

No. 2000-10

**WARRANTY INFORMATION** 

SERVICE INFORMATION

# Cylinder Head Re-Torque/Valve Adjustment On In-line Diesels

### Models

MCM/MIE D2.8L D-Tronics S/N 0L098059 and above, MCM/MIE D3.6L S/N 0L098671 and above, MCM/MIE D4.2L S/N 0L099756 and above, MCM/MIE D4.2LD S/N 0L344381 and above and MCM/MIE D4.2L D-Tronics S/N 0L098232

#### Situation

These engines now use a cylinder head gasket, which no longer requires the initial 100 hour re-torque. The engines now also use hydraulic lifters so valve adjustment is not required. If a replacement cylinder head gasket is required for service of the above listed engines, refer to Parts Bulletin 2000-1, use torque procedure following.

## **Torque Procedure**



D2.8L D-Tronic (4 Cylinder)



## D4.2L D-Tronic (6 Cylinder)

- a Central Screw Set
- **b** External Screw Set
- 1. Tighten the central screw set as indicated.
  - a. First pass:

Engine	Sequence	Torque
4-Cyl. Central Screws	3-2-1-4-5-8-9-10-7-6	22 lb-ft (30 Nm)
6-Cyl. Central Screws	11-12-13-14-10-9-8-4-3-2-1-5-6-7	22 lb-ft (30 Nm)

b. Second pass:

Engine	Sequence	Torque Angle
4-Cyl. Central Screws	3-2-1-4-5-8-9-10-7-6	+ 65°
6-Cyl. Central Screws	11-12-13-14-10-9-8-4-3-2-1-5-6-7	+ 65°

c. Third pass:

Engine	Sequence	Torque Angle
4-Cyl. Central Screws	3-2-1-4-5-8-9-10-7-6	+ 65°
6-Cyl. Central Screws	11-12-13-14-10-9-8-4-3-2-1-5-6-7	+ 65°

- 2. Tighten the external screw set as indicated.
  - a. First pass:

Engine	Sequence	Torque
4-Cyl. External Screws	11-12-13-14-15-16-17-18	22 lb-ft (30 Nm)
6-Cyl. External Screws	15-16-17-18-19-20-21-22-23-24-25-26	22 lb-ft (30 Nm)

b. Second pass:

Engine	Sequence	Torque Angle
4-Cyl. External Screws	11-12-13-14-15-16-17-18	+ 85°
6-Cyl. External Screws	15-16-17-18-19-20-21-22-23-24-25-26	+ 85°

- 3. Operate engine at idle until water temperature reaches 158° F (70° C). Then operate engine at 2000 rpm for approximately 20-30 minutes at normal operating temperature. Let the engine cool down completely (inoperative overnight, if possible).
- 4. After Step 3. and when engine is cold:
  - a. One at a time loosen each central screw and tighten as indicated.
    - (1.) First pass:

Engine	Sequence	Torque
4-Cyl. Central Screws	3-2-1-4-5-8-9-10-7-6	22 lb-ft (30 Nm)
6-Cyl. Central Screws	11-12-13-14-10-9-8-4-3-2-1-5-6-7	22 lb-ft (30 Nm)

(2.) Second pass:

Engine	Sequence	Torque Angle
4-Cyl. Central Screws	3-2-1-4-5-8-9-10-7-6	+ 120°
6-Cyl. Central Screws	11-12-13-14-10-9-8-4-3-2-1-5-6-7	+ 120°

b. Without loosening, tighten each external screw as indicated.

Engine	Sequence	Torque
4-Cyl. External Screws	11-12-13-14-15-16-17-18	66 lb-ft (90 Nm)
6-Cyl. External Screws	15-16-17-18-19-20-21-22-23-24-25-26	66 lb-ft (90 Nm)