

**DETROIT<sup>TM</sup>  
ENGINES**

**DD13<sup>®</sup>**

**DD15<sup>®</sup> TC**

**DD16<sup>®</sup>**

# VOCATIONAL PERFORMANCE



**DETROIT<sup>TM</sup>**  
DEMAND PERFORMANCE™

# POWER FOR WORK TRUCKS.

CONSTRUCTION, HEAVY HAUL,  
LOGGING, MINING OR OIL FIELD:  
THE DETROIT™ DD13®, DD15® TC AND  
DD16® ENGINES OFFER A WIDE RANGE  
OF HORSEPOWER AND TORQUE  
RATINGS TO GET THE JOB DONE.

## TORQUE

Wide, flat torque curves pull strong down to 1000 RPM, an important advantage when pulling heavy loads at low speeds. Outstanding gradeability helps pull the heaviest loads up the steepest hills. You even get power at the start to get your load moving fast.





## PERFORMANCE

Amplified Common Rail Fuel System (ACRS™) provides precision fuel injection and multiple injection events for a powerful and quiet operation. Turbo compounding\* creates usable energy out of normally wasted exhaust gas. And an integrated Jacobs® engine brake offers three levels of quiet, controlled braking.

## ECONOMY

Detroit engines are designed and built to offer peak performance, while achieving best-in-class fuel economy. Continuous innovation and rigorous testing ensure that our customers can depend on their vehicles for whatever job or journey is required. Even routine maintenance and service are simplified to offer a lower cost of operation. It's no wonder so many businesses demand Detroit.

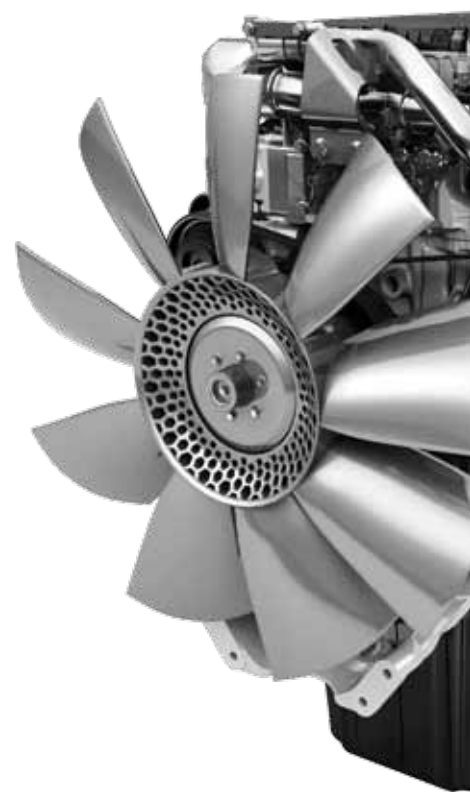


\* DD15® TC and DD16® only



**PERFORMANCE. POWER. FUEL ECONOMY.  
LOW COST OF OWNERSHIP.**





Engine Specifications	DD13	DD15 TC	DD16
Displacement	12.8 L	14.8 L	15.6 L
HP Range	350 – 470	455 – 505	475 – 600
Torque Range	1250 – 1650 lb-ft	1550 – 1750 lb-ft	1850 – 2050 lb-ft

Markets	DD13	DD15 TC	DD16
Construction	x	x	x
Distribution Services	x	x	
Dump	x		
Heavy & Specialty Haul		x	x
Logging		x	x
Mining		x	x
Municipality Services	x		
Oil & Gas		x	x
Refuse	x		

**IN TODAY'S WORLD, VOCATIONAL CUSTOMERS DEMAND A GREATER RETURN ON THEIR PURCHASING DOLLARS. AND THE DETROIT ENGINE FAMILY DELIVERS IT.**

# DD15 TC



# DETROIT DD16



DD13 Operational Specifications						
Accessory/Location	Drive Ratio	Rotation	Output Flange	Capacity in lb-ft @ Engine RPM	Maximum Permissible Joint Angle	Comments
<b>REPTO</b>						
Accessory Drive (REPTO) RHS of engine @ 1:00 o'clock position on fly wheel housing	1.217:1	CCW (viewed from rear of engine)	Spicer 1350	650 Nm/479 lb-ft @ 1800 RPM	6 degrees	Only available on SAE#1 flywheel housing
<b>FEPTO</b>						
Front Crank shaft Mounted	1:1	CCW (viewed from rear of engine)	Spicer 1350	813 Nm/600 lb-ft @ 1800 RPM	N/A	N/A

## REPTO/FEPTO AVAILABILITY — DD13

The DD13 gives you a choice of rear-end or front-end power take off (PTO). In select applications such as post-hole digger and mixer, Detroit setups allow the engine to perform parked regens in PTO mode. A PTO with parked regen capabilities improves uptime and productivity. Shut down is not required on the job site, allowing you to continue working and helping improve your productivity.

## TRANSMISSION

Allison 3000 transmission availability provides an efficient and economical advantage for the DD13®. And the Allison 4000 meets the greater horsepower and torque demands of applications requiring the DD15 TC and DD16.

# TECHNOLOGY

## BLUETEC®

Detroit engines feature BlueTec selective catalytic reduction (SCR) emissions technology which was introduced to meet EPA 2010 emissions standards. This comprehensive system works in concert with exhaust gas recirculation (EGR) and has been improved, while still meeting today's emissions standards.

BlueTec includes the diesel oxidation catalyst, diesel particulate filter, diesel exhaust fluid and an SCR catalyst to remove particulate matter and nitrogen oxide from the exhaust. The system cleans emissions downstream, helping the engine run more efficiently which improves fuel economy. Most of the harmful exhaust is converted into nitrogen and water before being released from the tailpipe.

## EMISSIONS PACKAGES

There are three packaging options for BlueTec. Detroit's 1-Box™ Emissions Package is the only single component system of its kind in the industry, providing a clear back-of-cab (BOC) for easier body upfitting, along with the additional advantage of contributing to effective trailer swing. The 1-Box package also lowers exhaust back pressure for better fuel economy.

## FEWER REGENERATIONS



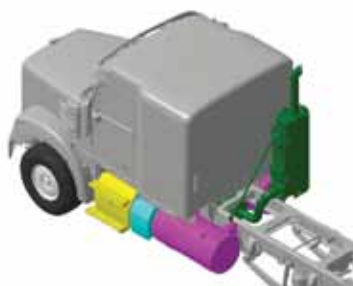
Detroit engine technology reduces regeneration (regen) frequency, increases vehicle productivity and helps improve your bottom line. Regen intervals will vary by application and duty cycle.

## DDEC®

Detroit DDEC is a suite of innovative features that allows you to better manage fuel economy, engine performance, driving efficiency and maintenance. You can utilize technology to better control speed, assist in passing, optimize idle efficiency and even reward your drivers for reaching fuel economy targets. With DDEC, there also are several options available to fleet managers that will help drivers better control engine idling, shifting techniques and aftertreatment management. To learn more, contact your local Detroit dealer, distributor or representative.

## GHG

All Detroit engines are 2013 OBD (OBD13) Certified and are compliant with 2014 Greenhouse Gas (GHG14) regulations.

	1-BOX	TWO-BOX VERTICAL	TWO-BOX VERTICAL/HORIZONTAL
SYSTEM			

# SERVICEABILITY

## VIRTUAL TECHNICIAN™

Productivity drives success. That's why managing vehicle downtime is so important. Our factory-installed Virtual Technician onboard diagnostic system takes the guesswork out of engine repair. When a truck's check engine light illuminates, data is collected immediately, providing a technical snapshot of the engine's status before, during and after a fault code event. This information is sent to you and to the Detroit Customer Support Center (CSC), where a trained representative can diagnose the issue, recommend service and even contact the nearest authorized service locations with parts in stock. The CSC can tell you if the truck needs to be serviced immediately, or if it can wait until a more convenient time. This system is like having a technician in every truck.

Virtual Technician's optional Visibility Package helps you manage your business and your projects more efficiently. The groundbreaking vehicle management system offers access to the Ground Traffic Control website and tracks latitude, longitude, time and odometer readings for all of your work trucks. With pinpoint accuracy, the system records vehicle stops, speeds, routes, mileage traveled, excessive idling, fuel consumption and other onboard events. With the Visibility Package, you can more effectively oversee the productivity of every vehicle in your work fleet.

### Standard Warranty

Item	Warranty Limits (Whichever Occurs First)		Repair Charge (Paid by Owner)	
	Months	Miles / Kilometers	Parts	Labor
Engine	0-24	Unlimited	No charge	No charge
Injectors	0-24	200,000 mi 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	500,000 mi 800,000 km	No charge	Not covered

## COMPREHENSIVE WARRANTIES

Detroit already gives you the peace of mind you demand with B50 lives of 1 million (DD13) and 1.2 million miles (DD15 TC, DD16). For that added insurance, we also offer the most comprehensive extended warranty service coverage in the industry. Contact your local Detroit representative for extended warranty options.

## SERVICE INTERVALS

In addition to being built for reliability and durability, Detroit engines have the longest service intervals in their class. And, as an added benefit, oil, coolant and fuel filters are positioned above the frame rails for easier, faster and cleaner filter changes. All engines have maintenance-free crankcase breathers.

### Maintenance Intervals

Item	Mi/Hr*	Severe Duty	Short-Haul
Engine Oil and Filter Change†	Miles	25,000	35,000
	Hours	640	895
Fuel Filter Change	Miles	25,000	35,000
	Hours	640	895
Valve Lash Adjustment	Miles	Adjust at 100,000, at 500,000 and every 500,000 thereafter.	
	Hours	Adjust at 2,565, at 12,825 and every 12,825 thereafter.	
Diesel Particulate Filter	Miles	A check engine light will illuminate when ash requires removal. Normal DPF ash cleaning intervals are 300,000 to 400,000 miles.	
	Hours	A check engine light will illuminate when ash requires removal. Normal DPF ash cleaning intervals are 9,000 to 10,250 hours.	
DEF Pump Filter	Miles	150,000	175,000
	Hours	3,840	4,475

\* Miles/Hours, whichever occurs first.

† Based on using the Detroit lube oil and oil analysis program.

Severe duty is up to 30,000 annual miles and a vehicle that averages less than 5 miles per gallon (mpg).

Short-haul is between 30,000 and 60,000 annual miles and a vehicle that averages between 5.1 and 5.9 mpg.





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## EMPOWERED BY DETROIT

Here at Detroit, we've built our reputation by building high-quality products that perform beyond expectations. Today, you'll find our engines in Freightliner and Western Star® trucks on roads and at job sites around the globe.

The secret to our success goes beyond the engines we build. Our people and our continuous pursuit of innovation are powerful driving forces. Our engineering and manufacturing expertise are world class. Our service network is expansive and responsive. That's why we continue to grow and evolve. That's also why we now offer a full line of products: engines, axles, transmissions and advanced technologies. That's right. The company that makes the heart of the truck now gives you the arms, legs and backbone to go with it. So, if you demand it all, demand Detroit.

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