

**DETROIT
ENGINES™**

DD13®

DD15®

DD16®

VOCATIONAL PERFORMANCE



DETROIT™
DEMAND PERFORMANCE™

POWER FOR WORK TRUCKS.

WHETHER IT'S CONSTRUCTION, HEAVY HAUL, LOGGING, MINING OR OIL FIELD — WITH WELL OVER 30 DIFFERENT HORSEPOWER AND TORQUE RATINGS TO CHOOSE FROM — THERE'S A DETROIT™ ENGINE READY FOR THE JOB.

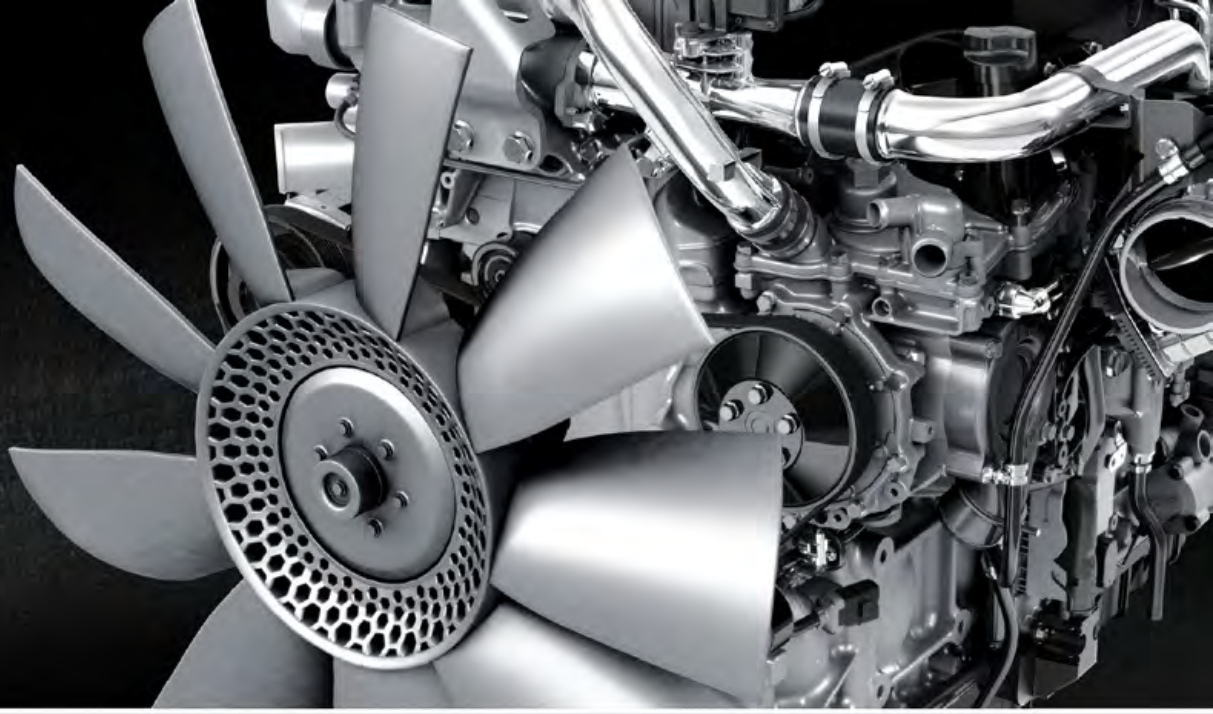


TORQUE

Wide, flat torque curves pull strong down to 1000 RPM, which is 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. POWER. FUEL ECONOMY.
LOW COST OF OWNERSHIP.**



PERFORMANCE

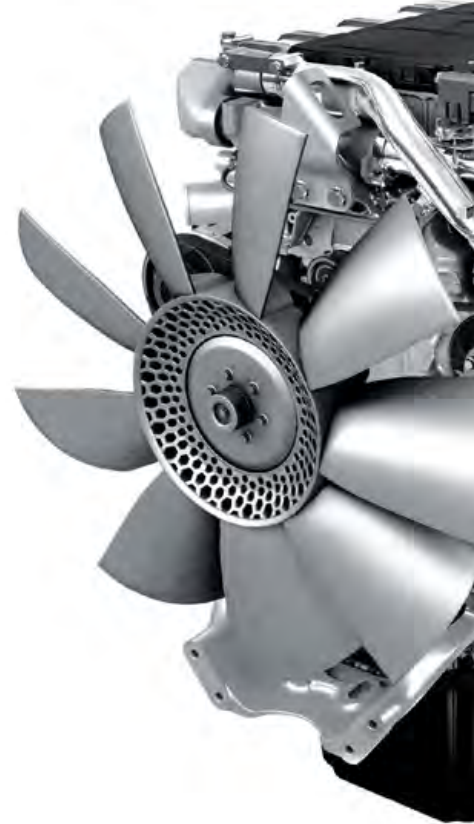
Amplified Common Rail Fuel System (ACRS™) provides precision fuel injection and multiple injection events for a powerful and quiet operation. Turbo compounding (DD15® and DD16® only) creates usable energy out of normally wasted exhaust gas. And an integrated Jacobs® Brake offers three levels of quiet, controlled braking.

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 and DD16.



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



ENGINE PERFORMANCE

EPA 2010 SPECIFICATIONS	DD13	DD15	DD16
Target Market	Construction, Dump, Refuse, Municipality and Distribution Services	Distribution Services, Mining, Logging, Construction, Oil & Gas, Heavy and Specialty Haul	Construction, Oil & Gas, Heavy and Specialty Haul, Mining and Logging
Displacement	12.8 L	14.8 L	15.6 L
HP Range	350 – 470	455 – 560	475 – 600
Torque Range	1250 – 1650 lb-ft	1550 – 1850 lb-ft	1750 – 2050 lb-ft

Maintenance Intervals

ITEM	HOURS/MILES*	SEVERE DUTY	SHORT HAUL
Engine, Oil and Filter Change†	Hours	640	895
	Miles	25,000	35,000
Fuel Filter Change	Hours	640	895
	Miles	25,000	35,000
Valve Lash Adjustment	Hours	Adjust at 2,565, at 12,825 and then every 12,825 thereafter.	
	Miles	Adjust at 100,000, at 500,000 and then every 500,000 thereafter.	
Diesel Particulate Filter (DPF)	Hours	A "check engine" light will illuminate when ash requires removal. Normal DPF ash cleaning intervals are 9,000 to 10,250 hours.	
	Miles	A "check engine" light will illuminate when ash requires removal. Normal DPF ash cleaning intervals are 300,000 to 400,000 miles.	
DEF Pump Filter	Hours	3,840	4,475
	Miles	150,000	175,000

*Hours/Miles, whichever occurs first.

† Based on using Detroit's 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.

DD15

DETROIT DD16



COMPREHENSIVE WARRANTIES

Detroit already gives you the peace of mind you demand with a B50 life of up to 1.2 million miles.* 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.

SERVICEABILITY

In addition to being built for reliability and durability — with B50 lives of 1 million (DD13) and 1.2 million miles (DD15/DD16) — 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.

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

*DD15 and DD16. DD13 B50 life is 1.0 million miles

TECHNOLOGY

BLUETEC EMISSIONS TECHNOLOGY

BlueTec® is a complete emissions system that combines exhaust gas recirculation (EGR), diesel particulate filter (DPF), diesel oxidation catalyst (DOC) and selective catalytic reduction (SCR) to efficiently meet the EPA 2010 emissions standards. BlueTec treats the exhaust gases downstream of the engine instead of requiring complex changes under the hood. It does this by injecting a small amount of diesel exhaust fluid (DEF) into the exhaust stream which reacts with the NOx in the SCR catalyst, forming nitrogen and water. Lastly, the nitrogen and water, safe elements in the air we breathe, are released into the environment.

EMISSIONS PACKAGES

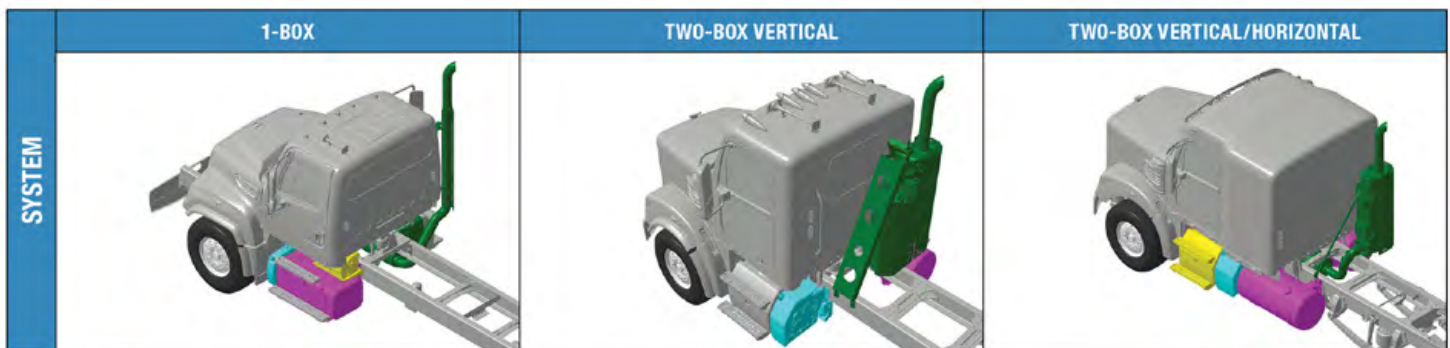
There are three packaging options for BlueTec. Detroit's 1-Box™ Emissions Package is the only single component system of its kind in the industry — providing a clear back-of-cab (BOC) for easier body upfitting, along with the additional advantage of contributing to effective trailer swing. The 1-Box 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. The regen intervals will vary by application and duty cycle, but the minimum regen interval for EPA 2010 Detroit engines is more than five times that of the EPA 2007 model.

UP TO 5% FUEL ECONOMY INCREASE

Until BlueTec, there has never been an emissions solution that improved fuel economy. BlueTec combines with ACRS to improve fuel economy in the DD13 and DD15 up to 8% when compared to EPA 2007 Series 60 engines. And up to a 5% improvement over the EPA 2007 DD13 and DD15.



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 to improve your productivity.

PTO OPERATIONAL SPECIFICATIONS						
Accessory/Location	Drive Ratio	Rotation	Output Flange	Capacity in lb-ft @ Engine RPM	Maximum Permissible Joint Angle	Comments
Accessory Drive (REPTO) RHS of Engine @ 1:00 o'clock position on flywheel housing	1.217:1	CCW (viewed from rear of engine)	Spicer 1350	650 Nm/479 lb-ft @ 1800 RPM	6°	Only Available on SAE #1 Flywheel Housing
FEPTO	1:1	CW (viewed from front of engine)	Spicer 1350	813 Nm/600 lb-ft @ 1800 RPM	NA	NA

DDEC

Detroit Diesel Electronic Controls (DDEC®) is a suite of innovative features that enable you to better manage fuel economy, engine performance, driving efficiency and maintenance. In addition to our Virtual Technician onboard diagnostic system, 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, you can maximize efficiency, and profitability.

VIRTUAL TECHNICIAN

Virtual Technician is factory-installed onboard diagnostic system that puts you in control of your business 24/7. When a truck's check engine light illuminates, data is immediately collected, providing a technical snapshot of the engine's status before, during and after a fault code event. This information is sent to our Customer Support Center, where a trained representative can diagnose the issue, recommend service and even contact the nearest authorized locations with parts in stock. Additionally, Virtual Technician's optional Visibility Package offers access to the Ground Traffic Control website. This groundbreaking system captures latitude, longitude, time and odometer readings. With pinpoint accuracy, the system records vehicle stops, speeds, routes traveled, mileage by state, excessive idling and other onboard events. Put simply, Virtual Technician takes the guesswork out of engine repair, helping you manage your business more efficiently.

DETROIT SUPPORT. ANYWHERE.

- Unmatched parts availability
- Factory-certified technicians
- Live technical support
- More than 800 authorized service outlets in North America

