

400-500 HP/1450-1850 LB-FT TORQUE



TH



14434

IT ALL STARTS WITH DEPENDABILITY.

THE POWER OF CHOICE: Direct drive and overdrive.

X15 SmartAdvantage[™] Powertrain small-step overdrive and direct drive options make this the most fuel-efficient powertrain you can buy.

SmartAdvantage[™] Powertrain

t Cummins, dependability goes 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 you don't have to worry. We've run over 9 million total miles in the largest field test in the history of the company. With our new X15 engine platform, we are reconfirming our commitment to provide customers with the most dependable product in the market. Period.

DURABILITY, EFFICIENCY AND INNOVATION THAT WILL Make History. Again.

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. Customers took notice, quickly making the Cummins ISX15 the best-selling engine in its category, by far. But at Cummins, we're never satisfied with the status quo. So virtually every critical component has been scrutinized, modified, upgraded and improved. All that makes the 2017 X15 a completely reinvented platform that delivers the best performance and dependability in the industry.

Dynamic electronic features, the high-efficiency VGT[®] Turbo and an optimized combustion formula have resulted in a significant increase in fuel efficiency and throttle response. The integrated Single Module[™] aftertreatment system dramatically increases cleaning intervals while saving weight and space. We've combined the best available components with our advanced engine controls into one fully integrated powertrain package that is so efficient that it is redefining the heavy-duty trucking industry. Again.



Cummins redefined efficiency and reliability at the 1931 Indianapolis 500,® with the only car in the history of the race to complete the full 500 miles without stopping,

using only \$1.40 in fuel.



In 1931, a Cummins-powered truck demonstrated reliability and fuel efficiency in a cross-country run from New York to Los Angeles, averaging 33.03 mph and beating the record held by General Motors,[®] with a running time of 97 hours, 20 minutes. The truck averaged 15.75 mpg, and fuel for the 3,214-mile trip cost \$11.22.

PASS GO. SAVE \$200.

You don't run a business with play money. So fuel economy matters – a lot. Cummins X15 includes the most advanced fuel-saving features, so you get the most out of every drop of diesel fuel, from the optimized cam profile to a new piston structure. Your money stays where it belongs – in your wallet.

Cummins continues to deliver superior fuel economy on the X15 through innovation in dynamic electronic controls, enhanced engine breathing and an optimized combustion process. Taking advantage of the big-bore architecture, Cummins is applying a variable compression ratio commonly known as the Atkinson cycle, which enables the X15 to achieve the highest compression ratio in the industry, and improve thermal efficiency. Cummins is able to leverage the technology through the application of our proprietary VGT Turbo and XPI fuel system.

The integration of these technologies provides superior efficiency and crisp response to driver command. In essence, the X15 breathes like a medium-bore engine, but delivers big-bore performance. Cummins continues its legacy of innovation by becoming the first to introduce this combustion technology to the commercial truck market.

"Not like anything I've ever driven... superior to any transmission setup I've ever experienced. For every little detail, it knows exactly what grade you are at and exactly how much fuel to apply and how much power is needed.... It's been truly unbelievable...far more than I ever expected. The SmartAdvantage setup gives me all the numbers I want, and then just the ease of driving.... it takes a lot off your shoulders, especially going through mountains; it is not nearly as stressful."

Mike Carlson,
Redefining Tour Driver

20% BETTER. EVERY GALLON.

If you're driving a 2010 truck, you're missing out on lots of great stuff, including the introduction of the SmartAdvantage Powertrain. Cummins and Eaton[®] have combined forces to deliver the ultimate fuel-sipping powertrain package on the market. Many things go into perfecting the integration of the best products from two legendary powertrain component manufacturers, but here's what matters: You can get up to 20 percent better fuel economy with the X15 SmartAdvantage Powertrain alone. If you're currently getting 6.5 mpg, you'll see that number jump to at least 7.5 mpg, and probably closer to 8 mpg. For a truck running 120,000 miles per year, that means about 2,500 fewer gallons of fuel going into the tank – a direct savings of \$7,500 per truck at \$3 a gallon. The SmartAdvantage Powertrain also offers the power of choice. It is available with either small-step overdrive or direct-drive gearing. To see which option might fit your needs, visit cumminsengines.com/smartadvantage and click on the Selection Guide.



MORE HORSEPOWER. MORE SAVINGS.

Whether you're hauling 80,000 pounds through the Rockies or you're an expedited shipper committed to delivering on a moment's notice, you need a big-bore 15-liter engine to get the job done – but not just any big-bore: You need the X15. Otherwise, you're going to be riding the right lane with your flashers on and getting passed by minivans. Not to mention, you'll be wasting fuel. Fact is, the X15 Efficiency Series will deliver best-in-class fuel economy on those kinds of runs, with up to 500 hp. The X15 500 is the ultimate package, pleasing drivers and accountants alike, and can be expected to drive our industry-leading resale value to even greater heights down the road.

ROOKIES DRIVE LIKE PROS — WITH ADEPT."

ADEPT interacts with automated manual transmissions, adapting to operating conditions to help even novice drivers operate as efficiently as your most seasoned and efficient professional. The full suite of ADEPT features includes SmartTorque2, SmartCoast[™] and Predictive Cruise Control. Together, they are proven to deliver up to 6 percent better fuel economy. SmartTorque2 senses both the selected gear and overall engine load, based on gross vehicle weight (GVW), aerodynamic drag and road grade. As those conditions vary, SmartTorque2 determines the exact amount of torque needed to maintain road speed and eliminate unnecessary downshifts, ensuring more time spent inside the "sweet spot" – the rpm range that achieves the best fuel economy.



SmartCoast improves efficiency while coasting. On moderate downhill grades, the transmission will keep the clutch engaged while shifting out of gear, allowing the engine to return to idle and reducing drag on the vehicle. That conserves vehicle momentum and improves fuel economy. The transmission automatically shifts into the correct gear at the exact moment that power is needed to maintain road speed, whether you need acceleration or engine braking. SmartCoast alone improves a truck's fuel economy by 2 percent.

An additional feature that works with SmartCoast is Predictive Cruise Control (PCC). Using Global Positioning System (GPS) technology, it previews the road ahead and modifies both the fueling rate and road speed limit, to take advantage of vehicle momentum with such precision that you'll gain an extra 1 percent in fuel efficiency. Every X15 Efficiency Series engine will leave the Cummins factory with PCC installed and enabled. Advanced technology such as SmartTorque2, SmartCoast and PCC make the X15 the most fuel-efficient engine in the industry – a fact that's not up for debate.

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 a capable telematics system to enable Over-the-Air (OTA) engine programming and customization. In addition to our proven Connected Diagnostics,[™] we're introducing a new level of customer services enabled by data and Cummins expertise.

OVER-THE-AIR CAPABILITY.

A first for the market, Cummins will enable 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 Calibrations[™] family of applications will enable updates without a visit to the service bay. Or maybe tune your engine for higher performance, and return to a lower rating later. Or track engine parameters of your entire fleet from your office. The growing family of Connected Tuning[™] applications provides that capability. The power of Cummins information and services enabled by data will empower you to keep your trucks rolling and customers happy.





quipment Status

76458

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 is sent to fleet management.

POWER TO GO. Power to whoa.

The X15 is optimized to deliver the power you need, with 400 hp to 500 hp and 1450-1850 lb-ft of peak torque – more than enough to get you off the line, down the road and up the steepest 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 400 braking horsepower (bhp) at just 1300 rpm. When the X15 pulls on the reins, you can go light on the brake pedal, saving wear and tear on your service brakes while staying in total control.

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 cleaning intervals in many cases.

IMPROVED DOSER.

X15 EFFICIENCY SERIES

BRAKING HORSEPOWER.

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 four to six 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 fewer cleanings. 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. Adds control on downhill grades, helping reduce service brake wear, downtime and replacement costs.

Vehicle Acceleration Management (VAM)

VAM reduces driveline wear and improves fuel economy in bobtail and light-load driving conditions.

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.



XI5 SERIES

400-500 HP 1450-1850 LB-FT TORQUE

X15 EFFICIENCY RATINGS.

With a broad range of traditional, SmartTorque2 and SmartAdvantage ratings from 400 hp to 500 hp, there is an optimized solution to deliver what you need with the fuel economy you want.

For a complete list of ratings, visit cumminsengines.com.

LESS TIME IN THE SHOP, AND MORE ON THE ROAD.

Cummins X15 now has some of the longest service intervals in the industry. The X15 will help you keep more of your hard-earned money. If you're currently running a 2010 Cummins ISX15, you're going to see a 40 percent reduction in maintenance costs over the first half-million miles – from close to \$14,000 to less than \$8,000.

How is that possible? Not only have we increased the oil drain interval to 50,000 miles in light duty cycles, but with Cummins OilGuard oil analysis program, engines can extend to 80,000 miles between drains. The DPF in our Single Module aftertreatment system doesn't require a cleaning until 600,000 to 800,000 miles, which makes it nearly maintenance-free for many first owners. And now, the system tells you when the DPF needs to be changed, so you can wait as long as it takes to get full before replacing it. Our fuel filters last 2.5 times longer. And we eliminated the hydrocarbon doser and the maintenance on the crankcase ventilation filter, so you don't even need to think about those anymore.

X15 MAINTENANCE INTERVALS.

Item	Severe < 5.5 mpg	Normal 5.5-6.5 mpg	Light > 6.5 mpg
	mi/km	mi/km	mi/km
Oil Drain Interval	25,000 mi	35,000 mi	50,000 mi
	40,000 km	56,000 km	80,000 km
Oil Drain with OilGuard¹	-	-	Up to 80,000 mi Up to 130,000 km
Fuel St 1 Filter	25,000 mi	35,000 mi	50,000 mi
	40,000 km	56,000 km	80,000 km
Fuel St 2 Filter	25,000 mi	35,000 mi	50,000 mi
	40,000 km	56,000 km	80,000 km
Diesel Particulate	250,000-400,000 mi	400,000-600,000 mi	600,000-800,000 mi
Filter ²	400,000-640,000 km	640,000-960,000 km	960,000-1,300,000 kr
DEF Filter	250,000 mi	280,000 mi	300,000 mi
	400,000 km	448,000 km	480,000 km
Valve Adjustment	500,000 mi	500,000 mi	500,000 mi
	800,000 km	800,000 km	800,000 km

Cummins recommends Valvoline Premium Blue

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

2 - Maintenance lamp will illuminate when DPF cleaning is required.

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 for 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.

BIGGER IS BETTER. CUMMINS CARE.

There's no telling where your next contract is going to take you, but one thing's certain – there will be an authorized Cummins facility close by. With over 3,500 locations, we have the most comprehensive and most capable service network out there. And finding a location is as easy as calling 1-800-DIESELS[™] (1-800-343-7357) any time. You'll get to speak with a Cummins Care representative who knows how to get stuff done the right way, right away.



TRUST MAKES ALL THE DIFFERENCE.

The most reassuring part of owning any Cummins-powered vehicle is knowing that we've always got your back. Cummins engine experts and our extensive training programs ensure service and support excellence you can depend on, no matter the situation. We are committed to the success of your business, which means complete dedication to working with you on everything from upfront vehicle and engine spec'ing to maximizing your vehicle uptime. You aren't just buying a Cummins engine; you're buying Cummins expertise and commitment, anywhere and everywhere your business takes you.

REDEFINING VALUE.

The highest fuel economy in the industry. The longest maintenance intervals, for lower maintenance costs. Increased uptime, for greater productivity and profits. Technology that accelerates service accuracy and speed. The biggest, most capable parts and service network in the industry. Being able to choose the best components and put them together. Top it off with the best resale value of any engine in the industry, and you've got a Total Cost of Ownership that puts you in front of your competition.

The Cummins X15 Efficiency Series is redefining value, so you can redefine success. To learn more about Cummins X15, visit cumminsengines.com.







Cummins Inc. Box 3005 Columbus, IN 47202-3005 U.S.A.

Phone: 1-800-DIESELS™ (1-800-343-7357) Internet: cumminsengines.com

Twitter.com/CumminsEngines YouTube.com/CumminsEngines

Bulletin 5410582 Printed in U.S.A. 7/16 ©2016 Cummins Inc.