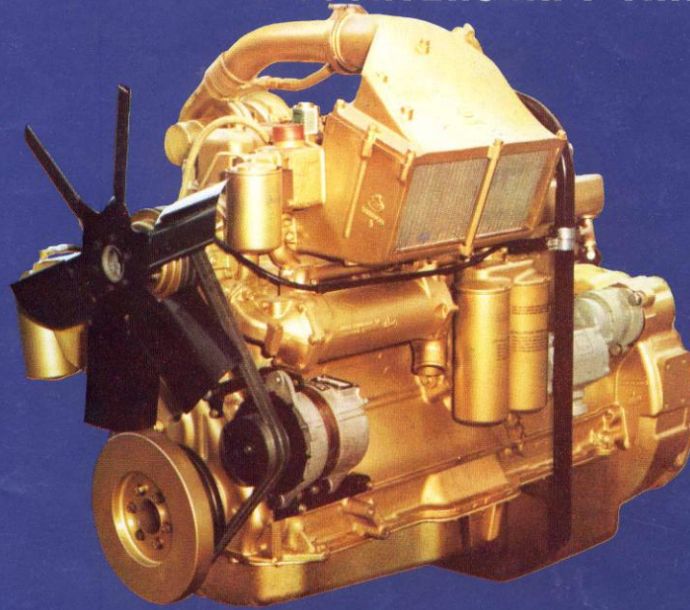




MAXIDYNE 300

**FIRST WITH AIR-TO-AIR INTERCOOLER
HIGHEST POWER WEIGHT RATIO,
TEAMED WITH MAXITORQUE
3-COUNTERSHAFT TRANSMISSIONS**

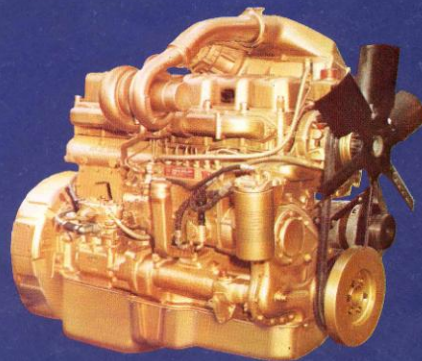


Mack's Maxidyne 300 Series Engine ENDTB 676

EXTENDED SERVICE INTERNAL ENGINE features an intercooler to reduce the engine intake temperatures allowing for introduction of a greater mass of cooler air to the combustion chamber and thus permitting a proportionate increase in fuel flow.

A new, higher capacity engine turbocharger is matched to the engine to first provide more air for the engine and also provide a source of air to drive a tip turbine fan which blows air across the efficient air-to-air intercooler. This, in turn, substantially cools the engine intake air providing the greater mass flow into the engine.

A separate air filter is included to protect the tip turbine fan and the exclusive plate-fin type cross flow air-to-air Garrett intercooler.



DETAIL SPECIFICATIONS:

MACK ENDTB 676 ENGINE (ESI)

MAXIDYNE 300:

Type Turbocharged open chamber, **air-to-air intercooled**
 Cylinder arrangement Six in line
 Bore & Stroke 123.8 x 152 mm (4.875" x 6")
 Piston Displacement 11.01 litres (672 cu. ins.)
 Compression Ratio 14.9:1
 A.M.A./R.A.C. Horsepower 57.03
 Power, @ 1200 r.p.m. 184 kW (247 h.p.)
 @ 1800 r.p.m. 212 kW (285 h.p.)
 @ 2100 r.p.m. (Govd.) 211 kW (283 h.p.)
 Maximum Torque @ 1200 r.p.m. 1468 Nm (1080 lbs/ft)

FLYWHEEL HOUSING: Std. SAE No. 1 — Malleable Iron

CYLINDER BLOCK:
 Cylinder Block Alloy cast iron
 Cylinder Liners Centrifugally cast alloy iron
 Type Dry, replaceable

CYLINDER HEADS:

Cylinder Head Material Alloy cast iron, two per engine
 Cylinder Head Gasket Combination Seal Keyed, steel fire ring
 Gasket Body Compressible material with steel centre

PISTONS & RINGS:

Pistons, Material Aluminium Alloy with Top Ring Groove Insert
 Type Two-piece
 Cooling Continuous Oil Jet Spray

PISTON RINGS:

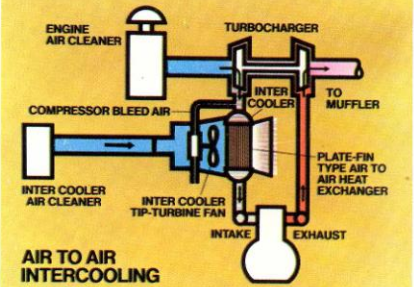
Compression Number Two
 Type Wedge, Chromium Plated
 Oil Control Number: One
 Type Spring Loaded, Double Rail, Chromium Plated
 Piston Pins, Type Full Floating
 Diameter 50.8 mm (2")
 Retention Retaining Rings
 Lubrication Full Pressure, Through Rifle Drilled Holes in Connecting Rods

CONNECTING RODS & BEARINGS:

Type Drop Forged I-Beam Steel with Tapered Rod at Piston Pin End
 Cap Angle 35°
 Length, Centre to Centre 271 mm (10.81")
 Bearing Type Precision, Steel Backed Insert

CRANKSHAFT AND BEARINGS:

Type Integral Counterweights
 Material Drop Forged Medium Carbon Steel, Elotherm Hardened Journals and Fillets
 Bearings, Type Precision, Steel Backed Insert
 Number & Diameter Seven, 102 mm (4")
 Total Length 273 mm (10.75")
 Vibration Damper Viscous



AIR TO AIR INTERCOOLING

CAMSHAFT:

Camshaft, Material Carbon Steel, Carborise Hardened Journals & Fillets
 Bearings, Number Seven
 Timing Drive Forged Steel, Case Hardened Spur Gears

STANDARD: MACK Dynatard Engine Brake.

VALVES:

Two per cylinder In Cylinder Head
 Valve Inserts Cast Nickel Base Alloy Pressed in Cylinder Heads

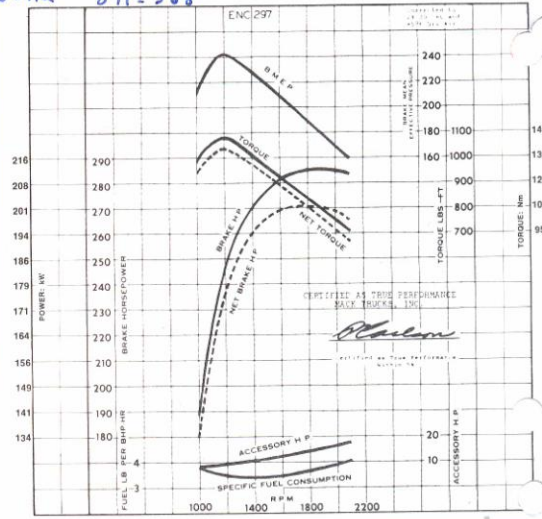
INLET VALVES:

Type 30° Seat, Poppet, With Positive Rotators
 Material Hard Faced Chromium-Silicon Steel Head (Chromium Plated Stem)
 Lift 14.22 mm (.56")

SAE DIESEL ENGINE TEST CODE

Eng. Mfr. MACK, Model ENDTB 676, Serial No. _____, Date _____
 No. Cyl. 6, Bore 4.875", Stroke 6.00", Displacement 672 CU. IN.
 Test No. _____

67112
 871=568



EXHAUST VALVES:

Type 30° Seat, Poppet, With Positive Rotators
 Material Nickel Base Super Alloy, Solution Treated Heads (Chromium-Nickel Steel Stem)
 Lift 14.22 mm (.56")
 Valve Lifters: Type Mushroom Durafaced (Tungsten Carbide)

FUEL SYSTEM:

Fuel Injection Pump, Make American Bosch, APE6-BB
 Type Multiple Plunger, Flange Mounted, Automatic Retard, Cold Starting Feature and Puff Limiter
 Transfer Pump, Type Plunger
 Nozzles, Type Five-hole Spray
 Fuel Filters E.S.I. System, Primary & Secondary Spin-on Disposable Type
 Governor, Make American Bosch or Robert Bosch
 Type Mechanical

TURBOCHARGER:

Type Exhaust Gas Driven, Radial Flow
 Lubrication & Cooling Pressurised Engine

INTERCOOLER:

Heat Exchanger Air to Air Plate Type
 Cooling Air Supply Charge Air Driven Tip Turbine Fan

AIR COMPRESSOR:

Type Flange Mounted, Gear Driven, Tu-Flo 50,
 Engine Oil Lubricated, 340 070 cm³ (approx. 12 cu. ft)

COOLING SYSTEM:

Water Pump Type Centrifugal-Rotor
 Drive (Water Pump & Fan) V-Belts
 Thermostat, Std. 67.6°C (155°F), Opening
 Coolant Conditioner E.S.I. System, Spin-on Disposable

LUBRICATING SYSTEM:

Type Full Pressure — Wet Sump
 Oil Filters, Type E.S.I. System, Dual Spin-on, Full Flow, Disposable

Oil Capacity:

Filters (2) 2.27 litres each (2 Qts.)
 Oil Pan 26.43 litres (5.8 galls.)
 System Total (Incl. Oil Cooler) 31 litres (6.8 galls.)
 Oil, Cooler, Type Shell with Removable Tube Bundle

WEIGHT, DRY

With Std. Accessories (Incl. Clutch but less Alternator and Starting Motor) 982.9 kg (2165 lbs.)