

# **EFFICIENCY & DEPENDABILITY FOR A WORLD THAT'S ALWAYS ON.**

**2020 X15™ EFFICIENCY SERIES  
FOR TRUCK APPLICATIONS.**



**ALWAYS ON**

# IT ALL STARTS WITH DEPENDABILITY.

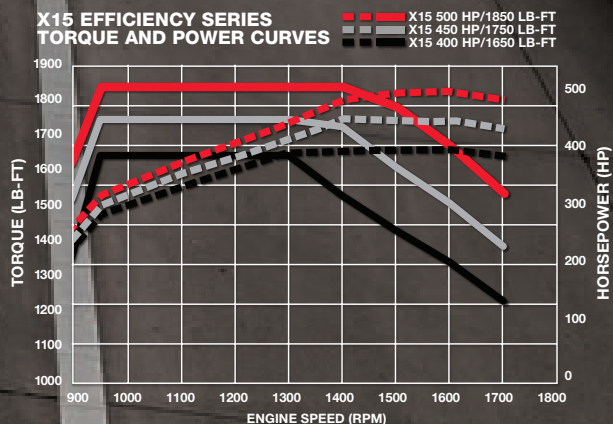
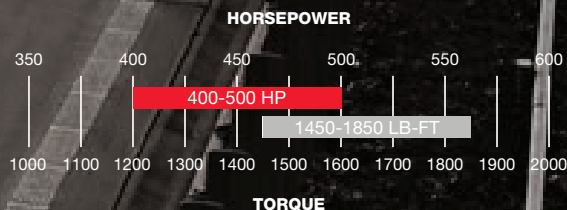
At Cummins, dependability goes beyond engine performance or a response to a service event. It means being able to count on us to do what we say we will do. Dependability means you don't have to worry. The X15 platform has over 10 million field test miles to help us deliver the most dependable product on the market.

# 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.

# EFFICIENCY THAT IMPROVES YOUR BOTTOM LINE.

Driving down operating costs starts with the X15 having the best fuel economy of any heavy-duty engine in the industry. With peak torque starting at 950 rpm, base engine improvements, downspeeding and powertrain optimization, the 2020 X15 Efficiency Series delivers UP TO 3.5% fuel economy compared to the 2017 X15. The fact that burning less fuel means that you meet Greenhouse Gas (GHG) and 2021 fuel economy regulations a year ahead of schedule is a bonus. From integrated powertrain technology to over-the-air engine software updates, Cummins is delivering our total efficiency package a year ahead of the mandated schedule – so you can start making bigger profits right away.



## PASS GO. SAVE \$200.

You don't run a business with play money, so fuel economy matters – a lot. In 2020, the X15 Efficiency Series delivers up to 3.5% better fuel economy compared to 2019, through powertrain optimization and base engine improvements, helping you get the most out of every drop of fuel.



## EFFICIENCY SERIES RATINGS.

Engine Model	Power hp (kW)	Peak Torque lb-ft (N•m) @ rpm
400EX	400 (298)	1650 lb-ft (2237)
400EX	400 (298)	1750 lb-ft (2372)
400EX	400 (298)	1850 lb-ft (2508)
450EX	450 (335)	1750 lb-ft (2372)
450EX	450 (335)	1850 lb-ft (2508)
500EX	500 (372)	1850 lb-ft (2508)
400ST	400 (298)	1450/1650 lb-ft (1966/2237)
400ST	400 (298)	1550/1750 lb-ft (2101/2372)
400ST	400 (298)	1650/1850 lb-ft (2237/2508)
450ST	450 (335)	1450/1650 lb-ft (1966/2237)
450ST	450 (335)	1550/1750 lb-ft (2101/2372)
450ST	450 (335)	1650/1850 lb-ft (2237/2508)
500ST	500 (372)	1650/1850 lb-ft (2237/2508)
450	450 (335)	1650 lb-ft (2237)
450	450 (335)	1750 lb-ft (2372)
450	450 (335)	1850 lb-ft (2508)
500	500 (372)	1650 lb-ft (2237)
500	500 (372)	1850 lb-ft (2508)

## X15 INTEGRATED POWER OFFERING.

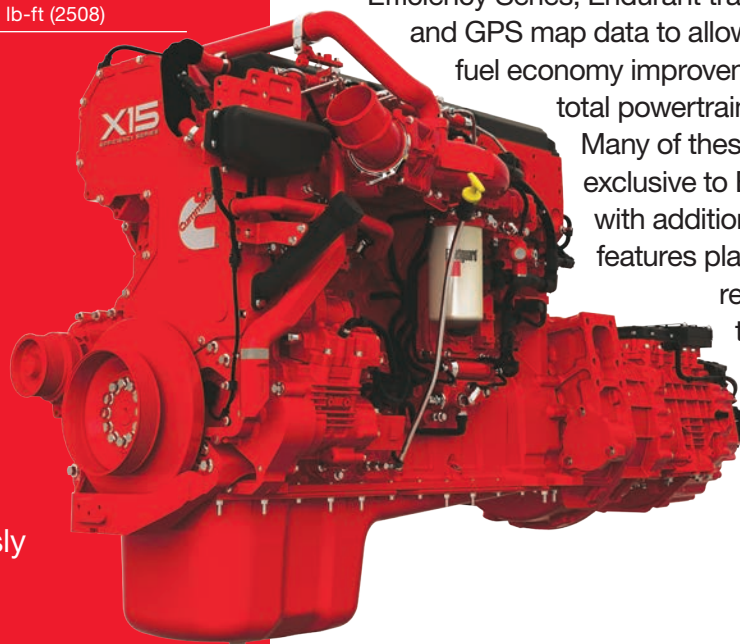
When X15 engines are strategically paired with the Endurant™ transmission from Eaton Cummins Automated Transmission Technologies, the products communicate seamlessly to elevate performance and efficiency.

## POWER TO SPARE AND POWER TO SAVE.

Cummins X15 Efficiency Series ratings offer fuel-savings technology you can take to the bank. Literally. Hardware and software upgrades that are new for 2020 deliver improved fuel economy, driveability and powertrain performance, especially when the X15 Efficiency Series is paired with the Endurant™ transmission from the Eaton Cummins Joint Venture. New EX ratings provide advanced features such as predictive gear shifting, on-ramp boost, predictive engine braking and dynamic power. EX ratings require the use of the X15 Efficiency Series, Endurant transmission and GPS map data to allow up to 1.5%

fuel economy improvements to the total powertrain package.

Many of these features are exclusive to EX ratings, with additional powertrain features planned for release during the product's life cycle.



# BRAWN AND BRAINS.

The value that Cummins is bringing to the trucking industry goes beyond engines. Every X15 offers the capability to deliver Cummins smart connected products, including our suite of remote monitoring, reporting, calibrating and servicing solutions designed to enable uptime and reliability. With Connected Diagnostics™, Connected Advisor and Connected Software Updates, Cummins leverages wireless technologies and takes fleet management to the next level, resulting in streamlined field operations and reduced cost of ownership.

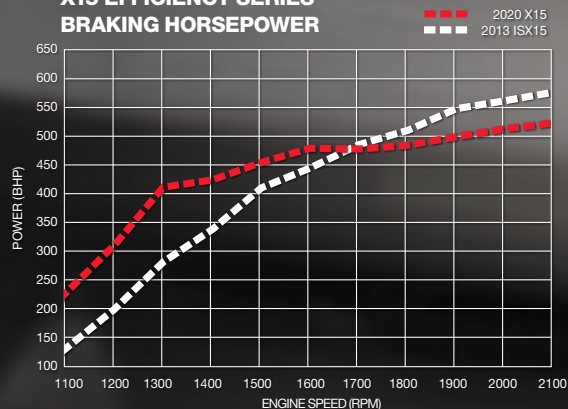
## OVER-THE-AIR PROGRAMMING CAPABILITY.

When connected to a compatible and participating telematics system, Cummins Connected Software Updates facilitates engine control module calibrations remotely in about five minutes, which slashes downtime by eliminating a traditionally scheduled visit to the service bay. Once integrated, customers can leverage the same technology to take advantage of Cummins full upcoming suite of over-the-air programming solutions designed to enhance performance, safety and fuel efficiency.

Braking power is available where you need it most, at lower rpms, providing better drivability and extending service brake life.



**X15 EFFICIENCY SERIES  
BRAKING HORSEPOWER**



Braking power is available where you need it most, at lower rpms, providing better drivability and extending service brake life.

# 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.

## PROVEN COMPONENTS. PROVEN TECHNOLOGY.

### ■ VG TURBOCHARGER

Highly reliable and precise design for rapid acceleration

### ■ XPI FUEL SYSTEM

High pressure enables multiple injection events per cycle for industry-leading fuel economy and quieter operation

### ■ SINGLE MODULE™ AFTERTREATMENT SYSTEM

A compact and lightweight fully serviceable system that offers increased ash capacity and extended maintenance intervals

### ■ FLEETGUARD FUEL AND LUBE FILTERS

Superior holding capacity provides better protection, enables longer service intervals, and NanoNet(TM) media provides industry leading protection at 3 microns

### ■ HIGH-CAPACITY ELECTRONIC CONTROL MODULE

This allows full integration of data inputs from all subsystems, optimizing performance

# X15 MAINTENANCE INTERVALS. GO LONG.

Cummins X15 engines have some of the longest maintenance intervals in the transportation industry. Our Single Module™ aftertreatment system has built-in sensors that tell you when the DPF finally needs to be changed – so you get every single mile you can out of it.

ITEM	SEVERE <5.0 MPG	SHORTHAUL <5.0 - 5.9 MPG	NORMAL 6.0 - 6.9 MPG	LIGHT >7.0 MPG
<b>OIL DRAIN INTERVAL LEVEL</b>	25,000 Mi 40,000 Km	40,000 Mi 64,000 Km	50,000 Mi 80,000 Km	75,000 Mi 120,000 Km
<b>X15 OIL DRAIN WITH VALVOLINE PB*</b>	30,000 Mi 48,000 Km	45,000 Mi 72,000 Km	55,000 Mi 89,000 Km	80,000 Mi 130,000 Km
<b>X15 OIL DRAIN WITH CUMMINS OILGUARD™ 1</b>	extensions available	extensions available	extensions available	Up to 100,000 Mi 160,000 Km
<b>FUEL FILTER<sup>2</sup></b>	25,000 Mi 40,000 Km	40,000 Mi 64,000 Km	50,000 Mi 80,000 Km	75,000 Mi** 112,000 Km
<b>DIESEL PARTICULATE FILTER<sup>3</sup></b>	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	
<b>DIESEL EXHAUST FLUID FILTER</b>	250,000 Mi 400,000 Km	280,000 Mi 600,000 Km	300,000 Mi 480,000 Km	
<b>VALVE ADJUSTMENT</b>	500,000 Mi 800,000 Km	600,000 Mi 965,606 Km	500,000 Mi 800,000 Km	

If combined percent idle time plus power takeoff (PTO) time is greater than 40% for shortfall, normal, or light intervals, use the next lowest drain interval.

\* Cummins recommends Valvoline Premium Blue (PB 8600ES)

\*\* Extending fuel filter interval from 60,000 miles to 75,000 requires use of extended filter available through Cummins service network.

1 - Up to 100,000-mile oil drain interval with participation in Cummins OilGuard oil analysis program.

2 - For Premium Blue users, the fuel filter interval matches the ODI.

3 - Maintenance lamp will illuminate when DPF maintenance is needed.

# 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 600,000 miles (965,606 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.

## CUSTOMER SUPPORT IS ALWAYS ON WITH CUMMINS CARE.

We are here to make your life easier by creating a seamless support experience. We are equipped with quality tools and innovative resources to address issues with varying degrees of complexity. We deliver complete solutions while working with one of over 3,700 authorized parts and service locations. Visit [care.cummins.com](http://care.cummins.com) or call 1-800-CUMMINS™ to connect with a Care expert.



For details about the X15 Efficiency Series, see your local Cummins distributor or dealer, or visit [cummins.com](http://cummins.com).



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

1-800-CUMMINS™ (1-800-286-6467)  
[cummins.com](http://cummins.com)

[Twitter.com/CumminsEngines](https://twitter.com/CumminsEngines)  
[YouTube.com/CumminsEngines](https://www.youtube.com/CumminsEngines)

Bulletin 5410582 Printed in U.S.A. Rev. 4/20  
©2020 Cummins Inc.