

# CYLINDER STUD & HEAD BOLT INSTRUCTIONS

FOR H-DR ENGINES





- PON'T RISK HEAD GASKET OR BASE GASKET FAILURE! THE STRONGEST STUDS & BOLTS AVAILABLE!
- SUPERIOR IN STRENGTH AND PERFORMANCE TO ANY OTHER CYLINDER STUD HEAD BOLT KIT ON THE MARKET. THIS KIT IS DESIGNED TO EXCEED THE NEEDS OF PERFORMANCE ENGINES.
- HEAT-TREATED 8740 CHROME MOLY STEEL STUDS
- PRECISION J-FORM THREADS FOR OPTIMUM ENGAGEMENT, PREVENTS GALLING AND PROMOTES MORE CONSISTENT TORQUE LOADING.
- SPECIAL ALLOYED STAINLESS STEEL HEAD BOLTS
- MANUFACTURED BY ARP® TO FEULING'S EXACT SPECIFICATIONS
- RELOMMENDED FOR ALL V-TWIN ENGINES STOCK REPLACEMENT MADE IN THE U.S.A.

Part #3000, 3001 '99 - Up Twin Cam engines Part #3025, 3026 '83 - '99 EVO engines

Part #3005 '99 - Up Twin Cam, EVO, '92-Up XL, '00-up Buell. Qty 4 @1.875", Qty 4 @ 3.175"

Part #3006 S&S Heads requiring all long head bolts. Qty. 8 @ 3.175"

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.

CAUTION

IMPROPERLY TORQUED CYLINDER STUDS AND HEAD BOLTS MAY RESULT IN CYLINDER STUD FAILURE. GASKET LEAKS AND DISTORTION OF THE CYLINDER AND OR CYLINDER HEAD.

- 1 Refer to the proper service manual for your model motorcycle engine for removal of existing studs and head bolts
- 2 Always use new head gaskets, base gaskets and O-rings
- 3 Clean and inspect case stud holes and threads
- 4 Clean and inspect new Feuling hardware
- 5 Apply the supplied Loctite® Pipe Sealant 545 to the collar side threads
- 6 Start cylinder studs in cylinder deck with the collar side down.

- 7 Thread a 3/8" 16 nut onto cylinder stud
- 8 Thread a second nut onto cylinder stud until it contacts the first
- 9 Turning the second nut installed alternately tighten each cylinder stud to 5 ft. lbs.
- 10 Following the same sequence final torque each stud to 10 ft. lbs.
- 11 Lightly coat the threads of the cylinder studs, head bolt and bottom face of the head bolts with the supplied moly assemble lubricant.
- 12 Start the head bolts onto the cylinder studs the 2 short bolts on the left side of the head and the 2 long bolts on the right side of the head.
- 13 Alternately turn each cylinder head bolt until finger tight.
- 14 Using the sequence shown in your service manual, torque the head bolts in the following steps 10 ft. lbs. 20 ft. lbs. 30 ft. lbs. and final torque to 35 ft. lbs.
- 15 Wait 10 15 minutes then recheck final torque of 35 ft. lbs. on the head bolts using the same sequence.

## PARTS LIST

PART #	DESCRIPTION	QTY.
3000-01	TWIN CAM CYLINDER STUD 3/8-16 X 6.325"	8
3000-02	HEAD BOLT (SHORT) 1.875"	4
3000-03	HEAD BOLT (LONG) 3.175"	4
3000-04	565 THREAD SEALANT .ZO OZ.	1
3000-05	MOLY ASSEMBLY LUBRICANT .5 OZ.	1
3025-01	EVO CYLINDER STUD 3/8-16 X 6.675"	8

#### 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.

### 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.