

DETROIT™ DD16

TECHNICAL SPECIFICATIONS

EFFICIENCY AND PERFORMANCE. THAT'S WHAT DETROIT ENGINES DELIVER. OPTIMISED FOR YOUR BOTTOM LINE, DETROIT ENGINES ARE DESIGNED FOR MAXIMUM PRODUCTIVITY.

Detroit offers a big-bore workhorse with up to 600 horsepower and 2050 lb-ft of torque, delivering dependable power and performance. Beyond performance, Detroit engineers have been able to meet GHG17 requirements whilst improving fuel economy.

PERFORMANCE

- The 2nd generation amplified common rail system™ fuel system, with higher injector pressure, improves performance and fuel economy:
 - Precise fuel delivery for extremely quiet, smooth combustion and to meet stringent emissions-control requirements
 - Variable injection patterns for optimal fuel economy across all modes of engine operation
 - Final high-pressure amplification is isolated in the injector, not in the rail or fuel lines, which results in less stress on components
- Exceptional torque response leads to superior launch feel and acceleration
- Outstanding gradeability:
 - Flattens steep grades and mountain roads with greater speeds and pulling power
- Turbo-compounding system recovers normally wasted exhaust gases and turns them into usable power without sacrificing fuel economy
- Integrated Jacobs® Engine Brake:
 - Offers three levels of quieter engine braking for enhanced downhill control
 - Reduces wear on service brakes, tyres, and other components

SERVICEABILITY

- Above the frame rail, cartridge-style filters for easier, faster, and cleaner filter changes
- Unmatched parts availability and expert service through the Daimler Truck service network
- Detroit Connect™ Virtual Technician remote diagnostic service helps you maximise uptime

POWER

- 15.6 L displacement is the largest engine built by Detroit
- 600 bhp/2050 lb-ft rating available to pull the most extreme loads
- Wide, flat torque curve pulls strong all the way down below 1000 RPM

COMPLIANCE

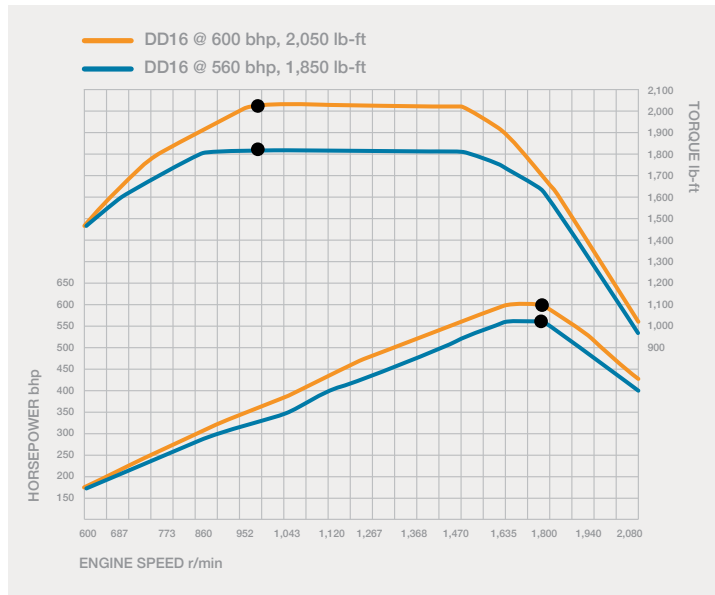
- The DD16 is compliant with 2017 Greenhouse Gas (GHG17) requirements

DD16 SPECIFICATIONS

Configuration.....	Inline 6 Cylinder
Displacement.....	952 cu. in. (15.6 L)
Compression Ratio.....	17:1
Bore.....	5.47 in. (139 mm)
Stroke.....	6.73 in. (171 mm)
Weight (Dry).....	2837 lb. (1287 kg)
Electronics.....	DDEC®
Service Fill (Oil & Filter Change)...	45 qt. (43 L)
Horsepower Range.....	500-600 bhp
Torque Range.....	1850-2050 lb-ft



Horsepower and Torque Curves



Maintenance Intervals**

Component	Severe, Short-Haul and Dusty Conditions	B-Double or Single Trailer	Multi-Trailer	Heavy Multi-Trailer
Engine Oil and Engine Oil Filter	30,000 km or 480 hrs	80,000 km or 1,280 hrs	60,000 km or 960 hrs	50,000 km or 800 hrs
Engine Fuel Filter	60,000 km or 960 hrs	160,000 km or 2,560 hrs	120,000 km or 1,920 hrs	50,000 km or 800 hrs
Frame Mounted Fuel / Water Filter	30,000 km or 480 hrs	80,000 km or 1,280 hrs	60,000 km or 960 hrs	50,000 km or 800 hrs
Valve Lash Adjustment	150,000 km	320,000 km	300,000 km	250,000 km
Coolant Change – ELC	450,000 km or every 2nd M3	960,000 km or every 2nd M3	900,000 km or every 2nd M3	750,000 km or every 2nd M3
Diesel Particulate Filter	A check engine light will illuminate when ash requires removal. Normal DPF ash clean interval is approximately 600,000 km or 8,250 hours			
DEF Filter	225,000 km	480,000 km	450,000 km	375,000 km

*Maintenance intervals using DFS 93K222(CK-4) Approved Oils that also Meet MB 228.51 or MB 228.31 using Ultra Low Sulfur Diesel (ULSD) Fuel.

Severe, Short-Haul and Dusty Conditions: Vehicles that operate under normal conditions and travel less than 100,000 km annually in metropolitan areas with infrequent freeway travel, or stop-and-go travel.

B-Double or Single Trailer: With one or more trailers to be pulled on sealed roads 100% of its operation and annually travels more than 100,000 km up to 68.5t GCM.

Multi-Trailer: Applies to multi-trailer general freight operation vehicles that operate 100% on sealed roads and annually travel more than 100,000 km from ≥ 68.5t up to ≤ 90t GCM.

Heavy Multi-Trailer: Applies to multi-trailer general freight operation vehicles that operate 100% on sealed roads and annually travel more than 100,000 km ≥ 90t GCM.

†Kilometres or Hours, whichever occurs first.

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Power Ratings

DD16 Engine Power Ratings	
500 bhp @ 1800 RPM	1850 lb-ft @ 975 RPM
530 bhp @ 1800 RPM	1850 lb-ft @ 975 RPM
560 bhp @ 1800 RPM	1850 lb-ft @ 975 RPM
560 bhp @ 1800 RPM	2050 lb-ft @ 975 RPM
600 bhp @ 1800 RPM	1850 lb-ft @ 975 RPM
600 bhp @ 1800 RPM	2050 lb-ft @ 975 RPM

Standard Warranty

Item	Warranty Limits (Whichever Occurs First)		Repair Charge (Paid by Owner)	
	Months	Kilometres	Parts	Labour
Engine	0-24	Unlimited	No charge	No charge
Injectors	0-24	320,000 km	No charge	No charge
Upon expiration of the 24-month warranty coverage, but within 500,000 mi / 800,000 km of use, the warranty continues to apply as follows:				
Major Components	25-60	800,000 km	No charge	Not covered

Extended Coverage

Agreement Limitation		Adjustment Charge	
Years	Kilometres	Parts	Labour
4	800,000 km [†]	No Charge	No Charge

*Fuel burn and engine hours limits also apply. The engine must be maintained in accordance with Detroit operator's guide. For complete details and customer obligations please refer to EW4 Agreement.

All data is correct at the time of printing.