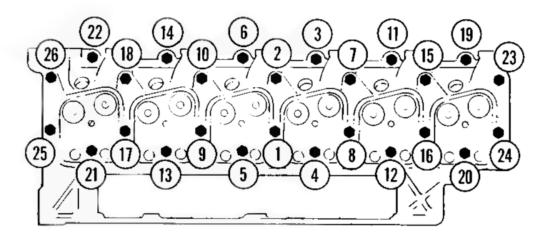
POWER DRIVEN DIESEL 12V HEAD BOLTS

Installation Instructions

Kit Contents:

- 6x Short Bolts (for locations 3, 6, 11, 14, 19, 22)
- 14x Medium Bolts (for locations 1, 2, 7, 8, 9, 10, 15, 16, 17, 18, 23, 24, 25, 26)
- 6x Long Bolts (for locations 4, 5, 12, 13, 20, 21)
- 20x Washers (for all locations EXCEPT 4, 5, 12, 13, 20, 21)
- Lube Packet



To install the bolts one at a time, on a complete engine, follow these steps:

- 1. Ensure engine is cool and there is no positive pressure in the cooling system.
- 2. Remove injection lines and valve covers.
- 3. Select correct length of new PDD head bolt and apply lubricant.
 - a. Lubricate threads and both sides of washer.
 - b. Chamfered side of washer must be in contact with the bolt head.
 - c. DO NOT use washers on rocker tower bolts (4, 5, 12, 13, 20, and 21).
- 4. Remove one factory head bolt (reference torque sequence for proper order of replacement).

- a. Clean bolt hole with brake cleaner and compressed air. Ensure threads are completely dry before installing.
- 5. Install PDD head bolt.
 - a. Torque in one step to 125 ft-lbs.
- 6. After all bolts have been replaced, torque bolts again in sequence to 125 ft-lbs.
- 7. Reinstall injection lines and valve covers.

To install the bolts during an engine build, follow these steps:

- 1. Ensure all bolt holes in block are clean.
- 2. Select correct length of new PDD head bolt and apply lubricant.
 - a. Lubricate threads and both sides of washer.
 - b. Chamfered side of washer must be in contact with the bolt head.
 - c. DO NOT use washers on rocker tower bolts (4, 5, 12, 13, 20, and 21).
- 3. Install all bolts, finger-tight.
- 4. Torque in sequence to 50 ft-lbs.
- 5. Torque in sequence to 100 ft-lbs.
- 6. Torque in sequence to 125 ft-lbs.
- 7. Retorque to 125 ft-lbs.
- 8. Any retorques to follow (such as during engine break-in) should be done at 125 ft-lbs. Always follow your engine builder's advice on retorque procedures.