

NEW F-150 | OVERVIEW

Tougher Than Ever Before

By Derek Price AUTOMOTIVE WRITER

s America's most popular truck for decades, the Ford F-150 has long embodied the strength, toughness and durability of the American workforce.

Now, with a completely new design for 2015 intended to save fuel without sacrificing capability, Ford's challenge is to innovate in a big way without alienating those core buyers who depend on the F-150 to do their jobs.

And make no mistake, the new Ford pickup platform marks a historic change.

Not only does it add a long list of impress-your-friends features, like a tailgate that can lower by remote control and cameras that can see 360 degrees around the vehicle to help you park, but it's also got one of the most groundbreaking designs ever introduced on a mass-market vehicle.



F-150 — which is America's most popular vehicle — a true innovator in bringing this previously exotic material to the masses.

MODERN DESIGN

As a whole, Ford's new generation F-150 represents a major leap forward for pickup trucks. It brings new features that have never been offered on trucks before, but it also looks more modern.

The body styling, particularly around the hood and headlights, is aggressive and dramatic looking, but it retains the F-150's characteristic overall shape.

The new cabin is also a big improvement, with better materials and construction.

ALUMINUM BODY

For years, luxury brands and exotic car companies have used aluminum body panels to save weight and go faster.

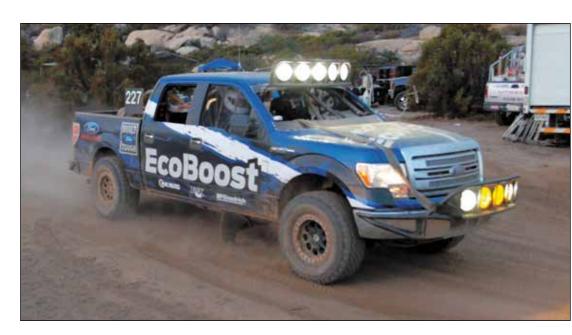
Aluminum car construction actually has its roots on the racetrack, where lightweight materials can pay big dividends in speed.

More recently, luxury brands such as Audi and Jaguar — along with rare, exotic cars from Lamborghini and Aston

The Ford F-150, America's best-selling vehicle, is completely redesigned for the 2015 model year.

Martin — have experimented with using aluminum panels to save weight. Because they're built in relatively small numbers and command relatively high prices, the added cost of buying and machining the aluminum could be absorbed.

Until this new F-150 was unveiled, though, aluminum has never been used on such a large scale in the automotive industry. That makes the



As part of its testing regimen, a heavily disguised 2015 F-150 secretly competed in the Baja 1000 rally race, where it successfully completed all 883 miles of the famously brutal off-road course.

NEW F-150 | ENGINEERING



The F-150's all-new frame uses more high-strength steel than ever before, offering a more rigid backbone and improved handling.

COURTEST OF FORL

New Design Saves Fuel

The F-150 is getting plenty of updates for its next generation, but the most revolutionary change of all is the extensive use of aluminum in the body to save weight.

Overall, the new aluminum-intensive architecture helps the truck shed up to 700 pounds of weight compared to the previous generation truck, which improves towing, hauling, acceleration and braking performance.

Most importantly, it contributes to considerably better gas mileage than before, making the new F-150 a leader in fuel consumption that can save big money for both fleet operators and individual owners.

TOUGHNESS

Ford's biggest challenge will be convincing the F-150's conservative buyers that aluminum can be as tough — or tougher — than traditional steel bodies. Many people associate aluminum with foil or cans, but it also is used in aerospace and military applications that demand incredible strength. Ford says the new aluminum body is actually more resistant to dings and dents than the previous generation's steel body panels.

STRONGER FRAME

The F-150 also has a stronger backbone than before thanks to an all-new frame design.

The new frame is still fully boxed, which has become a Ford signature, but it uses more highstrength steel than ever before. That means it is more rigid and lighter at the same time.



An aluminum body helps the new F-150 shed up to 700 pounds compared to its predecessor, something that improves both performance and fuel economy.

Innovative Power Solutions

ord took a big gamble — and won — when it became the first truck maker to offer an efficient turbocharged engine called the EcoBoost back in 2011.

Since then, Ford has sold hundreds of thousands of EcoBoost F-150s and forced other truck makers to be more daring and innovative with their powertrains to keep up.

Now Ford is taking things a step further, introducing a new, smaller EcoBoost engine to offer even better fuel economy.

NEW ECOBOOST ENGINE

A new 2.7-liter EcoBoost engine comes standard with what Ford calls "Auto Start-Stop" technology, which turns off the engine when the vehicle stops to save fuel. It's the same principle that many hybrid cars use to boost their fuel economy ratings, briefly turning off the engine instead of burning fuel while idling.

Ford has tweaked this technology for truck customers, though. Unlike the start-stop systems in other vehicles, the Ford version will not shut off the engine when the vehicle is towing or has four-wheel drive engaged.

All F-150s that come with EcoBoost engines will also get a feature that makes the truck more aerodynamic: Active Grille Shutters.

These shutters can stay open when the engine needs extra cooling, such as in stop-and-go driving situations in the city or when driving in hot weather. If the extra cooling is not needed, the shutters will close, which seals the grille and reduces drag at highway speeds — which results in better gas mileage.



COURTESY OF FORD

A new 2.7-liter EcoBoost engine is offered on the 2015 F-150, giving buyers a smaller, even more efficient alternative to the 3.5-liter EcoBoost engine that has proven popular with Ford Truck buyers since its introduction in 2011.

OTHER ENGINES

In addition to the new 2.7-liter EcoBoost engine, Ford is now making a 3.5-liter, normally aspirated V6 available in the F-150 with a high-tech design. It features twin independent variable camshaft timing.

Two other engines are returning to the F-150 lineup, too: the 3.5-liter EcoBoost and a 5.0-liter V8.

TRIM LEVELS

Just like in the past, the all-new F-150 will offer an incredibly wide array of trim levels to meet the needs of different types of customers.

The five main trim levels are XL, XLT, Lariat, Platinum and King Ranch. Buyers will also have the option of a chrome appearance package on all but the Platinum trim, and a sporty, monochrome look will be available on the XL, XLT and Lariat.

For people who use their trucks for off-road driving, the FX4 package will still be available on most four-wheeldrive models. It adds special shocks that are tuned for off-road use, an electronic locking rear axle and skid plates to protect the truck's underbody.

Cameras See From All Angles

Rear-view cameras are becoming a common feature on virtually all cars and trucks hitting the market these days. And when redesigning the F-150 for 2015, Ford wanted to take those cameras a step further.

The new F-150 doesn't just have a backup camera, but it is available with four cameras that can see in 360 degrees around the vehicle.

This feature isn't entirely new. It's been used on a few high-end luxury cars for several years, but Ford is the first truck company to incorporate the 360-degree cameras into a pickup.

HOW IT WORKS

Just like a rear-view camera, which provides a live video picture from the back of the vehicle on a digital display letting you see more clearly and avoid objects that might not be visible behind your bumper — the F-150's cameras show what's happening all around your vehicle in real time.

The added cameras give the driver a bird's eye view around the entire truck when parking or backing up. Its digital display combines the view from all the cameras onto one screen.

It's useful when you want to carefully line your truck up into a parking space, for example — letting you see where the stripes are without having to open your door or do guesswork.

It's also good for pulling up close to a wall in a garage or avoiding obstacles when driv-



An 8-inch "productivity screen" has a prominent position in the new F-150's cabin. With an available 360-degree camera system, it lets the driver see in all directions around the truck when parking or backing up, providing a bird's eye view.

ing at very low speeds in a parking lot. Basically, if you want to see what's close to your vehicle in any direction, the new F-150's cameras let you do that without stepping out of the cabin.

NEW 8-INCH SCREEN

A big, 8-inch LCD digital display in the center of the dash draws lots of attention in the F-150's redesigned cabin. Ford calls it a "productivity screen," and it serves a lot of different functions. It can display your fuel economy or give you towing tips, for example, using a suite of Ford's truck apps.

It also allows you to create a personalized home screen

that keeps all your favorite apps in one place.

From the SYNC system with MyFord Touch to navigation and entertainment options, the new, larger screen will provide for more real estate to keep you digitally connected.

COURTESY OF FORD

NEW F-150 | CAPABILITY

Designed to Work Smarter

epending on how they're outfitted, today's pickup trucks can range from bare-bones work vehicles to comfortable family haulers and even luxurious status symbols.

At their core, though, trucks are designed to do one thing: hard work.

The new F-150 comes with a lot of innovations for working smarter, including some that have never been seen on pickups before.

CARGO SOLUTIONS

Ford's engineers designed the next-generation F-150 around several ideas that should help make life easier for pickup buyers.

For example, the truck can be outfitted with integrated loading ramps that make it easier to load ATVs, motorcycles and mowers into the bed.

It also adds a system called BoxLink that combines metal brackets with custom cleats that can be used to secure all kinds of cargo into place. It also lets you customize the bed with a range of accessories, including storage bins and bed dividers.

REMOTE TAILGATE

One of the coolest new features on the F-150 is a remote-controlled tailgate. The tailgate is not only dampened for easy, gentle lowering without slamming down, but it can also be locked and released by remote control. Just press a button on the remote, and the tailgate gently lowers into place.

TAILGATE STEP

Another design innovation on the tailgate is an integrated step. It's an improvement on the tailgate step that Ford introduced on the previous generation F-150, and this time it remains hidden inside the tailgate itself.

It stores under a flap in the top of the tailgate, keeping it protected from the elements and offering a cleaner, more integrated look. And it's easy to deploy when necessary to help you load cargo into the bed.

TRAILER TOW MODULE

A new trailer tow module uses what Ford calls a "smart" wiring harness that can warn the driver of potential problems.

If the trailer lights are burned out or not working, or if there is a fault in the trailer battery or brake lights, for example, the new module is designed to let the driver know that.



PHOTOS COURTESY OF FORD

Integrated loading ramps are designed to make it easier to load ATVs, motorcycles and mowers into the pickup bed. They're among many smart innovations in the new generation Ford F-150.



Ford's new BoxLink system offers a wide range of cleats and accessories to secure and store cargo.

NEW F-150 | ADVANCEMENTS

Power Up the Jobsite

- pickup trucks — and the Ford F-Series in particular — are almost as common as power tools on the job site. And when redesigning the F-150, Ford's engineers made it easier for tools and trucks to work together.

From innovative lighting solutions to features that can keep your tools powered up, the new F-150 has a lot of electronic advancements.

LED HEADLAMPS

Both the headlights and taillights in the new F-150 use LED lighting, which provide great visibility after dark.

In fact, the new F-150 is the first pickup truck to offer LED headlights, which provide brighter illumination and a longer lifespan than traditional lightbulbs.

According to Ford, the new headlights will create a light that is more similar in color to daylight, unlike the yellowish incandescent bulbs or the blue-tinted, high-intensity discharge bulbs that have been popularized in recent years.

Another advantage is that LED lights use less power than traditional bulbs.

LED SIDE VIEW MIRROR

Ford is deploying LED lighting in other places, too, including the side mirrors.

New forward-facing spotlights use LEDs to cast light in front of the doors. Just like



COURTESY OF FORD

The new F-150 uses advanced LEDs in the headlights, taillights, cargo box and side view mirrors to provide bright illumination that approximates the color of daylight without using much power.

some luxury cars that use spotlights to help visibility when you approach the vehicle, the class-exclusive LED lights in Ford's new F-150 will improve safety while also giving it an air of sophistication at night.

POWER INVERTER

Power generators are a

common tool on any jobsite, providing the electricity needed to run tools and get work done.

For some jobs, though, the new F-150 could play the role of a generator. It can be equipped with 400-watt, 110-volt power outlets that let you operate corded power tools, charge your cordless tools or wireless devices, power laptop computers and charge your mobile devices while driving or at the jobsite.

CARGO BOX LIGHTING

Because, for many people,

work doesn't stop when the sun goes down, the new generation F-150 uses LED cargo lights to keep the bed brightly lit at night.

These LED lights are embedded into the truck's bed, and they provide lots of illumination to help truck owners find their tools or load cargo after dark.

NEW F-150 | PEACE OF MIND

Cutting-Edge Safety Tech

ord aimed to make the all-new F-150 the most advanced truck on the road, and that's certainly the case with its safety equipment. It includes several features never before offered in pickup trucks.

INFLATABLE SAFETY BELTS

The most dramatic new safety feature is an inflatable safety belt for the back seats.

If the F-150's sensors detect a wreck is imminent, the seatbelts in the back seat will inflate in the blink of an eye, much like an airbag.

They use cold compressed gas to instantly fill the tubular

safety belts with air, which creates a bigger surface area to absorb the force of an impact. The goal is to reduce the chance a back-seat passenger will be injured in a wreck.

CURVE CONTROL

Another innovation is something Ford calls "Curve Control." It's a variation on the standard traction control and stability control systems used by many cars today to help drivers control their vehicles in extreme conditions.

When sensors detect that the truck is entering a corner too fast, Curve Control will automatically provide more aggressive braking to all four wheels to help the driver keep control in the turn.

LANE-KEEPING SYSTEM

Another new feature to automatically assist the driver is Lane-Keeping Assist. It uses cameras to detect stripes in the road, and it will warn the driver when he starts to veer over the stripes.

OTHER TECHNOLOGIES

In addition, the F-150 offers several new features that can help avoid accidents and keep the driver informed.

Adaptive cruise control, which has been a popular option on high-end luxury cars for years, is now available on the F-150. It uses radar sensors to detect cars in front of you, and it will automatically slow down or speed up your truck to keep the vehicle a set distance from the car you're following. Blind Spot Information System (BLIS) uses radar sensors hidden in the taillamps to detect vehicles in the driver's blind spot. It works both when driving and when backing up, giving an extra layer of protection for areas that drivers sometimes struggle to see clearly.

The BLIS system on the new F-150 also includes cross traffic alert. When backing up, it can detect whether another vehicle is approaching from either side and will alert the driver to the possibility of a collision. It's just one more way modern electronics can help keep the driver's attention focused on the road.

Another Ford technology,

A FORD TRUCK EXCLUSIVE: REAR INFLATABLE SAFETY BELT

> BELT IN EVERYDAY USE

BELT INFLATES DURING CRASH

BELT FULLY INFLATED



Ford's rear inflatable safety belt functions like a standard safety belt in everyday use. The vehicle's crash-sensing system determines when the belt should deploy. In a blank of an eye, the tubular airbag inflates across the body, with cold compressed gas flowing through a specially designed buckle from a cylinder housed below the seat. The fully inflated belt helps distribute crash force energy across five times more of an occupant's body than a traditional belt to help reduce injury risks.