

MACK

ENGINE MP7 US07

FEATURES

- High Torque MAXICRUISE™ Diesel Engine
- Cooled Exhaust Gas Recirculation (CEGR)
- Maximum Horsepower 365 BHP [272 kW]
- Electronic Unit Pump Fuel Injection with Rate Shaping
- V-MAC IV Total Vehicle Electronics System
- Wide Operating Range 1200-1950 RPM
- Chassis Mounted Charge Air Cooled
- Variable Geometry Turbocharger
- Extended Service Intervals
- MACK PowerLeash Engine Brake

SPECIFICATIONS

Peak HP (kW) @ RPM 365 [272] @ 1500-1700
 HP [kW] @ Governed RPM 340 [254] @ 1950
 Max. Torque lb. ft. [N•m] @ RPM 1,460 [1 978] @ 1200
 Type Direct Injection Diesel
 Number of Cylinders 6, In-Line
 Bore & Stroke, in. [mm] 4.84 x 5.98 [123 x 152]
 Displacement, in.³ [L] 659 [11]
 Compression Ratio 16:1
 Firing Order 1-5-3-6-2-4
 Torque Rise 60%
 Clutch Engagement 720 lb. ft. [976 N•m] @ 800 RPM
 Idle Speeds:
 Low Adjustable; 650 RPM
 High Adjustable; 2100 RPM
 Engine Brake Retarding Power (If Applicable)
 420 HP [313 kW] @ 2100 RPM
 Weight, Dry: (Approx.) 2,270 lbs. [1 030 kg]
 (With air compressor, but no oil, water, starter, fan, alternator, or clutch)

V-MAC IV® FUNCTIONS

4th Generation Vehicle Management And Control System

V-MAC IV PRODUCTIVITY FEATURES:

- PTO (4) and Electronic Hand Throttle Control
- Engine "Smart Fan Control"
- Integrated Sleeper Low Voltage Disconnect †
- "Smart Idle" Speed Regulator
- GuardDog Routine Maintenance Monitoring †

V-MAC IV DRIVER CONVENIENCE FEATURES:

- Full Featured Cruise Control
- Cruise and Brake Engine Brake Control
- Programmable Engine Governor Type
- Idle Cooldown
- Daytime Running Light (DRL) Override †

V-MAC IV FUEL ECONOMY FEATURES:

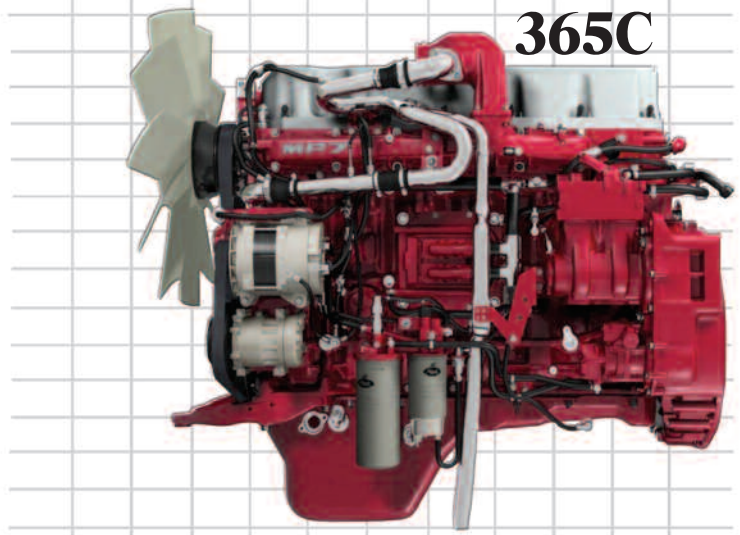
- Vehicle Speed Limiting
- Engine "Sweet Spot Indicator"
- Fuel Economy Incentive Program
- Idle Shutdown
- Integrated Temp-A-Start †

V-MAC IV RELIABILITY FEATURES:

- Engine Protection
- Starter Protection
- Differential Lock Auto Control

V-MAC IV FLEET MANAGEMENT FEATURES:

- DataMax Comprehensive On-Board Data Logger
- InfoMax PC Fleet Management Software



V-MAC IV SAFETY AND SECURITY FEATURES:

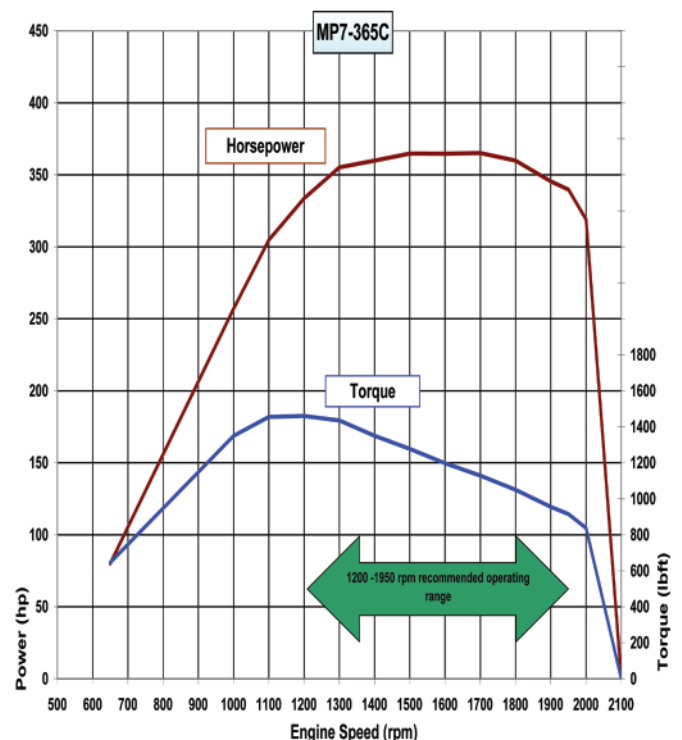
- Speed Sensor Tamper Resistance
- Theft Deterrence
- 5th Wheel Slide Unlocked Vehicle Speed Limiting
- Air Suspension Deflated Vehicle Speed Limiting

V-MAC IV SERVICEABILITY FEATURES:

- SAE J1587 and J1939 Diagnostic Port
- Electronic Fault Logging with Fault Reporter
- VCADS PC Based Service Software

† Denotes an available option.

ENGINE PERFORMANCE



ENGINE SPECIFICATIONS

Flywheel Housing	Die cast Aluminum
Cylinder Block:	
Material	Alloyed Grey Cast Iron
	Ladder Frame Reinforcement
Cylinder Liners:	
Type	Full Wet Design
Surface Finish	Plateau Honed
Cylinder Head Assembly:	
Type	Grey Cast Iron Slab Head With
	Intermediate Deck
	Single Overhead Cam
Configuration	4 Valves/Cyl., OHV
Valve Type	Poppet
Valve/Insert Material	Super Alloy (Serviceable)
Pistons & Rings:	
Piston Type	Monotherm™ Single Piece Steel
	w/Closed Cooling Gallery
Pin Diameter	2.125" [54 mm]
Rings	2 Compression, 1 Oil Control
Crankshaft:	
Material	Forged, Carbon Steel
Heat Treatment	Induction-Hardened Journals/Fillet
Main Bearing Diameter	4.5" [114 mm]
Charge Air Cooling	Chassis Mounted, Air-To-Air
Fuel System	Delphi E3 Electronic Unit Injectors
	w/2 Solenoid Valve Technology and Rate Shaping
Fuel Supply Pump	ZF Meritor
Filter	Spin On, Disposable
Lubrication System:	
Type	Full Pressure, Wet Sump
Oil Filters	2 Spin-On Full Flow Disposable,
	Single Bypass Disposable
Oil Cooler	Stainless Steel Plate
Total Oil Capacity	36 qts. (Incl's. Filters)
Drain Plug	Magnetic
Cooling System:	
Capacity	17 qts. [16 L]
Thermostats	180°F [82°C]
Hose Material	Silicone
Air Compressor:	
Type	Meritor WABCO
Standard Capacity	18.7 cfm [8.9L/s]
Turbocharger	Holset, Sliding Nozzle Ring Variable
	Geometry w/Water Cooled Actuator and Bearings
	and Electronic Controls
Accessory Belt	Poly-V w/Automatic Tensioners
EGR System	
Single EGR Valve Assembly	Modulated Cast Stainless Steel
EGR Cooler	Stainless Steel Tube
	and Insert Gas to Coolant

OIL/FILTER SERVICE INTERVALS

Refer to the latest version of Mack Maintenance & Lubrication Manual TS494.

OPTIONAL EQUIPMENT**

- High Capacity Air Compressor
- 120 and 240 Volt Engine Block Heaters
- High Capacity Alternator

** Availability may be chassis model dependent.

GEARING RECOMMENDATIONS

Proper gearing is necessary to achieve optimum vehicle performance and fuel economy. Vehicle specifications, including engine, transmission, axle ratio, and tire selection, should generally be selected to meet the following criteria:

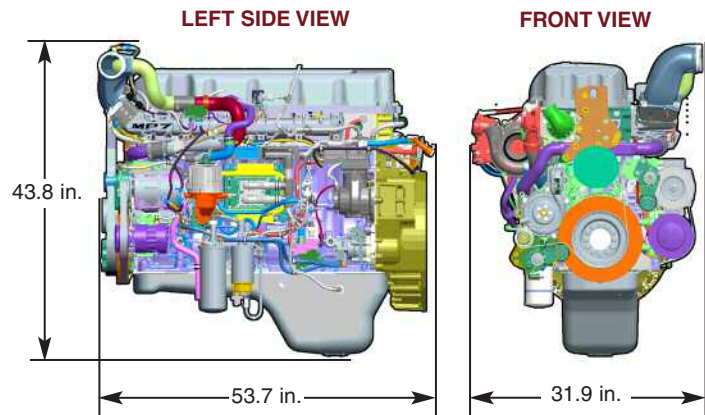
Startability	Highway Applications	≥ 10%
	On-Off Highway Applications	≥ 16%
Gradeability	@ Cruise Max. MPH	≥ 0.5%
	@ Peak Torque, Top Gear	≥ 1.5%
Cruise RPM		1500 ±50 RPM*

*Cruise RPM = Engine speed in top gear @ Cruise Max. MPH setting. Limited to 65 MPH. At higher speeds gear truck to obtain above RPM @ 65 MPH.

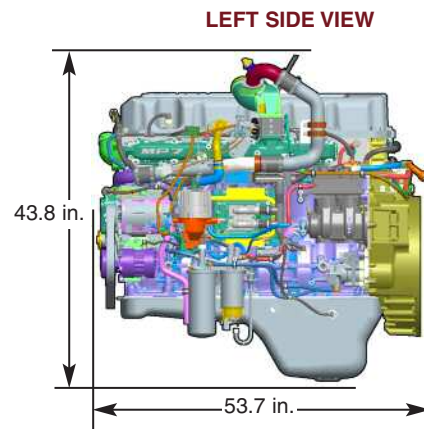
Refer to the MACKTRAQ® electronic sales tool to obtain startability, gradeability and cruise RPM results for specific vehicle specifications. Special service applications, road surfaces, high GCW's or other factors may require different gearing considerations.

DIMENSIONS

Conventional Chassis (CHU, CXU, GU7 AND GU8 MODELS)



LCF Chassis (MRU AND LEU MODELS)



The information in this brochure was accurate as of the day of publication. Mack Trucks, Inc. reserves the right to make changes in specifications, equipment or design, or to discontinue models or options without notice at any time.