FEULING® FASTENERS INSTALLATION INSTRUCTIONS 3032, 3037, 3047, 3052, 3053, 3062

MILWAUKEE EIGHT™ ROCKER ARM SHAFT STUD /NUT KIT INSTALLATION INSTRUCTIONS #3037 AND #3047




HELP PREVENT MILWAUKEE EIGHT CYLINDER HEAD CRACKING!

Use Feuling/ARP rocker arm shaft studs and nuts to help relieve stress on the Milwaukee Eight cylinder heads. The factory and SE cylinder heads have an extremely weak link with the rocker arm shaft standoffs. By using a stud some of the stress is transferred from the standoff casting into the stud. The use of higher lift camshafts and heavier valvesprings puts additional stress on the cylinder head making the use of our stud kit a must.

TOP ENGINE BUILDERS DEMAND QUALITY FASTENERS!

ROCKER STUD INSTALLATION

1.) Double nut the stud with qty. 2, 5/16-24 nuts, loctite the stud course threads and install into the cylinder head
2.) Torque studs to 3-5 Ft. Lbs
3.) FEULING recommends filling the rockers with oil using a oil squirt can, fill from the pushrod seat until oil squirts out the exit oil hole.
4.) Install rocker arms/shafts, Loctite the fine threads
NOTE: It is important to seat the rocker arm shafts by evenly tightening the nuts to estimated 10 Ft. Lbs. then loosening to allow the shafts to settle in, then re-tighten evenly and step the torque to a final 24 – 26 Ft. Lbs

Loctite course threads


Install stud


Torque stud to 3-5 Ft. Lbs


Fill rocker arm with oil

Loctite fine threads


Evenly seat rocker arm to 10 Ft. Lbs loosen to allow shaft to settle then evenly step torque to final spec of 24-26 Ft. Lbs

FEULING® FASTENERS INSTALLATION INSTRUCTIONS

IMPORTANT NOTICE

THIS INSTALLATION SHOULD BE DONE BY AN EXPERIENCED MECHANIC WHO HAS ACCESS TO A FACTORY SERVICE MANUAL AND ALL REQUIRED TOOLS

CAUTION

INCORRECT INSTALLATION CAN CAUSE ENGINE DAMAGE NOT COVERED UNDER WARRANTY. FAILURE TO INSTALL COMPONENTS CORRECTLY CAN CAUSE ENGINE SEIZURE. ENGINE SEIZURE MAY RESULT IN SERIOUS INJURY TO MOTORCYCLE, OPERATOR, PASSENGER, AND/OR OTHERS.

CAUTION

IMPROPERLY TORQUED BOLTS MAY RESULT IN OIL LEAKS AND DISTORTION OF COMPONENTS. IF REPLACING THE ENGINES HEAD BOLTS OR STUDS ALWAYS USE NEW HEAD & BASE GASKETS

SOME FASTENER KITS MAY INCLUDE FASTENERS NOT APPLICABLE TO YOUR MODEL

1 Refer to the proper service manual for your model motorcycle engine.

2 Wash, clean and inspect all new Feuling hardware

3 Clean and inspect all bolt holes

4 When threading into aluminum lightly coat the threads and under head flange of the new Feuling fasteners with moly lube.

5 When threading into steel lightly coat the threads of the new Feuling fasteners with loctite and coat the under head flange with moly lube and where applicable lightly coat the Feuling washers on both sides with moly lube.

6 It is recommended to use new gaskets and O-rings to insure proper sealing

7 Check gaskets / O-rings for proper installation

8 When installing fasteners on moving parts always rotate engine over several times before tightening to insure the parts are centered

9 First finger tight each fastener using the proper sequence from your service manual, if no sequence is giving always use an alternating sequence starting in the center working your way out.

10 Torque the fasteners following your recommended torque values and always tighten fasteners stepping the torque value in small increments.

WARRANTY:

All parts are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of twelve (12) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at FOP's option if the parts are returned to FOP by the purchaser within the (12) month warranty period. In the event warranty service is required, the original purchaser must notify FOP of the problem immediately. Some problems may be rectified by a telephone call and need no further action. A part that is suspect of being defective must not be replaced without prior authorization from FOP. If it is deemed necessary for FOP to make an evaluation to determine whether the part was defective, it must be packaged properly to avoid further damage, and be returned prepaid to FOP with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. After an evaluation has been made by FOP and the part was found to be defective, repair, replacement or refund will be granted. Excessive flywheel pinion shaft run out will damage camplate and oil pump and or cause engine damage and or failure. Damage to Feuling oil pump corporation products from excessive pinion shaft run out will void manufacturer's warranty.

ADDITIONAL WARRANTY PROVISIONS:

FOP shall have no obligation in the event an FOP part is modified by any other person or organization, or if another manufacturer's part is substituted for one provided by FOP. FOP shall have no obligation if an FOP part becomes defective in whole or in part as a result of improper installation, improper break-in or maintenance, improper use, abnormal operation, or any other misuse or mistreatment. FOP shall not be liable for any consequential or incidental damages resulting from the failure of an FOP part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or any other breach of contract or duty between FOP and the customer. The installation of parts may void or otherwise adversely affect your factory warranty. In addition, such installation and use may violate certain federal, state and local laws, rules and ordinances as well as other laws when used on motor vehicles operated on public highways, especially in states where pollution laws may apply. Always check with federal, state, and local laws before modifying your motorcycle. It is the sole and exclusive responsibility of the user to determine the suitability of the product for his/her use, and the user shall assume all legal, personal injury risk and liability and all other obligations, duties and risks associated therewith. Our high performance parts, engines and motorcycles are intended for experienced riders only.

Feuling Oil Pump Corporation reserves the right to change prices and/or discounts without notice and to bill at the prevailing prices at the time of shipments. The words Harley®, Harley-Davidson® and H-D® and all H-D® part numbers and model designations are used in reference only. Feuling Oil Pump Corporation is in no way associated with, or authorized by Harley-Davidson Motor Co®. To manufacture and sell any of the engine parts described in this instruction sheet.

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www.feulingparts.com

#3032 MILWAUKEE EIGHT BAGGER EXTERNAL ENGINE, STAINLESS FASTENER KIT '17-'19

12	Case Bolts	5/16-18 x 3.250''

 # 3037 MILWAUKEE EIGHT INTERNAL ENGINE, ROCKER STUD/NUT KIT BLACK OXIDE FASTENER KIT, '17-'19

8	Rocker arm studs	5/16-24 x 1.700''
8	Rocker stud nuts	5/16-24

#3047 MILWAUKEE EIGHT INTERNAL ENGINE, BAGGER/SOFTAIL, BLACK OXIDE FASTENER KIT, '17-'19

6	Camplate	1/4-20 x 1.250''
4	Oil Pump Allen Heads W/ washers	1/4-20 x 2.750
8	Rocker arm studs	5/16-24 x 1.700''
8	Rocker stud nuts	5/16-24
8	Lower rocker covers Ft & Rear	1/4-20 x 1.000''
2	Front & Rear Breather	1/4-20 x 1.250''
2	Lifter Retainers	1/4-20 x 1.000''
2	Cam Chain Tensioner	1/4-20 x .750''
4	AN washers for oil pump bolts	1/4"
1	Loctite	Packet
1	Ultra Torque Lube	Lube

#3052 MILWAUKEE EIGHT BAGGER EXTERNAL ENGINE, STAINLESS FASTENER KIT '17-'19

8	Cover for front & rear Lifters	1/4-20 x 1.000''
9	Cam Cover	1/4-20 x 1.250''
20	Rocker cover bolts Ft & Rear – use washers	1/4-20 x 1.250''
20	Washers	Lrg. Dia. 1/4-20
2	Horn mount, use washers	3/8-16 x 1.250''
4	Oil Line Blocks off of head	1/4-20 x 1.000''
2	Front Head Mount Bolts	3/8-16 x 1.750''
2	Front Stabilizer link Bolts	3/8-16 x 1.250''
2	Volt / Oil Line Bracket	1/4-20 x .750''
4	Exhaust Studs	5/16-24 x 1.700''
4	Exhaust Nuts	5/16-24
2	Induction module bracket bolts	M6 1.000 x 20mm
2	Washer for induction module bracket	M6
12	Case Bolts	5/16-18 x 3.250''
1	Ultra Torque Lube	Lube

#3053 MILWAUKEE EIGHT BAGGER PRIMARY & TRANSMISSION 12 POINT STAINLESS BOLT KIT '17-'19

9	Primary Cover	1/4-20 x 1.250''
4	Primary Cover	1/4-20 x 4.000''
2	Engine to Trans - bottom, use thick washers	3/8-16 x 2.000''
2	Engine to Trans - top, use standard washers	3/8-16 x 1.500''
5	Derby Cover use washers	1/4-20 x .750''
2	Trans Clutch Release Cover use washers	1/4-20 x 1.500''
8	Trans Bearing Housing Cover use washers	5/16-18 x 1.250''
6	Transmission Top Cover use washers	1/4-20 x 1.000''
2	3/8" Washers, standard thickness	3/8"
2	3/8" Washers, Heavy duty	3/8"
8	5/16'' Washers	5/16''
18	1/4'' Washers	1/4''
1	Ultra Torque Lube	Lube

3062 - MILWAUKEE EIGHT ROAD GLIDE CHASSIS DRESS UP KIT

4	Nacelle W/ Washer	5/16-18 x 0.560"
2	Front Turn Signals	1/4-20 x 1.000"
4	Front Brake Caliper Mounting Hardware	M10-1.50 x 1.375"
4	Front Fender Mounting Hardware	5/16-18 x 1.750"
2	Passenger Footpeg Top Mounting Bolt	3/8-16 x 1.000"
2	Rear Brake Master Cylinder Mounting Hardware	5/16-18 x 1.000"
5	Front Engine Isolater Mounting Brackets	3/8-16 x 1.250"
2	Lower Engine Guard	3/8-16 x 0.750"
2	Rider Floorboard, Front Bolt, Use Lock Waseher	3/8-16 x 2.250"
2	Rider Floorboard, Rear Bolt, Use Lock Washer	3/8-16 x 1.250"
4	License Plate Mounting Hardware, Use Lock Nuts	1/4-20 x 0.750"
4	1/4" Lock Nut	1/4"
4	5/16" Washer	5/16"
4	3/8" Lock Washer	3/8"
1	Ultra Torque Lube	Lube

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MADE IN USA