



FEATURES

- High Torque MAXICRUISE™ Diesel Engine
- Cooled Exhaust Gas Recirculation (CEGR)
- Maximum Horsepower 395 BHP [295 kW]
- · Electronic Unit Fuel Injection with Rate Shaping
- V-MAC IV Total Vehicle Electronics System
- Wide Operating Range 1100-1950 RPM
- · Chassis Mounted Charge Air Cooled
- Variable Geometry Turbocharger
- · Extended Service Intervals
- MACK PowerLeash Engine Brake

SPECIFICATIONS

Peak HP (kW) @ RPM	395 [294] @ 1500-1700
HP [kW] @ Governed RPM	
Max. Torque lb. ft. [N•m] @ RPM	1,560 [2114] @ 1100-1300
Type	Direct Injection Diesel
Number of Cylinders	6, In-Line
Bore & Stroke, in. [mm]	
Displacement, in. ³ [L]	659 [11]
Compression Ratio	16:1
Firing Order	
Torque Rise	
Clutch Engagement	0 lb. ft. [1519 N•m] @ 800 RPM
Idle Speeds:	
Low	Adjustable; 600 RPM
High	1950 RPM
Engine Brake Retarding Power (If Appli	
	20 HP [313 kW] @ 2100 RPM
Weight, Dry: (Approx.)	2,286 lbs. [1 037 kg]
Greenhouse Gas 2014 Certified, OBD 2013	3 Certified

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

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



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.

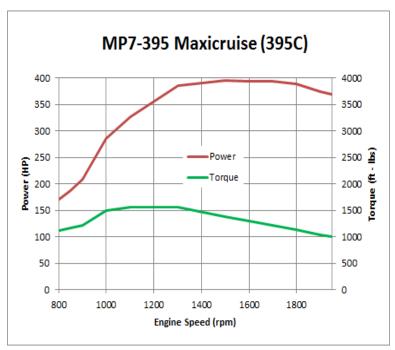
ENGINE PERFORMANCE

MaxiCruise - Highway

To fully optimize Mack ClearTech engine fuel economy performance, all MaxiCruise engines in a highway type operation should operate at 1400 RPM +/- 50; providing you have enough HP at Cruise RPM to maintain >1.5% gradability in top gear. For the real FE seekers 1325 RPM +/- 25; same conditions as previous apply.

MaxiCruise - Vocational

In Vocational duty cycle type chassis with MaxiCruise, startability must also be considered when determining an optimized engine cruise RPM.



ENGINE SPECIFICATIONS

Flywheel Housing
Material Alloyed Grey Cast Iron Ladder Frame Reinforcement
Cylinder Liners: Type
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
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:
TypeFull Pressure, Wet Sump
Oil Filters 2 Spin-On Full Flow Disposable, Single Bypass Disposable
Oil Cooler
Drain Plug Magnetic
Cooling System: Capacity
Thermostats
Hose Material Silicone
Air Compressor: Type Meritor WABCO
Standard Capacity
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
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

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:

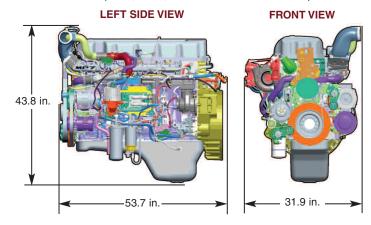
Startability	Highway Applications $ \ge 10\%$ On-Off Highway Applications $ \ge 16\%$	
Gradeability	@ Cruise Max. MPH ≥ 0.5%@ Peak Torque, Top Gear ≥ 1.5%	

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)

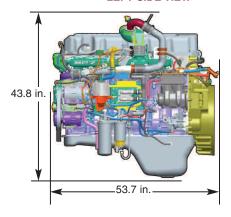
Conventional Chassis

(CHU, CXU, GU7 AND GU8 MODELS)



LCF Chassis (MRU AND LEU MODELS)

LEFT SIDE VIEW





^{**} Availability may be chassis model dependent.