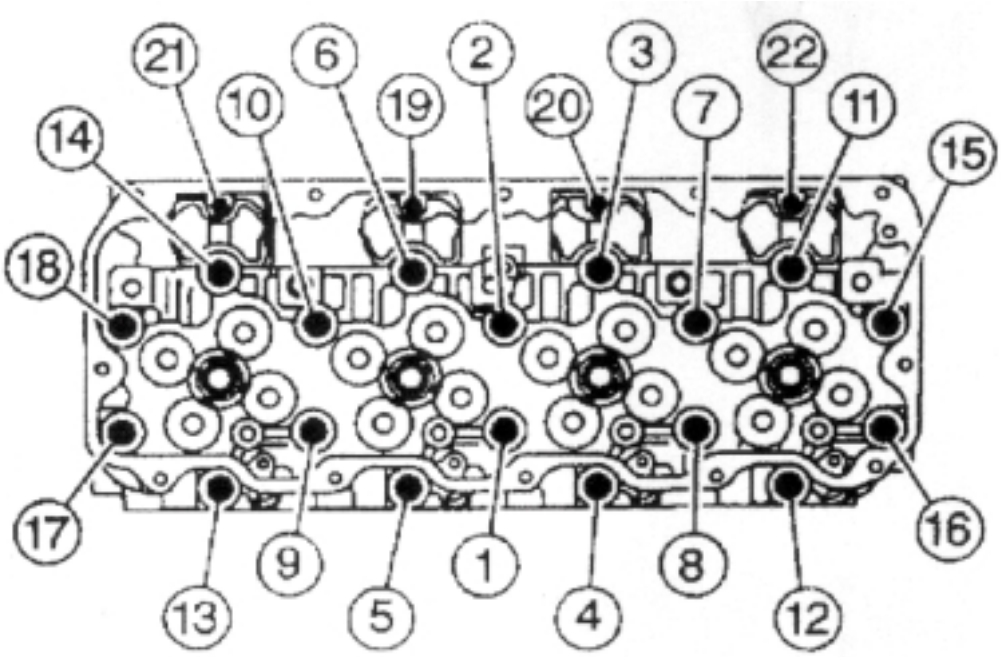
Installation Manual v1.0:
Head Bolt Studs
GM 6.6L Duramax

Please read all instructions before installation.



Note: We urge you to use moly lube instead of engine oil for this installation. Using moly lube will give you the most holding force and greatest reliability. 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.

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 *remove all debris* 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 Moly Assembly Lube to the exposed stud threads, as well as both sides of the washer, and torque to 60 ft-lb, loosen, torque to 60 ft-lb, loosen, torque to 85 ft-lb and stop.

4. Perform steps 1-3 for bolt #2 on the diagram. Continue in this order until the head studs labeled 1-18 on the torque sequence diagram have been torqued to 85 ft-lb. (You do not need to loosen or tighten the studs labeled 19-22 on the diagram if you are reusing the old head gasket)

5. Torque the studs labeled 1-18 on the diagram to 100 ft-lb in the proper sequence.

If using a new head gasket:

1. Remove the existing bolts and head gasket, retain the bolts labeled 19-22 in the diagram, you will reuse these.

2. Use a bottoming tap to clean the bolt holes and *remove all debris* 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 1-18 only.

3. Apply a conservative amount of Moly Assembly Lube to the exposed stud threads, as well as both sides of the washer, and torque the studs labeled 1-10 to 60 ft-lb using the proper sequence, loosen them, re-torque to 60 ft-lb in sequence, loosen them, torque them to 85 ft-lb in sequence and stop.

4. After studs 1-18 have been torqued to 85 ft-lb, Torque them to 100 ft-lb in the proper sequence.

5. Torque bolts 19-22 to 18 ft-lbs.