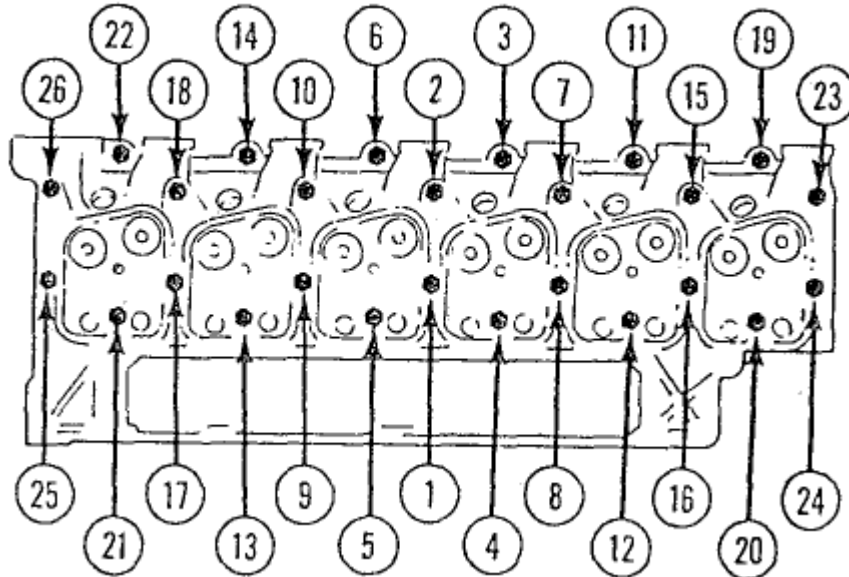




**Installation Manual v1.1:  
Head Bolt Studs  
1994-1998.5 Dodge 5.9L Cummins**

**Please read all instructions before installation.**

**Torque Sequence**



**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.**

### **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 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 **50 ft-lb, loosen**, tighten to **50 ft-lb, loosen**, torque to **75 ft-lb** and stop.
4. Perform steps 1-3 for bolt #2 on the diagram. Continue in this order until all 26 head studs have been torqued to **75 ft-lb**.
5. Torque all studs to **95 ft-lb** in the proper sequence that is shown in the diagram.
6. Retorque Procedure-
  - a. Leave valve cover off, start vehicle and let run until it reaches operating temperature.
  - b. Retorque studs to 95 ft-lb.
  - c. Check valves, re-adjust if necessary.  
INTAKE- 0.008 (on hot engine)  
EXHAUST- 0.018 (on hot engine)

### **If using a new head gasket:**

1. Remove all the existing bolts (in reverse sequence) and head gasket.
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 a 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
3. Apply a conservative amount of Moly Assembly Lube to the exposed stud threads, as well as both sides of the washer, and torque all studs to **50 ft-lb** using the proper sequence, **loosen all**, re-torque all to **50 ft-lb** in sequence, **loosen all**, torque all to **75 ft-lb** in sequence and stop.
4. After all studs have been torqued to **75 ft-lb**, torque them to **95 ft-lb** in the proper sequence.
5. Retorque Procedure-
  - a. Leave valve cover off, start vehicle and let run until it reaches operating temperature.
  - b. Retorque studs to 95 ft-lb.
  - c. Check valves, re-adjust if necessary.  
INTAKE- 0.008 (on hot engine)  
EXHAUST- 0.018 (on hot engine)