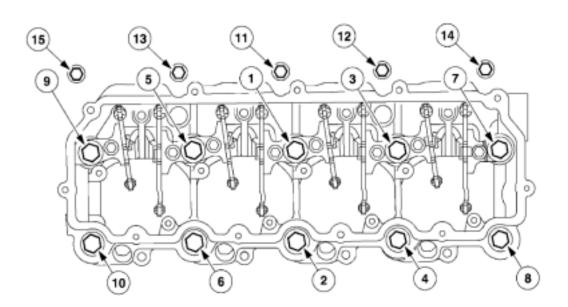


## Installation Manual v2.0: Head Bolt Studs Ford 6.0L Power Stroke

# Please read all instructions before installation.

#### **Torque Sequence**



Note: We urge you to use moly lube instead of engine oil for this installation. <u>Using moly lube will give you the most holding force and greatest reliability</u>. The torque specifications in this manual are only valid when using the moly lube. We recommend "International Compound #2" made by Detroit Diesel, part # 5198563.

If you are trying to stop coolant from purging from the overflow tank on your 6.0L Power Stroke, consider the ATS 6.0L Fire Ring kit, the ATS EGR Cooler, and ATS Cylinder Head Coolant Return Line Modification in addition to Head Studs.

#### If reusing the head gasket:

- 1. Reference the supplied diagram for head bolt removal and tightening. Find the bolt corresponding to #1 on the diagram, and remove it.
- 2. Use a bottoming tap to clean the hole and <u>remove all debris</u> from the hole. Apply a small dab of engine oil to the stud threads that will go into the engine block and install the stud into the hole by hand and verify that the chamfered shoulder of the stud bottoms out in the block. If it doesn't, re-tap the hole. Only tighten the stud finger tight.
- 3. Apply a conservative amount of <u>Moly Assembly Lube</u> to the exposed stud threads, as well as both sides of the washer, and torque to 90 ft-lb, loosen, torque to 90 ft-lb and stop.
- 4. Perform steps 1-3 for bolt #2 on the diagram. Continue in this order until the head studs labeled 1-10 on the torque sequence diagram have been torqued to 130 ft-lb. (You do not need to loosen or tighten the studs labeled 11-15 on the diagram if you are reusing the old head gasket)
- 5. Torque the studs labeled 1-10 on the diagram to 175 ft-lb in the proper sequence.

### If using a new head gasket:

- 1. Remove the existing bolts and head gasket, retain the bolts labeled 11-15 in the diagram, you will reuse these.
- 2. Use a bottoming tap to clean the bolt holes and <u>remove all debris</u> from the hole. Apply a small dab of engine oil to the stud threads that will go into the engine block and install the stud into the hole by hand to verify that the chamfered shoulder of the stud bottoms out in the block. If it doesn't, re-tap the hole. Only tighten the stud finger tight. Do this for the locations labeled 1-10 only.
- 3. Apply a conservative amount of <u>Moly Assembly Lube</u> to the exposed stud threads, as well as both sides of the washer, and torque the studs labeled 1-10 to 90 ft-lb using the proper sequence, loosen them, re-torque to 90 ft-lb in sequence, loosen them, torque them to 130 ft-lb in sequence and stop.
- 4. After studs 1-10 have been torqued to 130 ft-lb, Torque them to 175 ft-lb in the proper sequence.
- 5. Once study 1-10 are torqued to 175 ft-lb, apply a small dab of engine oil to the thready of the existing bolts for locations 11-15. Torque these in sequence to 18 ft-lb. Then torque them in sequence to 23 ft-lb.