



485-605 HP / 1650-2050 LB-FT TORQUE



# WE WROTE THE BOOK ON HIGH-PERFORMANCE DIESEL ENGINES.



It began as a radically innovative platform, complete with dual overhead cams, exceptionally strong engine braking and an even tougher head and block, for unrivaled dependability. The Cummins ISX15 rapidly outpaced the competition, becoming the industry's dominant big-bore engine over the past three decades.

But at Cummins, we're never satisfied with the status quo. So virtually every critical component, including the power cylinder, camshaft, turbo and fuel system, has been scrutinized, modified, upgraded and improved. All that makes the X15 a completely reinvented platform that delivers the best performance and dependability in the industry.

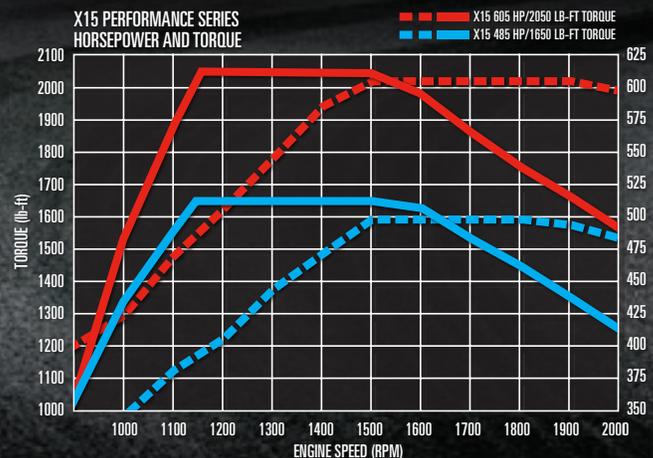
These enhancements improve air handling, for faster throttle response plus even stronger braking power at lower rpm. In addition to delivering the rewarding performance drivers want, the X15 delivers superior fuel economy over competitive engines. So you can blow past other trucks — as well as diesel stops.

In 1952, the No. 28 Cummins Diesel Special featured the first turbocharger used at the Indianapolis 500, winning the pole position with a qualifying speed of 138 mph.

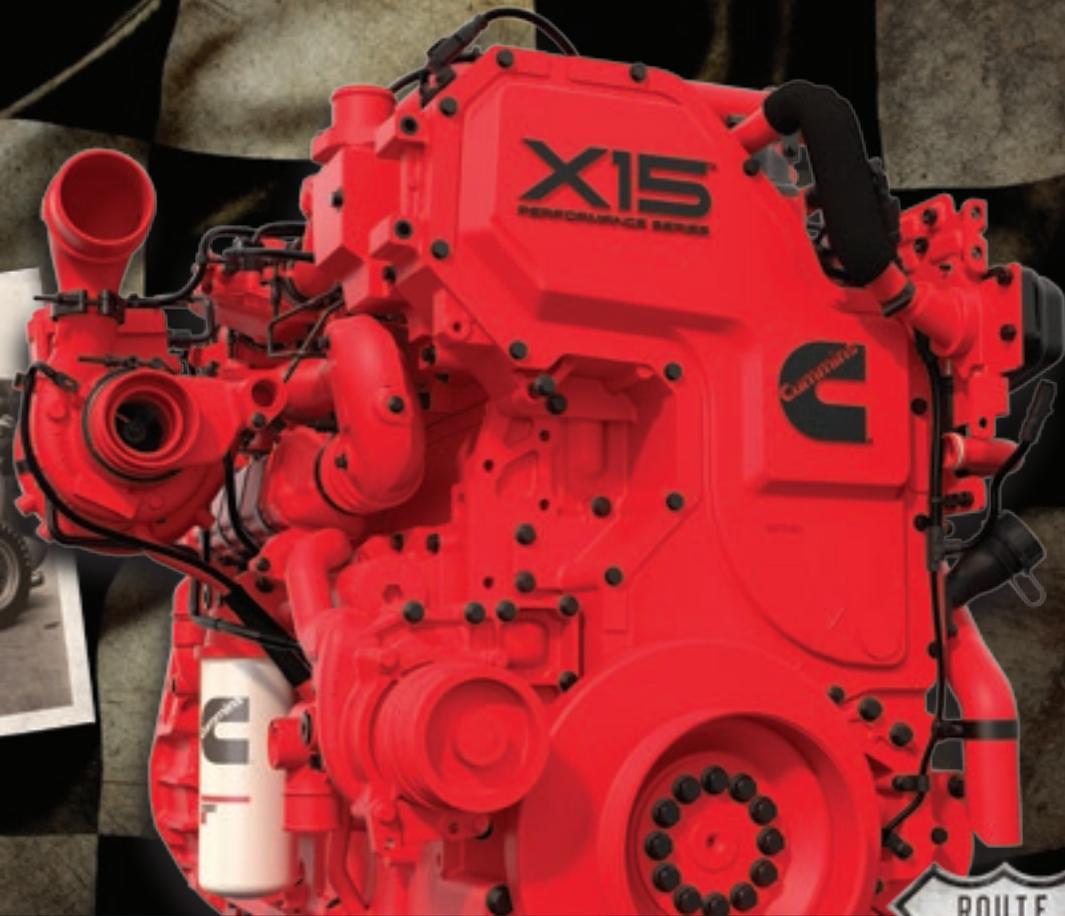


## X15 PERFORMANCE RATINGS.

With ratings up to 605 hp and 2050 lb-ft, the X15 Performance Series has the power and torque to conquer whatever you throw at it.



# THE RECORD BOOK.



## WANT TO KICK SOME BUTT ON HILLS? WE THOUGHT SO.

The X15 delivers power on the hills like a hot rod coming off the starting line. With ratings from 485 hp to 605 hp and available torque up to 2050 lb-ft, this is the most powerful engine available in a truck. The extra muscle of 15 liters means that the X15 doesn't have to work as hard pulling the load, so you've got an engine that's going to use less fuel, last longer and be worth more at the end of the run. Yeah, going big pays big dividends. But you already knew that.



## IT ALL STARTS WITH DEPENDABILITY.

At Cummins, dependability goes way beyond engine performance or a response to a service event. It means being able to count on us to do what we say we will do. Dependability means that you don't have to worry. Dependability is what separates an industry-defining product from the competition, and creates a legacy for decades to come.

We ran over 9 million total miles in the largest field test in the history of the company. With our X15 engine platform, we are reconfirming our commitment to provide customers with the most dependable product in the market. Period.



## 600 BRAKING HORSEPOWER FROM AN ENGINE. BELIEVE IT.

The X15 is optimized to deliver the power to get you past traffic and over the next hill. But what's really impressive is what happens when you crest the hill and take your foot off the accelerator. That's when the most powerful engine brake in the industry kicks in, and you just ease on down the road. You get over 450 braking horsepower (bhp) at 1500 rpm, and up to 600 bhp at 2100 rpm. The X15 lets drivers go light on the brake pedal, saving wear and tear on service brakes while maintaining a higher degree of control.



X15 PERFORMANCE SERIES BRAKING HORSEPOWER



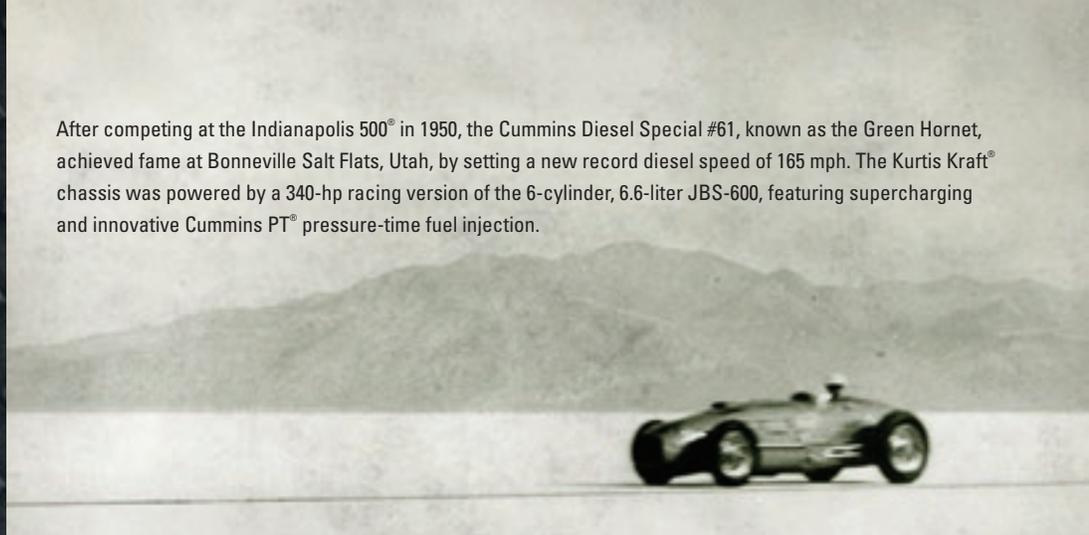
"Not only does the performance package have great pulling power, but the stopping power is second to none. The engine braking is phenomenal."

— Frank Madril,  
Cummins Redefining Tour Driver





After competing at the Indianapolis 500® in 1950, the Cummins Diesel Special #61, known as the Green Hornet, achieved fame at Bonneville Salt Flats, Utah, by setting a new record diesel speed of 165 mph. The Kurtis Kraft® chassis was powered by a 340-hp racing version of the 6-cylinder, 6.6-liter JBS-600, featuring supercharging and innovative Cummins PT® pressure-time fuel injection.



## **ONE DOES THE WORK OF TWO: SINGLE MODULE™ AFTERTREATMENT.**

Designed by Cummins Emission Solutions, this is truly a one-piece design. Up to 40 percent lighter and up to 60 percent smaller, it has better heat management, and offers easier serviceability. Plus, Diesel Particulate Filter (DPF) ash capacity has been increased to more than double the maintenance intervals in many cases.

## **IMPROVED DOSER.**

A second-generation urea doser eliminates the need for engine coolant lines to and from the injector, and prevents crystallization and clogging of Diesel Exhaust Fluid (DEF) within the unit. The combination of better spray performance, enhanced mixing and reduced deposit formation makes this unit far more robust and reliable than alternative aftertreatment systems.



## X15 FEATURES.

### **VGT® Turbocharger From Cummins Turbo Technologies**

This turbocharger has variable geometry, for precision and responsiveness. The actuator is 6 times stronger than that of previous versions, for even better dependability. An enhanced design with a new impeller provides rapid boost and improved engine braking.

### **XPI Fuel System From Cummins Fuel Systems**

The XPI system delivers superior performance, regardless of engine rpm. Multiple injection events per cycle improve fuel efficiency and enable smoother, quieter operation. Steel plungers and diamondlike coated roller tappets make this the toughest XPI fuel system to date.

### **Single Module™ Aftertreatment System From Cummins Emission Solutions**

A flow-through design offers better heat management, for improved efficiency. Increased ash capacity means less maintenance. And it's up to 40 percent lighter and 60 percent smaller than two-part systems.

### **Fleetguard® Fuel Filters And Lube Filters From Cummins Filtration**

These filters protect against corrosion and contaminants that can cause performance issues. The Fleetguard LF 14000NN lube filter provides less restriction, for faster flow and better cold-start capability, while still trapping nearly 99 percent of particles down to 4 microns.

### **High-Capacity Electronic Control Module (ECM)**

The robust ECM manages the engine and aftertreatment system simultaneously, for optimum performance and fuel efficiency, and is factory-ready for over-the-air programming when connected to a capable telematics system.

### **Cummins Engine Brake**

The most powerful engine brake in the industry offers up to 600 bhp, adding control on downhill grades, and helping reduce service brake wear, downtime and replacement costs.



### **Connected Diagnostics™**

This software-only application works through the telematics system of your preference to wirelessly connect the engine to Cummins for rapid fault diagnosis. Information and expert Cummins guidance maximize uptime.

### **Power Cylinder Improvements**

Combustion's hot. That's bad for your oil. The X15 incorporates an enhanced piston design that reduces the transfer of heat to the oil, increasing both durability and oil-drain intervals.

## SAY "NO" TO HIGH MAINTENANCE, "YES" TO LONG LIFE.

Don't sweat the numbers. This engine doesn't need to be babied. With longer maintenance intervals, the less time your trucks spend in the shop, and the more loads you can carry. So instead of bleeding your wallet dry, you're stuffing it full. It gives new meaning to "win/win."

# X15 PERFORMANCE SERIES

**485-605 HP**

**1650-2050 LB-FT TORQUE**

To prove the durability of the new 11-liter Model H, Clessie Cummins installed the 125-hp engine in the Cummins Diesel Test Truck, and embarked on a nonstop endurance run at Indianapolis Motor Speedway® in 1931. The truck was modified to refuel and service while in motion, and after two grueling weeks of circling the track, came in at 13,535 miles – well beyond all previous records.



## X15 MAINTENANCE INTERVALS.

Item	Severe < 5.5 mpg mi/km	Normal 5.5-6.5 mpg mi/km	Light > 6.5 mpg mi/km
Oil Drain Interval	25,000 mi 40,000 km	35,000 mi 56,000 km	50,000 mi 80,000 km
Oil Drain with Cummins OilGuard™ <sup>1</sup>	–	–	Up to 80,000 mi Up to 130,000 km
Oil Drain with Valvoline™ Premium Blue	–	–	60,000 mi 96,000 km
Fuel Filters	25,000 mi 40,000 km	35,000 mi 56,000 km	50,000 mi 80,000 km
Diesel Particulate Filter <sup>2</sup>	250,000-400,000 mi 400,000-640,000 km	400,000-600,000 mi 640,000-960,000 km	600,000-800,000 mi 960,000-1,300,000 km
DEF Filter	250,000 mi 400,000 km	280,000 mi 448,000 km	300,000 mi 480,000 km
Valve Adjustment	500,000 mi 800,000 km	500,000 mi 800,000 km	500,000 mi 800,000 km

1 – Up to 80,000-mile oil drain interval with participation in Cummins OilGuard™ oil analysis program.

2 – Maintenance lamp will illuminate when DPF maintenance is required.

## BRAWN AND BRAINS.

The value that Cummins is bringing to the trucking industry goes well beyond engine hardware. Every X15 is factory-ready to connect to Cummins suite of telematics services that provide engine monitoring, real time diagnostics, prognostics and on-the-road calibration updates (over-the-air programming). With Connected Diagnostics, Connected Advisor and Connected Software Updates, Cummins-powered trucks run with the highest efficiency and lowest maintenance costs possible.





## OVER-THE-AIR PROGRAMING CAPABILITY.

A first for the market, Cummins enables you to manage your engine system remotely when it is connected to a capable telematics system. Want the latest engine calibration software update without taking time out of your schedule? The new Connected Software Updates service enables updates without a visit to the service bay. In addition to updating calibrations, Cummins will leverage the capability to securely transmit information to the engine to tune your engine for optimum performance, fuel economy or road speed in the future. Cummins is a leader in providing telematics services to the trucking industry and strives to bring services that will empower you to keep your trucks rolling and customers happy.

## CONNECT WITH A WORLD OF CONFIDENCE.

The minute a fault code is generated, Connected Diagnostics uses your on-board telematics system to connect with Cummins. Instantly, a snapshot of performance data is analyzed and compared to our worldwide history for diagnosis. A probable cause is determined, and a recommended action with recommended service locations is sent to fleet management. Plus, now with the prognostic capability of Connected Advisor, Cummins leads the way by offering the capability to predict engine issues before they even occur. Helping you always stay one step ahead.



Connected Diagnostics

76458  
Engine Diagnostics

Derate Notice  
25% Torque Derate In 20 Operating Hours After Initial Fault Occurrence

PRIMARY FAULT

**2387** VGT Actuator Driver Circuit (Motor) - Mechanical System Not Responding Or Out Of Adjustment  
Count: 3  
Active  
SPN 641, FMI 7  
January 4, 2016 at 3:13:37 AM

SUGGESTED ROOT CAUSES

Turbocharger	67% prob
Turbocharger Actuator	19% prob
Electronic Control Module Calibration	5% prob

Connected Diagnostics

Equipment Status

76458 3V6N83GUFN10932...	Service Soon 3 d ago
C31710 3V6N83GUG671321...	Service Soon 5 d ago
T541 3V6N83FNG1734382...	Service Soon 6 d ago

## A BASE WARRANTY THAT COVERS ALL THE BASES.

Base engine warranty coverage\* for Cummins X15 includes parts and labor on warrantable failures for both the engine and aftertreatment system —with no deductible. Cummins base warranty coverage is good for 2 years/250,000 miles (402,336 km).

\*Covers defects in Cummins materials or factory workmanship.

## WE'VE GOT YOUR BACK.

Peace of mind comes from knowing that you've bought a quality product, and that the manufacturer will stand behind it. Cummins offers a wide variety of protection plans for X15 engines, tailored to meet the needs of specific applications and trade cycles. Extended coverage allows you to make financial projections with complete confidence, with protection plans up to 7 years or up to 500,000 miles (804,672 km) on registered parts and labor. Cummins extended coverage plans are available covering internal components and major engine systems, including the turbocharger, water pump and fuel injectors, air compressor, fuel pump and select engine sensors. For details, contact your Cummins distributor or dealer.

## BEYOND SUPPORT. CUMMINS CARE.

1-800-CUMMINS™ (1-800-286-6467) goes beyond just being a new phone number for Cummins Care. It's your connection to a whole new level of support. One call, and you'll be quickly connected with a Cummins expert who has the specialized skill set, experience, technology and in-depth knowledge to deliver complete solutions while working with one of over 3,500 authorized parts and service locations.



## TRUST MAKES ALL THE DIFFERENCE.

At Cummins, we've got your back. Our engine experts and extensive training programs ensure service and support excellence you can depend on. Everything from upfront vehicle and engine spec'ing to maximizing uptime with features like Cummins Guidanz™ mobile app and INLINE™ mini adapter. This innovative technology enables rapid downloading of engine information on a smartphone or tablet, delivering prioritized fault codes and other key engine information as you stand beside your Cummins-powered vehicle. It's just one example of how Cummins is totally committed to ensuring your success.

## REDEFINING PERFORMANCE. INCREASING VALUE.

You want power? You want performance? You want reliability and durability? You can't do better than Cummins X15. Plus, you get the best fuel economy in the industry and the longest maintenance intervals, for lower maintenance costs. Connected Diagnostics that accelerate service accuracy and speed.

Top that off with the largest, most capable parts and service network in the industry. It's a total package that adds up to the best resale value of any engine in the industry. With a Total Cost of Ownership that makes the competition look like a tiny spec out the side-view mirror. To learn more about Cummins X15, visit [cumminsengines.com](http://cumminsengines.com).

## PERFORMANCE SERIES RATINGS.

Engine Model	Power hp (kW)	Peak Torque lb-ft (N•m) @ rpm
X15 605	605 (451)	2050 (2779) @ 1150
X15 605	605 (451)	1850 (2508) @ 1150
X15 565	565 (421)	2050 (2779) @ 1150
X15 565	565 (421)	1850 (2508) @ 1150
X15 525	525 (392)	1850 (2508) @ 1150
X15 505	505 (376)	1850 (2508) @ 1150
X15 505	505 (376)	1650 (2237) @ 1150
X15 485	485 (362)	1850 (2508) @ 1150
X15 485	485 (362)	1650 (2237) @ 1150



# X15

PERFORMANCE  
SERIES



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