



NEWS

2017 JAGUAR XF INTRODUCES NEW INGENIUM DIESEL ENGINE

Contacts:

Nathan Hoyt
National Product Communications
Manager
Jaguar Land Rover
North America, LLC
201-818-8136
nhoyt@jaguarlandrover.com

Maria Rodriguez
Product Communications
Coordinator
Jaguar Land Rover
North America, LLC
201-818-8346
mrodrig2@jaguarlandrover.com

- First-ever diesel powertrain for US XF customers combines improved fuel economy⁶ of up to 42 MPG highway and sporting characteristics, delivering 180-hp and 318-lb.-ft. of available torque
- New Ingenium diesel engine designed and built entirely in-house by Jaguar Land Rover
- All-wheel drive (AWD)¹ now available globally
- F-TYPE-derived Intelligent Driveline Dynamics technology¹ maximizes traction and performance benefits of AWD while preserving rear-wheel drive agility
- Adaptive Surface Response mode for Jaguar Drive Control designed to deliver greater composure in adverse conditions¹
- Configurable Dynamics available on Prestige & R-Sport models and standard on S models, enabling individual settings for suspension, steering, throttle and transmission for a tailored driving experience¹
- Outstanding usability and practicality with a 19.1-cu.ft. (540-liter) luggage compartment
- All models available with Jaguar EliteCare, a Best-in-Luxury-Class 5-year/60,000 mile customer care and warranty program²
- 2017 Jaguar XF range features three powertrain options – two V6 gas powered engines (a 340hp “35t” and a 380hp “S”) and a 180hp “20d” diesel – selectively available in RWD or AWD and five trim levels – XF, XF Premium, XF Prestige, XF R-Sport and XF S

U.S. Models and MSRP⁵

XF 20d	2.0L Turbocharged I-4 diesel, 180hp	From \$47,450
XF 35t	3.0L Supercharged V6, 340hp	From \$50,490
XF S	3.0L Supercharged V6, 380hp	From \$62,700

(Mahwah, N.J.) – August 2016 – For the 2017 model year, the Jaguar XF line-up expands with the introduction of an all-new diesel powertrain delivering up to 42 miles per gallon⁶ on the highway; providing a greater breadth of dynamic ability with enhanced fuel economy⁶ to the already popular mid-size sport sedan.

For the first time ever, US customers have the option of a diesel powertrain in the XF. The new diesel has been wholly designed and built in-house by Jaguar Land Rover, features the brand’s advanced lightweight aluminum construction and is the first of a new generation of “Ingenium” engines the company has introduced to the US market. In the XF, the four-cylinder 180hp “20d” Ingenium diesel returns a more than 44 percent improvement in fuel economy over the 3.0L gas V6 while producing almost the same amount of torque.

With the addition of the diesel engine, the XF model range expands for 2017 to include 18 total variants; three engine options – the 340hp “35t” gasoline V6, the 380hp gasoline V6 “S” and the 180hp “20d” four-cylinder diesel – selectively available in five trim levels – XF, XF Premium, XF Prestige, XF R-Sport and XF S.

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The new 4-cylinder engine represents the first of an entire family of diesel and gas Ingenium engines that have been designed, engineered and built fully in-house by Jaguar Land Rover. Starting from a clean sheet meant that Jaguar powertrain engineers could make the Ingenium engines as light and efficient as possible, and deliver the blend of power, torque and smoothness customers expect from Jaguar. In fact, these were proven over two million miles of real-world testing before any customers took delivery.

Engine Construction

Based around a deep-skirt aluminum cylinder block featuring thin wall, press-fit cast iron liners which offer the best balance of weight, surface finish and robustness, Ingenium diesel engines are characterized by the rapid build-up of torque from very low engine speeds. Maximum torque (318-lb.-ft in the XF 20d) is maintained over a wide rev range, ensuring instantaneous response and strong acceleration³ whenever the driver demands it.

Weighing only 304 lbs. (138kg), this all-aluminum engine features twin counter-rotating balancer shafts to cancel-out second order forces, offering the smoothness and power of a naturally aspirated six-cylinder but in a smaller, more efficient package.

An innovative feature is the sheet metal turbine housing integrated into the air-gap insulated exhaust manifold. As well as saving weight, the assembly's reduced thermal mass means that the catalyst reaches light-off temperature more quickly, reducing emissions. The low-inertia turbine wheel delivers outstanding transient response.

Emissions Technology

Even before it found a home in US market cars, the new engine was designed from the outset to be fully compliant with all federal and state emissions regulations; using several key technologies that help the engine meet stringent US LEV 3 and CARB emissions testing procedures to make it as clean as it is efficient⁶.

A cooled low-pressure exhaust gas recirculation (EGR) system reduces combustion chamber temperatures, inhibiting the formation of harmful oxides of nitrogen (NOx) by taking exhaust gases at low pressure – after the diesel particulate filter (DPF) in the exhaust pipe – and feeding them back to the turbocharger inlet for secondary combustion. By using this low pressure system Jaguar is able to not only reduce NOx emissions, but also improve fuel economy and transient performance across a wider rpm range; helping to contribute to an incredibly responsive and drivable powertrain.

Alongside the low pressure EGR, Jaguar also incorporated a Selective Catalytic Reduction (SCR) system which injects Diesel Exhaust Fluid (DEF) into the exhaust where it mixes and passes through the SCR, converting NOx into harmless nitrogen gas. SCR technology has been proven to cut NOx emissions by as much as 90 percent.

Similar to all Jaguar gasoline engines, Ingenium diesel engines will feature Variable Valve Timing enabled by a cam phaser on the exhaust side. This design enables more rapid catalyst heating, further minimizing harmful emissions during the critical engine warm-up period.

Further to this, the engine's split-cooling system, mapped thermostat, and fully variable mechanical water pump work together to help the engine warm more quickly, reduce friction and fuel consumption. An electronically-controlled oil pump matches its flow rate according to engine speed, load and temperature, and switchable piston cooling jets operate only when needed further decreasing parasitic losses.

All-Wheel Drive

Already proven on the 340- and 380-hp 3.0-liter supercharged V6 gasoline powered XF models, the Jaguar torque-on-demand all-wheel drive¹ system is also available as an option for North American diesel XF customers.

In normal driving, all of the engine's torque is sent to the rear axle. Compared to permanent all-wheel drive systems, the Jaguar torque on-demand all-wheel drive (AWD) system preserves rear-wheel drive dynamics and agility, ensures that steering feel remains uncorrupted and also reduces parasitic losses in the driveline.

Decisions of when torque should be transferred to the front axle – and how much – are controlled by the Intelligent Driveline Dynamics (IDD) system¹ – a highly sophisticated technology designed, developed and calibrated entirely in-house by Jaguar Land Rover. IDD is designed to continuously estimate the friction between the tires and the road surface as well as how much of the available grip is being exploited at each tire contact patch.

First used on the F-TYPE AWD, IDD is integrated into the transfer case and can apply predictive, feed-forward control strategies as well as reactive, feedback control. IDD is also networked to the Dynamic Stability Control (DSC) system, the Torque Vectoring system and Jaguar Drive Control¹.

If IDD predicts that the rear axle is approaching the limit of available traction, torque is transferred to the front axle. Torque can also be transferred to the front axle to help mitigate oversteer during fast cornering by providing yaw damping¹.

AWD diesel models accelerate from 0-60mph in as fast as 7.9 seconds with an electronically limited top speed of 121mph³. Achieving a maximum torque output of 318-lb.-ft. from just 1,750rpm, the 180hp Ingenium diesel delivers strong mid-range acceleration and outstanding real world performance in day-to-day driving.

Configurable Dynamics¹ improves the driving experience further by allowing the driver to individually tune settings for the suspension, steering, throttle and transmission through the vehicle's touchscreen⁷. Originally offered on V6 models, Configurable Dynamics is also available on 180hp four-cylinder diesel Prestige and R-Sport models.

For vehicles equipped with the Jaguar InControl[®] Touch Pro[™] infotainment system, Configurable Dynamics also benefits from Dynamic-i. Displayed on the 10.2-inch touchscreen, this feature provides the driver with a stopwatch, g-meter, lap timer and graphs of brake and accelerator pedal activation, enhancing the vehicle's performance-orientated character⁴.

AWD-equipped XF S models will also benefit from Adaptive Surface Response (AdSR) technology as standard. Replacing Rain, Ice, Snow mode in the Jaguar Drive Control, AdSR optimizes the mapping of the throttle, automatic transmission and DSC system to suit the type of road surface¹.

Developed from the award-winning Land Rover Terrain Response[®] technology, AdSR is designed to fully exploit the available traction, improving driver confidence in a variety of challenging conditions, such as ice-covered roads¹.

The combination of AWD, and Jaguar All-Surface Progress Control system is unique in the segment and ensures that the Jaguar XF delivers outstanding all-weather performance and capability¹.

In addition to advanced vehicle dynamics, the Jaguar XF boasts exceptional usability and practicality as well, thanks to a 19.1-cu.ft. (540-liter) luggage compartment.

The 2017MY Jaguar XF range will consist of the following variants:

Model	Powertrain, Horsepower	MSRP⁵
XF 20d (RWD/AWD)	2.0L Turbocharged 4-Cyl. Diesel, 180hp	\$47,450 / \$50,450
XF 20d Premium (RWD/AWD)	2.0L Turbocharged 4-Cyl. Diesel, 180hp	\$49,550 / \$52,550
XF 20d Prestige (RWD/AWD)	2.0L Turbocharged 4-Cyl. Diesel, 180hp	\$54,200 / \$57,200
XF 20d R-Sport (RWD/AWD)	2.0L Turbocharged 4-Cyl. Diesel, 180hp	\$58,300 / \$61,300
XF 35t (RWD/AWD)	3.0L Supercharged V6 Gasoline, 340hp	\$50,490 / \$53,490
XF 35t Premium (RWD/AWD)	3.0L Supercharged V6 Gasoline, 340hp	\$51,900 / \$54,900
XF 35t Prestige (RWD/AWD)	3.0L Supercharged V6 Gasoline, 340hp	\$56,550 / \$59,550
XF 35t R-Sport (RWD/AWD)	3.0L Supercharged V6 Gasoline, 340hp	\$60,650 / \$63,650
XF S (RWD/AWD)	3.0L Supercharged V6 Gasoline, 380hp	\$62,700 / \$65,700

TECHNICAL SPECIFICATIONS – DIESEL MODELS

	180-hp Turbocharged 2.0L 4-Cyl Diesel
ENGINE & TRANSMISSION	
Engine capacity	1,999cc
Cylinders	4 in-line
Valves per cylinder	4; DOHC, variable inlet and exhaust cam timing
Bore x stroke	83.0 x 92.4 mm
Compression ratio	15.5:1
Fuel injection	1,800 bar common rail
Boosting system	Single variable geometry turbocharger
Power	180-hp @ 4,000rpm
Torque	318 lb. ft. (430Nm) @ 1,750-2,500rpm
Transmission	ZF 8HP45 8-speed auto
Gear ratios (:1)	
1st	4.714
2nd	3.143
3rd	2.106
4th	1.667
5th	1.285
6th	1.000
7th	0.839
8th	0.667
Reverse	3.295
Final Drive	2.73
CHASSIS	
Front suspension	Double wishbone
Rear suspension	Integral Link
Steering	Rack-and-pinion; electromechanical power-assisted
DIMENSIONS	
Length	195in (4,954mm)
Width inc./excl. mirrors	82.3in (2,091mm)/ 74in (1,880mm)
Height	57.4in (1,457mm)
Wheelbase	116.5in (2,960mm)
Track front/ rear	63.2in (1,605mm)/ 62.8in (1,594mm)
Curb weight	RWD: From 3,520 lbs AWD: From 3,750 lbs
Trunk volume	19.1-cu.ft. (540 liters)
Fuel tank; usable	17.4 gal (66 liters)
PERFORMANCE	
0-60mph ³	RWD: 8.0 sec AWD: 7.9 sec
0-100km/h	RWD: 8.5 sec AWD: 8.4 sec
Top speed ³	121 mph (195 km/h)

TECHNICAL SPECIFICATIONS – GASOLINE MODELS

	340-hp Supercharged 3.0L V6 Gasoline	380-hp Supercharged 3.0L V6 Gasoline
ENGINE & TRANSMISSION		
Engine capacity	2,995cc	2,995cc
Cylinders	6 in-vee	6 in-vee
Valves per cylinder	4; DOHC, variable inlet and exhaust cam timing	4; DOHC, variable inlet and exhaust cam timing
Bore x stroke	84.5 x 89.0 mm	84.5 x 89.0 mm
Compression ratio	10.5:1	10.5:1
Fuel injection	150bar direct injection	150bar direct injection
Boosting system	Twin-Vortex supercharger	Twin-Vortex supercharger
Power	340hp @ 6,500rpm	380hp @ 6,500rpm
Torque	332 lb. ft. (450Nm) @ 4,500rpm	332 lb. ft. (450Nm) @ 4,500rpm
Transmission	RWD: ZF 8HP45 8-speed auto AWD: ZF 8HP70 8-speed auto	RWD: ZF 8HP45 8-speed auto AWD: ZF 8HP70 8-speed auto
Gear ratios (:1)		
1st	4.714	4.714
2nd	3.143	3.143
3rd	2.106	2.106
4th	1.667	1.667
5th	1.285	1.285
6th	1.000	1.000
7th	0.839	0.839
8th	0.667	0.667
Reverse	3.317	3.317
Final Drive	3.23	3.23
CHASSIS		
Front suspension	Double wishbone	Double wishbone
Rear suspension	Integral Link	Integral Link
Steering	Rack-and-pinion; electromechanical power-assisted	Rack-and-pinion; electromechanical power-assisted
DIMENSIONS		
Length	195in (4,954mm)	195in (4,954mm)
Width inc./excl. mirrors	82.3in (2,091mm)/ 74in (1,880mm)	82.3in (2,091mm)/ 74in (1,880mm)
Height	57.4in (1,457mm)	57.4in (1,457mm)
Wheelbase	116.5in (2,960mm)	116.5in (2,960mm)
Track front/ rear	63.2in (1,605mm)/ 62.8in (1,594mm)	63.2in (1,605mm)/ 62.8in (1,594mm)
Curb weight	RWD: From 3,770lbs (1,710kg) AWD: From 3,880 (1,760kg)	RWD: From 3,770lbs (1,710kg) AWD: From 3,880 (1,760kg)
Trunk volume	142.7gal (540 liters)	142.7gal (540 liters)
Fuel tank; usable	19.5gal (74 liters)	19.5gal (74 liters)
PERFORMANCE		
0-60mph ³	RWD: 5.2 sec AWD: 5.1 sec	RWD: 5.1 sec AWD: 5.0 sec
0-100km/h	5.3 sec	5.3 sec
Top speed ³	121 mph (195 km/h)	121 mph (195 km/h)

¹ These features are not a substitute for driving safely with due care and attention and will not function under all circumstances, speeds, weather and road conditions, etc. Driver should not assume that these features will correct errors of judgment in driving. Please consult the owner's manual or your local authorized Jaguar Retailer for more details.

² Class is cars sold by luxury automobile brands and claim is based on total package of warranty, maintenance and other coverage programs. For complete details regarding Jaguar EliteCare coverage, please visit JAGUARUSA.COM, call 1.800.4.JAGUAR or visit your local Jaguar Retailer.

³ Always follow local speed limits.

⁴ Do not use Jaguar InControl® features under conditions that will affect your safety or the safety of others. Driving while distracted can result in loss of vehicle control.

⁵ All prices shown are Manufacturer's Suggested Retail Price. Excludes \$995 destination/handling charge, tax, title, license, and retailer fees, all due at signing, and optional equipment. Retailer price, terms and vehicle availability may vary. See your local authorized Jaguar Retailer for details.

⁶ EPA estimates 31 city / 42 highway/ 35 combined mpg. Actual mileage may vary.

⁷ Driving while distracted can result in loss of vehicle control. Do not operate, adjust or view the navigation or multimedia systems under conditions that will affect your safety or the safety of others. Only use mobile phones, and other devices, even with voice commands, when it is safe to do so.

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About Jaguar

Jaguar is a premier manufacturer of luxury sedans and sports cars offering unparalleled design with tremendous performance. The company's vision throughout its storied history has been simple: To produce beautiful, fast cars that are desired the world over. Jaguar strives to provide a world class ownership experience to every owner. Today's Jaguar lineup consists of the Jaguar XE, two-seater F-TYPE, XF sports sedan, and the XJ luxury sedan. Jaguar designs, engineers and manufactures exclusively in the United Kingdom, at the Castle Bromwich manufacturing plant in the British Midlands. Jaguar is fully engaged with sustainability initiatives and social concerns with continuous involvement in environmental and community programs. For more information visit the official Jaguar website at www.jaguarusa.com.

About Jaguar Land Rover

- *The United States is one of the leading global markets for both Jaguar and Land Rover*
- *Jaguar Land Rover employs 32,000 people and sells vehicles in 170 countries around the world*
- *Jaguar Land Rover has two state of the art engineering and design facilities and four advanced manufacturing plants in the UK*
- *Headquartered in Mahwah, New Jersey in the United States, Jaguar Land Rover North America, LLC has offices across the USA*
- *Jaguar Land Rover is represented by more than 330 independently operated retail outlets in the USA*