

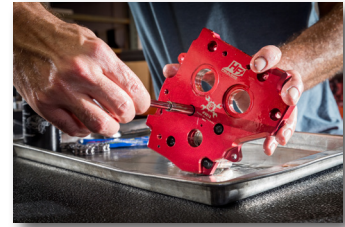
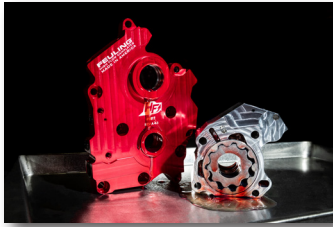


FEULING®

CAMPLATE AND OIL PUMP FASTENER KIT INSTRUCTIONS

FOR M-EIGHT & TWIN CAM ENGINES EQUIPPED WITH FEULING OIL PUMPS & CAMPLATES

PART #'S:
8020, 8022, 8023



IMPORTANT NOTICE:

This installation should be done by an experienced mechanic who has access to a factory service manual and all required tools. This procedure requires use of specialty 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. Improperly torqued bolts may result in oil leaks and distortion of the camplate and oil pump.

Part # 8020 - Twin Cam® Engines '99 - '17 equipped with Feuling® HP+/RACE SERIES & HIGHFLOW Camplate & Oil Pump.

Part # 8022 - M-Eight® engines equipped with Feuling® HIGH FLOW camplate and HP+ or RS oil pump.

Part # 8023 - M-Eight® engines equipped with Feuling® OE+ camplate and factory HD oil pump.

INSTRUCTIONS

- 1.) Refer to the proper service manual for your model motorcycle engine.
- 2.) Always use new O-rings.
- 3.) Clean and inspect case and oil pump holes and threads.
- 4.) Clean and inspect new Feuling® hardware.
- 5.) Lightly coat the threads and under head flange of the new Feuling bolts with the supplied moly lube.
- 6.) Bolt the complete Feuling® Oil Pump including sub seal to the camplate only finger tight with the pressure housing of the pump facing the camplate using the correct oil pump bolts. 1.250 for HP+ and RS oil pumps and 1.00 bolts for OE+ oil pumps.
- 7.) Check O-rings for proper installation on the case and oil pump.
- 8.) Align the Gerotor gear flats with the crankshaft flats. Slide the assembly onto the crankshaft, using slight pressure slip sub seal into scavenge port hole of crankcase, it's helpful to use pressure from your thumb to push on the oil pump housing to ensure proper fit into the scavenge port hole, at the same time wiggle assemble to align camplate with dowel pins in case.
- 9.) Install the 1" camplate bolts only finger tight then rotate engine over several times. This will center the camplate assemble. Alternately tighten all camplate bolts to 10 inch lbs.
- 10.) Rotate engine over several times then final torque camplate bolts to 90 – 120 inch lbs.
- 11.) With oil pump bolts only finger tight, rotate engine over several times. This will center the Gerotors and pump housing to the crankshaft. Alternately tighten the four oil pump bolts to 10 inch lbs.
- 12.) Rotate engine over several times then final torque the oil pump bolts to 90 – 120 inch lbs.

Part # 8020 - Camplate bolts = Qty. 6, ¼-20 x 1.000, Qty. 4 Oil Pump bolts = ¼-20 x 1.250, Moly Assembly Lube ½ OZ pack.

Part # 8022 - Camplate bolts = Qty. 6, ¼-20 x 1.250, Qty. 4 Oil Pump bolts = ¼-20 x 2.750, Moly Assembly Lube ½ OZ pack.

Part # 8023 - Camplate bolts = Qty. 6, ¼-20 x 1.250, Qty. 4 Oil Pump bolts = ¼-20 x 2.750 USE with washers, Moly Assembly Lube ½ OZ pack.



EXTERNAL DRESS UP FASTENER KITS



MILWAUKEE EIGHT ('17-'20)

Part #3052: EXTERNAL ENGINE:

12 point stainless Cam cover, lifter block covers, rocker covers, case bolts, oil lines, volt regulator, Exhaust studs, exhaust locking nuts, Moly lube and Loctite. Fits: Milwaukee Eight '17 BAGGER.

Part #3053: PRIMARY & TRANSMISSION:

12 point stainless Primary cover, derby cover, top transmission cover right transmission bearing housing, clutch release cover, sensors and engine to transmission mounting bolts. Fits: Milwaukee Eight '17 BAGGER.

TWIN CAM ('99-'17)

PRIMARY & TRANSMISSION KITS '99-'17

Kits include 12 point stainless bolts & applicable washers for the primary cover, derby cover, inspection cover, transmission top cover, right transmission bearing housing, clutch release cover, sensors & engine to transmission mounting bolts.

DYNA

Part #3054: T/C '99-'05

Part #3055: T/C '06-'17

BAGGER

Part #3056: T/C '00-'06

Part #3057: T/C '07-'17

SOFTAIL

Part #3058: T/C '00-'06

Part #3059: T/C '07-'17

EVO - FXR / BAGGER

Part #3067: '85-'99 PRIMARY & TRANSMISSION:

Kit includes 12 point stainless bolts & applicable washers for the outer primary cover, inner primary cover outer front bolts, derby cover, inspection cover, shifter lever, transmission top cover, transmission bearing housing, transmission clutch release cover, moly paste & loctite for installation.

Part #3068: '89-'99 CHASSIS & TRIM:

Chassis & Trim Stainless 12 point bolt kit, includes the following bolts & applicable washers: Front right rotor (bolts do NOT clear speedo for left rotor), fork clamps, headlight bracket, voltage regulator, rear fender struts, upper rear shocks (requires drilling larger fender hole), lower rear shocks, rear rotor, rear pully/sprocket, rear swing arm supports, front stabilizer, side covers, dash board, foot pegs (right & left), shifter peg, front axle nut, moly paste & loctite for installation.

Part #3069: '89-'99 EXTERNAL ENGINE:

EVO Engines '85-'99, kit includes 12 point stainless bolts and applicable washers for Front engine mount, front case mount, rear engine to trans mount, oil filter adapter mount, upper oil pump, cam cover, case nuts (use factory bolts), rocker covers with sealing washers, moly paste and loctite for installation.

XL SPORTSTER ('04 - PRESENT)

Part #3060: EXTERNAL ENGINE:

12 point bolt kit, Includes: right side cover, lifter blocks, rocker covers, front engine mount, case bolts, crank sensor, required washers, Allen head button screws for points cover and moly paste for installation.

Part #3063: PRIMARY & TRANSMISSION:

12 point stainless bolt kit, Includes: Primary cover, clutch cover, required washers and moly paste for installation.

Part #3066: CHASSIS & TRIM:

12 point bolt kit, Includes: Front caliper, front rotor, fork clamps, rear fender struts, rear rotor, rear master cylinder line bracket, rear belt guard, required washers and moly paste for installation.

* STANDARD 1 YEAR WARRANTY:

- WARRANTY COVERS MANUFACTURE DEFECTS.
- DOES NOT COVER PARTS THAT HAVE FAILED DUE TO IMPROPER INSTALLATION, MAINTENANCE, EXCESSIVE CRANKSHAFT RUNOUT, OR MISUSE.
- DOES NOT COVER ANY CONSEQUENTIAL DAMAGE RESULTING FROM A FAILURE OF A FEULING PRODUCT.

* OPTIONAL 2 YEAR WARRANTY:

- ADDITIONAL YEAR WARRANTY IS ONLY AVAILABLE IF PARTS ARE INSTALLED BY A PROFESSIONAL INSTALLER.
- THE ONLINE WARRANTY FORM MUST BE COMPLETED BY THE DEALER PRIOR TO BIKE DELIVERY.
- OIL TANK MUST BE DROPPED & CLEANED.
- CRANKSHAFT RUNOUT MUST BE BELOW 0.005"

NOTE: FOR FULL WARRANTY INFORMATION VISIT WWW.FEULINGPARTS.COM/WARRANTY