

These installation instructions show an example installation on a 2021 Ford F150. The installation may vary for your vehicle, so it may be necessary to consult a Ford service manual for specific instructions for your year model.

Tools needed: 7mm nut driver or socket and trim removal tools (optional) Be advised: These instructions may not include specifics for all vehicle configurations.

# In-Line Speedometer Calibrator Module Software Setup Instructions

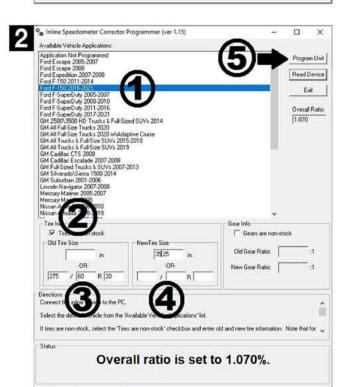
#### 1. UPDATE

This step makes sure that the In-Line Speedometer Calibrator Module has the latest firmware installed. If the Tuner Update Software is not already installed on your PC, go to our website (hypertech.com) and download the Tuner Update Software. Connect the In-Line Speedometer Calibrator Module to your PC with the supplied USB cable, run the update software and click the Update Tuner button.

Cli	ck Here To Configure The Inline Module's Tire and Gear Setting
	Or
	Click Here To Update The Inline Module's Firmware

### 2. CONFIGURE

For accurate readings, measure the stock and new tire height from the ground to the top of the tire. Enter these measurements (in inches) into the configuration software, and click program to commit these settings. Once configuration is complete, take the In-Line Speedometer Calibrator Module and harness to the vehicle.



#### 3. CONNECT

Securely connect the In-Line Speedometer Calibrator Module to the In-Line Speedometer Calibrator harness.





## In-Line Speedometer Calibrator Module Vehicle Installation Instructions

Remove the Display Bezel. Using a trim panel removal tool, start at the top and work your way from the top down to the sides. There are eight
 (8) snap-in clips that hold this bezel in place. Four (4) are equally spaced along the top. There are two (2) on the left side, one near the middle
 and the other at the bottom. The right side has two (2) at these same locations.



2. Remove the Ignition Bezel. Adjust the steering wheel out and down to give yourself more room. Starting near the ignition switch, use a trim panel removal tool to gently pry the panel clips loose from the dash. Work your way across the dash toward the passenger side door. This panel has fourteen (14) retention clips. Two (2) are to the left of the ignition switch and one (1) is to the upper right of it. There are five (5) under the display, equally spaced. There are five (5) equally spaced in the section between the glove boxes. The last one (1) is at the upper right corner. Once the panel is loose, unplug the ignition switch and remove the bezel.





3. Remove the Knee Panel below the Steering Wheel. Using the trim panel removal tool, start at the right side of the steering wheel and pop loose the retaining clips. Moving to the left side of the steering wheel, use the trim panel removal tool to pop loose these retaining clips. This panel can be fully removed, or simply pulled back enough to allow access to the panel screws behind it. This panel has eight (8) retention clips; One (1) at the top left, three (3) at the bottom left corner, one (1) at the bottom right in about 2 inches, and three (3) at the top right.





4. Remove the Left Vent Bezel. Starting at the left side, use the trim panel removal tool around the outside of the bezel to pop loose the snap-in clips and work your way to the bottom and then the top of the bezel. This panel has four (4) retaining clips located at the top right, top left, bottom left, and far bottom right.



Remove the Panel Screws. Using a 7mm socket/nut driver, remove the cluster bezel screw to the left of the steering wheel. Once complete, remove the two (2) screws to the right of the steering wheel which are side-by-side just below the ignition switch location. These screws are tightened to 22 Lb.In (22.5Nm) when re-installed.





6. Remove the Steering Column Cover. Lower and extend the steering wheel position. Using the trim panel removal tool, pop loose the retaining clips on the steering column cover. This cover has six (6) snap-in retaining clips; four (4) on top and one (1) on each side near the bottom.





7. Remove the Cluster Bezel. Using the trim panel removal tool, start at the left side and pop loose the retaining clips working at the lower bend of the bezel. Repeat this process on the right side. The right side provides a little more room so using your hand may be easier here. Switching to the top, use the trim panel removal tool to pop loose the upper clips. It can be helpful to pull the panel towards you when popping these upper clips loose. This panel has seven (7) clips remaining that are holding it in. The two (2) clips on the left side are near the corners, and the clips on the right side are in similar places. The top has three (3) clips spread equally along the top flat section.



 Remove the Instrument Panel Cluster. Using a 7mm socket/nut driver, remove the instrument panel cluster screws at each corner of the cluster. These screws are tightened to 22 Lb.In (22.5Nm) when re-installed. Once removed, genity lift the cluster out and set it lightly on the dash with the dials facing up.





9. POWER OFF the vehicle for ten (10) minutes with the ignition key out of proximity of the vehicle to ensure the HSCAN bus powers down completely.





10. Unplug the Large Connector. There are two (2) connectors on the back side of the instrument panel cluster. You will disconnect the large one on the right. Using light pressure, squeeze the connector clip and pull the connector straight out.



- 11. Update and Configure the In-Line Speedometer Calibrator Module. Prior to installation you will need to update the In-Line Speedometer Calibrator module and configure it for the vehicle platform, as well as the stock and new tires being installed. If you have NOT configured your In-Line Speedometer Calibrator Module, see the In-Line Speedometer Calibrator Module Software Setup Instructions on the first page of these instructions and follow the steps.
- Install the In-Line Speedometer Calibrator Module. To install the unit properly, first connect the appropriate connector the instrument cluster. Second, connect the appropriate connector the factory harness.





13. Secure the In-Line Speedometer Calibrator Module. Secure the In-Line Speedometer Calibrator Module and wires in place behind the instrument cluster using the provide zip ties.





14. Install the Instrument Panel Cluster. Carefully lower the instrument panel cluster back down into place with the screws you removed in Step 8. We recommend getting all four (4) of the screws installed, but not fully tightened. Before tightening completely, push the cluster in all the way and then tighten the screws down to 22 lb.in (22Nm).



15. Reinstall the Ignition Bezel. Reconnect the ignition switch and then reinstall the ignition bezel you removed in Step 2. There are fourteeen (14) clips that hold this bezel in place.



16. Drive the Vehicle and Verify the Speed. Prior to fully reinstalling the rest of the interior panels it is advised to drive the vehicle to verify that the speed readings are correct. You can use a GPS reading from your cell phone to compare the dash speed reading. Do this test in a safe environment with little traffic to ensure your safety and those around you.





17. Remove the Ignition Bezel. You will need to remove the ignition bezel again and disconnect the ignition switch once again to allow you to reinstall the rest of the interior pieces to complete the installation.



18. Reinstall the Remaining Interior Panels. Starting at Step 8, reverse the process to reinstall the trim panels and bezels removed during this process. Take your time and be careful to protect the pieces and rest of the interior. Your installation is now complete!



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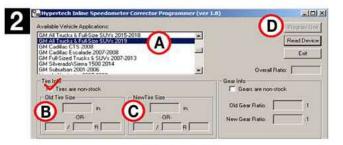
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## In-Line Speedometer Calibrator Module Vehicle Installation Instructions

- 1. Set parking brake in case you need to move the shift lever from the Park position to facilitate the instrument cluster removal. Adjusting the steering column down and out will help as well.
- 2. Place masking tape, a towel or t-shirt over the steering column, wiper stalk, shift lever and the lower portion of the instrument cluster to protect them from damage or scratches.
- 3. The instrument cluster shroud is made up of two (2) pieces, an outer trim and a center section that covers the steering column. First remove the column shroud by grabbing on one side and pulling up on the front with your thumb as shown below and disengage both sides.





4. Next disconnect the vinyl column cover from the steering column itself. Reach under the backside of the cover and gently pull up, it will disconnect from the steering column rather easily. Completely remove this piece.







5. Raise steering column up to the highest position and reach behind the kick panel on the left and right side of the column and pull towards you to disengage the upper retaining clips. This allows access to the screws that retain the instrument cluster shroud.





6. With the kick panel lowered, remove the two (2) 7mm screws that retain the instrument cluster shroud.



- 7. Remove the instrument cluster shroud by grasping the upper left and right sides and pulling towards yourself.



8. With access to the instrument cluster achieved, remove the four (4) 7mm screws that retain it.





 POWER OFF the vehicle for ten (10) minutes with the ignition key out of proximity of the vehicle to ensure the HSCAN bus powers down completely.



10. Slide the instrument cluster out and remove the connector from the back side. Press the tab in the middle above the arrow and remove. Slide the instrument cluster out.



11. Plug the male side of the In-Line Speedometer Calibrator Module harness into the factory instrument cluster connector as shown. Make sure that the locking tabs are both facing upright and slide a zip tie through the retaining tabs and through the hole on the bottom of the In-Line Speedometer Calibrator Module harness connector to ensure they do not become disconnected.





12. For the F150, tuck the harness and module on top of the air duct that runs inside of the instrument cluster cavity to gain clearance for installation. For the F250, access to the top of the duct is limited so insert the harness and module below and orientate them sideways.







- 13. Slide the instrument cluster back into the cavity and insert the In-Line Speedometer Calibrator Module harness into the instrument cluster. When sliding the instrument cluster back, be aware of the harness routing, access is limited and the harness and module must be tucked above or below the A/C ducting or the instrument cluster will not fit.
- 14. Re-install the instrument cluster and dash trim in reverse of removal process shown earlier in this installation. Be gentle with the vinyl steering column shroud cover, the retaining pins are easily deformed.
- 15. Start the vehicle and check for any warning signs or messages. Test drive the vehicle to ensure proper speedometer function. Your installation is now complete!

