Year/ Application	Product Details	Oiling Side	Oiling End	Use with Key	Use with Nut Pinion Gear Side	Use with Nut Flywheel Side
24005-37	45" Models 1937-73	Plug #2197 included	X		JIMS® 2488	N/A	H-D® 7974
24006-37	74" and 80" Sidevalves 1937-48	Left hand screw included, No. 24020-51	X		JIMS® 2488	N/A	JIMS® 24023-36
24005-57	Sportster 1957-76			X	JIMS® 2488	N/A	H-D® 8011
24005-80	Sportster 1981-85	Bearing diameter is 1.2482"		X	JIMS® 2187	H-D® 7913	H-D® 23902-81


24005-37


24006-37


24005-57


24005-80

SPROCKET/PINION SHAFT KITS & SPACERS

KIT INCLUDES:
- 1 - 24006-73, Pinion shaft
- 1 - 24023-36, Flywheel side nut
- 1 - 24023-54, Pinion side nut
- 1 - 2488, Flywheel key, Rep.23985-12
- 2 - 2480, Gear keys, Rep.23985-54
- 2 - 2482, Washers, Rep.24692-58
- 1 - 2481, Retaining ring, Rep.11007

BIG TWIN 1973-81. Same shaft as No.24006-73 (End oiling) pinion bushing.

KIT INCLUDES:
- 1 - 24006-80/83, Pinion shaft
- 1 - 2196, Metered oil jet screw
- 1 - 24016-80, Flywheel side nut
- 1 - 2187, (H-D® No.11218), Flywheel side key
- 1 - 2480, (H-D® No.23985-54), Pinion gear key
- 1 - 2481, (H-D® No.11007), Retainer
- 2 - 2482, (H-D® No.24692-58), Washers
- 1 - 24023-54, Pinion Nut
- 1 - 2483, (H-D® No.26348-15), Oil pump drive gear key

BIG TWIN 1981-EARLY 1986. End oiling. ***(NOTE:*** *Fits aftermarket and S&S® engines.)* Use with H-D® flywheels 1981-Early 1986 or aftermarket flywheels with common taper design. This flywheel assembly can then be used in Big Twin 1973-92.

BIG TWIN SPROCKET SHAFT KIT (Kit includes nuts and key)

	Part No.	Year/Application	Sprocket Shaft	Nuts		Key
				Sprocket Side	Flywheel Side	
	2433	Big Twin Late 1981-Early 1985 for H-D® flywheels & all aftermarket flywheels, single cam only	JIMS® 23909-80	JIMS® 24003-55	JIMS® 24017-80	JIMS® 2489

SPROCKET SHAFT SPACER KIT

Use on Big Twin 1955-69. Spacers are machined to a 32 finish, and burr free for extended seal life. Made to fit the rubber sprocket shaft oil seal. This kit contains the following. ***Spacers NOT sold separately.***

.336" Wide .516" Wide .546" Wide .574" Wide
.606" Wide .621" Wide .636" Wide .666" Wide

No.**24029-KIT -** *Includes one of each of the above. Complete kit only.*

Spacers NOT Sold Separately.

SPROCKET SHAFT OIL SEAL SPACER

Spacers are machined to a 32 micron finish, and burr free for extended seal life. Use JIMS® tool No.39361-69 to install seal.

No.**24002-70 -** *Use on single cam Big Twin 1970-99.*
(NOTE: *Includes aftermarket engines.)*

PINION GEAR SPACER

Quality replacement spacer for stock or aftermarket engines. (Use with matching JIMS® gear No.26349-84 or equivalent)

No.**24703-54B -** *Use on Big Twin 1954-1989.*

PINION SHAFT HARDWARE, IDLER & CIRCUIT BREAKER SHAFTS & RETAINERS

OIL METERING JET SCREW (WITH HOLE)

Use on JIMS® No.24006-80/83 and No.24006-87 Pinion Shafts. Use as needed for oil control to rod rollers with hole size of .087" (One included with JIMS® No.24006-87 & 24006-80/83). **Sold in a pack of 10.**

No.**2196K -** *Oil metering screw*

PINION SHAFT PLUG (NO HOLE)

Replacement plug for JIMS® pinion shafts No. 24005-37, 24006-54A and 24006-58. 1 plug included with these shafts. Use only with side oiler shafts. **Sold in a pack of 10.**

No.**2197K -** *Oil plug*

CAUTION: USING A "NO HOLE" PLUG IN A PINION SHAFT 1973-PRESENT WILL SHUT OFF OIL TO CONNECTING RODS, WHICH WILL RESULT IN ENGINE DAMAGE.

PINION GEAR SHAFT SCREWS

Left hand screws for early pinion shafts. **Sold in a pack of 10.**

No.**24020-51K -** *Use on pinion shaft No.24006-37 and No.24007-39.*

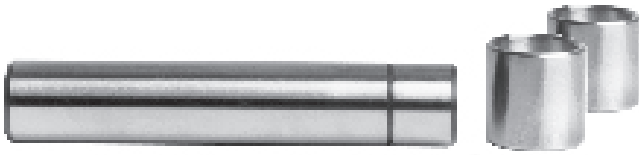
PINION BEARING RETAINER

Use with steel bearing retainers and JIMS® bearings, See page 86 and 87 for bearings. Replaces H-D® No.11007. **Sold in a pack of 10.**

No.**2481K -** *Use on Big Twin 1958-86, may also be used on 1986-1999 single cam only when using the right bearings and retainers. (**NOTE:** Includes aftermarket engines.)*

CIRCUIT BREAKER SHAFT

No.**25856-36 -** *Use on Big Twin 1936-69. (**NOTE:** Includes aftermarket engines.)*



CIRCUIT BREAKER SHAFT & BUSHING KIT

Kit includes: 1 - 25856-36 shaft, 2 - 25785-30A bushings.

No.**25856-KIT -** *Use on Big Twin 1936-69. (**NOTE:** Includes aftermarket engines.)*

IDLER SHAFT AND BUSHING KIT

No.**25791-KIT -** *Use on Big Twin 1936-69. (**NOTE:** Includes aftermarket engines.)*

IDLER GEAR SHAFT

No.**25791-36 -** *Use on Big Twin 1936-69. (**NOTE:** Includes aftermarket engines.)*

PINION BEARING WASHERS

Use with steel bearing retainers. **Sold in a pack of 5**. Replaces H-D® No.24692-58.

No.**2482K -** *Use on Big Twin 1958-86, may also be used on 1986-1999 single cam only when using the right flywheels and pinion shafts. (**NOTE:** Includes aftermarket engines.)*

SPROCKET & PINION SHAFT KEY

Sprocket & pinion shaft flywheel key. Replaces H-D® No.23985-12. **Sold in a pack of 10.**

No.**2488K -** *Use on all Big Twins 1912-80 pinion shafts. Use on all Big Twins 1912-55 sprocket shafts. (**NOTE:** Includes aftermarket engines.)*

SPROCKET SHAFT KEY

Sprocket shaft flywheel key. Replaces H-D® No.23985-56. **Sold in a pack of 10.**

No.**2489K -** *Use on all Big Twin 1956-present single cam only sprocket shafts, or when using aftermarket flywheels. (**NOTE:** Includes aftermarket engines.)*

CRANK PIN KEY EARLY

Early crank pin key. Use on crank pins No.23960-29, 23960-54, 23961-41 & 23962-40. Replaces H-D® No.23985-18. **Sold in a pack of 10.**

No.**2186K -** *Use on Big Twin Late 1941- Early 1981. (**NOTE:** Includes aftermarket engines.)*

CRANK PIN & PINION SHAFT KEY LATE

Late crank pin & pinion shaft key. Use on crank pins No.23960-80 & 23960-81. **Sold in a pack of 10.** Replaces H-D® No.11218.

No.**2187K -** *Use on Big Twin crank pins late 1981-present single cam only. Use on Sportster® crank pins late 1981-1999. Use on Buell® crank pins 1987-1999.*
*Use on Big Twin pinion shafts late 1981-89 and all aftermarket flywheels. Use on Sportster® pinion shafts late 1981-85. (**NOTE:** Includes aftermarket engines.)*

PINION GEAR KEY

Replaces H-D® No.23985-54. **Sold in a pack of 10.**

No.**2480K -** *Use 2 keys on Big Twin 1954-Early 75. Use 1 key for pinion gear Late 1975-89.*
*(**NOTE:** Includes aftermarket engines.)*

OIL PUMP DRIVE SHAFT KEY

Replaces H-D® No.26348-15. **Sold in a pack of 10.**

No.**2483K -** *Use 2 keys on Big Twin pinion and oil pump drive gear Late 1975-89. Use 3 keys on Big Twin oil pump drive shaft 1968-present single cam only. Use 2 keys on Big Twin oil pump drive shaft 1936-67.*
Use on K models 1952-59.
Use on Sportster® models 1972-76.
*(**NOTE:** Includes aftermarket engines.)*

PINION GEARS

JIMS® pinion gears are made with the finest American aerospace quality tool steel. Precision machined to exact tolerances with no compromises in workmanship.

JIMS® offers eight different sizes of early gears and seven sizes of the late style gears, providing you with the perfect fit for any cam gear fitment job. This cam gear fitment is essential to quiet valve train operation. Too loose of a fit will result in a clicking noise, sometimes confused with lifter noise, and too tight of a fit will produce a severe gear whine.

No matter what situation, use a gear you can depend on and one that's backed by over 44 years of manufacturing experience. For quality known world wide, use...JIMS®.

JIMS® RECOMMENDS:	
PART NO.	DESCRIPTION
1110	GAUGE PINS
1111	GAUGE PINS
2237	LOCKER TOOL
96830-51	PULLER
94555-55A	NUT SOCKET

PINION GEAR

*Use on Big Twin 1954-Early 1977. (**NOTE:** Includes aftermarket engines.)*

ORDER NO.	GEAR SIZE OVER .105 PINS	CAM GEAR OVER .105 PINS	COLOR CODE
No.**24010-OR**	*1.4490-1.4485*	*2.7665-2.767*	*Orange*
No.**24010-RE**	*1.4480-1.4475*	*2.7675-2.768*	*Red*
No.**24010-BLU**	*1.4475-1.447*	*2.768-2.7685*	*Blue*
No.**24010-GR**	*1.4470-1.4465*	*2.7685-2.769*	*Green*
No.**24010-WH**	*1.4465-1.446*	*2.769-2.7695*	*White*
No.**24010-BR**	*1.4460-1.4455*	*2.7695-2.770*	*Brown*
No.**24010-YE**	*1.4455-1.445*	*2.770-2.7705*	*Yellow*

PINION GEAR

*Use on Big Twin Late 1977-1989. (**NOTE:** Includes aftermarket engines.)*

ORDER NO.	GEAR SIZE OVER .105 PINS	CAM GEAR OVER .105 PINS	COLOR CODE
No.**24040-78**	*1.4751-1.4756*	*2.7324-2.7334*	*Orange*
No.**24041-78**	*1.4745-1.4751*	*2.7334-2.7344*	*White*
No.**24042-78**	*1.4737-1.4745*	*2.7344-2.7354*	*Yellow*
No.**24043-78**	*1.4729-1.4737*	*2.7354-2.7364*	*Red*
No.**24044-78**	*1.4721-1.4729*	*2.7364-2.7374*	*Blue*
No.**24045-78**	*1.4715-1.4721*	*2.7374-2.7384*	*Green*
No.**24046-78**	*1.4710-1.4715*	*2.7384-2.7394*	*Black*

ROD ROLLERS FOR BIG TWIN FEMALE ROD

These are the best rollers to use for longer motor life. Why? These rollers are made in the U.S.A. to JIMS® specs from aerospace quality 52100 bearing material. Standard O.D. is .1875", and a length of .325". Use JIMS® No.24336-51K retainers on 1941-present single cam only or any Big Twin using a 1-1/4" crank pin. **Sold in packs of 100 pcs.** ***(NOTE:*** *Includes aftermarket engines.)*

JIMS® NO.	*SIZE*	*O.D. SIZE*	*H-D® NO.*
No.**2442**	*+.0004"*	*O.D. is .1879"*	*9103A*
No.**2446**	*+.002"*	*O.D. is .1895"*	
No.**2447**	*+.003"*	*O.D. is .1905"*	

ROD ROLLERS BIG TWIN MALE ROD

Note: Male rollers are longer in length than female rollers. Standard O.D. is .1875", and a length of .660". Use JIMS® No.24366-51K retainers on 1941-present single cam only or any Big Twin using a 1-1/4" crank pin. **Sold in packs of 100 pcs.** ***(NOTE:*** *Includes aftermarket engines.)*

JIMS® NO.	*SIZE*	*O.D. SIZE*	*H-D® NO.*
No.**2449**	*+.0002"*	*O.D. is .1877"*	*9172A*
No.**2451**	*+.0006"*	*O.D. is .1881"*	*9174A*
No.**2452**	*+.0008"*	*O.D. is .1883"*	*9175A*
No.**2454**	*+.002"*	*O.D. is .1895"*	
No.**2455**	*+.003"*	*O.D. is .1905"*	

CONNECTING ROD BEARING SETS FOR SINGLE CAM BIG TWINS

These American made Torrington® rod bearing sets consisting of three packaged bearings with 16 rollers in steel cages. They will retro fit back to 1941. They are available in a standard size only. When refitting rods, use this set with JIMS® oversize crankpins.

No.**3999 -** *Use on 1941-99, Single Cam Big Twin Motors. Replaces H-D®No.24346-87A.* ***(NOTE:*** *Includes aftermarket engines.)*

ROD ROLLER RETAINERS 18 ROLLERS IN EACH

Made from billet steel. **Sold in a pack of 4.**

No.**24366-51K -** *Use on Big Twin 1941-99 single cam only.* ***(NOTE:*** *Includes aftermarket engines.) Use with rollers listed above.*

THESE RETAINERS ARE MADE FROM 1144 STRESS PROOF BILLET STEEL. THEY ARE THE ULTIMATE IN ROD ROLLER RETAINERS.

ROD ROLLERS FOR BIG TWIN MALE ROD

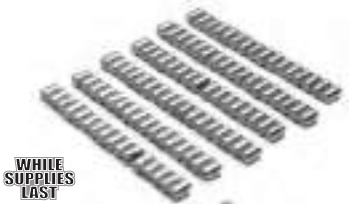
These rollers are made in the USA to JIMS® specifications from aerospace quality 52100 bearing material.

Use on Big Twin 1973-86 with aluminum cages. Standard bearing O.D. is .1875" x .590" long.

Sold in packs of 100 pcs.

*(**NOTE:** Includes aftermarket engines.)*

JIMS® NO.	SIZE	O.D. SIZE
No.**9182**	+.0006"	O.D. is .1881"
No.**9186AA**	+.0030"	O.D. is .1905"



ROD ROLLERS FOR BIG TWIN AND SPORTSTER®, FEMALE ROD

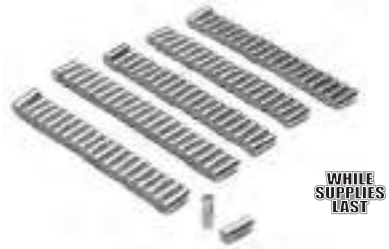
These rollers are made in the USA to JIMS® specifications from aerospace quality 52100 bearing material.

Use on Sportster® 1954-86 with aluminum cages. Use on Big Twin 1973-86 with aluminum cages. Standard bearing O.D. is .1875 x .290" long.

Sold in packs of 100 pcs.

*(**NOTE:** Includes aftermarket engines.)*

JIMS® NO.	SIZE	O.D. SIZE
No.**9450A**	-.0002 "	O.D. is .1873"



ROD ROLLERS FOR SPORTSTER® MALE ROD

These rollers are made in the USA to JIMS® specifications from aerospace quality 52100 bearing material.

Use on Sportster® 1954 - 86 with aluminum cages. Standard bearing O.D. is .1875" x .480" long. ***Sold in packs of 100 pcs.***

*(**NOTE:** Includes aftermarket engines.)*

JIMS® NO.	SIZE	O.D. SIZE
No.**9150A**	STD. O.D.	O.D. is .1875"
No.**9152A**	+.0002"	O.D. is .1877"
No.**9160A**	+.0010"	O.D. is .1885"
No.**9161**	-.0002"	O.D. is .1873"

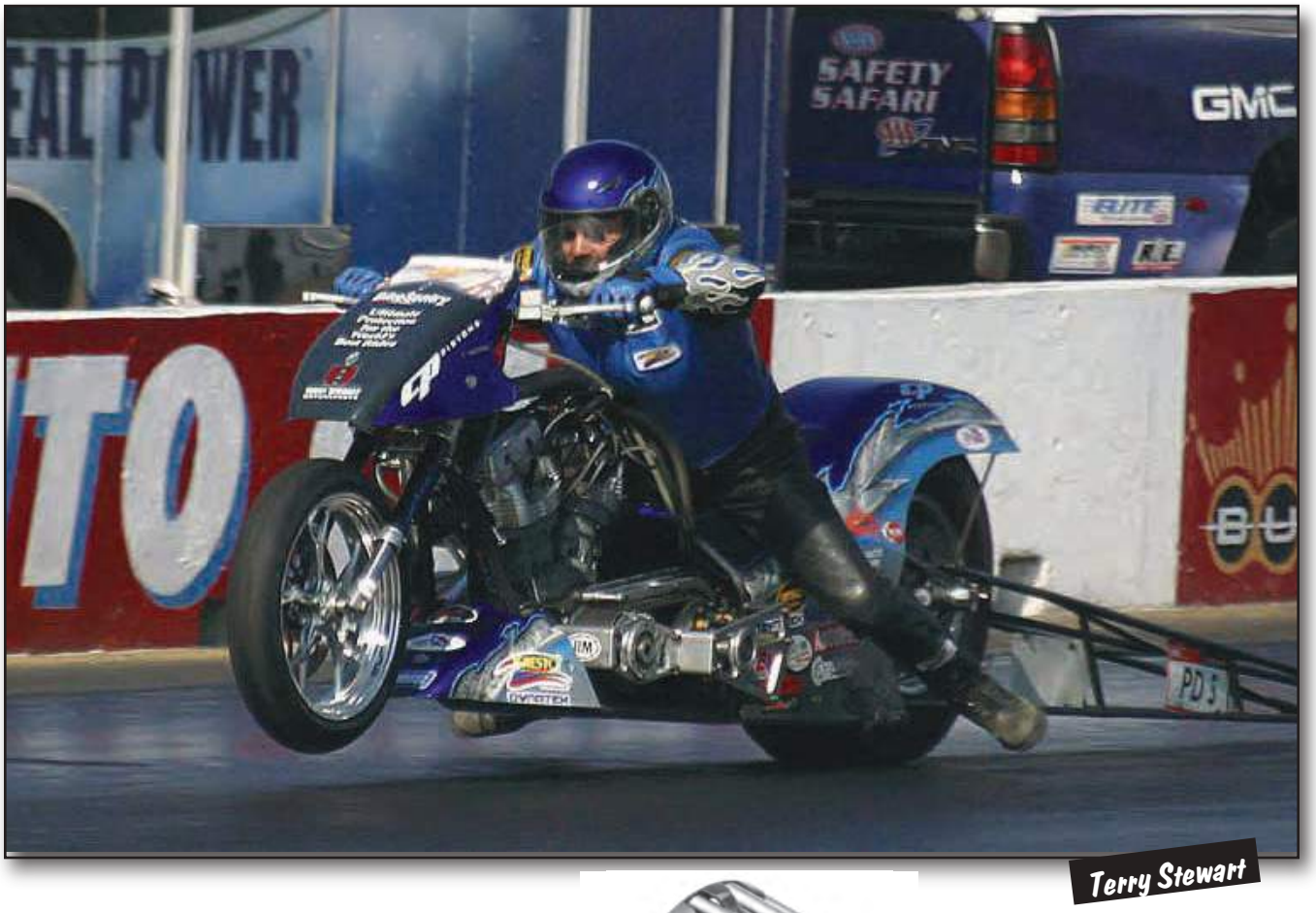
RIGHT CASE PINION SHAFT ROLLERS, BIG TWIN 1955-1957
RIGHT CASE PINION SHAFT ROLLERS, SPORTSTER® 1957-1976

These rollers are made in the USA to JIMS® specifications from aerospace quality 52100 bearing material.

Standard bearing O.D. is .1875" x .800" long. ***Sold in packs of 100 pcs.***

*(**NOTE:** Includes aftermarket engines.)*

JIMS® NO.	SIZE	O.D. SIZE
No.**9423**	+.0004"	O.D. is .1879"
No.**9424**	+.0006"	O.D. is .1881"
No.**9425**	+.0008"	O.D. is .1883"
No.**9426**	+.0010"	O.D. is .1885"



Terry Stewart

PINION SHAFT BEARINGS BIG TWIN

Use on Big Twin 1987 - 99 single cam only. Use these bearings with JIMS® Pinion Shaft No.2437. For H-D® flywheels 1981-86 and some aftermarket flywheels. Some aftermarket flywheels may need bearing washers for centering this bearing onto the bearing journal. If no outer bearing washer is used, use H-D® No.11177A snap ring for retaining bearing to pinion shaft. Overall length of bearing is 1.280". *(**NOTE:** Includes aftermarket engines.)*

JIMS® NO.	COLOR	BEARING O.D. X 2	PINION SHAFT O.D.	EXAMPLE OF LAPPED CASE RACE I.D.	EXAMPLE OF BEARING ON PINION SHAFT RUNNING FIT	
					High	*Low*
24628-87	*Green*	*.2502" x 2 = .5004"*	*1.2500" ±.0002"*	*1.7508"/1.7515"*	*.0009"-.0013"*	*.0002"-.0006"*
24626-87	*White*	*.2503" x 2 = .5006"*	*1.2500" ±.0002"*	*1.7510"/1.7517"*	*.0009"-.0013"*	*.0002"-.0006"*
24641-87	*Red*	*.2504" x 2 = .5008"*	*1.2500" ±.0002"*	*1.7512"/1.7519"*	*.0009"-.0013"*	*.0002"-.0006"*
24643-87	*Blue*	*.2505" x 2 = .5010"*	*1.2500" ±.0002"*	*1.7514"/1.7521"*	*.0009"-.0013"*	*.0002"-.0006"*

The list of examples are a reference starting point. Be sure to follow H-D® Service Manual specifications.

BIG TWIN BEARING RACE

With locking detents.

Right Case - Standard O.D. is 2.1270"

No.**24599-58** - *Use on Big Twin 1958-78.*

*(**NOTE:** Includes aftermarket engines.)*

No.**24600-58** - *Oversize +.002".*

No.**24601-5810** - *Oversize +.010".*

No.**24601-5832** - *Oversize +.032".*

BIG TWIN BEARING RACE

Without locking detents.

Right Case - Standard O.D. is 2.1270"

No.**24599-58A** - *Use on Big Twin 1979-92.*

*(**NOTE:** Includes aftermarket engines.)*

No.**24600-58A** - *Oversize +.002"*

No.**24601-58A10** - *Oversize +.010"*

No.**24601-58A32** - *Oversize +.032"*

BIG TWIN SV BEARING RACE

Right Case - Standard O.D. is 2.0015"

No.**24595-40** - *Use on 74" and 80" Sidevalves 1940-48.*

No.**24597-40** - *Oversize +.005".*

45" BEARING RACE

Right Case standard O.D. is 1.753"

No.**24585-39** - *Use on 45" 1939-73 Right Case.*

No.**24587-39** - *Oversize +.005".*

SPORTSTER, K BEARING RACE

Right Case - Standard O.D. is 1.7515"

No.**24585-57** - *Use on Sportster® and K model 1954-76.*

No.**24585-575** - *Oversize +.005".*

BIG TWIN BEARING RACE

Right Case Standard O.D. is 2.1270" - 360° oiling hole

No.**24599-58B** - *Use on Big Twin 1993-99 single cam.*

*(**NOTE:** Includes aftermarket engines.)*

No.**24600-58B** - *Oversize +.002".*

No.**24601-58B32** - *Oversize +.032".*

BIG TWIN BEARING RACE

Left Case Standard O.D. is 2.0015"

No.**24621-40** - *Use on 74" and 80" Big Twin 1940-54. Use on 74" and 80" Sidevalves 1940-48.*

No.**24623-4032** - *Oversize +.032".*

45" BEARING RACE

Left Case Standard O.D. is 1.753"

No.**24610-39** - *Use on 45" 1939-73.*

No.**24612-39** - *Oversize +.005".*

BIG TWIN BEARING RACE

Right Case - Standard O.D. is 2.0015"

No.**24599-40** - *Use on Big Twin 1940-54.*

No.**24601-40** - *Oversize +.005".*

BIG TWIN BEARING RACE

Right Case - Standard O.D. is 2.0015"

No.**24599-55** - *Use on Big Twin 1955-57.*

No.**24601-55** - *Oversize +.005".*

Phone 805-482-6913 JIMS Fax 805-482-9224

ROD RACES

Made from 52100 aerospace quality Timken® bearing stock. **Sold in a set of 3.**

No.**1025-15 -** *Use on 1915-36 61" and 74" - F, J, JD, VC, VL, VE, VLD, and VLH.*

PISTON PIN BUSHING

Twin Cam® Bushings are **Sold in packs of 2**. For removal and installation, use JIMS® tool No.1051. To ream to correct size, use JIMS® No.1726-3 wrist pin reamer. Bushing O.D. is 1.017"+-.0005, I.D. is .927",replaces No.24316-99.

No.**3998K -** *Use on all Twin Cam® 1999-2006 FL, FXD, 2000-2006 FXST.*

PISTON PIN BUSHING

Bushings are **Sold in a pack of 2.** Ream with JIMS® No.1726-2. Remove and install with JIMS® tool No.95970-32C. Sportster® and 45"- Standard O.D. is .8955".

No.**24331-36 -** *Use on Sportster® and 45" 1936-present. Use on Buell® 1987-present.*
*(**NOTE:** Includes aftermarket engines.)*

ROD RACES

Made from 52100 aerospace quality Timken® bearing stock. **Sold in a set of 3.** Replaces H-D® No.24345-36A female rod race, and No.24356-36A male rod race. I.D. is 1.622", Std. O.D. is 1.8195".

No.**1046-36A -** *Use on Big Twin 1941-99 single cam only.*
*(**NOTE:** Includes aftermarket engines.)*

PISTON PIN BUSHING

Bushings are **Sold in a pack of 2.** Big Twin - Standard O.D. is .8955". Ream with JIMS® No.1726-1, remove and install with JIMS® No.95970-32C.

No.**24334-36 -** *Use on Big Twin 1936-99 single cam.*
*(**NOTE:** Includes aftermarket engines.)*

No.**24335-36 -** *Oversize +.005".*

RECOMMENDED JIMS® ROD TOOLS	
PART NO.	DESCRIPTION
1003	*Rod Race remover/installer*
96740-36	*Rod Lapping set*
1051	*Rod Bushing*
96920-32C	*Rod Bushing*
1284	*Rod Holder*
1148	*Rod Alignment*
1010	*Rod Alignment*
1158	*Rod Alignment*
1726-1	*Pin Bushing Reamer*
1726-2	*Pin Bushing Reamer*
1726-3	*Pin Bushing Reamer*

OIL PUMPS

JIMS® FULLY CNC MACHINED BILLET OIL PUMP ASSEMBLIES

FEATURES:

- This Flow Pro 1 will give an increase in oil return (scavenge) volume over stock pumps, thus increasing horsepower by decreasing drag on the flywheels and other rotating parts.
- Choice of end cover for custom or stock oil line connections.
- Cover and body are polished Billet, or OEM style black wrinkle finish 6061-T651 Aluminum CNC machined to exact tolerances for strong, more durable and wear resistant oil pumps.
- "Matched" Feed and Return gears, individually "Matched" to each body. (See page 92)

BOTTOM FEED

TOP FEED

- Available for late 1973-present Single Cam Big Twins, use on 74" to 140" motors. 1981-present bolts on with no modification. ***NOTE:*** *1973-80 cases will require a simple drilling for oil drain hole.*
- No provisions for front or rear chain oiling.
- Oil pumps are supplied with late style, 1/4"-20 mounting hardware only.

For more details see No.1752-IS instructions.

PART NO.	APPLICATION	FINISH	FEEDPOSITIONS
No.**1754**	*Big Twin 1973-91*	*Polished*	*Top*
No.**1754B**	*Big Twin 1973-91*	*Black*	*Top*
No.**1753**	*Big Twin 1992-99*	*Polished*	*Bottom*
No.**1753B**	*Big Twin 1992-99*	*Black*	*Bottom*
No.**1755**	*Big Twin 1973-91*	*Polished*	*Bottom*
No.**1755B**	*Big Twin 1973-91*	*Black*	*Bottom*
No.**1752**	*Big Twin 1992-99*	*Polished*	*Top*
No.**1752B**	*Big Twin 1992-99*	*Black*	*Top*

RECOMMENDED JIMS® TOOLS FOR OIL PUMP SERVICE

PART NO.	DESCRIPTION
No.1053	*Oil pump seal installer*
No.1052	*Oil pump snap ring installer*
No.2361	*Dental pick*

IMPORTANT NOTICE

Chrome plating is not recommended by JIMS®. The chroming process and contaminates are very sensitive to the oil pump, therefore JIMS® voids all warranty if the pump is plated.

NOTE: *Oil Pumps are supplied with late style, 1/4"-20 mounting hardware only.*

JIMS® FULLY CNC MACHINED BILLET OIL PUMPS

This Flow Pro 1 will give an increase in oil return (scavenge) volume over stock pumps.

Features:

- Increase horsepower by decreasing drag on the flywheels and other rotating parts.
- Polished, or OEM style black wrinkle Billet 6061-T651 Aluminum. CNC machined to exact tolerances for the strongest, most durable, wear resistant oil pumps.
- "Matched" Feed and Return gears, individually "Matched" to each body.

Available for late 1973-present Big Twins, use on 74" to 140" motors. 1981- present bolts on with no modification. ***NOTE:*** *1973-80 cases will require a simple drilling. (for oil drain hole)*

For more details see No.1711-IS instructions.

No.**1711E** - *Polished Oil Pump Body, Use on Big Twin 1973-91.*

No.**1711EB** - *Black Oil Pump Body, Use on Big Twin 1973-91.*

No.**1711L** - *Polished Oil Pump Body, Use on single cam Big Twin 1992-99.*

No.**1711LB** - *Black Oil Pump Body, Use on single cam Big Twin 1992-99.*

NOTE: *See tools for oil pump work on previous page.*

NOTE: *No provision in the cover for front or rear chain oiling.*

POLISHED & BLACK WRINKLE BILLET OIL PUMP COVER (BOTTOM FEED)

Designed with late oil pressure relief enabling return of excess oil to feed side of oil pump. Use with all aluminum oil pump bodies. *(**NOTE:** No provision in the cover for front or rear chain oiling).*

No.**1698E** - *Polished, Use on JIMS billet oil pump bodies and Big Twin 1973-91.*

No.**1698EB** - *Black, Use on JIMS billet oil pump bodies and Big Twin 1973-91.*

No.**1698L** - *Polished, Use on JIMS billet oil pump bodies and Big Twin 1992-99.*

No.**1698LB** - *Black, Use on JIMS billet oil pump bodies and Big Twin 1992-99.*

IMPORTANT NOTICE
Chrome plating is not recommended by JIMS®. The chroming process and contaminates are very sensitive to the oil pump, therefore JIMS® voids all warranty if the pump is plated.

POLISHED & BLACK WRINKLE BILLET OIL PUMP COVER (TOP FEED)

This cover was designed for models not having oil tank under transmission. Designed with late oil pressure relief enabling return of excess oil to feed side of oil pump. Use with all aluminum oil pump bodies. (Note: No provision in the cover for front or rear chain oiling).

No.**1699E** - *Polished, Use on JIMS billet oil pump bodies and Big Twin 1973-91.*

No.**1699EB** - *Black Use on JIMS billet oil pump bodies and Big Twin 1973-91.*

No.**1699L** - *Polished, Use on JIMS billet oil pump bodies and Big Twin 1992-99.*

No.**1699LB** - *Black Use on JIMS billet oil pump bodies and Big Twin 1992-99.*

NOTE: *Oil Pumps are supplied with late style, 1/4"-20 mounting hardware only.*

OIL PUMP RELIEF VALVE SPRINGS

No.**26207-83 -** *Use on Big Twin late 1973-99 single cam only (including JIMS® oil pumps).*

No.**26262-80 -** *Use on Big Twin 1981-99 single cam only (including JIMS® oil pumps).*

OIL PUMP PRESSURE VALVE

No.**26400-82 -** *Replaces H-D® 26400-82B. Use on Big Twin late 1982-99 (including JIMS® oil pumps).*
Use on Twin Cam®, cam support plates1999-present.

OIL PUMP GEARS

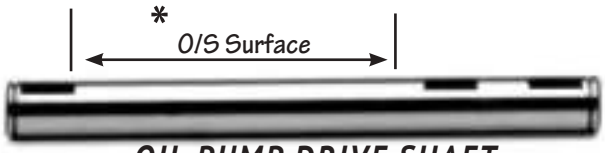
These gears are made from Solid Billet Steel. Use on Big Twin 1968-99 single cam only (including JIMS® Flow Pro) oil pumps and aftermarket pumps. Just by installing JIMS® gear you'll have you an increase over 5% of pressure, as well as an increase of over 5% in volume.

No.**26315-68A -** *Return drive gear.*
No.**26317-68A -** *Return idler gear.*
No.**26326-62A -** *Feed idler gear.*
No.**26328-74 -** *Feed drive gear.*

OIL PUMP DRIVE GEAR

Made with premium aerospace quality Alloy Bar Steel, heat treated for wear resistance and precision cut to exact tolerances, JIMS® replacement gears are the finest gears available for your stock or replacement engine. (Use with matching JIMS® Gear No. 26345-73 or equivalent)

No.**26349-84 -** *Use on Big Twin 1954-1989.*



OIL PUMP DRIVE SHAFT

No.**26346-36 -** *Use on Big Twin 1936-67.*

*No.**1744 -** *Use on Big Twin 1936-67, +.005" Oversize O.D.*

JIMS® oversize oil pump shafts are designed to eliminate the job of replacing the oil pump drive shaft bushing and ream or hone the worn bushing to size.

OIL PUMP DRIVE SHAFT

No.**26346-69/70 -** *Use on Big Twin 1968-99 single cam only.*

*No.**1719 -** *Use on Big Twin 1968-present single cam only, +.005" Oversize O.D.*

OIL PUMP SHAFT KIT

No.**2435 -** *Use on Big Twin 1936-67.*
Kit includes the following:

1 - *26346-36 Oil Pump Shaft.*
1 - *2486 (H-D® 26340-36) Key.*
2 - *2483 (H-D® 26348-15) Keys.*
2 - *2487 (H-D® 26348-36) Retaining Rings.*

OIL PUMP SHAFT KIT

No.**2436 -** *Use on Big Twin 1968-1999 single cam only.*
Kit includes the following:

1 - 26346-69/70 Oil Pump Shaft
3 - 2483 (H-D® 26348-15) Keys
1 - 2487 (H-D® 26348-36) Retaining Ring
1 - 2485 (H-D® 11002) Retaining Ring

OIL PUMP DRIVE GEAR

Billet Steel replacement drive gear made to fit stock and replacement shafts. Precision machined and heat treated to far outlast stock parts. (Use with matching JIMS® gear No.26349-84 or equivalent)

No.**26345-73 -** *Use on Big Twin 1954-present single cam only, 24 tooth.*

Phone 805-482-6913 JIMS Fax 805-482-9224

BREATHER VALVE GEARS

BREATHER VALVE GEAR (STD SIZE)

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

No.**2338S -** *Use on Big Twin 1948-Early 1977.*

No.**2337S -** *Use on Big Twin Late 1977-99 single cam only.*

BREATHER VALVE GEAR +.030"

Made in the USA from aerospace grade steel, this is another quality JIMS® product. Oversize by +.030", this breather is used to repair a damaged breather hole. Use JIMS® Breather Hole Reamer Tool. A damaged breather hole used to be a costly problem, now it is not. Disassembly of the engine, welding and machining are the usual procedure to repair. Use JIMS® No.1706 tool. No special tools required, just hand tools.

No. **2338 -** *Use on Big Twin 1948-Early 1977.*

No.**2337 -** *Use on Big Twin Late 1977-1999 single cam only.*

BREATHER VALVE GEAR WITH ELONGATED OIL HOLE

This breather gear has an elongated rear hole to aid in better crankcase flywheel cavity vacuum. Made from the finest aerospace quality steel and CNC machined to JIMS® highest standards. Designed to replace the stock plastic breather valve gear. Standard size only.

No.**2337ST -** *Use on Late 1977-99 Big Twin single cam only.*

STEEL BREATHER GEAR END-PLAY SHIMS

These shims are manufactured out of stress proof steel. Designed to fit steel breather gears only. These shims are available in 9 different sizes.

(Sold in packs of 5)

USE ON BIG TWIN LATE 1979-82, AND MOST ALL STEEL AFTERMARKET GEARS.

No.**2505** - *.110" (No.25320-79)*
No.**2510** - *.135" (No.25326-79).*

No.**2506** - *.115" (No.25321-79)*
No.**2511** - *.140" (No.25327-79).*

No.**2507** - *.120" (No.25322-79)*
No.**2512** - *.145" (No.25328-79).*

No.**2508** - *.125" (No.25323-79)*
No.**2513** - *.150" (No.25328-93).*

No.**2509** - *.130" (No.25325-79).*

JIMS® 1.5KW PERFORMANCE STARTER

JIMS has just released a new 1.5w starter for 07 to present Big Twins. This new style starter can be removed without the need of taking the outer primary off to disconnect the jackshaft bolt. Our new 1.5kw starter has an enclosed housing that supports the starter shaft and starter gear that is attached to the shaft like a Sportster. Available in polished chrome or Black Wrinkle.

No. 652 - *Use on 2007 to present Touring Models, Dyna's, or Softails.* **(***Polished/Chrome finish)*

No. 653 - *Use on 2007 to present Touring Models, Dyna's, or Softails.* **(***Black wrinkle finish)*

JIMS® 1.8KW HIGH TORQUE STARTER

These starters incorporate superior windings, high tolerance heavy duty clutch, and a thicker commentator that resists flying shorts. Static balanced for smoother operation, it has the torque to start today's high performance, big inch engines with the least amount of amperage drain. The lower profile design will clear the electronic speedometer for easy installation. These starters are available in Polish/Chrome and Black Wrinkle finish.

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NOTE: *Requires use of spacer block JIMS No.8088 when used on 1990-2006 FLT models. On Softails, Dynas and FXR models you must relocate oil lines and some wiring.* *See page 103.*

No.**635 -** **(***Polished/Chrome finish)*
Use on Big Twin Models 1989-93.

No.**636 -** **(***Black finish)*
Use on Big Twin Models 1989-93.

No.**637 -** **(***Polished/Chrome finish)*
Use on Big Twin - EVO's 1994-99, Twin Cam® Dyna® 1999-05, Twin Cam® FXST 2000-06, Twin Cam® FL 1999-06.

No.**638 -** **(***Black finish)*
Use on Big Twin - EVO's 1994-99, Twin Cam® Dyna® 1999-05, Twin Cam® FXST 2000-06, Twin Cam® FL 1999-06.

STARTER RING GEARS & CABLES

JIMS® STARTER RING GEAR RIVET FIXTURE TOOL

No.**965** - *Use on 1990-2006 FL, FXST, & 1990-2005 FXR, & FXD*

NOTE: *Use to remove rivets from old starter ring gear on clutch basket. See page 191. For more details see No. 965-IS instructions.*

JIMS® SUPER FLEX PERFORMANCE BATTERY CABLE SETS

JIMS® 1,666 strand Super Flexible Battery Cables exceed all OEM standards. They deliver maximum power from the battery to the starter. Top quality materials assure superior durability, strength and heat resistance.

The unique terminal design and construction provides positive connections for trouble free installation and dependable service. JIMS® Mega-Lugs have at least twice as much copper weight as standard lugs, and are manufactured with 99% pure electrolytic copper, and then we finish it with 24K gold plating for greater conductivity. These are the heaviest starter ground lugs in the industry and will deliver more cranking power with less voltage drop than any other battery cable. Cable lengths listed in parenthesis for set.

PART NO.	DESCRIPTION
No.**641**	*Use on 1989-06 Softail Models (10" & 12").*
No.**642**	*Use on 1984-88 Softail Models (8", 15" & 17").*
No.**643**	*Use on 1993-06 FL Models (13", 14" & 8").*
No.**644**	*Use on 1989-92 FL Models (33" & 33").*
No.**645**	*Use on 1980-88 FL Models (9", 30" & 30").*
No.**646**	*Use on 1965-79 FL Models (9", 16" & 16").*

PART NO.	DESCRIPTION
No.**647**	*Use on 1991-06 Dyna™ Models (10", 15" & 8").*
No.**648**	*Use on 1989-94 Low Rider FXR Models (12" & 16").*
No.**649**	*Use on 1982-88 Low Rider FXR Models (12",16" & 16").*
No.**650**	*Use on 2004-06 Sportster® XL Models (12" & 13").*
No.**651**	*Use on 1981-03 Sportster® XL Models (11" & 16").*

JIMS PERFORMANCE CLUTCHES

No.8376 SHOWN

JIMS® HIGH PERFORMANCE BILLET CLUTCH

JIMS® sets the standard for performance V-Twin Clutches! Whether your bike is stock or modified - street or strip - the JIMS® clutch has what it takes to get the job done. These billet clutches feature a 100% increase in clutch surface area compared to stock. Each clutch includes a CNC machined billet aluminum pressure plate, friction plates, steel plates, a steel inner hub, and additional sets of coil springs (40, 58, or 82LB) to allow you to tune your clutch to your needs. The JIMS® High Performance clutch can also be run wet or dry in an open or enclosed primary. *For more details see No. 8375-IS instructions.*

No.**8375** - *Use on 1990-97 Big Twin models.*

No.**8376** - *Use on 1998-99 EVO's Big Twins.*
Use on 1999-06 FL's.
Use on 1999-05 FXD's.
Use on 2000-06 FXST.

No.**8379** - *Use on 2007 - 2010 FXST, FL and 2006 - 2010 FXD.*

No.**8382** - *Use on all 2011 to present Big Twins.*

Mark Colburn

PRIMARY SPROCKET LOCK KIT & CLUTCH SETS

No.8381 SHOWN

JIMS® PERFORMANCE CLUTCH SETS

JIMS® replacement clutch plate sets were developed for the Big Inch, performance motors. These clutch sets consists of friction and steel drive plates.

No.8381 - *Use on JIMS® Clutch Kit No. 8375 for 90-97 Big Twin models.*

No.8380 - *Use on JIMS® Clutch Kit No. 8376, 8379, and 8382 for 1998 to present Big Twins.*

CLUTCH ASSEMBLY SERVICE TOOL FOR BIG TWINS

This tool will safely disassemble and assemble the clutch shell assembly. Easily removes and installs the clutch hub from it's bearing. Safely removes and installs the clutch shell ball bearing (H-D® No.37906-90) without any damage to the new bearing. This is done by pushing on the outer perimeter of bearing. *For more details see No. 971-IS instructions.*

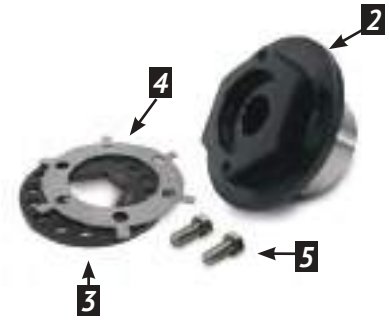
No.**971** - *Use on all Big Twins 1990-2006.*

COMPENSATING SPROCKET LOCK KIT

Peace of mind is key when it comes to building a high performance powertrain. The Compensating Sprocket Lock Kit is now ready and available for select Harley-Davidson motorcycles. This system positively secures the compensating sprocket so it cannot come loose. Rubber mounted engines may insulate the rider and frame mounted components from vibration, but the entire powertrain, including the compensating sprocket, is still at risk from fasteners coming loose due to shaking. Additionally, today's larger and more powerful engines can cause a lesser fastening system to come loose from large power pulses combined with the back and forth motion from getting on and off the throttle. Along with drive line security, the JIMS Compensating Sprocket Lock Kit keeps the alternator rotor in place to prevent damage to the charging system as well. This is not only a race engine item, stock bikes will also benefit from this upgrade to increase reliability and safety. For use on 2006 Dyna® and 2007-present Big Twins with Screamin' Eagle performance compensator. Not for early style compensator with spring cup attached to rotor or 2014 stock compensator. *For more details see No. 8385-IS instructions.*

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	1	RETAINER, SHORT COMP LOCK	8387-1
2	1	RETAINER, LONG COMP LOCK	8385-1
3	1	LOCK RING	8387-2
4	1	LOCK TAB	8387-3
5	2	SCREW	8388
6	1	INSTRUCTION SHEET	8385-IS



No. 8387 - *Use on 2011 FLH and 08-11 Softail Rocker, No. 40370-08 and 83935-09 and Screamin' Eagle No. 40274-08.*

No. 8385 - *Use on 2012-2013 OEM compensators No. 83935-09A and Screamin' Eagle No. 40274-08A.*

RIGHT SIDE DRIVE COMPLETE TRANSMISSIONS EVO & TWIN CAM®

Right Side Drive done the right way! JIMS® Right Side Drive (RSD) 6-Speed Transmissions have the most innovative design, strength, quality and durability in the industry. Twin Cam® transmissions ship with chrome H-D® top covers. It looks as good as it works too. All other covers are CNC machined from billet aluminum. They are then polished and chrome plated to JIMS® high standards. Accepts either hydraulic or cable clutch actuation, and is a drop-in for most major manufacturers right side drive frames. No frame modifications are required.

Built with large powerful engines in mind, JIMS® Right Side Drive transmission have unique features important to its strength and durability. It has an outboard support bearing for the output mainshaft. This bearing minimizes flexing of the shaft and enhances reliability with engines like the JIMS® 120. The outboard bearing support, are pressure fed by a built-in oil pump. The transmission shafts are positively located. There is no stronger right side transmission available.

Every part of the JIMS® RSD is manufactured in America from the finest materials. Every part is machined to JIMS® close tolerances. Because of JIMS® manufacturing efficiency, the JIMS® Right Side Drive transmission is also a smart economical choice.....The best for Less!

For more details see No. 8236-IS instructions.

Gear	Ratio
1	2.94
2	2.21
3	1.57
4	1.23
5	1.00
6 (Overdrive)	0.86:1

RIGHT SIDE DRIVE "EVO" COMPLETE TRANSMISSIONS

Right Side Drive EVO Softail® transmissions have been installed into Softail® cases specific to the "transmission mount". **ANY** installation of an RSD transmission is considered a CUSTOM application, thus modifications may be necessary. RSD transmissions are **NOT** compatible with a stock chassis.

PART NO.	APPLICATION/ YEAR	1ST GEAR RATIO	CASE	PULLEY COVER	JIMS® TRAP DOOR
8248 7075T	Softail® 90-99	Close Ratio	Black	Mechanical	Chrome
8249 7075T	Softail® 90-99	Close Ratio	Silver	Mechanical	Chrome
8250	Softail® 90-99	Close Ratio	Polished	Mechanical	Chrome 7075T
8251	Softail® 90-99	Close Ratio	Black	Hydraulic	Chrome 7075T
8252	Softail® 90-99	Close Ratio	Silver	Hydraulic	Chrome 7075T
8253	Softail® 90-99	Close Ratio	Polished	Hydraulic	Chrome 7075T

EARLY SOFTAIL PICTURED

RIGHT SIDE DRIVE TWIN CAM® COMPLETE TRANSMISSIONS

Right Side Drive Twin Cam® transmissions are installed into transmission cases specific to the Twin Cam® "transmission mount". **ANY** installation of an RSD transmission is considered a CUSTOM application making modifications be necessary. RSD transmissions are **NOT** compatible with stock chassis.

PART NO.	APPLICATION/ YEAR	1ST GEAR RATIO	CASE	PULLEY COVER	JIMS® TRAP DOOR
8259	Softail® 00-06	Close Ratio	Black	Mechanical	Chrome 7075T
8260	Softail® 00-06	Close Ratio	Silver	Mechanical	Chrome 7075T
8266	Softail® 00-06	Close Ratio	Black	Hydraulic	Chrome 7075T
8267	Softail® 00-06	Close Ratio	Silver	Hydraulic	Chrome 7075T

LATE SOFTAIL PICTURED

RIGHT SIDE DRIVE, 6-SPEED OVERDRIVE, SUPERKITS TWIN CAM® & EVO SOFTAILS

Built with large powerful engines in mind, JIMS® Right Side Drive transmission has unique features that are important to its strength and durability. It has an outboard support bearing for the output mainshaft. This bearing minimizes flexing of the mainshaft and enhances reliability with engines like the JIMS® 120", 131" & 135". The bearing, including the outboard support bearing, are pressure fed by a built-in oil pump. There is no stronger RSD transmission available.

JIMS® RSD 6 Speed Super kits are designed to install in any H-D® Softail® transmission case or aftermarket Softail® cases. Some minor modifications may be required to trans case depending on the manufacturer. Complete instructions for installation are provided with each kit. RSD super kits are supplied with a chrome aluminum trap door.

You'll have a choice of a hydraulic actuated clutch pushrod system or a mechanical actuated pushrod. It is best if these assembled RSD transmissions are installed in a RSD style frame offered by most frame manufacturers for ease of installation and fitment. *For more details see No. 8236-IS instructions.* RSD transmissions will not bolt into a stock style frame without extensive modification to the frame.

NOTE: *Different parts options are listed below, depending on the year and type of trans case being used, either an EVO or Twin Cam®.*

RSD SUPER KIT FITS:

- No.**8235 -** *1990 - 2006 Softail® transmission cases, supplied with hydraulic actuated clutch pushrod system. This hydraulic system will require a master cylinder, hydraulic line and Dot 5 or equivalent (example of master cylinder kit H-D® No.45232-03A.)*
- No.**8236 -** *1990 - 2006 Softail® transmission cases, supplied with mechanical actuated clutch pushrod system has a ball and ramp system that works with common O.E.M. type clutch cables.*

OPTIONAL PRODUCT FOR INSTALLING A RSD IN A 1990-1999 EVO TRANSMISSION CASE:

The following list of product will be required for installation, if not previously obtained or on the transmission case.

- No.**7514** - *Trans-case shifter shaft sleeve (replace existing sleeve or modify the longer early existing sleeve).*
- No.**1664** - *Trans-case shifter shaft sleeve remover / installer tool, use to install JIMS® No.7514 shifter shaft sleeve.*
- No.**33904-00** - *Neutral switch with o-ring (this late switch must be installed when using a neutral light).*
- No.**8135** - *Neutral switch wiring kit: (use on 1990-1997) use of this wiring kit will convert a single pole wiring harness into a two pole wiring harness, instructions included.*
- No.**8136** - *Neutral switch spacer kit: Required when using a OEM top cover (lid) from 1990 to1997 and switch No.33904-00.*

No.8247
MECHANICAL VERSION

OPTIONAL PRODUCTS FOR INSTALLING A RSD IN A 2000-2006 TWIN CAM® TRANSMISSION CASE:

The following list of product will be required for installation, if not previously obtained or on the transmission case.

- No.**33904-00** - *Neutral switch with o-ring (this late switch must be installed when using a neutral light).*
- No.**8135** - *Neutral switch wiring kit: use of this wiring kit will convert a single pole wiring harness into a two pole wiring harness or for custom wiring application, instructions included.*

No.8246
HYDRAULIC VERSION

FAT 5™ SUPERKIT OVERDRIVE TRANSMISSIONS EVO & TWIN CAM®

You want strong? We have strong! JIMS® "Fat 5™ Overdrive" is simply the strongest, toughest gearbox made. Period. JIMS® took advantage of its, more compact shifter technology to increase the width and strength of every gear. The width increase varies from 18% to 53%, depending upon the loads each gear set must carry.

Big Power is more popular than ever. Large engines like the JIMS® 120", 131" & 135" deliver double the stock power and torque. When such power is linked to the ground through high torque clutches and big sticky tires, the peak loads on transmission gears rise far above what anyone but JIMS® ever expected their trannies to have to endure.

Gear	Ratio
1	2.91
2	1.93
3	1.31
4	1.00
5 (Overdrive)	0.886

An oil filler spout spacer, JIMS No.8088 may be required on 1993 to 2006 FL's. See page 101.

For more details see No. 8273-IS instructions.
One final note – "Buy American!"

FAT 5-SPEED OVERDRIVE COMPLETE TRANSMISSIONS & OVERDRIVE SUPERKITS

Got strong? We have strong! JIMS® "Fat 5 Overdrive" is simply the strongest, toughest gearbox made. Period. JIMS® took advantage of its new, more compact shifter technology to increase the width and strength of every gear. The width increase varies from 18% to 53%, depending upon the loads each gear set must carry.

Big power is more popular than ever. Large engines like the JIMS® 135" deliver double the stock power and torque. When such power is linked to the ground through high torque clutches and big sticky tires, the peak loads on transmission gears rise far above what anyone but JIMS® ever expected their trannies would need to endure.

All are available with a mechanical clutch activated system only.

The Fat 5 Overdrive fits both Evo and Twin Cam® chassis. However, it is wider on the right side which may interfere with other components. For this reason, we consider our Fat 5 Overdrive to be part of a custom build and not a drop-in product. It is available as a JIMS® Super Kit or complete transmission. As you'd expect, all Fat 5 gears are manufactured to JIMS® renowned standards of strength and quality. *For more details see No. 8273-IS instructions.*

6 YEARS / 60K MILES WARRANTY

FAT 5 OVERDRIVE COMPLETE TRANSMISSIONS

Fat Gear™ complete transmissions are shipped as a complete assembly installed in a case. Transmissions DO NOT include pulley. Fat Gear™ Transmissions are a CUSTOM application. Modifications to the exhaust bracket and oil filler spout may be necessary.

PART NO.	APPLICATION/ YEAR	1ST GEAR RATIO	CASE	JIMS® TRAP DOOR
8279	*00-06 FXST*	*2.91*	*Silver*	*Chrome*
8280	*00-06 FXST*	*2.91*	*Black*	*Chrome*
8282	*90-99 FXST*	*2.91*	*Silver*	*Chrome*
8283	*90-99 FXST*	*2.91*	*Black*	*Chrome*
8284	*90-99 FXST*	*2.91*	*Polished*	*Chrome*

FAT 5 OVERDRIVE SUPERKITS

Fat Gear™ Superkits are shipped as a gear cluster installed into a trap door. All necessary shifting components, gaskets and unique components are supplied to be installed into an existing transmission case. Fat Gear™ Transmissions are a CUSTOM application. Modifications to the exhaust bracket and 1993 to 2006 FL's oil filler spout may be necessary. Also trans top lid will require shift lever clearanceing modification on certain models.

**** AN OIL FILLER SPOUT SPACER, JIMS NO.8088 MAY BE REQUIRED ON 1993 TO 2006 FL'S.***

	PART NO.	APPLICATION/ YEAR	1ST GEAR RATIO	JIMS® TRAP DOOR
	8273	*91-00 FXD2.91*	*Chrome*	
	8273	*90-99 FXST & FXR*	*2.91*	*Chrome*
*	**8273**	*90-00 FLH2.91*	*Chrome*	
	8274	*00-06 FXST*	*2.91*	*Chrome*
*	**8274**	*01-06 FLH2.91*	*Chrome*	
	8275	*01-05 FXD2.91*	*Chrome*	

VERY IMPORTANT: The Fat Gear transmissions incorporate a unique trapdoor and a mechanical cable type side cover design that extends approximately .560" from a stock side cover. For this reason, certain modifications may be necessary to the exhaust bracket and or FL's oil filler spout to properly install a Fat Gear transmission. For this reason, this is a custom application only.

5 SPEED TRANSMISSIONS & 6-SPEED OVERDRIVE TWIN CAM® & EVO TRANSMISSIONS

6 YEARS / 60K MILES WARRANTY ON COMPLETES

***SPECIAL APPLICATION NOTE:** JIMS® Softail® and FXR single cam transmissions can be used in any year, single cam only, when used with the late starter motor, inner and outer primarys, clutch, etc...*

5-SPEED PRECISION-CUT GEARS

JIMS® Precision-Cut 5-Speed transmissions feature late style 5-speed shifter upgrade, chromed covers, trap door, and are shipped complete with bottled transmission oil and instruction sheet No.8000-IS.

PART NO.	APPLICATION/ YEAR	1ST GEAR RATIO	CASE	CASE FINISH	JIMS® TRAP DOOR
8000	Softail® 1990-99*	Close Ratio	JIMS®	Plain Aluminum	Chrome 7075T
8002	Softail® 1990-99*	Stock Ratio	JIMS®	Black Wrinkle	Chrome 7075T
8004	Softail® 1990-99*	Close Ratio	JIMS®	Polished Aluminum	Chrome 7075T
8001	FXR 1990-94 & 1999	Close Ratio		Plain Aluminum	Chrome 7075T

6-SPEED OVERDRIVE PRECISION-CUT GEARS

JIMS® Precision-Cut 6-Speed transmissions with late model improved shift drum and shift lever assemblies. Includes chromed covers, trap door and are shipped complete with bottled transmission oil and instruction sheet No.8085-IS.

PART NO.	APPLICATION/ YEAR	1ST GEAR RATIO	CASE	CASE FINISH	JIMS® TRAP DOOR
8000C6	Softail® 1990-99*	Close Ratio	JIMS®	Plain Aluminum	Chrome 7075T
8002C6	Softail® 1990-99*	Close Ratio	JIMS®	Black Wrinkle	Chrome 7075T
8004C6	Softail® 1990-99	Close Ratio	JIMS®	Polished Aluminum	Chrome 7075T
8001C6	FXR 1990-94 & 1999	Close Ratio		Plain Aluminum	Chrome 7075T
8111	Softail® 2000-2006	Close Ratio	H-D®	Plain Aluminum	Chrome 7075T
8112	Softail® 2000-2006	Close Ratio	H-D®	Black Wrinkle	Chrome 7075T

ELECTRONIC SPEEDOMETERS FOR JIMS® TRANSMISSIONS, CONTACT THE FOLLOWING:

Dakota Digital
3421 W. Hovland Avenue
Sioux Falls, SD 57107
Phone 605-332-6513 • Fax 605-339-4106

V.D.O. Instruments
188 Brook Road
Winchester, VA 22601
Phone 703-665-2452 • Fax 703-772-4198

TRANSMISSION TECH INFORMATION

PRECISION CUT GEARS

Gears are made complete on CNC machine centers, and made from materials that exceed 8620 steel. All shifting dogs are CNC machine cut with lead in ramps for better and quicker shifting. All gears are checked dimensionally and for surface finish for quiet smooth shifting.

JIMS No.2385-7
5-SPEED SUPER KIT

CLOSE RATIO VS. STOCK RATIO

Stock ratio transmission gears for 5-speed Big Twins were developed by Harley-Davidson® engineers for all of their models. An overall internal gear ratio was chosen to work well with everything from a Dresser to a Dyna™ Super Glide. This stock ratio (3.21:1 ratio low gear) works fine with the approximately 69 horsepower that the stock Harley Davidson® motor makes.

CLOSE RATIO 1ST

JIMS® 6-SPEED OVERDRIVE TRANSMISSION GEARS

JIMS® is proud to offer 6-speed overdrive transmission gears made in the U.S.A. by JIMS®. Imagine riding down the road at 75 MPH in 5th gear and by shifting into 6th you reduce your engine RPM by almost 500 RPM.'s. It's possible to have this option with the strength and reliability of JIMS® quality gears and shafts. All gears are standard width for performance and strength, with first gear being close ratio 2.94, and the last four being the same ratio as a stock 5-speed. 6th gear goes to .86:1 overdrive.

Gear	Ratio
1	2.94
2	2.21
3	1.57
4	1.23
5	1.00
6 (Overdrive)	0.86:1

JIMS No.8085
6-SPEED OVERDRIVE
SUPER KIT

JIMS® FL OIL FILLER SPOUT SPACER

This is a universal spacer designed to give you clearance for the OEM oil fill spout covers on the FL model 5-speed transmissions or aftermarket 6-speeds. This spacer is a must for the longer High Performance starters motors. Also used for trapdoor clearance or spout cover vent line/speedo sensor clearance on aftermarket 6-speeds. You will need to do some fabrication work on the spacer and possibly the spout cover depending on what clearance you are dealing with and year of FL. This polished aluminum spacer is 1-7/8" thick.

No.**8088** - *Use on 1993 - 2006 Big Twin FL 5-speed transmissions or aftermarket 6-speeds.*

6-SPEED OVERDRIVE FOR A 4-SPEED FRAME & 5-SPEED FOR A 4-SPEED FRAME

JIMS® 4/5 and 4/6 conversion transmissions are designed to fit most 1970 – early 1984 Harley-Davidson Shovelhead electric start models only. However, we do not consider our 4/5 and 4/6 transmissions to be a "drop-in" product. We offer them as custom transmissions, requiring installation by an experienced Harley mechanic.

Gear	Ratio
1	2.94
2	2.21
3	1.57
4	1.23
5	1.00
6 (Overdrive)	0.86:1

These transmissions are shipped fully loaded with the finest components available by JIMS®, such as: gears with lead-in ramping and back-cut engagement dogs, close ratio 1st gear, precision machined and heat-treated counter and main shafts, chrome billet trap doors, chrome billet top and side covers, and JIMS® performance gaskets. *For more details see No. 8028C6-IS instructions.*

6-SPEED FOR A 4-SPEED FRAME

PRECISION-CUT 4/6 SPEED

PART NO.	APPLICATION/ YEAR	CASE
8028C6	*FX & FL 1970 early '84*	*Plain Aluminum*
8030C6	*FX & FL 1970 early '84*	*Polished Aluminum*

BUILDERS NOTE:

If installed on any other motorcycle other than one that came stock with a dry clutch, it will be the responsibility of the builder to install the proper parts needed to make this transmission installation work and function safely. For example: Primaries and other related parts. There is not a standard list of parts and or modifications required to install these transmissions.

Gear	Ratio
1	2.94
2	2.21
3	1.57
4	1.23
5	1:1

5-SPEED FOR A 4-SPEED FRAME

PRECISION-CUT 4/5 SPEED

PART NO.	APPLICATION/ YEAR	CASE
8028	*FX & FL 1970 early '84*	*Plain Aluminum*
8030	*FX & FL 1970 early '84*	*Polished Aluminum*

For more details see No. 8028-IS instructions.

Additional Parts Required:

- Clutch pushrods: No.37090-79 (left), No.37088-79 (center) and No.37089-79 (right)
- Clutch release bearing kit:
  JIMS® No.2226 or H-D® No.37312-75 (1) +
  No.37313-80 (2), + No.11096 (1)
- 1986 and later clutch cable & pivot pin
- 22T or larger offset sprocket for early 5-speed (1980 – 83) or special pulley
- Main drive gear nut (No.35211-36)
- Inner primary seal (No.12018)
- Inner primary bearing (No.9037)
- Shift lever:
  JIMS® No.33715-85AC or H-D® No.33715-85
- Shovelhead style "dry" clutch hub as used on 4-speed (tapered shaft with woodruff key)
- 1986 or later clutch cable
- Forward or aftermarket mid-controls
- Offset rear sprocket or special pulley
- Chain or belt electric start primary drive

Optional Parts: (See Build Note)

- If you wish to use a belt final drive, a special front pulley is required.
- Electronic speedometer sensor

Possible fitment issues:

- Some installations may require modification or fabrication of exhaust, oil tank or electric starter mounting brackets.
- 22-tooth chain sprockets require modification of the transmission casting to clear the chain.
- Some inner primary covers require modification to clear the main drive nut.
- Some electric starter installations require modification of the transmission case for clearance.

JIMS® 6-SPEED OVERDRIVE SUPER KITS

Reduce vibration that creates wear and enjoy a relaxing cruise with JIMS® Overdrive 6-speed transmission. Our Overdrive 6th gear (.86:1 ratio) lowers engine rpm by almost 475 at 75 mph. In addition, 1st gear is a 2.94:1 close ratio that widens your bike's speed range in 1st gear and lessens the rpm drop when shifting into second. You can enjoy having a gear for every situation, from putting in traffic to open road cruising. Combined with the convenience of well-spaced gearing is the renowned strength and reliability of JIMS® race-proven, American made gears and shafts.

GENERAL NOTES:

- *All JIMS® Super Kits require a No.8042K Speedo Sensor Block-Off Plate Kit. If the speedometer is not driven from the transmission, then two block off plates kits are required.*
- *All JIMS® 6-speed installations require the speedometer be recalibrated. For calibration kits see this page.*
- *The JIMS® Trap Door extends 3/8" farther to the right than the stock part. Alterations to some parts that attach to or around the trap door may be required.*
- *JIMS® Spout Spacer No.8088 on page 101 will be required on FL's and spout may need modification.*

6-SPEED OVERDRIVE TRANSMISSION SUPER KITS

Just like our popular 5-speed transmission super kits, our 6-speed kits are made with the same aerospace quality steel and precision machining. These kits are carefully assembled and ready to slip into your transmission case without removing it from your motorcycle. Detailed instructions and a JIMS® gasket set included. Use as a complete gear set. *For more details see No. 8085-IS instructions.*

All kits incorporate JIMS® PRECISION CUT™ gears.

Gear	*Ratio*
1	*2.94*
2	*2.21*
3	*1.57*
4	*1.23*
5	*1.00*
6	*0.86:1 Overdrive)*

	KIT NO	APPLICATION
*	**8085L**	*2000-2006 Twin Cam® FXST (Softail®) and 2001-06 FLHT, and 2001-05 FXD*
	8085	*Big Twins 1990-1999 and 1999-2000 FLHT, FXD*

* ***IF INSTALLING IN 2002 TO 2006 FL TRANS CASE, YOU WILL NEED A JIMS No.8088 OIL FILLER SPOUT SPACER FOR CLEARANCING TRANS TO MOTOR VENT LINE.***

Gear	*Ratio*
1	*2.94*
2	*2.21*
3	*1.57*
4	*1.23*
5	*1.00*
6	*0.86:1 (Overdrive)*

JIMS® 6-SPEED OVERDRIVE SUPER KIT & PARTS

FOR 4-SPEED FRAME STYLE CONVERSION CASE

4-5-6 Super Kit: 6-speed parts to fit in JIMS® 4-5 trans case. This Super Kit uses the same proven 6-speed transmission parts as found in JIMS® other 6-speed Super Kits and JIMS® 6-speed complete transmissions. Comes complete with Precision-Cut gears, close ratio 1st gear, shafts, JIMS® chrome trap door, shift drum, bronze shift forks, gaskets and bearings and ready to install in one of the cases No.8096 or No.8096P. *For more details see No. 8028C6-IS instructions.*

No.**8101** - *Precision-Cut gears. Use on all 1970 - early 1984 FX electric start only, and FL style frames with JIMS® new 4-5 trans case or aftermarket equivalent.*

5-SPEED TRANSMISSION SUPER KITS

5-SPEED TRANSMISSION SUPER KITS

We use JIMS® proven transmission parts to start with, then top it off with a JIMS® Gasket set, together in one convenient package. This super kit is ready to slip into your favorite transmission case, H-D® or aftermarket. All super kits are built in house with the finest air gauging instruments available, with inspections before and after assembly. All kits incorporate JIMS® PRECISION CUT™ gears (Use as a Complete Gear Set). *For more details see No. 2386-IS instructions.*

Kit No.	Application	FEATURES
2386-7	*Big Twin 1990-06 Single & Twin Cam®*	*Close Ratio First Gear - 7075-T651 Billet Polished Aluminum Trap Door*
2386	*Big Twin 1990-06 Single & Twin Cam®*	*Stock Gear Ratio - 7075-T651 Billet Polished Aluminum Trap Door*
2385-7	*Big Twin 1985-89*	*Close Ratio First Gear - 7075-T651 Billet Polished Aluminum Trap Door*

Gear	Ratio
1	2.94
2	2.21
3	1.57
4	1.23
5	1:1

JIMS® 5-SPEED SUPER KIT AND PARTS

FOR 4-SPEED FRAME STYLE CONVERSION CASE

4-5 Super Kit: 5-speed parts to fit in JIMS® 4-5 trans case. This Super Kit uses the same proven transmission parts as found in JIMS® other Super Kits and JIMS® complete transmissions. Comes complete with: JIMS® Precision-Cut gears, close ratio 1st gear, shafts, JIMS® chrome trap door, shift drum, bronze shift forks, gaskets and bearings and ready to install in one of the cases No.8096 or No.8096P. *For more details see No. 8100-IS instructions.*

No.**8100 -** *Precision-Cut gears. Use on all 1970 - early 1984 electric start only, FL style frames with JIMS® new 4-5 trans case.*

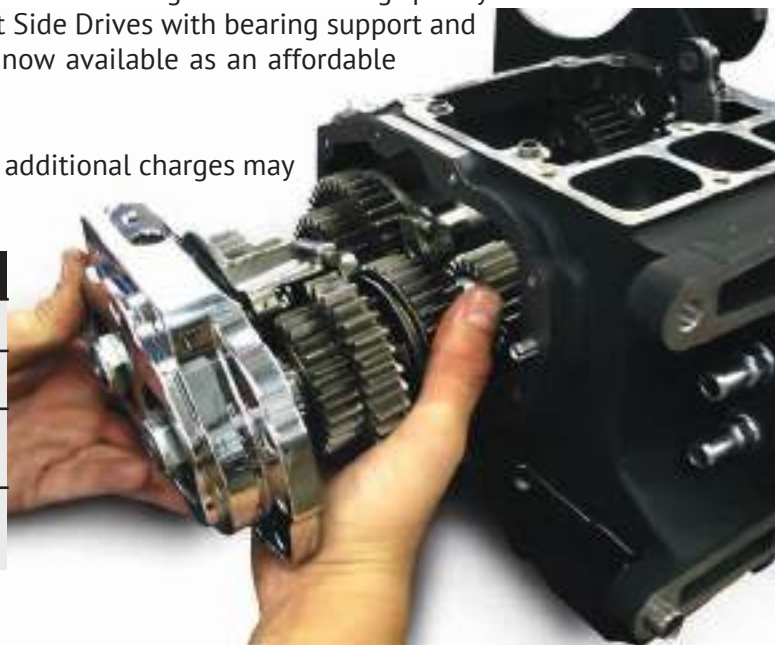
TRANSMISSION REBUILD SERVICE
RSD & FAT 5 REBUILD KITS

JIMS NOW OFFERS A TRANSMISSION REBUILD SERVICE FOR HARLEY DAVIDSON® AND AFTERMARKET TRANSMISSIONS.
THIS INCLUDES YOUR OLD 5-SPEED ALL THE WAY THROUGH THE NEW CRUISE DRIVE!

We all know times are tough. For some, that means keeping your "older" motorcycle running good instead of upgrading to a new bike. That's where this new Transmission Rebuild Service from JIMS comes in. You can now send your old, tired transmission into JIMS for a complete overhaul: JIMS will completely disassemble your transmission, inspect all wear surfaces and replace all bearings, and seals*. This is a great option for those who are trying to "maintain" their current bike instead of buying a new transmission or a new motorcycle. JIMS has built a reputation for manufacturing and assembling quality transmissions, including 5 and 6 speeds, Right Side Drives with bearing support and the JIMS Fat 5™ overdrive. This expertise is now available as an affordable option by industry professionals.

For more information, please contact JIMS.

*If new gears or shafts are deemed necessary, additional charges may apply.



PART NO.	DESCRIPTION
8131	*All Screamin' Eagle 6 SPD Transmissions.*
8132	*All H-D Cruise Drive 6 SPD Transmission.*
8133	*All Aftermarket 6 SPD Transmissions.*
8134	*All H-D 5 SPD Transmissions.*

JIMS RIGHT SIDE DRIVE TRANSMISSION REBUILD KIT

JIMS now offers a rebuild kit for any of JIMS Right Side Drive complete transmissions or JIMS Super Kits using mechanical or hydraulic clutch. This kit includes all retainers, seals, o-rings, bearings, races, and gaskets. For parts list and more detail see No. 8236-IS.

No. 8269 - *Use rebuild kit on any JIMS Right Side Drive complete transmissions or Super Kits with mechanical or hydraulic clutch.*
No. 890 - *JIMS RSD mechanical clutch gasket & seal kit only. For more details see 890-IS.*
No. 891 - *JIMS RSD hydraulic clutch gasket & seal kit only. For more details see 891-IS.*

JIMS FAT 5 TRANSMISSION REBUILD KIT

JIMS now offers a rebuild kit for any of JIMS Fat 5 complete transmissions or Super Kits. This kit includes all retainers, seals, o-rings, bearings, races, and gaskets. For parts list and more detail see No. 8273-IS.

No. 8277 - *Use rebuild kit on any JIMS Fat 5 complete transmissions or Super Kits.*
No. 892 - *JIMS FAT5 gasket & seal kit only. For more details see 892-IS.*

4,5, & 6 -SPEED TRANSMISSION REBUILD KITS

JIMS COMPLETE TRANSMISSION REBUILD KITS

If you've ever used any of JIMS rebuild kits in the past, then you know the convenience, and time saved by ordering just one part number that comes with all the necessary gaskets, seals, locks and bearings you will need to completely rebuild a transmission all at one time. One part number, one price and you're done. *For more Cruise Drive details see No. 1056-IS instructions or for Screamin Eagle details see No.1060-IS instructions.*

KIT No. 1067 SHOWN

CRUISE DRIVE (LATE 6 SPEED TRANS)

No. 1056 - *Use on 2007 - present FLH*
No. 1067 - *Use on 2006 - present FXD*
No. 1068 - *Use on 2007 - present FXST*

SCREAMIN' EAGLE 6 SPEED TRANS

No. 1060 - *Use on 1990 - 2006 FLH*
No. 1061 - *Use on 1991 - 2005 FXD*
No. 1062 - *Use on 1990 - 2006 FXST*

5 OR AFTERMARKET 6-SPEED OVERDRIVE TRANSMISSION REBUILD KITS

We use JIMS® proven transmission parts to start with, then top it off with a JIMS® gasket set, together in one convenient package. This is a big time saver. *For more details see No.1035-IS instructions.*

KIT NO.	APPLICATION
1019	*Big Twin 1980-Early 1984 5-Speed*
1020	*Big Twin Late 1984-1990 5-Speed*
1021	*Big Twin 1991-1998 5-Speed or aftermarket 6-Speed*
1035	*Big Twin 1999-2006 5-Speed or aftermarket 6-Speed*

4-SPEED TRANSMISSION REBUILD KITS

We use JIMS® proven transmission parts to start with, then top it off with a JIMS® Gasket set, together in one convenient package. This is a big time saver. Note: Most kits include standard O.D. size races – please order oversize races separately. *For more details see No.1035-IS instructions.*

KIT NO.	APPLICATION	ASSEMBLY TIPS
33031-36	*Big Twin 1936-Early 1976*	*Use JIMS® Shift Fork Gauge No.96384-39 to align Shifter forks*
33031-76E	*Big Twin Late 1976-Early 1977*	*Use JIMS® Shift Fork Gauge No.96384-39 to align Shifter forks*
33031-76L	*Big Twin Late 1977-Early 1979*	*Use JIMS® Shift Fork Gauge No.96384-39 to align Shifter forks*
33031-80	*Big Twin Late 1979-1986*	*Use JIMS® Shift Fork Gauge No.96385-78A to align Shifter forks*

TRANSMISSION CASES & NEUTRAL SWITCHES

JIMS® 5-SPEED OR 6-SPEED TRANSMISSION CONVERSION CASE FOR A 4-SPEED FRAME

JIMS® 4/5 or 4/6 transmission case is cast from 356T6 aerospace quality aluminum material and manufactured on the latest C.N.C. equipment. With this case, you can build a new 5-speed, using kit No.8100, 8100P, and JIMS® 6-speed overdrive transmission No.8101, 8101P for your 4-speed motorcycle. For 4/6-Speeds, some case modification are required. Complete instructions included. *For more details see No. 8028C6-IS instructions.*

No.**8096** - *(Plain Finish) Use on all 1970 - early 1984 FL style frames.*

No.**8096P** - *(Polished Finish) Use on all 1970 - early 1984 FL style frames.*

FXR TRANSMISSION CASE

All cases are made from 356-T6 prime heat treated aluminum. The cases are then CNC machined to exact tolerances, which provide a superior strength and fit. All cases are offered in brilliant show polish or plain finish. Either are perfect for that custom application or for just upgrading your existing ride. These cases are 2 to 3 times stronger than stock and accept all OEM and JIMS® transmission parts and covers. This case has provisions for stock speedo sensor pickup. If a speedo sensor is not used, or you are installing a 6-speed gear set, you must install a speedo block-off plate (JIMS® No.8042K).

No.**2530** - 1990-94, 1999 *FXR, Plain finished case. Single Cam only.*

JIMS® SOFTAIL TRANSMISSION CASE

JIMS® case, along with JIMS® gears, can handle the loads of big inch motors as well as stock engines. JIMS® casting is made of 356T6 aluminum aerospace quality material. Case comes with provisions to install speedo sensor, or if not used order JIMS® No.8042K speedo sensor blockoff plate kit. JIMS® transmission cases are machined to close tolerance and will accept JIMS® gears as well as OEM or other aftermarket gears. *For more details see No. 7999-IS instructions.*

No.**7999B** - *Use on Softail®, black finish, replaces H-D® No.34732-96 Single Cam only.*

No.**7999** - *Use on Softail®, plain, replaces H-D® No.34732-96 Single Cam only.*

No.**7999P** - *Use on Softail®, polished, replaces H-D® No.34732-96 Single Cam only.*

NOTE: *Can be used for any year 5-speed Softail® application, single cam, if used with a late starter motor, No.31553-90 or equivalent, inner and outer primaries, clutch etc.*

TRANSMISSION NEUTRAL SWITCH

All are quality American made switches and meet or exceed OEM specifications and directly replace H-D®- Part Numbers.

Normally closed switch replaces H-D No.33900-59C

No.**621** - *Use on 1959-64 FLS, Late 1973 - early 1979 FL and FX, 1982-94 FXR, 1991-97 FXD, 1980-97 FLT, 1986-97 FXST, 1986-98 XL.*

Normally closed switch replaces H-D® No.33902-98. Use with H-D® harness 72405-98BK or 72405-98TN.

No.**33902-98** - *Use on 1998-00 FXD, FLT, 1998-99 FXST, and 1999 FXR.*

This is a normally open switch. Replace H-D® No.33904-00A.

No.**33904-00** - *Use on Big Twin 2001-06 FL's, FXST's. Use on Big Twin 2001-05 FXD's.*

JIMS® 5-SPEED BILLET TRAP DOORS

All of JIMS® trap doors are designed to be used with the 100 HP+ High Performance engines used in today's Big Twins. They are 5 times stronger than cast stock trap doors, manufactured with premium aluminum and can be ordered in show quality chrome or polished form. The bearing bore holes are held perpendicular to the mounting flange to + .0002". These doors will accept either early or late clutch release covers.

NOTE: *If using an earlier clutch release cover this will not cover unchromed surface completely when mounted.*

TRAP DOORS WITH EXHAUST MOUNT FOR SMALL BEARING #8998

Small bearing trap doors were originally used on all Big Twins 1980-98. *For more details see No. 2347-IS instructions.*

No.**2347-7** - *Polished trap door **without bearings or retainers**. Use on any Big Twin 5-Speed 1980-06.*

No.**2347-7**C - *Chrome trap door **without bearings or retainers**. Use on any Big Twin 5-Speed 1980-06.*

CHROME

TRAP DOOR ASSEMBLIES WITH EXHAUST MOUNT FOR SMALL BEARING #8998

Small bearing trap doors were orginally used on all Big Twins 1980-98. *For more details see No. 2347-IS instructions.*

No.**2347-7B** - *Polished trap door **with installed bearings and retainer**s. Use on any Big Twin 5-Speed 1980-06.*

No.**2347-7CB** - *Chrome trap door **with installed bearings and retainers**. Use on any Big Twin 5-Speed 1980-06.*

CHROME

TRAP DOORS ASSEMBLIES WITH EXHAUST MOUNT FOR BIG BEARING #8992

Big bearing trap doors were orginally used on all Big Twins 1999-06 5-speeds. For more details see No. 2326-IS instructions.

No.**2326B** - *Polished trap door **with installed bearings and retainers**. Use on any Big Twin 5-Speed 1980-06.*

No.**2326CB** - *Chrome trap door **with installed bearings and retainers.** Use on any Big Twin 5-speed 1980-06.*

CHROME ***NOTE:*** *Use JIMS® Tool No.2283 or No.1014 to remove door assembly.*

TRAP DOORS ASSEMBLIES WITHOUT EXHAUST MOUNT FOR BIG BEARING #8992

Big bearing trap doors were orginally used on all Big Twins 1999-06 5-speeds. For more details see No. 2326-IS instructions.

No.**2327B** - *Polished trap door **with installed bearings and retainers**. Use on any Big Twin 5-Speed 1980 to 2006 or all 4/5 Speed transmissions.*

No.**2327CB** - *Chrome trap door **with installed bearings and retainers.** Use on any Big Twin 5-Speed 1980 to 2006 or all 4/5 Speed transmissions.*

CHROME

TRAP DOORS WITHOUT EXHAUST MOUNT FOR SMALL BEARING #8998

Small bearing trap door without exhaust mount hole were orginally used on 1994-1998 FLT. For more details see No. 2347-IS5 instructions.

No.**2347-75C** - *Chrome trap door **without bearings or retainers**. Use on any Big Twin FLT 5-Speed 1994-98, or all 4/5 Speed transmissions.*

CHROME

JIMS CRUISE DRIVE WIDE BEARING TRAP DOOR AND SHIFT FORK SHAFTS UPGRADE KIT

This new JIMS Cruise Drive upgrade kit was designed to give your transmission positive shifting and shaft centerline integrity to handle today's performance powertrains. The upgraded 6061 precision-machined aluminum trap door holds transmission shaft centerlines to within .0005" and incorporates wider, heavy duty bearings. These bearings are retained with beveled retaining rings to minimize bearing end play. Included with the kit are two solid, true centerline, rigid, high strength shift fork shafts that replace the OEM hollow shafts. *For more details see No. 2336-IS instructions.*

No. 2336 - *Black, Use on all H-D Cruise Drive transmissions to present.*

No. 2340 - *Silver, Use on all H-D Cruise Drive transmissions to present.*

Black Anodized

WHILE SUPPLIES LAST

JIMS HANDCRAFTED TRANSMISSION SIDE COVER

These new billet transmission side covers come with the latest look, Raw Cut & welded. They come to you plated with a Bright Dipped or Black Anodized finish. The cover has a handcrafted look, combined with a clean precision cut fin pack & add in some welded accents make these pieces the latest in style. Gaskets & screws included. Order a JIMS Cam cover No. 2300 to match up with & you'll be No. 1. See page 68. Screws and gaskets included for No. 2394, 2395, 2396, 2398.

No. 2395 - *Use on all 2006 to present H-D Cruise Drive 6-speed transmissions Bright Dipped Anodized.*

No. 2396 - *Black Anodized.*

No. 2394 - *Use on all 1987 to 2006 Big Twin 5-Speed transmissions and aftermarket 6-speeds with a minor hardware change. (Not for FXR with controls.) Bright Dipped Anodized.*

No. 2398 - *Black Anodized.*

CHROME BILLET TRANSMISSION SIDE COVER KIT

This precision machined billet cover is made of 6061-T651 aluminum and is designed to reduce the amount of flex force, as seen in most end covers when using either a stock or high pressure clutch spring. Includes six chrome allen screws, inner and outer ramp, three ball bearings, snap- ring, coupler, chrome allen dipstick with o-ring, and gasket. *For more details see No. 2371-IS instructions.*

No.**2371CK -** *Chrome with ball ramp release, gaskets and screws. Use on all 5-speed models. 1987-2006. (except FXR with mid controls) May be used on aftermarket 6-Speed if using 6-Speed hardware.*

BILLET CLUTCH END RELEASE COVER

This billet clutch release end cover is precision machined and comes polished or chrome. This very clean and light end cover is designed to reduce the amount of flex force as seen in most end covers, when using either a stock or high pressure clutch spring. Includes gaskets and screws. *For more details see No. 2371-IS instructions.*

No.**2371CH -** *(Chrome) Use on all 5 speed models. (May be used with aftermarket 6-speed by using different hardware.) 1987- 2006, (except FXR with mid controls.)*

No.**2371P -** *(Polished) Use on all 5-Speed models 1987-2006. (Except FXR with mid controls.) (May be used with aftermarket 6-speed by using different hardware.)*

JIMS® BILLET TRANSMISSION TOP COVER

JIMS® Billet aluminum transmission top cover is made from 6061-T6 aircraft quality aluminum. Covers come with gasket and chrome allen screws. Replaces OEM No.(chrome) 34468-98 or No.(polished) 34464-98.

No.**8999PK -** *(Polished kit) Use on 1998-1999 FLH and Softail® and 6-speed models.*

No.**8999CK -** *(Chrome kit) Same as above.*

N.8999BK - *(Black Kit) Same as above.*

NOTE: *Will fit 1987-97 FLH and FXST models when using H-D® No.33902-98 switch and H-D® No.33320-98 shifter drum.*

5 SPEED PRECISION-CUT FORGED GEARS

COUNTERSHAFT GEARS

4TH GEAR COUNTERSHAFT

No.**35625-79B** -

Use on Big Twin 1980-2006 5 Speed transmissions.

1ST GEAR COUNTERSHAFT

No.**35622-79C** -

Use on Big Twin 1980-2006 5-Speed transmissions.

3RD GEAR COUNTERSHAFT

No.**8291** -

Replaces 35026-79C. Use on Big Twin 1980-2006 5-Speed transmissions.

2ND GEAR COUNTERSHAFT

No.**8292** -

Replaces 35027-79B. Use on Big Twin 1980-2006 5-Speed transmissions

5TH GEAR COUNTERSHAFT

No.**8299** -

Replaces 35626-79B. Use on Big Twin 1980-2006 5-Speed transmissions

FIRST GEAR 2.94:1 CLOSE RATIO SET

Makes first gear higher for lighter bikes and high performance motors, for more m.p.h. in first gear. Ramping has been machined in for cleaner and more positive shifting. *For more details see No. 2220-IS instructions.*

No.**2220** - *Use on Big Twin 1980-2006 5-Speed transmission. Fits Twin Cam 88®*

(2 piece gear set, 35025-CR first gear mainshaft, 35622-CR first gear countershaft)

MAINSHAFT GEARS

MATES WITH

4TH GEAR MAINSHAFT

No.**8294** -

Replaces 35028-79B. Use on Big Twin 1980- 2006 5-Speed transmissions.

MATES WITH

1ST GEAR MAINSHAFT

No.**35025-79B** -

Use on Big Twin 1980-2006 5-Speed transmissions

MATES WITH

3RD GEAR MAINSHAFT

No.**8292** -

Replaces 35027-79B. Use on Big Twin 1980-2006 5-Speed transmissions

MATES WITH

2ND GEAR MAINSHAFT

No.**8291** -

Replaces 35026-79C. Use on Big Twin 1980-2006 5-Speed transmissions.

MATES WITH

LATE 5TH GEAR MAINSHAFT

Replaces 35029-91A. Bearing and seal, installed. Requires a mainshaft with a bearing diameter of .9845". Use this gear with mainshaft No.35042-91 for the 1990 model year.

No.**8296** -

Use on Big Twin 1991-2006 5-Speed transmission.

EARLY 5TH GEAR MAINSHAFT

Replaces 35029-85A. Bearing and seal installed. Requires a mainshaft with a bearing diameter of 1.000".

No.**8297** -

Use on Big Twin 1985-90 5-Speed transmission.

EARLY 5TH GEAR MAINSHAFT

Replaces 35029-79. Bearing and seal installed. Requires mainshaft with a bearing diameter of 1.000".

No.**8298** -

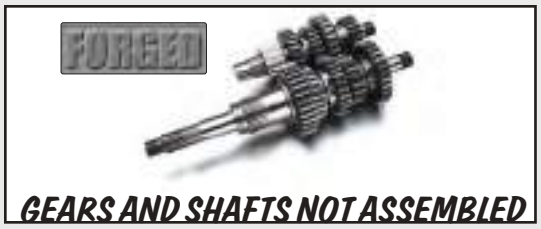
Use on Big Twin 1979-84 5-Speed transmission.

NOTE: *Use JIMS® Tool No.35316-80 to remove and install 5th gear, mainshafts.*

Phone 805-482-6913 JIMS Fax 805-482-9224

COMPLETE 5 SPEED PRECISION-CUT FORGED GEAR SETS

JIMS® shot peened gears sets and heat treated shafts come unassembled and ready to install in your stock or aftermarket 5-speed case. Gear sets are available with either a close ratio first gear 2.94:1, or standard ratio first gear as an option. *For more details see No. 8015-IS instructions.*



GEARS AND SHAFTS NOT ASSEMBLED

APPLICATION	STD RATIO	CLOSE RATIO
1980-1984	No.**8044**	No.**8045**
1985-1989	No.**8046**	No.**8047**
1990-2006	No.**8015**	No.**8016**

NOTE: *Use JIMS® Tool No.2189 to install these shaft assemblies into trap doors.*

5-SPEED MAINSHAFT

Use this mainshaft with gear No.35029-91A for the 1990 year models, bearing diameter area is .9845".

No.**35042-91** - *Use on Big Twin 1991-2006 5-Speed transmission. May be used on 1990 with main drive gear No.8296.*

4-SPEED COUNTERSHAFT

Standard O.D. is .750".

No.**35614-80** - *Use on Big Twin 1980-86.*

4-SPEED COUNTERSHAFT

Standard O.D. is .750".

No.**35614-76** - *Use on Big Twin late 1976-79.*

5-SPEED MAINSHAFT

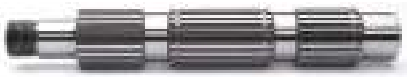
Main drive gear bearing diameter area is 1.000".

No.**35042-85** - *Use on Big Twin 1985-89 5-Speed transmission.*

5-SPEED MAINSHAFT

Main drive gear bearing diameter area is 1.000".

No.**35042-79** - *Use on Big Twin 1980-1984 5-Speed transmission.*



COUNTERSHAFT

No.**35632-79** - *Use on Big Twin 1980-06 5-Speed transmission and Twin cam 88®.*

COUNTERSHAFT - 1/4" SHORTER

This countershaft is identical to JIMS® standard 5-Speed countershaft, above No.35632-79, except modified to work in a JIMS®, Sputhe or C.C.I. 4-5 Speed case which requires a 1/4" shorter countershaft.

No.**35632S** - *Use on JIMS®, Sputhe's or C.C.I.'s special 5-Speed in a 4-Speed, transmission.*

4- SPEED COUNTERSHAFT

Standard O.D. is .755".

No.**35614-65** - *Use on Big Twin 1936-76.*

4-SPEED MAINSHAFT

Stock replacement mainshaft for all H-D® and aftermarket 4-Speed transmissions.

No.**35039-80** - *Use on Big Twin 70-Early 84 4-Speed transmission.*

INNER PRIMARY BEARING UPGRADE KIT

Thinking of running an open primary system, or looking for added durability in your high output engine? JIMS now has a new double row ball bearing with seal and retaining ring kit. Remove stock primary bearing with JIMS Tool No. 967 and remove bearing race from main shaft with JIMS Tool No. 34902-84. *For more details see No. 8960-IS instructions.*

No. 8960 - *Use on 1990 to 2006 FLH & FXST, and on 1990 to 2005 Dyna models or any 5 or aftermarket 6-speeds using H-D bearing No.9135 (capatiable with Bandit clutch kits).*

No. 8961 - *Seal for No.8960 kit above.*

SPLIT NEEDLE BEARING

Mainshaft - Countershaft bearing, 4 used per transmission - **Sold Individually.**

No.**8876A** - *Use on all Big Twin 5-Speeds, or aftermarket 6-Speeds, 1980-2006.*

LATE 4-SPEED BIG TWIN AND SPORTSTER® COUNTERSHAFT BEARING

American made by Torrington. For the best results install bearing with JIMS Countershaft Bearing Tool No.34733-77.

No.**35961-52** - *Use on Big Twin Late 1977-84, 2 per transmission. Use on Sportster® 1954-1984, 2 per trans. Use on Sportster® 1985-1990, 3 per trans. Use on Buell 1987-90, 3 per transmission.*

LATE 4-SPEED BIG TWIN MAIN DRIVE GEAR BEARING

American made by Torrington. For the best results install bearing with JIMS Transmission Main Drive Gear Bearing Tool No.33428-78.

No.**8905** - *Use on Big Twin Late 1977-81.*

CLOSED END SPORTSTER® COUNTERSHAFT CASE BEARING

American made by Torrington.

No.**35960-54** - *Use on Sportster® and K models 1954-90. Use on Buell 1987-90.*

CLUTCH RELEASE BEARING KIT

Kit comes with U.S.A. made bearing. Since this kit is made to JIMS® high standards, it ensures proper clutch operation. Replaces H-D® No.'s 37312-75, 37313-80 and 11096.

No.**2226** - *Use on Big Twin 1975-present 4, 5, and 6-Speed transmissions. Includes Twin Cam® Cruise Drive A and B motors.*

COUNTERSHAFT BEARING

Countershaft end bearing - Primary side.

No.**8977** - *Use on Big Twin EVO 1980-1999.*
Use on 5-Speed Twin Cam® 1999-2006.
Use on Sportster® 1991-2005.
Use on Buell® 1991-2005.

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FIFTH GEAR BEARING

Use in fifth gear - 2 per transmission. Install with JIMS® Tool No.34734-80 to the right depth. See "Transmission Tool" section.

No.**8904 -** *Use on Big Twin 1980-90.*

FIFTH GEAR BEARING

Use in fifth gear - 2 per transmission. Install with JIMS® Tool No.37842-91 to the right depth. See "Transmission Tool" section.

No.**35051-89 -** *Use on all Big Twin 1991-06 FL, FXST and 1991-05 FXR and FXD.*
Use on Sportster® 1991-present.
Use on Buell® 1991-present.

5-SPEED LATE LARGE DOOR BEARING

Use on all 5 and 6 speed transmissions that use the larger O.D. (2.047") door (H-D® No.8992A) bearing. These bearings support the mainshaft and countershafts from the door side of all JIMS® standard left side drive 5 and 6 speed transmissions, and JIMS® billet doors requiring this large bearing. Use JIMS® Tool No.1014 to remove and install bearings. **Sold in a pack of 2.**

No.**8992K** - *Use on all 1999-2005 FXD and 1999-2006, FXST and FLH.*

5-SPEED TRAP DOOR BEARING

Use on all 5-Speed transmissions. These quality American bearings (H-D® No.8998) support the transmission main and counter shafts. Use one on countershaft of Buell® and XL. Use JIMS® Tool No.1014 on Big Twin to remove and install bearings. **Sold in a pack of 2.**

No.**8998K** - *Use on Big Twin 1980-1998 5-Speed transmission, Sportster® 1991-2003.*
Use on Buell® 1991-2005.

5-SPEED TRANSMISSION CASE MAIN GEAR BEARING

Quality main drive gear transmission bearing, manufactured in USA. This bearing must be replaced whenever the main drive gear is replaced. Use JIMS® tool No.35316-80 on Big Twin, See "Transmission Tool" section. This bearing must be installed with the proper tool. Replaces H-D® No.8996A.

No.**8996** - *Use on Big Twin Late 1984-2006 5-Speed transmission, also Sportster & Buell 1991 to 2005.*

5-SPEED TRANSMISSION CASE BEARING

Manufactured in USA, this bearing must be replaced every time the main drive gear is replaced. Use JIMS® No.35316-80 for installing bearing and main drive gear, See "Transmission Tool" section. This bearing must be installed with the proper tool.

No.**8978** - *Use on Big Twin 1980-Early 1984 5-Speed transmission.*

4 SPEED TRANSMISSION CASE BEARING

Quality mainshaft ball bearing. Manufactured in USA.

No.**9020 -** *Use on Big Twin 1936-86 4-Speed.*

MAINSHAFT INNER RACE

Inner primary race - pressed on mainshaft. Press on mainshaft with JIMS® Tool No.34902-84.
See "Transmission Tool" section.

No.**34091-85** - *Use on EVO Big Twin Late 1984-2000. Use on Twin Cam® 1999-2006 5-Speeds or aftermarket 6-Speeds.*

SPORTSTER® 4-SPEED MAINSHAFT END BEARING

These rollers are made in the USA to JIMS specifications from aerospace quality 52100 bearing material. **Sold in packs of 100 pcs.**

Use on Sportster® 1952-Early 84.

JIMS No.	SIZE	O.D.
9096	+.0004"	.1566"
9097	+.0008"	.1570"

TRANSMISSION MAIN BEARING RACE

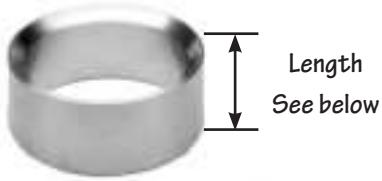
Standard O.D. is 2.314", I.D. is 1.8802". It will depend on the amount of press fit and will determine the amount of line lapping required to fit new bearing and mainshaft.

No.**35125-37** - *Use on Big Twin 1937-Early 1977.*
No.**35125-372** - *Oversize +.002".*
No.**35125-375** - *Oversize +.005".*
No.**35125-3710** - *Oversize +.010".*

TRANSMISSION MAIN BEARING RACE

Standard O.D. is 1.5635", I.D. is 1.3045". The amount of the press fit in the trans case will determine the amount of line lapping required to fit new bearing and mainshaft. Use JIMS® Tool No.34810-84 to install race.

No.**35105-52** - *Use on Sportster® and K Model 1954-83.*
No.**35105-525** - *Oversize +.005".*



TRANSMISSION SPROCKET SPACER

Smooth finish for a longer seal life.

No.**33334-85 -** *Use on Big Twin Late 1984-Early 1994 . Use with transmisson seal No.12050, .850" length.*

No.**33334-79 -** *Use on Big Twin 1980-Early 1984. Use with transmission seal No.12044A, 687" length.*

No.**33344-94 -** *Use on Big Twin 5-Speed or aftermarket 6-Speed. Late 1994-2006. Use transmission seal No.12067A. .600" length.*

MAINSHAFT SPACER

THIS SPACER HAS A SHOULDER

Transmission mainshaft spacer. Made to OEM specs. Spacer fits between the transmission door and mainshaft 4th gear. This spacer has a shoulder on it; the countershaft spacer does not. **Sold in a pack of 5.**

No.**35064-79K** - *Use on Big Twin 1980-2006 5-Speed and aftermarket 6-Speed transmissions.*

COUNTERSHAFT SPACER

Use on countershaft door side (The spacer without the step). **Sold in a pack of 5.**

No.**35629-79K** - *Use on Big Twin 1980-2006 5-Speed and aftermarket 6-Speed transmissions.*

MAINSHAFT & COUNTERSHAFT SPACER

Use between the door bearing, JIMS® No.8998, and JIMS® nut No.35078-79. See "Transmission Tool" section. Use 2 per transmission. **Sold in a pack of 10.**

No.**35076-79K** - *Use on Big Twin 1980-2006 5-Speed transmission.*

MAINSHAFT & COUNTERSHAFT LOCK JAM NUT

Use to lock mainshaft and countershaft to bearing No.8998. Always use a new one if it is being removed. **Sold in a pack of 2.**

No.**35078-79K** - *Use on Big Twin 1980-2006 5-Speed and aftermarket 6-Speed transmissions. Use on Sportster® 1987- 2003 master cylinder.*

TRANSMISSION DRIVE GEAR BUSHING

After installing JIMS® bushing No.35094-65 with Jims tool remover and installer No.1005, the I.D. of bushing must be honed to size for a running clearance on mainshaft of .0017 to .0025 with a 32 or better finish.

No.**35094-65 -** *Use on Big Twin 1931-86 4-Speed transmission.*

MAINSHAFT GEAR BUSHING

For second and third gears. After installing JIMS® bushing No.35094-65 with JIMS tool remover and installer No.1005, the I.D. of bushing must be honed to size for a running clearance on mainshaft of .0017 to .0025 with a 32 or better finish.

No.**35322-38 -** *Use on Big Twin 1938-Early 1979.*

COUNTERSHAFT GEAR BUSHING

For low and second gears

No.**35791-36 -** *Use on Big Twin 1940-86.*

Low and reverse gears

No.**35789-36 -** *Use on Big Twin 1936-86.*

SHIFTER SHAFT BUSHING

Sold in a pack of 2.

No.**40520-63 -** *Use on Sportster® 1977-2005. Use on Buell® 1987-2006.*

Phone 805-482-6913 JIMS Fax 805-482-9224

LATE 5 SPEED DOOR RETAINING RINGS

Use these retaining rings to hold No.8992 JIMS® door bearings in place. American made to fit perfectly. **Sold in a pack of 10.** Also replaces H-D® No.35087-99.

No.**35087-99K** - *Use on all 1999-2005 FXD and 1999-2006, FXST and FLH.*

EARLY 5-SPEED DOOR RETAINING RINGS

Use these retaining rings to hold No.8998 JIMS® door bearings in place. American made to fit perfectly. **Sold in a pack of 10.** Also replaces H-D® No.11020.

No.**11020K** - *Use on Big Twin 1980-98 5-Speed transmission. Use on Sportster® and Buell 1991-1998.*

MAIN DRIVE GEAR RETAINING RING

Retains main drive gear bearing in 5-Speed transmission case. **Sold each.**

No.**11161** - *Use on Big Twin Late 1984-2006 5-Speed and aftermarket 6-Speed transmissions.*

MAIN DRIVE GEAR RETAINING RING

Retains main drive gear bearing in early style 5-Speed transmission case. **Sold in a pack of 10.**

No.**11057K** - *Use on Big Twin 1980-early 1984 5-Speed transmission.*

MAINSHAFT & COUNTERSHAFT RETAINING RING

Retainers precision made, better than stock, and are used to keep gears in place on bearings. Use JIMS® tool No.2362, for removing and installing retainers, See "Transmission Tool" section. **Sold in a pack of 10.**

No.**11067K** - *Use on Big Twin 5-Speeds and aftemarket 6-Speeds,1980-2006 transmissions. Use on Sportsters® and Buells® 1991-present transmissions.*

THRUST WASHER

Use on 5-Speed transmission shafts where a retainer ring is positioned. Use between gear and retainer ring. For a 5-Speed transmission, washers are .070" thick for the best end play control.
Sold in a pack of 5. Use with JIMS® tool No.2362, See "Transmission Tool" section.

No.**6003K** - *Use on Big Twin 5-Speeds and aftermarket 6-Speeds 1980-2006. Use on Sportster® and Buell 1991-present.*

SHIFTER ARM ADJUSTING SCREW

A high quality replacement, made to our highest standards. Fits all 5-Speed transmissions. Hardened to 47-49 Rockwell.

No.**33119-79A** - *Use on:*

***FL**-1979-00; **FXR**-1982-94 and 1999; **FXD**-1991-00; **FXST**-1986-99*

ADJUSTING ARM SCREW LOCK NUT

Lock (Jam) nut to lock adjusting screw after gear engagement adjustment is set.
Sold in a pack of 10.

No.**7515K** - *Use on:*

***FL**-1979-2000*
***FXR**-1982-1994 and 1999*
***FXD**-1991-2000*
***FXST**-1986-1999*

SHIFTING ASSEMBLY KIT

This kit includes: No.35068-79 plate, No.34087-79 spring, No.34086-79 pawl plate, No.34084-86 shifter shaft, No. 34083-79 spring, No. 34082-79 pin, 6016 washer and 11016 retaining ring.

No.**2384** - *Use on:* ***FL****-1979-2000*
FXR*-1982-1994 and 1999*
FXD*-1991-2000*
FXST*-1986-1999*

CHROME TRANSMISSION SHIFT LEVER

This chrome shift lever replaces OEM transmission shift lever No.33715-85.

No.**33715-85AC** - *Use on all Big Twin 5-Speeds, 1985-1996 and aftermarket 6-Speeds, 4/5-Speeds, and 4/5/6-Speed Transmissions.*

CHROME TRANSMISSION SHIFT LEVER

This chrome shift lever replaces OEM transmission shift lever No.33849-79.

No.**8360** - *Use on all 1997-present Big Twins.*

CHROME SPEEDO SENSOR BLOCK-OFF PLATE KIT

Kit covers hole in transmission cases when speedometer pickup sensor is not installed in case. Kit includes chrome finish steel plate, gasket, and button head chrome allen screw.

No.**8042K** - *Use on all models where OEM speedometer pickup sensor are normally used, Big Twin and Sportster®.*

No.**8041K** - *10 pack of gaskets*

ELECTRONIC SPEEDO SENSOR

Original equipment sensor for 1996 to present FXST for Big Twin Transmission cases. Also fits any aftermarket transmission case with speedo sensor hole. Complete with o-ring, hardware and OEM connector.

No.**74437-96** - *Use on all FXST 1996-1999, replaces H-D® No.74437-96*

No.**74420-94** - *Use on FLT 1995-96, and FXD 1995-2005, replaces H-D® No.74420-94*

SPEEDO RE-CALIBRATION

This electronic speed correction module from Dakota Digital will plug into your speed sensor harness to correct the speedo meter and odo-meter after a change in tire size, pulley size or transmission gearing. This unit plugs directly between the stock transmission sensor and stock speedometer. No cutting or splicing is required. This module can correct the speedometer to within 1 MPH from 50% to 200% of the original reading. Manufacturer instructions included.

No.**8126** - *Use on Softail 1996-2006, Dyna 1996-2005, Sportster 1995-2003, FLH 2006 and earlier with OEM electronic Speedometer.*

NOTE: *2007 and later Harley models require hardwiring into stock harness, speed correction can be made up to Harley's factory margin of error, typically 3-5% from correct mileage.*

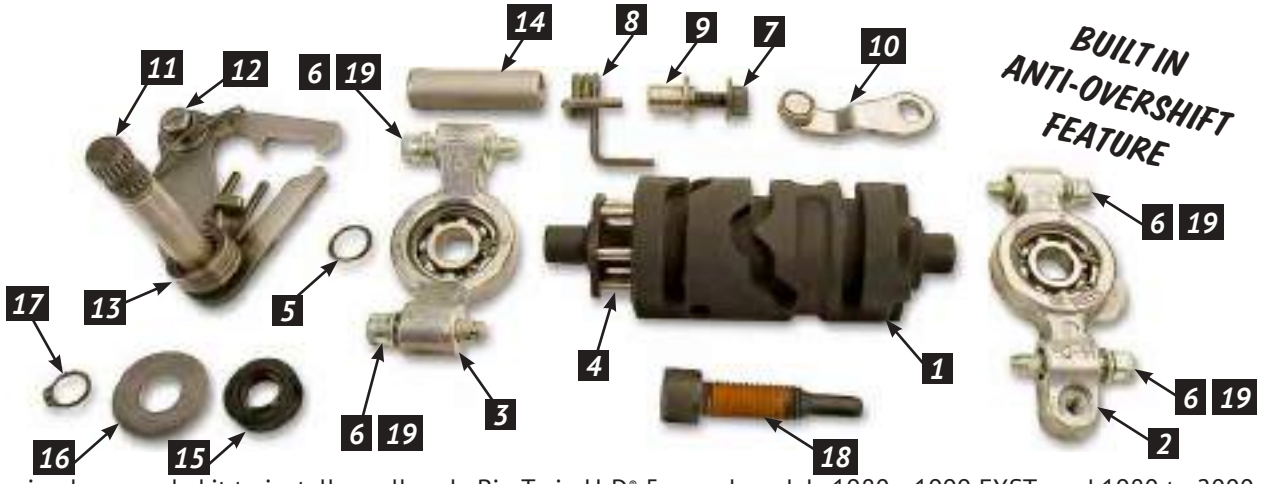
CHROME BILLET SPEEDO SENSOR BLOCK-OFF PLUG KIT

This chrome billet plug kit inserts in the hole in transmission cases when the speedo sensor is not being used. Includes chrome allen screw with o-ring.

No.**8102** - *Use on all models where O.E.M. speedo pick-up sensors are normally used on Big twin and Sportster®.*

No.**8103** - *Black Anodized*

EARLY TO LATE 5 SPEED SHIFTER UPGRADE KIT



This is a simple upgrade kit to install on all early Big Twin H-D® 5-speed models 1980 - 1999 FXST and 1980 to 2000 FL's and Dyna's. transmissions. Make your early model shift smooth and positive with 5-speeds latest in technology.This kit includes a JIMS® designed shift drum and lever assembly which has a built in anti-overshift feature. Kits come with late model pillow blocks, all necessary hardware, and a case shifter shaft sleeve bushing. Also included are complete installation instructions. For installation of the shifter sleeve item No.14 order JIMS® tool No.1664. *For more details see No. 8070-IS instructions.*

No.**8070** - *Use on all Big Twin Shovel and Evo 5-speed models 1980 to 1999 FXST and 1980 to 2000 FL's and Dyna's.*

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	1	SHIFT DRUM	8080
2	1	RIGHT PILLOW BLOCK	33304-00
3	1	LEFT PILLOW BLOCK	33301-00A
4	6	SHIFT DRUM DOWEL PIN	8356
5	1	SHIFT DRUM RETAINER	11342
6	4	SCREW, SHCS 1/4-20" x 1-1/4"	2135
7	1	SCREW, DETENT ARM	33376-00
8	1	SPRING, DETENT ARM	33374-00
9	1	SLEEVE, DETENT ARM SPRING	33375-00A
10	1	DETENT FOLLOWER ASSEMBLY	33364-00A

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
11	1	SHIFTER LEVER	8324
12	1	SPRING, RATCHET ARM	34977-02A
13	1	SPRING, CENTERING SHIFT LEVER	34064-00C
14	1	SLEEVE, SHIFTER SHAFT	7514
15	1	SEAL, SHIFTER SHAFT	12045
16	1	WASHER	6497HW
17	1	RETAINER, SHIFTER SHAFT	11150
18	1	CENTERING SCREW	34978-00A
19	4	WASHER, PILLOW BLOCK SCREW	1215
20	1	INSTRUCTION SHEET	8070-IS

SHIFT FORK SHAFT

No.**34140-36 -** *Use on Big Twin 1936-79.*

5-SPEED SHIFT FORK SHAFT

No.**34088-87 -** *Use on Big Twin 5-Speeds and after-market 6-Speeds 1987-2006.*

SHIFT FORK SHAFT KIT

Kit includes O-ring and retaining ring.

No.**34186-76 -** *Use on Big Twin 1936-86.*

No.**2181K -** *O-Ring for shafts No.34140-36 and No.34186-76.* **Sold in a pack of 10.**

No.**2182K -** *Snap ring for shaft No.34186-76.* **Sold in a pack of 10.**

SOLID BILLET LEFT PILLOW BLOCK

Replaces H-D® No.33326-79A. Includes: bearing No.9115. This is it, the one to use for extreme shifting. If you are building an automatic 5-Speed transmission or have back cut gears for super quick shifting, this pillow block is a must, at several times the strength of stock units. Will work on 6-Speeds.

No.**2528** - *Use on:*
***FL**-1979-2000; **FXR**-1982-1994 and 1999; **FXD**-1991-2000; **FXST**-1986-1999*

Phone 805-482-6913 JIMS Fax 805-482-9224

DRIVE PULLEYS & MEGA NUTS

PULLEY & SPROCKET MEGA NUT

JIMS now offers both early and late Mega Nuts. Once you install these left handed threaded nuts correctly they won't come loose with this exclusive lock plate design. They can also be used on BDL sprockets also. When using these nuts install using JIMS socket tool No. 946600-37A on early mega nuts and for late use No. 989 along with No. 2260 pulley locker. Some aftermarket pulleys and sprockets may need to be drilled and tapped. *For more details see No. 1733-IS instructions.*

No. 1733 – *Use on all H-D 6-speed Cruise Drive Transmissions 2006 – present FXD's and 2007 – present FLH's and FXST's . Also fits BDL sprockets for H-D 6-Speeds.*

No.**1708 -** *Use on all 91-present XL's. Use on 1985-2006, FL FXST, and FXR. Use on 1985-2005, FXD, and JIMS® 6-Speed.*

TRANSMISSION PULLEY NUT

1 - 1/2" - 24 Left Hand Thread. Use with JIMS® 94660-37A socket tool.

No.**35211-91B -** *Use on Big Twin 4 and 5-Speed or aftermarket 6-Speed 1936 to 2006. (Check for inner primary clearances on 4-Speeds).*

JIMS TRANSMISSION BELT DRIVE PULLEYS

JIMS® steel belt pulleys are made from premium grade aerospace material, thus you get a more durable, longer lasting product.

Stock 5-speed Big Twins come with 32 tooth pulleys. Will also work with aftermarket 6-speed. Not for use on H-D Cruise Drive 6-Speed.

**Steel Pulley kits come with correct spacer, seal, and Mega nut. See parts list below:*

JIMS® No.	DESCRIPTION
No.12067A	*Seal*
No.33344-94	*Spacer*
No.1708	*Mega Nut Kit*
No.11165	*Quad Seal*

Trans Pulley	Rear Wheel Pulley	Secondary Ratio	Overall Ratio (1.54 primary)	Overall Ratio (1.44 primary)
32T	70	2.19	3.37	3.15
32T	65	2.13	3.27	3.06
32T	61	2.10	3.13	2.92
34T	70	2.06	3.17	3.00
34T	65	1.91	2.94	2.75
34T	61	1.79	2.76	2.58

*No.**40250-94AK -** *Use on all Big Twins, Steel 32 tooth, kit, 1985-2006 FL, FXST, and FXR, 1991-2005 FXD.*

WHITE SIDEWALLS ONLY *No.**5001K -** *Use on all Big Twins, Steel 34 tooth, kit, 1985-2006 FL, FXST, and FXR, 1991-2005 FXD.*

No.**40250-94A -** *Use on all Big Twins, Steel 32 tooth pulley only, Includes 1999-2006 FL, FXST, and FXR, 1991-2005 FXD.*

WHITE SIDEWALLS ONLY No.**5001 -** *Use on all Big Twins, Steel 34 tooth pulley only, Includes 1999-2006 FL, FXST, and FXR, 1991-2005 FXD.*

LOCKDOWN AXLE KIT, OFFSET SPROCKETS & KICKER COMPONENTS

KICK STARTER SHAFT

Redesigned for added strength.

No.**33096-54B -** *Use on Big Twin 1937-86 4-Speeds.*

LONGER KICK STARTER SHAFT

For a cleaner, safer, kicker system, this starter shaft will eliminate the need for a fold out kicker arm. 3/4" longer design to give the needed kicker arm to exhaust clearance.

No.**33096-54AL -** *Use on Big Twin 1937-86 4-Speeds for big tire users with offset transmission kit.*

KICKER GEAR BUSHING

Standard O.D. is .907" - Domestic.

No.**33438-501 -** *Use on Big Twin 3 and 4 Speeds.*

Standard O.D. is .925" - Imported.

No.**33438-502 -** *Use on Big Twin 3 and 4 Speeds.*

4-SPEED KICKER SHAFT BUSHING

O-ring included. Standard O.D. is .940". **Sold in a pack of 2.**

No.**33288-37 -** *Use on Big Twin 1937-86.*

No.**33288-375 -** *Oversize +.005".*

No.**2183K -** *O-ring for kicker shaft* ***(Sold in a pack of 10)***.

KICK STARTER BUSHING

Standard O.D. is .8805".

No.**33099-52A -** *Use on Sportster® 1954-85.*

LOCKDOWN AXLE KIT

High performance is much more than how much power a machine makes or how fast it will go. At JIMS, we know reliability and safety are also important. To these ends, we now offer our axle retention upgrade kit. The OEM axle nut washer can become weakened or deformed, and that can lead to loosening, even with a castle nut system. To avoid this loosening and the problems associated with it, we have developed a much stronger part to replace the washer, along with superior adjuster plates for the final drive. Our kit includes a special slotted axle nut washer part as well as stronger swing arm end caps that have a better fit into the swing arm. This is a great way to improve both reliability and safety. *For more details see No. 1746-IS instructions.*

No. 1746 - *Use on 1991-2005 Dyna® Models.*

No. 1747 - *Use on 1979-04 XL, 1973-86 FL/FX and 1984 & 85 FXST Models.*

No. 1748 - *Use on 1980-2001 FLHT, 1982-2000 FXR.*

JIMS OFFSET SPROCKETS BY P.B.I.

These precision "American Made" sprockets are designed to provide more clearance to drive your fat tire motorcycles. They're made from nickel chromoly #8620 case hardened steel. They are compatible with H-D® #33334-94 spacer, #12067A seal and #11165 quad seal. Use JIMS® No.1708 Mega Nut to secure to main drive gear. Use on all Big Twin 5-Speed transmissions and aftermarket 6-Speeds 1994-2006.

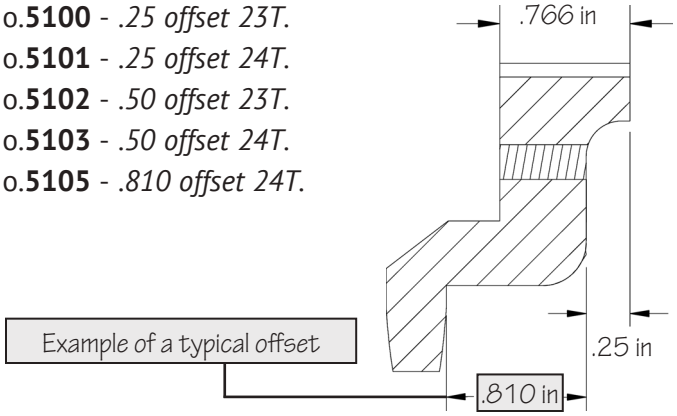
No.**5100** - *.25 offset 23T.*

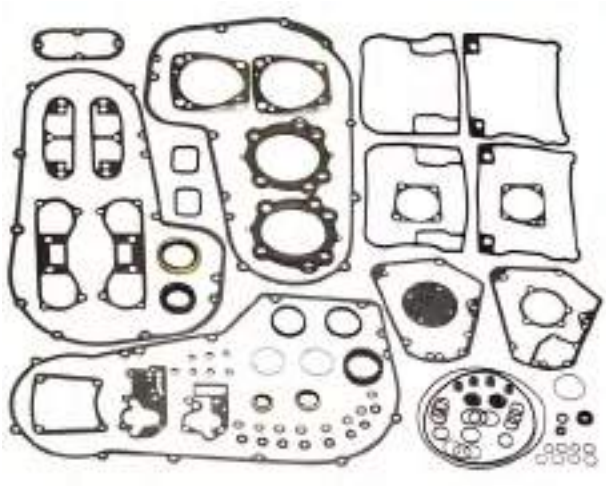
No.**5101** - *.25 offset 24T.*

No.**5102** - *.50 offset 23T.*

No.**5103** - *.50 offset 24T.*

No.**5105** - *.810 offset 24T.*





JIMS® EXTREME SEALING TECHNOLOGY (EST™) HIGH PERFORMANCE GASKETS

JIMS® introduces EST™ (Extreme Sealing Technology), a new breed of High Performance Gaskets for Harley-Davidson® Evo / Motors. EST™, the Ultimate in gasket sealing technology, is fabricated with an embossed stainless steel metal substrate coated with a proprietary high temperature rubber-like material that virtually eliminates leakage when joining two metal surfaces. EST™ gaskets are available in Complete, Top End and Rocker Box Kits for Twin Cam®, Evo Big Twin, Sportster® and Buell® applications. See JIMS® gasket locator tools No.968 on page 189. For stroke kit gaskets see page 26.

EVO SPORTSTER® ENGINE GASKET KITS

PART NO.	APPLICATION	OEM NO.	EST KIT
No.**826**	*Use on Evo XL 1100 1986-87*	*17026-86A*	**EST Kit*
No.**827**	*Use on Evo XL 883 1991-2003*	*17026-91A*	**EST Kit*
No.**828**	*Use on Evo XL 883 1986-90*	*17026-86*	**EST Kit*

Loran Whittaker

Troy Snider

TOP END ENGINE KITS

These kits provide all the gaskets needed for the top end build up, or rebuild, starting from the cylinder base gaskets to the complete rocker box assembly.

THIS KIT FEATURES:

- *Intake, power valve and base gasket material manufactured from premium fuel resistant material that will not creep, crack or become brittle. No additional sealants are required for installation.*
- *The exhaust gasket material consists of a steel reinforced core that prevents blow-outs and burning.*
- *The head gasket materials that surrounds the core will withstand heat and control the movement caused by the rapid contraction and expansion of exhaust temperatures.*
- *Our CFM-20 is a perforated steel core gasket, which allows heat to be drawn away from the combustion ring while dissipating heat evenly across the gasket surface. Hot spots that lead to head gasket failure are eliminated.*
- *CFM-20 elastomer surface provides maximum sealing characteristics and provides sealing around passages that carry oil and coolants.*

TWIN CAM® 4" BIG BORE HEAD AND BASE GASKET KITS

PART NO.	MODEL/YEAR	BASE/HEAD THICKNESS	EST KIT
No.**857**	*Use on Twin Cam® 1999-Present*	*0.02"/0.04"*	**EST Kit*

TWIN CAM® 4 1/8" BIG BORE HEAD AND BASE GASKET KITS (4 1/8" STOCK BOLT PATTERN)

PART NO.	MODEL/YEAR	BASE/HEAD THICKNESS	EST KIT
No.**873**	*Use on Twin Cam® 1999-Present*	*0.02"/0.04"*	**EST Kit*

EVO TOP END GASKET KITS

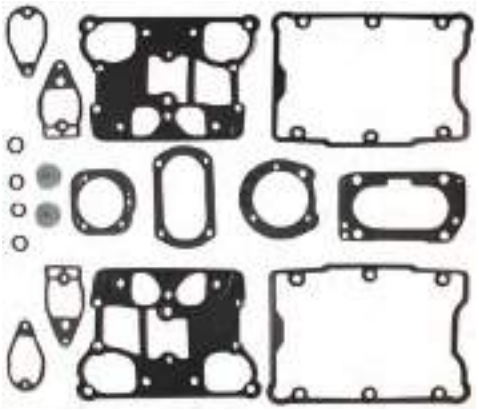
PART NO.	MODEL/YEAR	OEM NO.	EST KIT
No.**839**	*Use on Evo Big Twin 1984-91*	*17033-83A*	**EST Kit*

EVO XL TOP END GASKET KITS

PART NO.	MODEL/YEAR	OEM NO.	EST KIT
No.**840**	*Use on Evo XL 1200 and Buell® 1991-2003*	*17032-91*	**EST Kit*
No.**841**	*Use on Evo XL 1100 1986 and 87*	*17030-86A*	**EST Kit*
No.**842**	*Use on Evo XL 883 1991-Present*	*17030-89A*	**EST Kit*
No.**843**	*Use on Evo XL 1200 1988-90*	*17030-88A*	**EST Kit*
No.**844**	*Use on Evo XL 883 1986-90*	*17030-86B*	**EST Kit*

COMPLETE ROCKER COVER KITS

These kits provide all the gaskets needed for the build up, or rebuild of the rocker box assembly. EST™ – Rocker Box Gaskets are .020" thick and have .005" of high temperature rubber on both sides and will not weep, extrude, tear or become brittle over time. These kits are available for the following models.



PART NO.	APPLICATION	OEM NO.	EST KIT
No.**851**	*Use on Twin Cam® 1999-Present*	*N/A*	**EST Kit*
No.**852**	*Use on Evo Big Twin Single Cam 1992-99*	*17042-92*	**EST Kit*
No.**853**	*Use on Evo Big Twin 1984-91*	*17038-90*	**EST Kit*
No.**854**	*Use on Evo XL, Buell® 1991-2003*	*17030-91*	**EST Kit*
No.**855**	*Use on Evo XL 1986-90*	*17030-89*	**EST Kit*

INDIVIDUAL 10-PACK GASKETS (ENGINE)

These gaskets are conveniently packaged in packs of ten, giving you the flexibility to purchase the gaskets you use most. See our gasket description to learn more about the many benefits that can be expected from these gaskets. These kits are available for the following applications.

PART NO.	APPLICATION	OEM NO.	EST KIT
No.**2359K**	*Use on Front Tappet Block, Big Twin Single Cam 1948-1999*	*18634-48C*	*N/A*
No.**2358K**	*Use on Rear Tappet Block, Big Twin Single Cam 1948-1999*	*18633-48D*	*N/A*
No.**25225-70BK**	*Use on Cam Cover, Big Twin 1970-92*	*25225-70B*	*N/A*
No.**25225-93K**	*Use on Cam Cover Big Twin Single Cam 1993-99*	*25225-93*	*N/A*
No.**1268K**	*Use on Oil Pump Body, Big Twin 1980-91*	*26273-80B*	*N/A*
No.**1270K**	*Use on Oil Pump Body, Big Twin Single Cam 1992-99*	*26273-92*	*N/A*
No.**1269K**	*Use on Oil Pump Cover, Big Twin 1980-91*	*26276-80B*	*N/A*
No.**1271K**	*Use on Oil Pump Cover, Big Twin Single Cam 1992-99*	*26276-92*	*N/A*

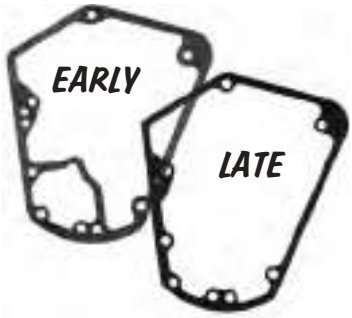
EARLY CAM COVER GASKET

Use on Big Twin 1970-92, precision made to fit perfectly. This gasket is included when ordering the JIMS® cam cover. **Sold in a pack of 10.**

No.25225-70BK **-**

Use on Big Twin single cam only 1970-92.

*(**NOTE:** Includes aftermarket engines.)*



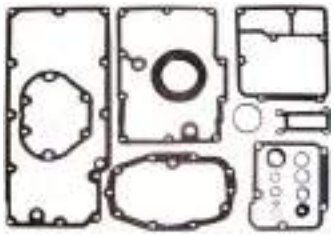
LATE CAM COVER GASKET

Sold in a pack of 10. This gasket is included when ordering the JIMS® cam covers.

No.25225-93K - *Use on Big Twin single cam only 1993-99.*

*(**NOTE:** Includes aftermarket engines.)*

TRANSMISSION GASKETS KITS



These kits provide all the gaskets, seals, nylon washers, and O-rings needed for the build up, or rebuild of a Big Twin transmission assembly. These are the same gasket kits used by JIMS transmission assembly department. These kits are available for the following applications:

PART NO.	APPLICATION
No.**881**	*Use on all FLH 6-sp Touring models for 2007 to present*
No.**882**	*Use on all FXD 6-sp for 2006 to present*
No.**883**	*Use on all FXST 6-sp models for 2007 to present*
No.**804**	*Use on Big Twin 5 or aftermarket 6-Speed 1999-2005 FXD, 1999-2006 FL, 2000-2006 FXST*
No.**803**	*Use on Big Twin 5 or 6-Speed 1991-98*
No.**802**	*Use on Big Twin 5-Speed 1980-90*
No.**801**	*Use on Big Twin 4-Speed Late 1979-86*
No.**800**	*Use on Big Twin 4-Speed 1936 to Early 1979*
No.**816**	*Use on 5-Speed Case 4/5 or 4/5/6 Speed, Electric Start only.*
No.**890**	*Use on JIMS Right Side Drive, Mechanical Clutch*
No.**891**	*Use on JIMS Right Side Drive, Hydraulic Clutch*
No.**892**	*Use on JIMS FAT - 5 RSD*

STEEL BACKED CAM SEAL
THE BEST ONE AVAILABLE - BAR NONE

American made cam cover seal, surpasses and replaces O.E.M. No.83162-51. Use JIMS® Tool No.2243 to remove and install seal. For a no leak fit, seal has a locking compound around the outside diameter to help seal the cam seal to the cam cover.

No.**2169 -** *Use on Big Twin single cam only 1970- 99.* (***NOTE:*** *Includes aftermarket engines.)*

5-PACK TRANSMISSION MAINSHAFT SEALS

These seals work on all 4, 5 and 6-Speed transmission cases. **Sold in packs of 5.**

PART NO.	APPLICATION	OEM NO.
No.**12013AK**	*Use on 1965-early 66, and Late 1981-86 Big Twin Models - Main Drive Gear Seal*	*12013A*
No.**12035AK**	*Use on 1991-06 Big Twin, 5 or aftermarket 6-Speed - Main Drive Gear Seal*	*12035A*
No.**817K**	*Use on 1936-79 (4-Speed Main Drive Case Seal)*	*35230-39*

INDIVIDUAL 10-PACK GASKETS (TRANSMISSION)

These gaskets are conveniently packaged in packs of 10 giving you the flexibility to purchase the gaskets you use most. These kits are perfect for stocking your shelves with fast moving items. They are available for the following applications:

PART NO.	APPLICATION	OEM NO.
No.**35652-79K**	*Use on Trap Door, 5 and aftermarket 6, 4/5, and 4/5/6 Speed 1980-06*	*35652-79*
No.**36801-87K**	*Use on Side Cover, 5 and aftermarket 6, 4/5, and 4/5/6 Speed 1987-06*	*36801-87A*
No.**34904-86K**	*Use on Top Cover, 5 and aftermarket 6, 4/5, and 4/5/6 Speed 1986-99*	*34904-86*
No.**8041K**	*Use on Speedo Sensor Block-off 5 and aftermarket 6-Speed 1995-06*	*N/A*