

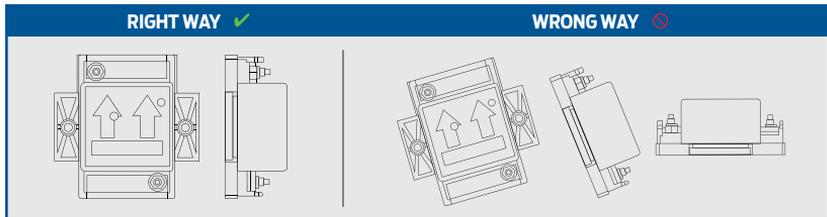
PRO TRAILER BACKUP ASSIST WITH TRAILER REVERSE GUIDANCE SENSOR SETUP

Note: Sensor kit and 7/12 connector must be purchased from dealer.

DETERMINE A SUITABLE LOCATION TO INSTALL THE SENSOR ON YOUR TRAILER THAT MEETS ALL OF THE SENSOR ATTACHMENT GUIDELINES:

* Attach on a vertical surface with the arrows on the housing pointed up.

SENSOR ATTACHMENT GUIDELINES



* Attach on a vertical surface close to the front of the trailer to allow the wiring harness to reach the 12-pin socket on the truck.

* Attach on a vertical surface with the arrows on the housing pointed up.

* For best performance and ease of use, the sensor should remain on the same trailer. Additional sensors can be purchased from your dealer.

The sensor can be attached with the included bracket and adhesive tape, or tie straps. Adhesive tape attachment is best suited for installation on flat, clean surfaces such as a large frame section. Tie strap attachment can be used for a vertical post.

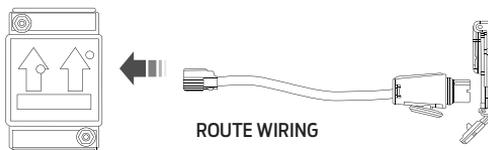
Prepare the attachment location by removing any debris, chipping paint or rust and wipe the surface clean.

For adhesive attachment, remove the protective backing from the adhesive. With the arrows pointed up, place the assembled sensor housing and mounting plate on a vertical surface of the trailer. Push firmly against the trailer, pressing firmly against each corner of the sensor housing.

Note: Do not install adhesive when temperature is below 32° F (0° C). See your Owner's Manual for more information.

ROUTE WIRING AND CONNECT SENSOR

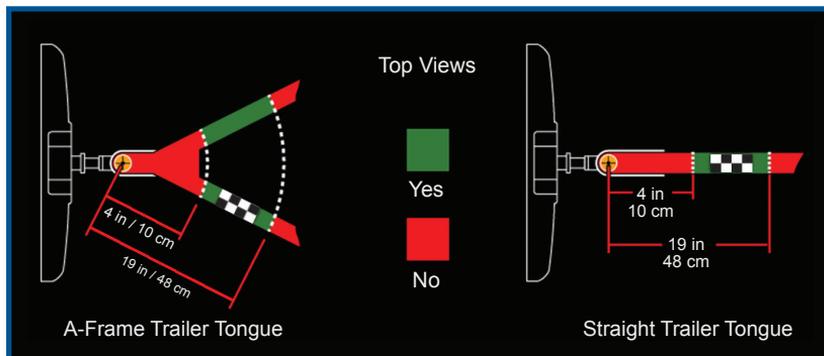
Using the 15 in (38 mm) tie straps, secure the cable next to the sensor housing within 4 in (10 cm) of the sensor, leaving enough wiring to unplug and plug in the sensor. Secure the wiring every 12 in (30 cm) to prevent strain on the sensor or the wiring. Route the wiring along the standard 7-pin electrical cable.



PRO TRAILER BACKUP ASSIST WITH TRAILER REVERSE GUIDANCE STICKER PLACEMENT

PLACEMENT TIPS

- Perform sticker placement when temperatures are above 32°F (0°C).
- Clean the trailer.
- Place the sticker:
 - On a flat, dry, horizontal surface.
 - Entire sticker must be visible to the camera located in the tailgate handle.
 - Within the green zone as shown below, 4-19 in (10-48 cm) from the trailer ball hitch.
 - Lengthwise on the trailer tongue.
- Once the sticker is in place, confirm that the sticker is visible using the touchscreen.



WARNING: Once placed, the sticker cannot be moved. Do not reuse stickers if removed.

Scan the code for additional information about your vehicle.



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CARD/STICKERS POCKET (SLEEVE)

IMPORTANT

The operation of the Pro Trailer Backup Assist™ with Trailer Reverse Guidance system depends on how and where you place the sticker.

- **DO NOT ATTEMPT TO PLACE THE STICKER UNTIL YOU READ THROUGH THIS GUIDE.**

Scan the code for additional information about your vehicle.



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This Quick Start Guide is not intended to replace your vehicle Owner's Manual, which contains more detailed information concerning the features of your vehicle, as well as important safety warnings designed to help reduce the risk of injury to you and your passengers. Read your entire Owner's Manual carefully as you begin learning about your new vehicle and refer to the appropriate chapters when questions arise. All information contained in this Quick Start Guide was accurate at the time of duplication. We reserve the right to change features, operation and/or functionality of any vehicle specification at any time. Your Ford dealer is the best source for the most current information. For detailed operating and safety information, consult your Owner's Manual.

WARNING:

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

LEARN MORE ABOUT YOUR NEW VEHICLE

United States Ford Customer Relationship Center

1-800-392-3673 (FORD)
TDD for the hearing impaired:
7-1-1 (where offered by your
telephone service provider)

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Canada Ford Customer Relationship Centre

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TDD for the hearing impaired:
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Scan the country- appropriate code with your smartphone (make sure you have a scanner app installed) and you can access additional information about your vehicle.



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PRO TRAILER BACKUP ASSIST WITH TRAILER REVERSE GUIDANCE

F-150

QUICK START GUIDE

WHAT IS PRO TRAILER BACKUP ASSIST WITH TRAILER REVERSE GUIDANCE?

The Pro Trailer Backup Assist with Trailer Reverse Guidance utilizes the control knob on your instrument panel, your steering wheel and a suite of cameras to take the guesswork out of getting your trailer positioned where you want it, quickly and easily, while you're driving in reverse (R).

Turn the knob in the direction you want the trailer to go and the system takes over the steering to get it there. This allows you to focus on monitoring the mirrors and applying the brake and accelerator. Use the cameras and on-screen guidance to make even the most difficult maneuvers simple. This guide walks you through the setup process, calibration and operation.

Below is some of the added functionality that Pro Trailer Backup Assist with Trailer Reverse Guidance provides:

TRAILER REVERSE GUIDANCE CAMERA*



See the camera view on the side where the trailer is moving, or both sides when the trailer is straight behind you.

Does not require setup.

STEER TRAILER WITH KNOB



Allows you to easily maneuver a trailer by turning the knob in the direction you want the trailer to go.



See page 13 for operation.

Setup required.

HITCH ANGLE GRAPHIC

A small top view representation of your vehicle and trailer.

The lines show you where the trailer is and where it is projected to go.



See page 17 for operation.

AUTO SPLIT VIEW CAMERA*



Changes views with the trailer direction.

See page 16 for operation.

STRAIGHT BACKUP MODE*



If you want to use the steering wheel:

A steering wheel image shows you which way to turn the steering wheel to keep your trailer straight.

See page 15 for operation.

*IF EQUIPPED

HOW DO I USE IT?

Set up this feature by following the steps in this guide. Scan the QR code on the back cover with your smartphone for more information about your vehicle.

SET UP THE SYSTEM

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SELECT THE TRAILER TYPE

Page 4

SETUP OPTIONS

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STICKER SETUP

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USING PRO TRAILER BACKUP ASSIST

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FEATURE OPERATION

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VIEW OPERATION

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HITCH ANGLE GRAPHIC

Page 17

TO SET UP THIS FEATURE:

A Pro Trailer Backup Assist control knob

B Touchscreen



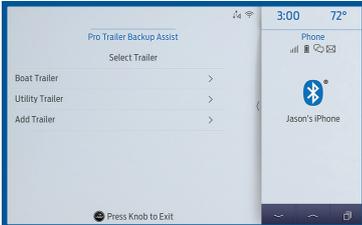
A

B

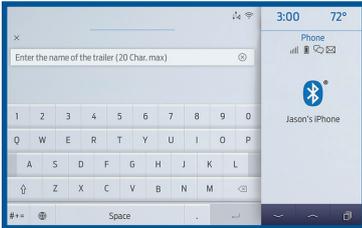
SET UP THE SYSTEM



Press the center button on the knob located to the right of the steering wheel to begin setting up the system.



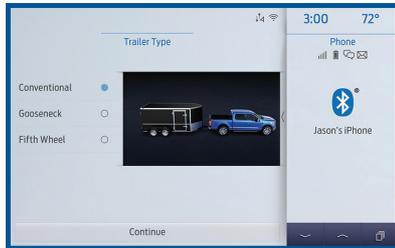
Select **Add Trailer** on the touchscreen.



Use the keyboard on the touchscreen to enter the trailer name, then press the return button to confirm.

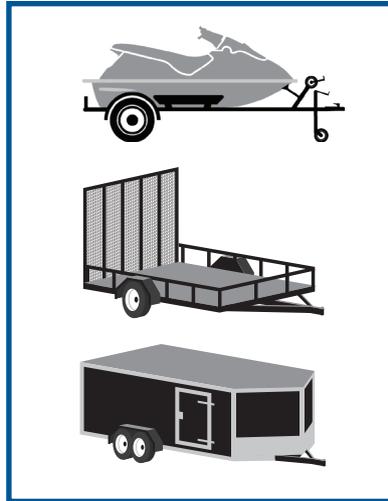
SELECT THE TRAILER TYPE

The system only works with conventional trailers. It does not work with other types, including fifth-wheel and gooseneck. Use the images to the right to help determine your trailer type.



Note: The system is designed to work with trailers that have a hitch point to the center of the axle or for axles measuring 6-33 ft (1.85-10.05 m). The system is designed to work with drawbars that have a license plate to hitch ball center measurement of 9-18 in (23-46 cm) when installed.

CONVENTIONAL TRAILER EXAMPLES



NON-CONVENTIONAL TRAILER EXAMPLES

The functionality of Pro Trailer Backup Assist with Trailer Reverse Guidance is not available for fifth wheel and gooseneck type trailers.



SETUP OPTIONS

A message appears in the touchscreen asking if you want to add pro trailer backup assist.

Straighten the trailer, if necessary.

The touchscreen directs you to this guide.

To continue setting up your trailer with a sticker, see page [6](#). For sensor installation, see the installation instructions included with your trailer sensor. For trailer calibration see page [11](#).

ONE-TIME SETUP

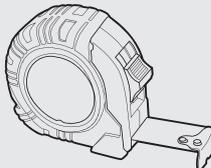
Once you input your trailer's information into the touchscreen, it is stored for easy recall. That way, when you want to use the Pro Trailer Backup Assist with Trailer Reverse Guidance system to help you back your trailer into your desired position, you can choose it from the touchscreen. You do not have to run through this setup again unless you want to add another trailer. You can store information for up to 10 trailers.



STICKER SETUP

WHAT YOU NEED FOR A ONE-TIME SETUP

MAKE SURE YOU HAVE THE FOLLOWING ITEMS:

<p>This guide with the sticker placement card and the stickers in the inside back cover pocket.</p>	<p>Tape measure (English or metric)</p>
	

Scan the country- appropriate code with your smartphone (make sure you have a scanner app installed) and you can access additional information about your vehicle.



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STICKER SETUP

POSITION YOUR VEHICLE AND TRAILER



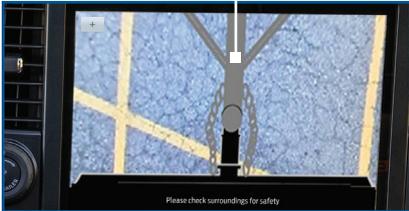
- Make sure that the trailer and vehicle are aligned by placing the transmission in drive (D) and pulling straight forward.



STICKER SETUP

PLACING THE STICKER

Place the entire sticker in the green zone on the trailer as outlined in the diagram on page 10. The sticker is in the back cover pocket of this guide.

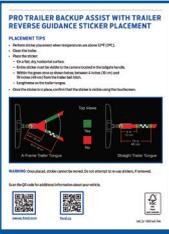


Rear view camera

STICKER SETUP

OUTSIDE THE VEHICLE

- Take the sticker placement card, the sticker from the back of this guide, and a tape measure, and walk to the back of the trailer.
- Place the sticker in the green zone as indicated in the diagram on the following page.
- Confirm that the sticker is visible using the touchscreen. An assistant can remain inside the vehicle to help you do this.

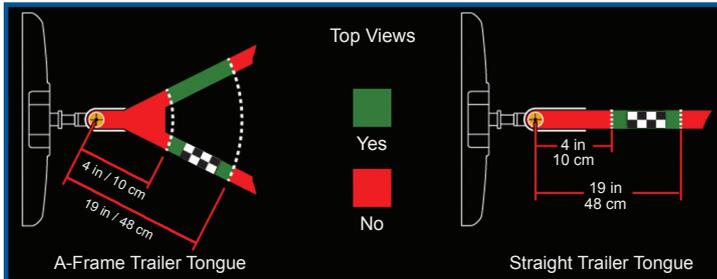


STICKER PLACEMENT TIPS

- Perform sticker placement when temperatures are above 32° F (0° C).
- Put the sticker on a flat, dry, clean horizontal surface.
- Using a tape measure, find a place to put the entire sticker in the range as shown below:
 - Within the green zone.
 - 4 - 19 in (10 - 48 cm) from the trailer ball hitch.
- Make sure no hardware, such as a jack handle or wiring, obstructs the view from the camera to the sticker.
- Place the sticker.

STICKER SETUP

STICKER PLACEMENT DIAGRAM



Note: Place the *entire sticker* within the green zone. Once you place the sticker, you cannot move it. Do not reuse stickers. Use a new sticker.

If you cannot find a location that meets the sticker requirements, the sensor is recommended.



SENSOR SETUP

SENSOR INSTALLATION

To use the sensor you need the sensor kit and the trailer connector. If you do not have these items, contact your Ford dealership to purchase the sensor kit and the trailer connector.



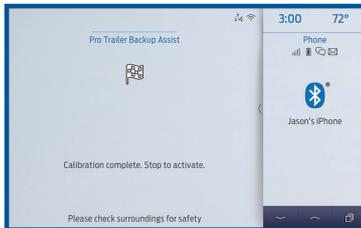
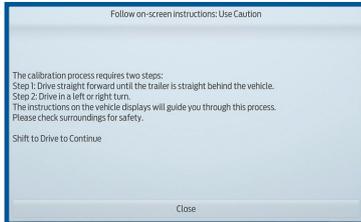
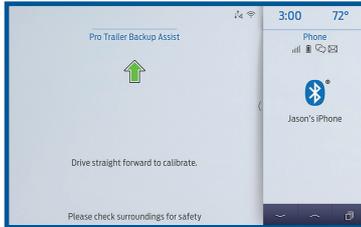
Mount the sensor to a vertical part of the trailer that pivots and moves when you turn the vehicle. Do not mount to a stationary surface or to the truck side of the trailer hitch.

Make sure the arrows on the sensor housing are facing up.



When you plug in the sensor connector, make sure the red seal on the connector is not visible when the connector is fully plugged in.

CALIBRATION



Note: You can calibrate within the Pro Trailer Backup Assist or Trailer Reverse Guidance system.

Find an area where you can safely drive forward and turn left or right to calibrate the system. An open parking lot is an ideal place to perform the calibration. During calibration, the system determines the hitch position and trailer length. Drive straight at approximately 2-9 mph (4-15 km/h) to align the trailer behind your vehicle.



 Too shallow of a turn

The touchscreen provides you with instructions and tells you when the system is ready for you to turn. Turn left or right whenever you are ready and in a safe turning area. Follow the instructions on the screen to complete the calibration process. Longer trailers could require a 180° turn. Some trailers could require you to drive straight then turn multiple times before calibration is complete.



 Correct 90 degree turn

When the calibration is complete, the touchscreen displays a message that calibration is complete. The feature is now ready to use.

FEATURE OPERATION

USING PRO TRAILER BACKUP ASSIST

- To switch the system on, press the center button on the knob and watch the touchscreen. Use the touchscreen to select the connected trailer. The system detects the trailer and instructs you to shift into reverse (R) when ready.
- Shift into reverse (R) to activate. The touchscreen instructs you to remove your hands from the steering wheel.
- Use the knob to turn the trailer. Turning the knob to the left turns the trailer to the left. Turning the knob to the right turns the trailer to the right.



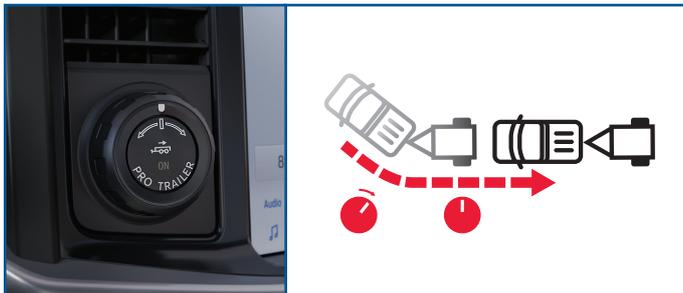
FEATURE OPERATION

USING TRAILER BACKUP ASSIST

- Once you have the trailer moving in the direction you want it to go, release the knob. You control the accelerator and brakes while the system steers the vehicle to keep the trailer moving straight back.
- The sharper you turn the knob, the sharper the trailer turns.

Note: If you attempt to accelerate beyond the system's threshold, the system automatically limits your vehicle's speed.

Note: If you use the steering wheel when using trailer backup assistance, the system turns off and a message displays in the touchscreen.



- As soon as you release the knob or turn it back to the center position, the vehicle starts following the trailer's path.
- Turn and hold the knob continuously for sharper vehicle and trailer turns.
- **CAUTION:** Always keep your hand close to the control knob. You may need to quickly redirect the trailer.
- Under certain conditions, you may have to use the knob to correct the trailer direction while attempting to move the trailer straight back.

Note: If you need to make a sharper turn, you can increase the trailer angle limit in the touchscreen towing menu. Refer to your Owner's Manual for selecting the trailer angle limit setting.

FEATURE OPERATION

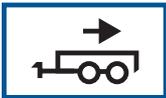
USING TRAILER REVERSE GUIDANCE

Trailer Reverse Guidance provides informational graphics and up to seven camera views to help you back up the trailer while using the steering wheel to control the trailer.

If you do not set up the system, you can still use the camera views. However, the hitch angle graphic, automatic view switching and straight backup mode are not available. Complete the system setup for full functionality.



- To use Trailer Reverse Guidance, shift your vehicle into reverse (R) and press the rear view camera button on the touchscreen to expand the menu.
- Select the Trailer Reverse Guidance icon on the screen. Select your trailer from the touchscreen.



- The system detects the trailer and displays the hitch angle graphic.
- The auto mode camera view is the default display. You can now use your steering wheel and the camera views to navigate your trailer into position.



USING STRAIGHT BACKUP MODE WITH TRAILER REVERSE GUIDANCE

- This view is only available when you are in Trailer Reverse Guidance.
- This mode shows you which way to turn your steering wheel to keep the trailer straight. A steering wheel icon is displayed on the touchscreen. A blue arrow shows you which way to turn the wheel to keep the trailer straight.
- To activate this mode, select the rearview camera icon, then the straight backup mode icon.

VIEW OPERATION

Use the buttons below to select the best view for backing up your vehicle and trailer. You can use these views for Pro Trailer Backup Assist or Trailer Reverse Guidance.

You can select the following views by selecting the rear camera icon  on the touchscreen. The view drawer displays. (View drawer shown.)



360 degree camera*: shows the rear camera view on the left side of the screen and the 360 degree view on the right side of the screen.



Rear view camera: shows your trailer hitch or what is directly behind your vehicle.



Rear split view camera*: shows a 180 degree view of area behind your vehicle.



Bed camera*: shows the truck bed.



Trailer AUX camera*: shows a rear view camera image of what is behind your trailer.
This camera needs to be purchased and installed separately.



Picture-in-picture view*: shows a main view and a secondary view when in bed camera view or trailer AUX camera view.



Trailer Reverse Guidance view*: shows you a view of the sides of your vehicle and your trailer.



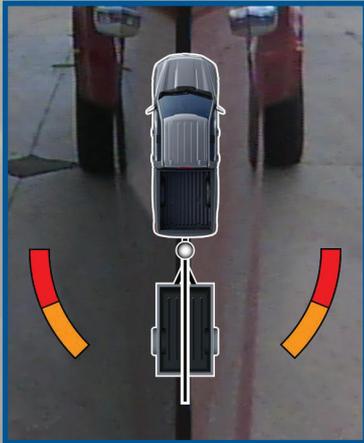
In auto mode, this view moves as your trailer moves so that you do not have to adjust the camera as you turn. You can use the left and right arrows to see more of the driver or passenger side. Press **Auto** to return to automatic camera adjustments.



Takes you back to the 360 degree camera system and out of the Trailer Reverse Guidance feature.

*IF EQUIPPED

HITCH ANGLE GRAPHIC



The hitch angle graphic shows you a small, top-view representation of your vehicle and trailer.

This graphic is part of both Pro Trailer Backup Assist and Trailer Reverse Guidance and can be seen in the normal rear view, bed camera, trailer AUX camera and Trailer Reverse Guidance camera views.

This representation shows two different colored lines:

- A black line shows you where your trailer is in relation to your vehicle.
- For Pro Trailer Backup Assist, the white line represents the amount the trailer turns based on knob input.
- For Trailer Reverse Guidance, the white line represents the amount the trailer turns based on steering wheel position.

The graphic shows a yellow and red zone for the hitch angle to warn you of a high angle condition that could require you to pull forward to reduce the hitch angle. The angle limits for each zone vary based on the trailer length.

The yellow zone indicates you are approaching the maximum controllable trailer angle for the system. When the trailer enters this zone, it is more difficult to reduce the trailer turn when backing up. It may be necessary to put your vehicle back into drive (D) and pull forward to get the truck and trailer back to an in-line position.

The red zone indicates you have exceeded the maximum controllable trailer angle for the system. Immediately stop reversing. Put your vehicle into drive (D) and pull forward until the trailer is no longer in the red zone.



