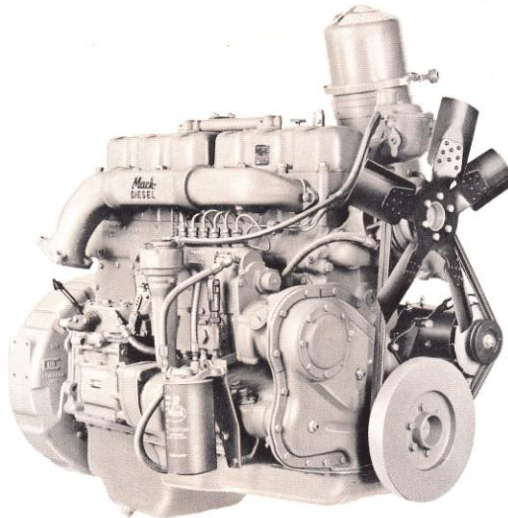


**Mack**  
engine

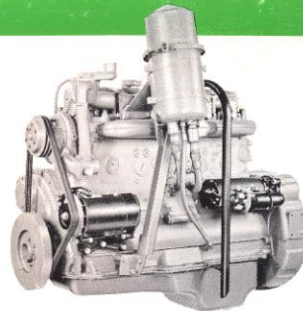
**END 673E**  
**ENDL 673E**  
diesel



Specifications subject to change without notice. Illustrations are not necessarily a representation of standard specifications.

**THERMODYNE DIESEL:**

Make .....	Mack
Type .....	Naturally aspirated
Number of cylinders .....	Six
Bore and stroke .....	4 $\frac{1}{8}$ " x 6"
A.M.A. horsepower .....	57.0
Brake horsepower @ 2100 rpm (gov.) .....	180
Piston displacement .....	672 cubic inches
Compression ratio .....	16.11:1
Max. torque @ 1400 rpm .....	501



The Mack END 673E is a naturally aspirated, four cycle, open chamber, overhead valve designed engine. Uniform cooling is achieved through directed water flow. Fully counter-balanced, induction case-hardened crankshaft with cool running hollow crank pins and a viscous type vibration damper are used.

Connecting rods are angle-split for easy removal through cylinder bore and are rifle bored

to lubricate piston pins. Cylinder sleeves are of the dry type and the valve lifters are Carboly faced.

Lubrication is by the full-pressure wet-sump system. The injection tuning is automatically controlled at all speeds. The addition of a synchrovanse contributes to smooth, flexible operation.

**MACK TRUCKS, INC.** Allentown, Pa. *The Truck Capital of the World*



# ENGINE/END 673E & ENDL 673E

## DETAIL SPECIFICATIONS

### CYLINDER BLOCK:

Construction	Chromium-nickel-copper alloy iron
Cylinder liners	Special alloy iron
Type	Dry
Cylinder heads cast in	Threes

### PISTONS:

Pistons, material	Aluminum alloy, with insert for top ring groove
Piston rings, compression	Three
Oil control	One
Wristpin, type	Full floating
Diameter	1 7/8"
Retention	Snap rings

### CONNECTING RODS:

Type	Drop forged, I-beam
Cap angle	35°
Length, center to center	10 11/16"
Bearings material	Copper-lead, steel back, babbitt overlay
Crankpins, dia. & length	3" x 1 15/16"

### CRANKSHAFT:

Type	Integral counterweights
Material	Drop forged, medium carbon steel, induction hardened journals and pins
Weight	242.5 lbs.
Vibration damper	Viscous type
Main bearings, material	Copper-lead, steel back, babbitt overlay
Number and diameter	Seven, 4"
Total length	10 3/4"

### CAMSHAFT:

Bearings	Seven
Timing drive	Drop forged, medium carbon hobbed, shaved mor-tempered and honed gears

### VALVES:

Valve-lifter, type	Mushroom Durafaced (Tungsten carbide)
Inlet and exhaust valve seats	Perma fit inserts of cobalt or nickel base alloy cast material
Valves, location	Overhead
Exhaust	Hardfaced with positive type rotators
Clear dia. of ports, inlet	2 3/4"
Exhaust	1 11/16"
Lift, inlet & exhaust	.56"
Material, inlet	Chrome-silicon steel, stellite faced (Chrome plate stem)
Exhaust	Stellite faced; head and upper end of stem, chromium-nickel-nitrogen-austenitic steel; solution heat treated; lower end of stem, nickel-chromium-molybdenum steel

### FIRING ORDER:

1-5-3-6-2-4

### FUEL SYSTEM:

Fuel injection pump	American Bosch, APE
Type	Multiple unit
Drive	Gear
Timing	Synchrovanse, variable automatic
Transfer pump, type	Plunger
Nozzles, type	Four-hole spray
Fuel filters	Screw-on, throw-away
Governor, make	American Bosch
Type	Mechanical

### MANIFOLDS:

Inlet	1 piece, 6 port, drawn steel
Exhaust	3 piece, 6 port

### AIR SUPPLY:

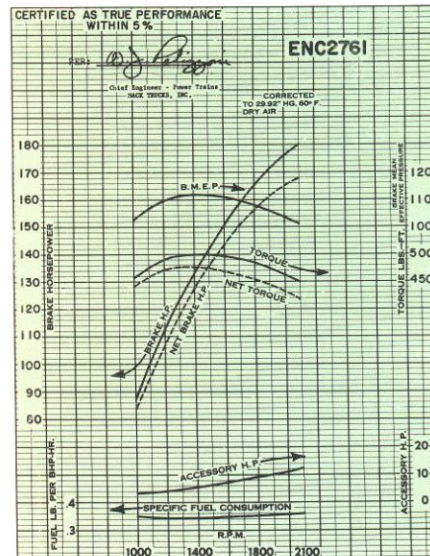
Air cleaner	Donaldson, oil bath
Air compressor (gear driven)	Tu-Flo 500 (12 cu. ft.)

### COOLING SYSTEM:

Thermostat, opening temp.	170°
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### LUBRICATING SYSTEM:

Lubrication, oil filter:	
Make and model	WGB, WB-5G-M
Type	Combination full flow/by pass
Capacity	12 quarts
Oil capacity, including filters	31 quarts



\*Engine Model ENDL 673E is the same as Model END 673E except for having the flywheel housing of aluminum instead of iron.