



FEATURES

- High Torque MAXICRUISE™ Diesel Engine
- Cooled Exhaust Gas Recirculation (CEGR)
- Maximum Horsepower 365 BHP [272 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
HP [kW] @ Governed RPM
Max. Torque lb. ft. [N•m] @ RPM 1,460 [1979] @ 1100-1300
Type Direct Injection Diesel
Number of Cylinders
Bore & Stroke, in. [mm] 4.84 x 5.98 [123 x 152]
Displacement, in. ³ [L]
Compression Ratio
Firing Order1-5-3-6-2-4
Torque Rise
Clutch Engagement
Idle Speeds:
Low
High
Engine Brake Retarding Power (If Applicable)
420 HP [313 kW] @ 2100 RPM
Weight, Dry: (Approx.) 2,286 lbs. [1 037 kg]
Greenhouse Gas 2014 Certified, OBD 2013 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.

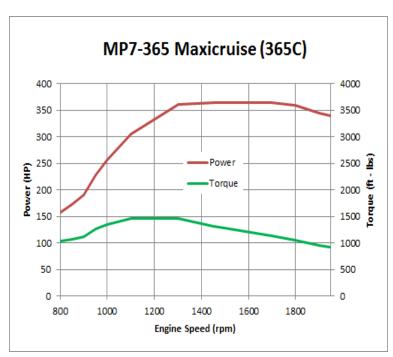
ENGINE PERFORMANCE

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

Electrical Hermiter	Dia and Alemaine
Cylinder Block:	Die cast Aluminum
	Alloyed Grey Cast Iron
Material I	Ladder Frame Reinforcement
Cylinder Liners:	
	Full Wet Design
	Plateau Honed
Cylinder Head Assembly: Type Grey Cast Iron Slab	Llood With
Type Grey Cast Iron Slab	Intermediate Deck
	Single Overhead Cam
Configuration	4 Valves/Cyl., OHV
Valve Type	Poppet
	Super Alloy (Serviceable)
Pistons & Rings:	Maratha wa TM Circula Dia a Otal
Piston Type	Monotherm™ Single Piece Steel w/Closed Cooling Gallery
Pin Diameter	2.125" [54 mm]
	2 Compression, 1 Oil Control
Crankshaft:	,
	Forged, Carbon Steel
Heat Treatment I	nduction-Hardened Journals/Fillet
	4.5" [114 mm] Chassis Mounted, Air-To-Air
	elphi E3 Electronic Unit Injectors
w/2 Solenoid Valv	e Technology and Rate Shaping
	ZF Meritor
	Spin On, Disposable
Lubrication System:	
TypeFull Pressure, Wet Su	ımp
Oli Filters	2 Spin-On Full Flow Disposable, Single Bypass Disposable
Oil Cooler	Stainless Steel Plate
	Magnetić
Cooling System:	
	17 qts. [16 L]
Air Compressor:	Silicorie
Type Meritor WABCO	
	18.7 cfm [8.9L/s]
Turbocharger Hols	set, Sliding Nozzle Ring Variable
Geometry w/Wate	er Cooled Actuator and Bearings
Accessory Dolt	and Electronic Controls
EGR System	. Poly-V w/Automatic Tensioners
	Modulated Cast Stainless Steel
	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

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 $\dots \ge 0.5\%$ @ Peak Torque, Top Gear $\dots \ge 1.5\%$
Cruise RPM	1450 ±50 RPM*

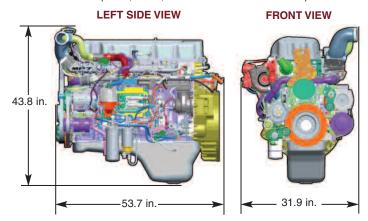
^{*}Cruise RPM = Engine speed in top gear @ Desired Cruise Speed Limited to 65 MPH. At higher speeds gear truck to obtain above RPM @ 65 MPH.

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)

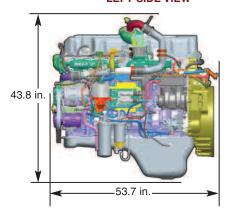
Conventional Chassis

(CHU, CXU, GU7 AND GU8 MODELS)



LCF Chassis (MRU AND LEU MODELS)

LEFT SIDE VIEW





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