

Engine Specifications

Model: 1998 MCM/MIE D-Tronic D4.2L

Engine

Propshaft Power	225 (168)
Displacement	254 cid (4.2L)
Engine Type	In-line 6 D-Tronic
Bore x Stroke	3.700 x 3.937 (94 mm x 100 mm)
Compression Ratio	16.5:1
Compression Pressures	435-464 PSI 30 - 32 bar (2950-3150 kPa)
Max. Press. Difference (Between Cylinders)	72 PSI (500 kPa)
Oil Pressure @ Idle RPM	22-45 PSI 1.5 - 3.1 bar (152-310 kPa)
Oil Pressure @ 3800 RPM	50-80 PSI 3.5 - 5.6 bar (345-556 kPa)
Valve Adjustment/Lifter	Hydraulic (non-adjustable)
Thermostat (Oil)	203°F (95°C)
Thermostats (Coolant)	1 at 160°F (70°C) 1 at 180°F (82°C)
Firing Order	1-5-3-6-2-4
Boost Pressure (Max. RPM)	16-18 PSI

Electrical

Electrical System	12v Negative (-) Ground
Alternator	949W, 14.6V, 65 Amp. (Mando)
Battery Required	750 cca, 950 mca, or 180 Ah
Starter	12v, 2.7 kW

Fuel

Fuel Required	Diesel #2 (ASTM Standards D975) or (DIN 51601) Min. Cetane Rating 45
Fuel Pressure/Lift Pump	2-5 PSI (14-34 kPa) (@2500 RPM, No Load)
Fuel Pressure/Injector	3915 PSI (27,000 kPa) (Opening Pressure)

RPM

Idle RPM	750 RPM
Full Throttle RPM	3800 RPM
Max. Governed RPM (No Load)	4200 ± 50

Capacities

Oil Change w/Filter	11-3/4 U.S. Quarts (11 L) (Approximate)
Closed Cooling System	13-3/4 U.S. Quarts (13 L) (Approximate)

Torques

Turbocharger Mt. Bolts	18 Lb. Ft. (24 N·m)
Exhaust Manifold	24 Lb. Ft. (32 N·m)
Cylinder Head (After 100hrs) (14mm bolts) 15 angle	
Cylinder Head (After 100hrs) (12mm bolts) 15 angle	
Flywheel	81 Lb. Ft. (110 N·m)
Engine Coupler	22 Lb. Ft. (30 N·m)
Intercooler	24 Lb. Ft. (32 N·m)
Fuel Injector	18 Lb. Ft. (24 N·m)

Model: 1998 MCM/MIE D-Tronic D2.8L

Engine

Propshaft Power	150 (112)
Displacement	169 cid (2.8L)
Engine Type	In-line 4 cyl.
Bore x Stroke	3.700 x 3.937 (94 mm x 100 mm)
Compression Ratio	16.5:1
Compression Pressure	435-464 PSI 30 - 32 bar (2950-3150 kPa)
Max. Press. Difference (Between Cylinders)	72 PSI (500 kPa)
Oil Pressure @ Idle RPM	22-45 PSI 1.5 - 3.1 bar (152-310 kPa)
Oil Pressure @ 3800 RPM	50-80 PSI 3.5 - 5.6 bar (345-556 kPa)
Valve adjustment/Lifter	Hydraulic (non-adjustable)
Thermostat (Oil)	203°F (95°C)
Thermostats (Coolant)	1 at 160°F (70°C) 1 at 180°F (82°C)
Firing Order	1-3-4-2
Boost Press. @ Max. RPM	15-17 PSI

Electrical

Electrical System	12v Negative (-) Ground
Alternator	949W, 14.6v, 65 Amp. (Mando)
Battery	750 cca, 950 mca, 180Ah
Starter	12v, 2.7 kW

Fuel

Fuel Required	Diesel #2 (ASTM Standards D975)(DIN 51601) Min. Cetane Rating 45
Fuel Pressure/Lift Pump	2-5 PSI (14-34 kPa)(@2500 RPM, No Load)
Fuel Pressure/Injector	3915 PSI (27,000 kPa) (Opening Pressure)

RPM

Idle RPM	750 RPM
Full Throttle RPM	3800 RPM
Max. Governed RPM (No Load)	4200 ± 50 RPM

Capacities

Oil Change w/Filter	7.5 U.S. Quarts (9 L) (Approximate)
Closed Cooling System	11-2/3 U.S. Quarts (11 L) (Approximate)

Torques

Turbocharger Mt. Bolts	18 Lb. Ft. (24 N·m)
Exhaust Manifold	24 Lb. Ft. (32 N·m)
Cylinder Heads (After 100hrs) (14mm bolts) 15° angle	
Cylinder Heads (After 100hrs) (12mm bolts) 15° angle	
Flywheel	81 Lb. Ft. (110 N·m)
Engine Coupler	22 Lb. Ft. (30 N·m)
Intercooler	24 Lb. Ft. (32 N·m)
Fuel Injector	18 Lb. Ft. (24 N·m)