PULSAR

INLINE CONTROL MODULE XT

2021-2023 Ford Bronco/F-150 Ecoboost

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Pulsar XT Mobile App

Download Instructions

This product requires a Mobile App to function correctly.

Scan this QR code or visit the link below to find download options for your smartphone. You can also find other useful information and instructions about the Pulsar XT on our website.

https://www.holley.com/products/tuners_and_programmers/inline_tuning_modules/pulsar_xt/

Read Me

Safety Warning & Caution

Throughout this User Manual you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words WARNING, CAUTION, or NOTICE.

⚠ WARNING

A WARNING indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ CAUTION

A CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

A NOTICE indicates a condition that could cause damage to the product or your vehicle.

NOTE

A NOTE is a step or reminder that is important to remember when installing or using the product.

The product you have purchased is a high-performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read the following safety information and the Owner Agreement.

> ⚠ *WARNING: Prior to use, read the User Manual. Misuse of the device could result in traffic accidents, death or serious injury, and/or damage to your vehicle. HOLLEY IS NOT RESPONSIBLE FOR AND SHALL HAVE NO LIABILITY TO YOU FOR ANY CLAIMS ARISING OUT OF OR RELATING TO ANY MISAPPLICATION OF THE DEVICE, CUSTOM TUNES, IMPROPER USE OF CALIBRATIONS, MALFUNCTION OR LACK OF LEGAL COMPLIANCE FOR CUSTOM PROGRAMS CREATED BY THIRD PARTIES.*

Safety Guidelines

$$\boxed{\triangle \ \text{WARNING}}$$

Before using device, read and understand the user manual, including these additional safety instructions. Failure to do so could result in DEATH or SERIOUS INJURY.

- Do not exceed legal speed limits on public roadways. Violating traffic laws is dangerous and could result in injury or vehicle damage or both.
- Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Violating traffic laws is dangerous and could result in injury or vehicle damage or both.
- Do not operate the device while driving. Distracted driving could result in traffic accidents, death or serious injury, and/or damage to your vehicle.
- Always perform all adjustments or changes while stopped. Changing a setting while driving can interfere with your attention to roadway conditions and could result in injury or vehicle damage or both.
- Do not stack products. "Stacking" performance-enhancing devices or other improper installation can cause power train failure on the road. Other products may have features incompatible with your device. Follow all installation and operating instructions.
- Some modifications may affect other parts of your vehicle. For example, if you remove/adjust the speed limiter in your vehicle, be sure your tires and other components are rated for the increased speeds they will have to withstand. Not doing so can lead to loss of vehicle control. Modify the speed limiter only for use in closed circuit, legally sanctioned racing environments, not for use on public roadways.

NOTE: The stickers included in some products apply to products that have recieved CARB exemption for emissions compliance.

This product may meet the emissions compliance requirements of the California Air Resources Board and Federal Environment Protection Agency. If so, it is legal for sale and use on pollution-controlled vehicles operated on public streets and highways. The device must be installed and operated according to the instruction provided in this user manual. Included with these compliant products is a sticker for you to keep in your vehicle. You can either adhere it somewhere on the vehicle (e.g., the inside end of driver's door) or simply store it in your glove box. The purpose of these stickers is to inform anyone who may have questions regarding the use of this product and how it affects emissions. For example, it would be something to show an emissions technician if questioned when taking your vehicle in for an emissions check to let him/her know the product is CARB emissions compliant.

FCC & Industry Canada Compliance

MODEL: Parallax FCC ID: 2AA9B05 IC: 12208A-05

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
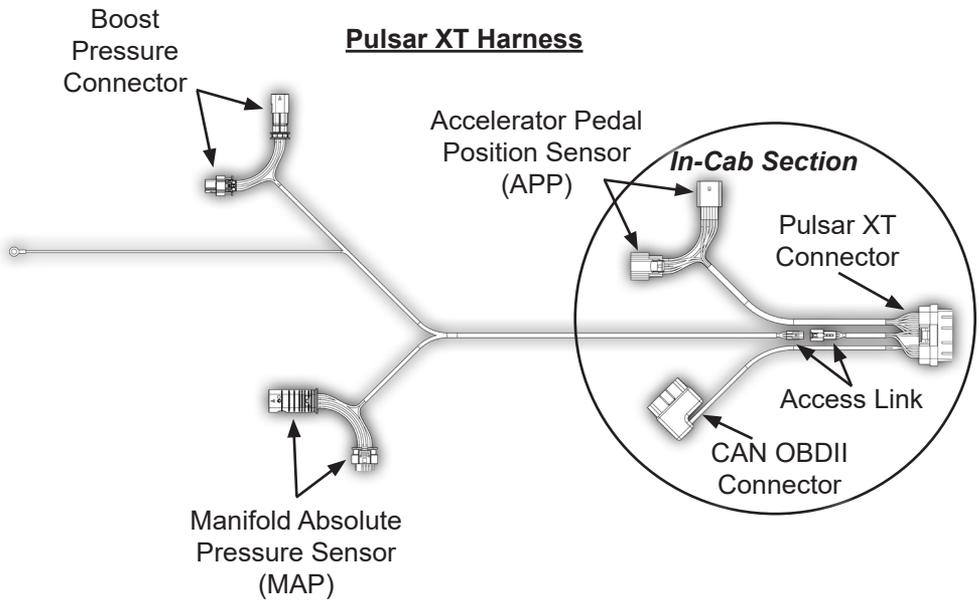
Industry Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisee aux deux conditions suivantes: (1) ll'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnememnt.

Installation of Pulsar XT 21-23 Ford Ecoboost

Materials

Boost Pressure Connector

Pulsar XT Harness

Accelerator Pedal Position Sensor (APP)

In-Cab Section

Pulsar XT Connector

Access Link

CAN OBDII Connector

Manifold Absolute Pressure Sensor (MAP)
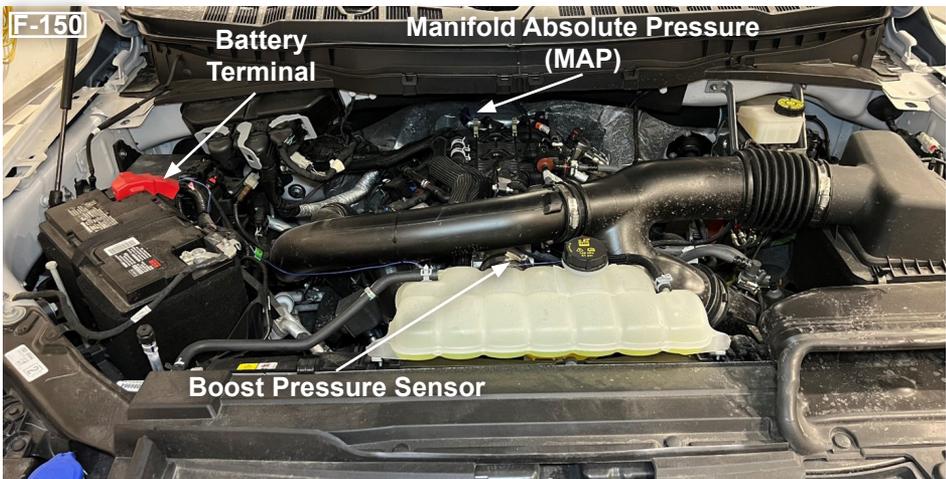
Zip Ties

Velcro

Pulsar XT Module

PULSAR XT

Required Tools

10mm & 11mm Sockets/Wrench
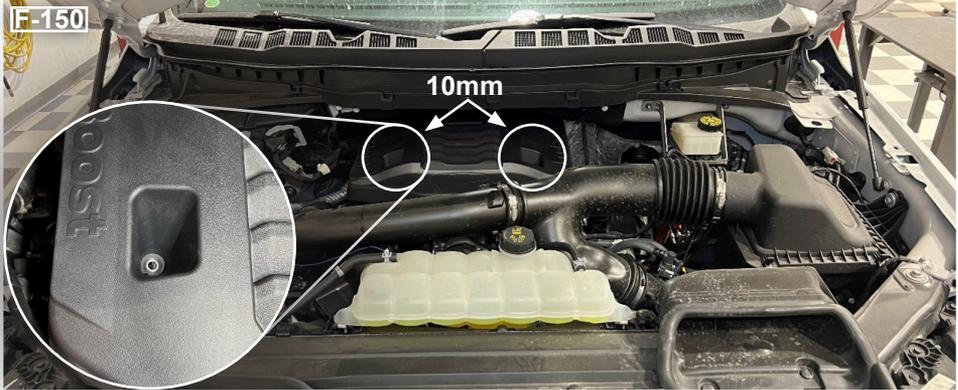Precision Knife/Blade

Pulsar XT Installation

NOTE: This manual works for both the Ford Bronco and F-150, and contains separate images where needed. Please be certain you are using the correct image for reference. Which vehicle each image is used for is identified in the top left corner of the image.

STEP 1 - To prevent causing trouble codes, disconnect the negative terminal on the battery using a 10mm socket and socket wrench.

Pulsar XT Installation Cont'd

NOTE: For F-150's you will need to remove the engine cover. Use a 10mm socket and ratcheting wrench to remove the 2 bolts holding down the engine cover. Then pull the engine cover up and toward the front of the vehicle and set aside.
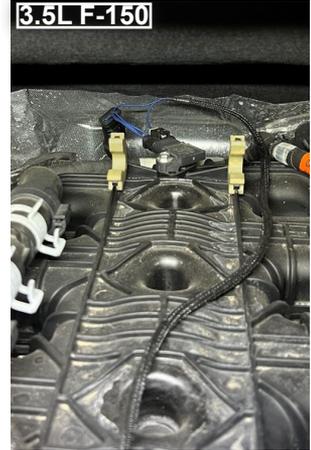

STEP 2 - Locate the Boost Pressure Sensor connector on the charge pipe before the throttle body. Disconnect the Boost Pressure Sensor by sliding the locking tab then squeezing it. Connect both connectors to the Pulsar XT harness and lock the locking tabs.

Pulsar XT Installation Cont'd

STEP 3 - Locate the MAP sensor found on the intake manifold behind the throttle body. Disconnect the MAP sensor by sliding the locking tab then squeezing it. Connect both connectors to the Pulsar XT harness and the locking tabs.

2.3L Bronco

2.7L Bronco & F-150

3.5L F-150

STEP 4 - Flip open the positive terminal cover on the battery and remove one of the nuts using a socket and ratchet (11mm for Bronco, 10mm for F-150). Install the Ring Terminal and replace the nut.

BRONCO
11mm

F-150
10mm

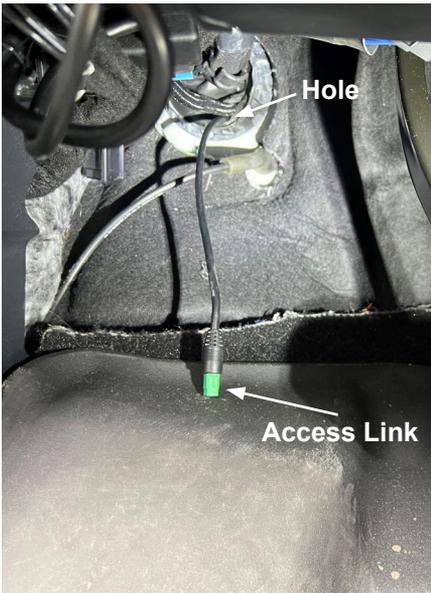# Pulsar XT Installation Cont'd

Inside Cab

STEP 5 - Locate the large rubber grommet with the large harness running through the firewall and cut an access hole through both layers. Then disconnect the in-cab harness via the 6-pin Access Link on the Pulsar XT harness by depressing the release tab. Feed the 6-pin Access Link connector from the engine bay through the firewall via the access hole. Finally reconnect the 6-pin Access Link together inside the cab.
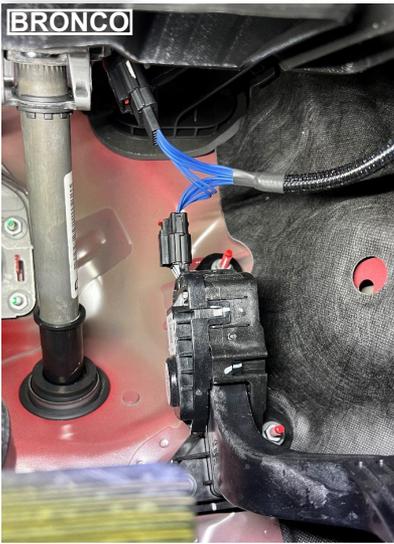

See next page for F-150 images

Pulsar XT Installation Cont'd

F-150

Hole

Access Link

Pulsar XT Installation Cont'd

STEP 6 - Locate the APP connector above the accelerator pedal and disconnect it by pulling up on the red lock tab and then pushing in the release tab. Connect both connectors to the Pulsar XT.

STEP 7 - Connect the OBDII plug into the OBDII port located on the lower left side of the kick panel.

Disconnecting Access Link Connector

During the installation process, or if removal of the device/harness is needed, you will need to disconnect the Access Link connector using these these instructions. Failure to do so may result in damage to the harness.

STEP 1 - Take a pick tool and locate the small locking clip on the green/teal portion of the connector.

STEP 2 - Carefully insert the pick tool tip under the connector, and push the locking clip upward/outward to release the connector.

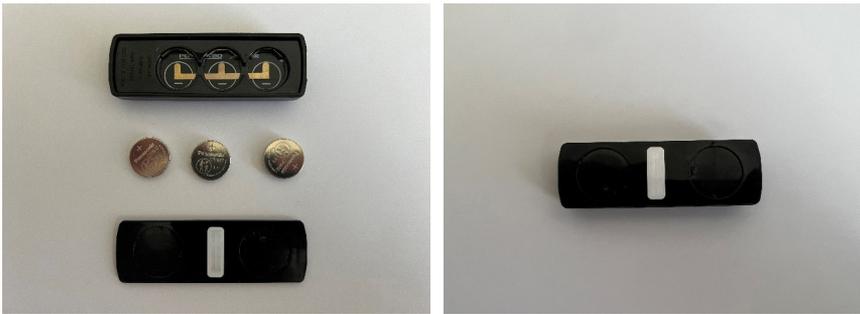**STEP 3** - Pull the connector apart while holding the clip out.

Bluetooth Switch Pairing

The power levels for the Pulsar XT can be controlled by the included remote switch. These instructions will show you how to pair and use this device.

Remove the backing plate from the switch and install the three included button cell batteries. Then, reinstall the backing plate. The switch should immediately start scrolling which signifies that it is in the pairing mode. Turn the ignition/key to the on-position with the Pulsar XT installed, and hold the switch on top of the Pulsar XT module while pairing. The lights on the switch will display the current power level once paired to the module.

NOTE: The switch cannot be used if the Pulsar XT app is open. The switch and the app will need to be used separately.

Using the Bluetooth Switch

Once paired, the switch will briefly display what level the module is currently in. Pushing the left arrow button will lower the current power level and the right arrow button will raise the current power level.

FAQs

Frequently Asked Questions

Question: What should I do if I'm getting codes or a check engine light on my truck?
Answer: This can happen if the truck is not fully powered down before installing the Pulsar XT (battery is not disconnected), or because of improper installation of the Pulsar XT.
  Fix 1: Double check all Pulsar XT connections, and make sure all connections are fully making contact.
  Fix 2: If codes are still coming up, use the Pulsar XT app to read and clear codes, and then drive the vehicle to see if they come back up. If the codes persist, call tech support.

Question: Can I shift on the fly with the Pulsar XT?
Answer: Yes, this device allows you to shift power levels on the fly using the cruise controls or the Pulsar XT app.

Question: Does the Pulsar XT program the PCM?
Answer: Yes, Pulsar XT has a couple of options that will program the PCM. If you make any changes to these settings, we recommend reverting or reprogramming to stock before going to the dealer.

Question: What is the best way to accurately measure tire size?
Answer: Mark a line on the ground where the center of the tire rests, then drive the vehicle for two full rotations of the tire and mark the spot where it comes to a rest with another line. Measure the length between the two lines and divide by two. Then divide that number by Pi π (3.14159265359).

Question: What happens if the OBDII plug is/needs to be unplugged?
Answer: The vehicle will revert back to the stock power level until the OBDII connection is reconnected.

Question: Can I use an OBDII splitter with the Pulsar XT?
Answer: Yes, an OBDII splitter may be used as long as all 16 pins are populated.

For additional questions not found in the user guide, call:
Holley Technical Support: (888)-360-3343
Mon - Fri 8:00 am - 5:00 pm MST, Sat 8:00 am - 2:00 pm MST

To expedite your support call, please have your Vehicle Information, Part Number, and Serial Number ready prior to calling Technical Support.