



We're committed to achieving top-level performance in real-world safety initiatives, driver-assist measures and more, including Ford Co-Pilot360™ Technology and Lincoln Co-Pilot360™ Technology. Advancing vehicle technology includes the development of features that further protect occupants and other vulnerable road users in a variety of situations. We offer drivers a range of innovations that utilize radar, sonar and cameras to sense and interpret the environment. These systems can also aid with routine tasks to reduce demands on the driver. Many innovations require stringent internal criteria long before regulatory standards are adopted.

#### SEE NUMEROUS FORD AND LINCOLN TECHNOLOGIES IN ACTION:

Visit YouTube.com/Ford, type Ford How-To – along with the name of the specific feature or technology – in the search box at the top of the page. Follow the same procedure for Lincoln vehicles at YouTube.com/Lincoln by typing Lincoln How-To – plus the name of the specific feature or technology – as the search query. These videos can also be found on Owner.Ford.com/support and Owner.Lincoln.com/support if preferred.

#### DETECTING ACCIDENTS

A number of Ford technologies – in addition to handling and braking capabilities – can benefit drivers by helping them control the vehicle or alerting to potential collisions. These technologies can support routine driving tasks by improving confidence and reducing demands on the driver.

#### ASSISTING DRIVERS

Driver-assist technology¹ will continue to advance to provide drivers more support in certain situations, such as when changing lanes, in traffic jams and on freeway trips. The driver will always remain in the loop to take control, if required.

#### PROTECTING OCCUPANTS

Many factors influence a vehicle's crash performance, including the design of the vehicle and the use of safety equipment. Our commitment to advancing vehicle safety includes research and development of technology that further enhances occupant protection in a wide variety of crash circumstances.

#### **RESPONDING TO CRASHES**

One method of assisting emergency responders to reach the scene of a vehicle crash quickly is through in-vehicle emergency call systems and post-crash notification. These systems can help occupants summon assistance in the event of an accident.<sup>2</sup>

#### **ENCOURAGING SAFER DRIVING**

Driver behavior can be a contributing factor in many vehicle crashes. We developed and support an array of programs and technologies – such as MyKey® – that help encourage safer behavior on the roadways, for both experienced and novice drivers.

#### MANAGING VEHICLE SAFETY

We design and manufacture vehicles that achieve high levels of vehicle safety for a wide range of people over a broad spectrum of real-world conditions. Vehicle safety is overseen by our Vice President of Sustainability, Environment and Safety Engineering.

Vehicles shown with available equipment

<sup>1</sup>Driver-assist features are supplemental and do not replace the driver's attention, judgment and need to control the vehicle. It does not replace safe driving. See owner's manual for details and limitations. <sup>2</sup>The vehicle's electrical system (including the battery), the wireless service provider's signal and a connected mobile phone must all be available and operating for 911 Assist to function properly. These systems may become damaged in a crash. The paired mobile phone must be connected to SYNC, and the 911 Assist feature enabled, in order for 911 to be dialed. When the feature is ON, 911 Assist uses your paired and connected mobile phone to assist occupants to contact emergency services by dialing 911 if your airbag deploys or, on certain vehicles, if the emergency fuel pump shut-off is activated. Aftermarket on-board diagnostic devices may interfere with various vehicle systems including 911 Assist. To avoid interference, remove the device or contact the device maker for more information on compatibility.

## SAFETY FEATURES<sup>1</sup>



#### 4-Way Adjustable Head Restraints

Head restraints are designed to help minimize the risk of neck injury in the event of a collision. Not everyone is the same size, so these restraints are adjustable – moving up and down, and back and forth - to suit each individual.



#### AdvanceTrac® Electronic Stability Control<sup>2</sup>

When this system senses wheelslip or loss of traction, it applies braking where needed to help keep the vehicle on its intended path. Several sensors combine information, including the steering-wheel angle, lateral acceleration and yaw rate, to determine if the vehicle begins to lose directional control.



#### AdvanceTrac with RSC® (Roll Stability Control™)<sup>2</sup>

When a loss of traction or wheelslip is sensed, AdvanceTrac with RSC applies braking where necessary to help keep the vehicle on its intended path. In addition to electronic stability control helping avoid skids and lateral slides, Roll Stability Control helps avoid a rollover thanks to a pair of gyroscopic sensors that monitor vehicle dynamic data.



#### **Brake Assist**

Engineered to detect how quickly a driver presses the brake pedal, the system can help provide additional stopping power in critical situations.



**Cornering Lamps** 

Automatically illuminate the inside of a corner when parking or when making tight turns.



**Heated Sideview Mirrors** 

Help keep the sideview mirrors clear of snow and ice so visibility is maintained in inclement weather. Heating begins when the rear-window defroster is activated.



#### **Inflatable Rear Safety Belts**

This feature combines attributes of traditional safety belts and airbags to provide an added level of crash-safety protection for 2nd-row outboard passengers. In the event of certain frontal or side collisions, they distribute crashforce energy across more of the occupant's torso than a traditional safety belt.



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#### **MyKey**®

Program a multitude of vehicle functions even when not behind the wheel. Where necessary, MyKey can help promote good driving habits: encourage front safety belt use through Belt-Minder,® limit top speed, provide speedlimit alert chimes, display an earlier low-fuel warning, keep audio volume down, and/ or prevent safety features and driver-assist technologies from being disabled.



#### Personal Safety System™

During certain types of frontal collisions, strategically placed sensors measure occupant conditions. Then, in milliseconds, the system determines how the dual-stage front airbags will deploy and front safety belt pretensioners will activate. This sophisticated network employs a Front-Passenger Sensing System to specifically determine whether (and in what stage) the front-passenger front airbag should deploy.



#### SOS Post-Crash Alert System™3

The horn sounds and hazard lights flash to alert others if the vehicle is involved in an accident where any airbag deploys and/or the front safety belt pretensioners activate; especially useful if the driver is unconscious and can't signal for help.



#### Individual Tire Pressure Monitoring System (TPMS)

This version of TPMS shows you specifically which road tires are underinflated, plus the actual pressure in all 4 tires: The psi (pounds per square inch) numbers are shown in the vehicle's information display.

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With the exterior lighting control set in the

Autolamp position, the headlamps and

the windshield wipers activate.

taillamps will automatically turn on when





Pressure is measured in all the road tires. When any tire is significantly underinflated, a telltale on the instrument panel alerts you. That's the signal to check the pressure of each tire, matching the figure to the psi (pounds per square inch) recommended for the vehicle.

<sup>1</sup>Feature availability varies by vehicle. <sup>2</sup>Remember that even advanced technology cannot overcome the laws of physics. It's always possible to lose control of a vehicle due to inappropriate driver input for the conditions. 3SOS hardware may become damaged or the battery may lose power in a crash, which could prevent operation. Not all crashes will activate an airbag or safety belt pretensioner.

## FORD CO-PILOT360™ TECHNOLOGY & LINCOLN CO-PILOT360™ TECHNOLOGY¹

From the driveway to the highway, we can all use more confidence on the road. Our standard and available driver-assist technologies<sup>2</sup> are about supplementing your driving skills. Helping you feel confidently in command behind the wheel of your Ford or Lincoln vehicle.



#### 180-Degree Camera

Get an extended perspective of what's in front of your vehicle to ensure a better cross-traffic view of oncoming vehicles. A lens washer is



#### 360-Degree Camera

A many-perspectives approach: The 4 cameras in each sideview mirror, along with the front and rear - relay full-color images (including a bird'seve view) to the Split-View Display. This system helps you see the ground in front of or around the vehicle to help avoid obstacles, or to help line up the vehicle when parking.



#### Active Park Assist™

It helps take the angst out of parallel parking: With the simple press of a button, ultrasonic sensors can detect an appropriate parallel parking spot and automatically steer the vehicle into the space. You control the accelerator, gear shift and brakes.



#### **Enhanced Active Park Assist**

Never pass up a potential parking space again. Enhanced Active Park Assist makes it simple to nail an impressive park – time after time – even in tight parallel or reverse-perpendicular spots. All you have to do is activate, shift, accelerate and brake while your vehicle takes care of the rest. This feature also offers Park Out Assist with side-sensing capability.



#### **Active Park Assist 2.0**

Find the parking space that's just right. When engaged, Active Park Assist 2.0 can actually help locate a potential spot. Then all you have to do is brake to a complete stop, shift into neutral, and hold down the Active Park Assist button – your vehicle takes care of the rest. Park Out Assist with side-sensing capability is included so you can confidently navigate out of a spot when someone's parked too close.



#### Adaptive Cruise Control with Stopand-Go and Lane Centering

Few driving situations can feel as tedious as stop-and-go traffic. Enter Adaptive Cruise Control (ACC) with Stop-and-Go. Not only does ACC help you keep pace on your journey, but it can also slow down your vehicle if the traffic ahead has stopped or slowed. When things clear, you'll resume your set speed.3 The added Lane Centering feature even scans lane markings to help you keep your vehicle centered between the lines.



#### **Autolamp (Automatic** On/Off Headlamps

In the Autolamp position, the headlamps will turn on automatically when necessary or whenever the windshield wipers activate. The headlamps will also stay on for a set period of time after you turn off the ignition and you exit the vehicle.



#### **Intelligent Adaptive Cruise Control**

You can think of it as next-level adaptive cruise. Intelligent Adaptive Cruise Control is so smart it can "read" speed limit signs and adjust your speed accordingly, as well as keep pace with traffic ahead by stopping or slowing down your vehicle as the need arises. The Lane Centering feature even scans lane markings to help you keep your vehicle centered between the lines.



#### **BLIS® (Blind Spot Information System)** with Cross-Traffic Alert

How many times have you tensed up during an attempted lane change? BLIS can help detect and alert you to vehicles in your blind spots, while Cross-Traffic Alert can detect traffic behind you when you're slowly backing out of a parking space.



#### **Adaptive Steering**

The steering ratio of the vehicle is adjusted to adapt to changing conditions. At slower speeds, the system makes the vehicle agile and easy to turn as it dials more steering into the road wheel. And at highway speeds, this technology further optimizes steering response, enabling the vehicle to react smoothly and precisely to driver input.



#### **Auto High-Beam Headlamps**

Now, unlit roads, dark peripheries, and other lowvisibility situations don't have to catch you off guard. Auto High-Beam Headlamps can sense poor lighting conditions and switch on to light your path ahead. They can even sense oncoming headlamps and dim automatically, so you don't have to worry about blinding other drivers.



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#### **Driver Alert System**

A forward-facing camera can detect lane markings on the road ahead. If the system detects your alertness level is reduced below a certain threshold, a chime sounds and a message appears in the cluster display.



#### **Evasive Steering Assist**<sup>5</sup>

Traffic is rolling along smoothly when suddenly there's a slow or stopped vehicle in your path. Evasive Steering Assist can help make it easier to potentially avoid a collision. It doesn't steer for you, but it can provide extra steering support if the system's warning goes off and you need to maneuver around the vehicle ahead.



#### **BLIS (Blind Spot Information System)** with Trailer Coverage

It's rush hour. You've got a large item in tow. And you need to change lanes. The situation is a bit daunting. To help ease lane-change anxiety, this feature can alert you not only when a vehicle is in your blind spot, but also when one is alongside your trailer.

#### **Curve Control<sup>4</sup>**

Sensing a particular curve is being taken too fast, this smart system slows the vehicle down. Employing engine throttle reduction and 4-wheel braking intervention, it's always active in helping you maintain control around curves.

## FORD CO-PILOT360™ TECHNOLOGY & LINCOLN CO-PILOT360™ TECHNOLOGY 1,2



#### Forward Sensing System

When the vehicle is in Drive and traveling at a low rate of speed, ultrasonic sensors on the front bumper determine the distance of certain objects in front of the vehicle. If an object is detected, a high-pitched tone sounds.



#### Hill Descent Control™

Steep hills are often tricky to navigate, especially if you're towing a trailer. Hill Descent Control can help ease the situation by doing just what its name says. It helps you maintain a set speed when you're driving down an incline by automatically applying the brakes when needed.



#### Hill Start Assist

On a slope, this technology helps to momentarily keep the vehicle from rolling when releasing the brake pedal. It allows time for you to transition your foot to the accelerator pedal.



#### Lane-Keeping System

It happens. Maybe you've wandered a little too close to the edge of your lane. The Lane-Keeping System can help, even during a moment of distraction. This feature scans your vehicle's position between the lines in the road ahead and can alert you if you're starting to edge out of your lane. Having trouble staying on track? After you've drifted a few times, you'll see a coffee cup icon letting you know it's time to take a break.



#### **Navigation**

Taking the wrong exit can put a serious dent in your day. Stay confidently on course with our Voice-Activated Touchscreen Navigation System, which helps you avoid traffic, find fuel (gas or java), and so much more.



## Pre-Collision Assist with Automatic Emergency Braking (AEB)

We should all drive defensively, but sometimes other people's lack of attention can create a hazard. This feature scans the road ahead and can alert you to potential collisions with vehicles or pedestrians detected in your path.<sup>4</sup> If an impact becomes imminent and you don't take corrective action, the brakes can apply automatically. But don't worry — they'll only activate if they're needed.



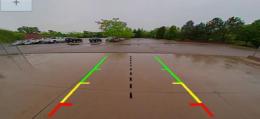
#### Pro Trailer Backup Assist™

Whether you're a novice or a seasoned pro, backing up with a trailer can be challenging. This technology makes it as easy as turning a knob – simply rotate it in the direction you want the trailer to go, and Pro Trailer Backup Assist responds accordingly. And it works with 5th-wheel and gooseneck trailers as well.



#### **Rain-Sensing Windshield Wipers**

Once set, they automatically turn on and adjust the rate of wiper action – depending on the amount of moisture (rain, sleet or snow) detected on the windshield.



#### **Rear View Camera**

Between glancing in the rearview mirror and craning your neck, backing up requires a little multitasking. The Rear View Camera may not be an extra set of eyes, but it does provide a great view of what's behind your vehicle.<sup>5</sup> Be sure to keep the camera lens free of debris (like dust and snow) and you can navigate Reverse with more confidence.



### • 911 Assist®

- Adaptive Cruise Control
- Adaptive Cruise Control with Stop-and-Go
- Adaptive Headlamps

- Adjustable Speed Limiter
- Auto Hold
- Dynamic Hitch Assist
- Lane-Keeping Alert

- Post-Collision Braking
- Side-Wind/Cross-Wind Stabilization
- Trail Control™



#### **Reverse Brake Assist**

Backing up just got a lot less stressful. Reverse Brake Assist can detect both stationary and moving objects behind your vehicle. Not only that, it can apply the brakes if you don't stop in time. The system can recognize vehicles crossing your path at up to 37 mph.



#### Reverse Sensing System

While slowly backing up, ultrasonic sensors on the rear bumper can help detect certain objects up to 6' behind the vehicle. Upon getting closer to the object, a low-pitch tone sounds more rapidly inside the vehicle.



#### **Trailer Sway Control**

The motions of the vehicle are monitored when towing. If trailer sway is detected, the system selectively applies the brakes<sup>6</sup> as needed to help you maintain control of the truck and trailer.



## ADDITIONAL AVAILABLE TECHNOLOGY



#### **Auto Start-Stop**

In an effort to help reduce vehicle tailpipe emissions and fuel consumption, the engine switches off when the vehicle is stationary and you have pressure on the brake pedal. As soon as you release the brake pedal, it seamlessly restarts.



## Configurable Daytime Running Lamps

Daytime running lamps complement the design and look of the headlamps and provide a subtle, visual cue for other drivers in daylight situations. Using the vehicle's information display, you can choose to turn them on or off.



#### Digital Owner's Manual

Browse how-to videos about features on your Ford or Lincoln vehicle from your vehicle's center stack touchscreen. Only available with SYNC® 4 Technology.





## Electric Power-Assisted Steering (EPAS)

An electric, speed-sensitive steering-assist system, EPAS helps deliver great maneuverability and responsive handling. Pull-drift compensation adapts to changing conditions, such as crowned roads or steady crosswinds. Active nibble control (if so equipped) helps smooth out the effect of minor tire vibrations.



#### **Integrated Trailer Brake Controller**

This factory-installed controller<sup>2</sup> synchronizes the vehicle and electric trailer brakes. It includes GAIN adjusters, a GAIN setting display, an output bar graph, and a visual/audible indicator for a successful trailer connection or trailer disconnect.



#### Intelligent 3-Blink Turn Signal

Especially beneficial for a simple lane change: With a single tap of the turn-signal lever, the signal blinks 3 times — and then it stops automatically. It can also be set to function for longer periods, such as when indicating a turn.



#### **Over-the-Air Updates**

Your Ford or Lincoln vehicle can continuously evolve with these secure Over-the-Air Updates<sup>3</sup> to most everything from SYNC 4/4A to vehicle performance to further refinement of driverassist features.



#### Phone As A Key

Using Bluetooth® Low Energy, your Ford or Lincoln vehicle can detect your smartphone as you approach, unlock the vehicle, and allow you to start driving without getting that phone out of your pocket or having to use a key fob.

Available on select vehicles. Requires feature activation.



#### QuickClear™ Electric Windshield Defroster

A transparent heating element embedded in the windshield greatly helps clear snow, ice and fogging, reducing the need to scrape the windshield.



#### SYNC 34

Keep your eyes on the road and your hands on the wheel with available SYNC 3. It's our easy-to-use, voice-activated technology<sup>4</sup> that also has a capacitive touchscreen. Its sleek, user-friendly interface offers more than just the ability to make phone calls and play music – it's also about making connectivity fast, smart and simple.



#### SYNC 44

This unique, customer-driven technology combines conversational voice recognition, cloud-based connectivity, Over-the-Air Updates<sup>3</sup> and so much more to bring you a seamless and personalized driving experience. And with the effortless integration of your smartphone, virtually everything's in order.



#### SYNC 4A<sup>4</sup>

As it learns your habits, voice-activated SYNC 4A personalizes the content on your center touchscreen. It might show you the quickest route to work on Mondays, or to your favorite hiking spot on Saturday afternoons. Adaptive Dash Cards bring your most frequently used items to the top of your screen. It's like rolling with a mind reader.



#### Terrain Management System™

Allows you to select different modes that help balance 4WD, engine, transmission and traction-control systems to various situations and road conditions encountered.

- 1. Normal (for everyday driving)
- 2. Mud/Rut 3. Sand
- 4. Snow/Gravel/Grass



#### Torque Vectoring Control (TVC)5

Operating automatically, it helps keep the vehicle tracking along the driver's intended path, even when road surfaces may compromise intention. While accelerating through a corner, TVC adjusts the speed between the front wheels to enhance cornering agility and reduce understeer. Braking is applied to the front inside wheel, so more engine torque goes to the outside wheel, which has more grip.



#### Tow/Haul Mode with Integrated Engine Brake

Helps provide better control when hauling a heavy trailer down steep grades. It downshifts the transmission — when needed — to provide additional levels of engine braking. Helping slow down the vehicle and trailer, the integrated engine brake harnesses the force of the Power Stroke® Turbo Diesel.

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A Driver Assist Package is available for E-Series Cutaway, E-Series Stripped Chassis, F-650 and F-750.

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UTILITIES

TRUCKS

VANS

LINCOLN

= Available.<sup>1</sup>

Ford Co-Pilot360 Technology &

Dynamic Hitch Assist

**Evasive Steering Assist** 

Lincoln Co-Pilot360 Technology (continued)

Forward Collision Warning with Brake Support



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## FORD FLEET

#### North American Fleet, Lease & Remarketing Operations

Some features discussed may be optional. Vehicles shown may contain optional equipment. Features shown may be offered only in combination with other options or subject to additional ordering requirements or limitations. Select features and packages are shown. Please visit fleet.ford.com for a complete Ordering Guide. Information in this Technologies Guide was developed from Ordering Guides as of October 2020. Following publication of this brochure, certain changes in standard equipment, options and the like, or product delays may have occurred which would not be included in these pages. Ford Motor Company reserves the right to change product specifications at any time without incurring obligations.

Availability of technologies and systems described in this brochure varies by model and trim level. Not all systems are available on all Ford Motor Company vehicles. See your local Ford or Lincoln Dealer for complete details.