



## Installation Instructions

# 18110

## 2017-21 CAN-AM MAVERICK X3 TURBO MODELS 900CC ENGINE

**Thank you for choosing the Flowmaster XDR Delta Boost Performance Tuner!** We have invested many hours in research and development to ensure this kit provides ease of installation, substantial performance gains and rugged durability.

The Delta Boost Performance Tuner plugs into the vehicle's Manifold Absolute Pressure (MAP) and Boost Pressure (BP) sensors, lending itself to quick and discreet installation (or removal, if needed). The Tuner ships in SPORT mode, automatically providing +3 PSI of boost out-of-the-box (with no need to use the optional Flowmaster DELTA BOOST mobile app). However, the Tuner's "Bluetooth Smart" connectivity permits boost mode adjustment via the free, downloadable Android and iOS mobile apps.

The Delta Boost Performance Tuner's four boost modes are:

| MODE     | PSI BOOST | COMMENTS                                                                   |
|----------|-----------|----------------------------------------------------------------------------|
| VALET    | -4        | "De-boost" mode for valet parking (or other restricted use)                |
| STANDARD | 0         | Vehicle stock boost performance.                                           |
| SPORT    | +3        | The Delta Boost Tuner's factory, out-of-the-box setting.                   |
| MAX      | +4        | <b>CAUTION: Flowmaster recommends use of 91+ octane fuel at MAX boost.</b> |

The app also provides real-time boost monitoring. So you'll not only feel the difference ... you'll see it as well!

**This kit contains:** 1 Delta Boost Performance Tuner, and 3 cable ties. Installation takes about half an hour, and can be accomplished by anyone with average mechanical abilities.

1. Please take a moment to read and understand these instructions before installing your Flowmaster Delta Boost Performance Tuner. If you should have any problems or questions, please call Flowmaster Technical Support.
2. Turn off your vehicle's ignition.

### DISCONNECT THE BOOST SENSOR:

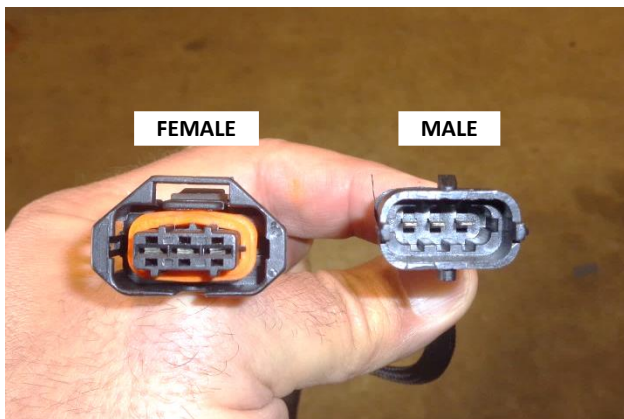


3. Locate the boost sensor – inboard of the left rear wheel, near the oil dipstick.

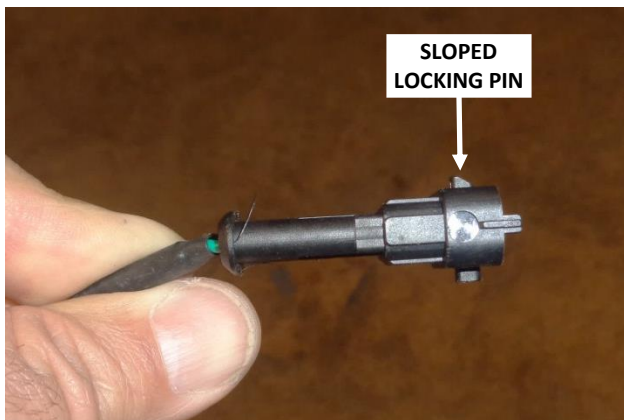


4. Unplug the boost sensor by squeezing the locking tab and pulling the plug straight off the sensor.

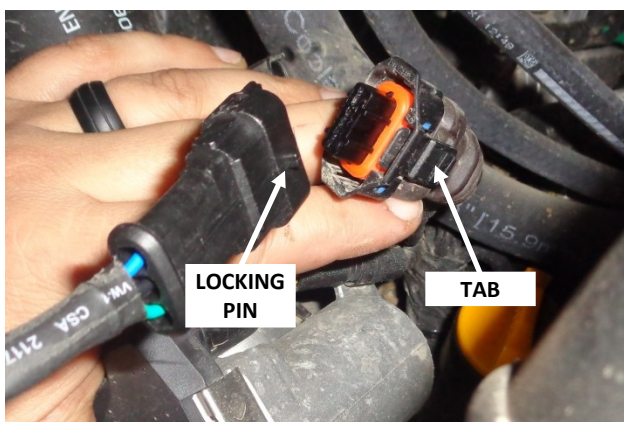
## INSTALL THE DELTA BOOST PERFORMANCE TUNER:



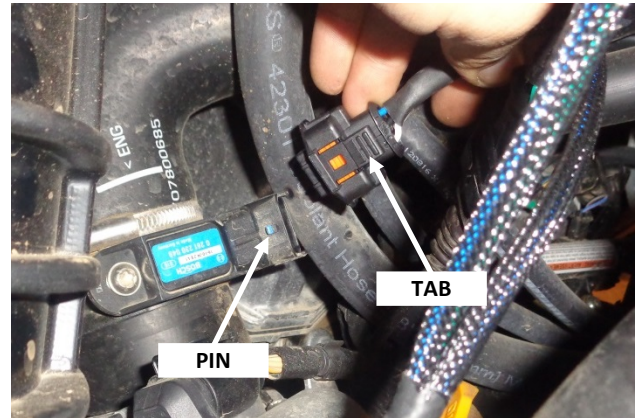
5. On the tuner, identify the FEMALE and MALE plugs as shown.



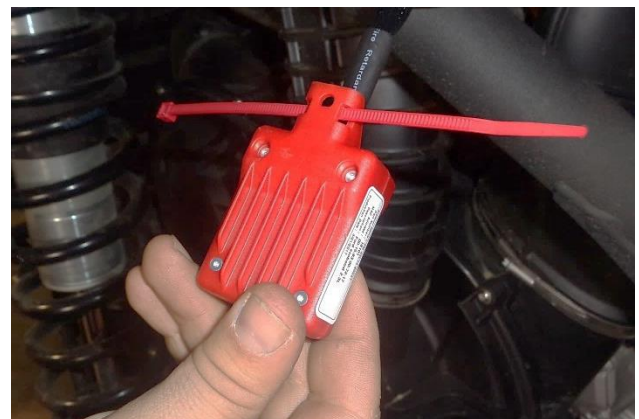
6. Also note that the locking pin on the MALE plug has a sloped profile.



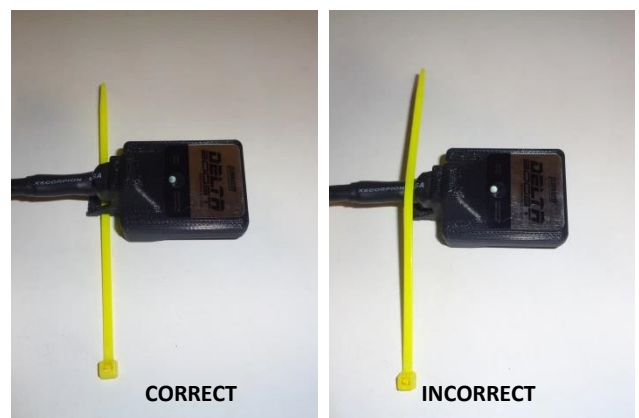
7. Align the MALE plug's locking pin with the tab on the sensor plug, and push them together until they latch. Check the security of the connection.



8. Align the FEMALE plug's locking tab with the pin on the sensor, and push the plug onto the sensor until it latches. Check the security of the connection.



9. Insert a cable tie through the mounting lug on the back of the module housing.



10. NOTE: When securing the module to the vehicle, route the cable tie through the mounting lug only, as shown. **DO NOT** secure the cable tie over the harness. This may stress the wire connections and damage the module.



11. Secure the module in a safe location, away from potential damage from debris. The unit is sealed and watertight but it is recommended to mount in a high location to avoid exposure to standing water. If necessary, use the two remaining cable ties to either bundle any excess wiring, and / or to secure the wiring to a safe location (away from any hot or moving parts).

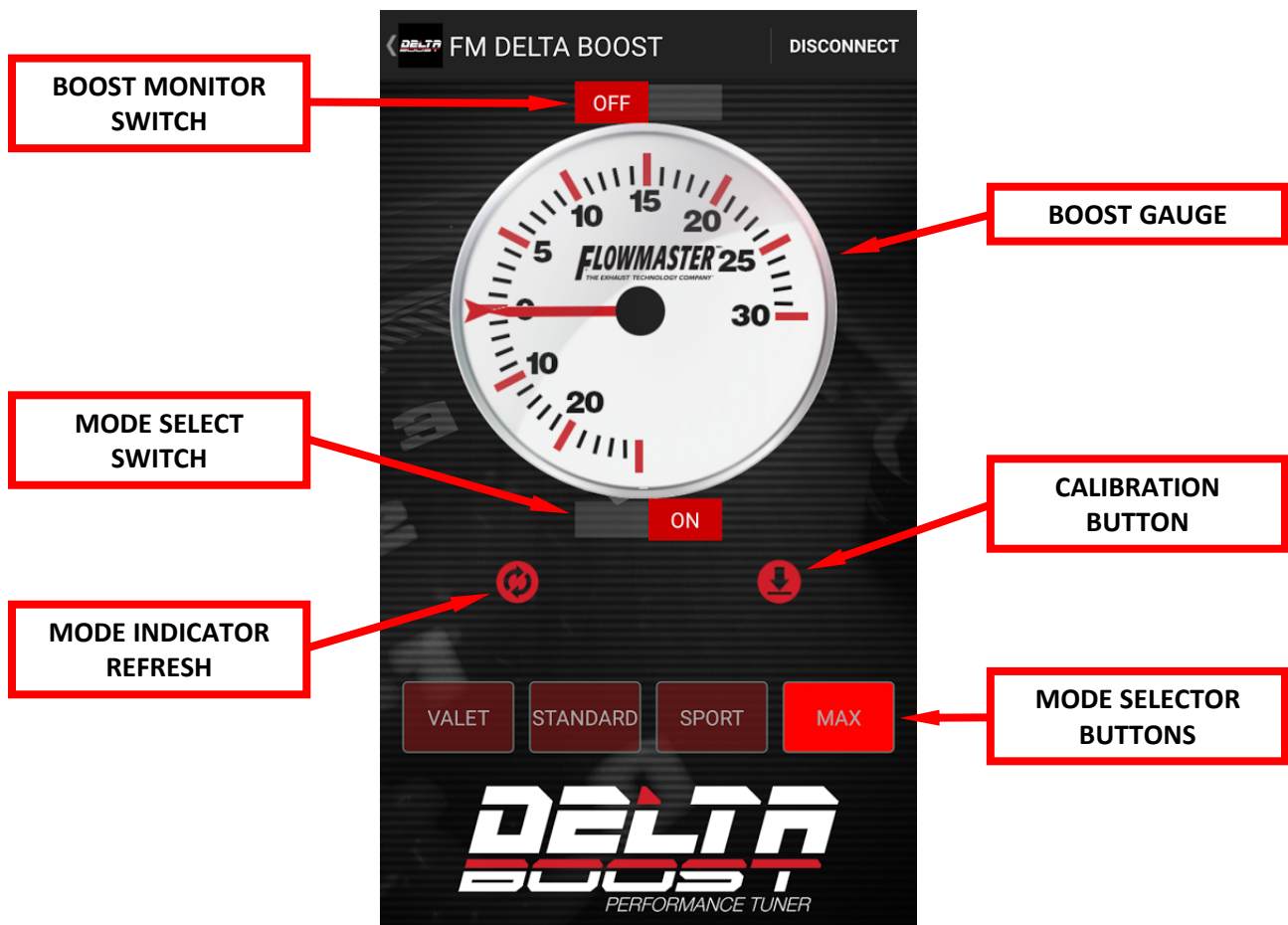
## THE FLOWMASTER DELTA BOOST APP

The Flowmaster Delta Boost Performance Tuner ships in SPORT mode, automatically providing +3 PSI boost out-of-the-box, with no need to use the optional Flowmaster DELTA BOOST mobile app.

The Tuner is “Bluetooth Smart,” thus permitting boost adjustment and monitoring via the free, downloadable Android and iOS mobile apps. The apps provide access to an additional level of boost increase in the MAX (+4 PSI) mode, as well as to the STANDARD (0 PSI or “stock” boost) and VALET (-4 PSI “de-boost”) modes. The app also allows real-time boost monitoring.

### DOWNLOAD THE APP

14. The Android app is available from Google Play, and the iOS app is available from the Apple App Store. Go to the appropriate source for your mobile device, and locate the app by searching for “Flowmaster DELTA BOOST.” Download the app and install it on your device. (NOTE: The Tuner’s “Bluetooth Smart” connectivity requires that your mobile device be equipped with Bluetooth version 4.0 or later.)



**DELTA BOOST APP DISPLAY**

### APP CONNECTION

15. Turn on the vehicle’s ignition switch, but do not start the engine. This will make the unit Bluetooth discoverable.



15. Be sure that your mobile device's Bluetooth is turned on, then launch the Flowmaster DELTA BOOST app. A "Discoverable Devices" screen will open. Tap the Tuner's device name ("FM DELTA BOOST" and MAC address).



18. In the **Mode Select** function, select the desired boost mode: VALET (-4 PSI "de-boost," for valet parking or other restricted use); STANDARD (0 PSI / stock); SPORT (+3 PSI boost); or MAX (+4 PSI boost).



16. The app's main screen will open and the Tuner will connect with your mobile device. The app automatically opens to the **Mode Select** function (the lower switch is turned ON, and the Mode Selector buttons are visible).



19. When MAX boost is selected, the app displays the following caution: "**Flowmaster recommends 91 or higher octane fuel with this setting.**"

## APP FUNCTIONS

17. The Flowmaster DELTA BOOST app features two functions: **Mode Select** and **Boost Monitor**.

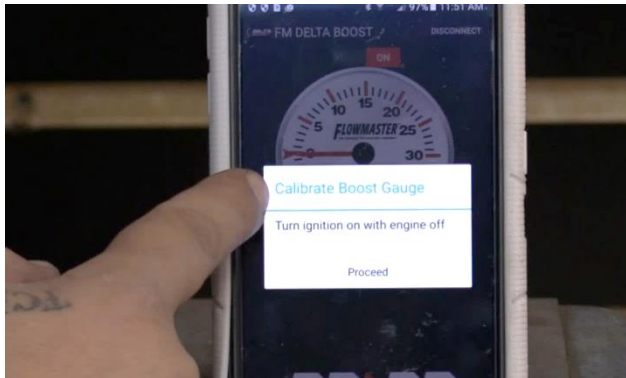
The active function is determined by the position of the two ON-OFF switches:

- Turning the **Mode Select** (lower) switch ON reveals the Mode Select and Refresh buttons.
- Turning the **Boost Monitor** (upper) switch ON hides the Mode Select and Refresh buttons, and activates the Boost Gauge.

NOTE: Only one switch can be turned ON at a time, since only one function can be active at a time.



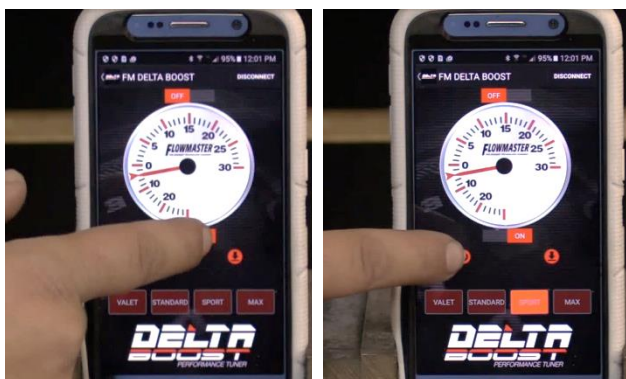
20. After selecting the desired boost mode, turn the **Boost Monitor** (upper) switch ON. The Mode Select switch turns OFF, and the Mode Selector and Refresh buttons are hidden.



21. Tap the **Calibration** button. Then, with the ignition switch on and the engine off, tap "Proceed." This zeros the gauge for best accuracy.



22. The **Boost Monitor** function is now active, and the engine may be started. The Boost Gauge needle will display the real-time boost reading (taken from the intake duct before the throttle body, NOT from the intake manifold). The small arrow opposite the needle is a peak hold indicator, briefly showing peak boost on engine deceleration.



23. To review or change the current boost setting, turn the **Mode Select** (bottom) switch ON. Then tap the **Refresh** button to view the current boost setting NOTE: Only change the boost setting when the ignition is ON and the engine is OFF. Do not change the boost setting with the engine running.

The Tuner's boost mode setting is saved each time the engine is turned off, and resumes each time the engine is started, until the setting is changed. It is not necessary to set the boost level each time you start the engine, unless you wish to change it.

**You are now ready to fully enjoy your new Flowmaster DELTA BOOST Performance Tuner!**

## DELTA BOOST APP TROUBLESHOOTING

**PROBLEM: Mobile device does not recognize the Delta Boost Tuner when attempting to connect.**

### POSSIBLE SOLUTIONS:

- Force close the app and restart.
- Verify the Delta Boost Performance Tuner is powered up. Turn on the ignition and verify that the LED on the module illuminates. If it doesn't:
  - Verify the electrical connections are properly seated and their locking tabs secured.
  - If the connections are properly made, contact Flowmaster Technical Support.
- Make sure your phone is Bluetooth 4.0 enabled and Bluetooth is turned on.
- The module may experience signal interference from an electrical component (the alternator, e.g.). Get as close to the module as possible and re-try.

**PROBLEM: Unable to change boost modes.**

### POSSIBLE SOLUTIONS:

- Boost modes can only be changed when the ignition is ON, and the engine is OFF.
- On some mobile devices, the boost mode may not highlight or display a change. Tap MODE INDICATOR REFRESH to verify what mode the Performance Tuner is in.

**PROBLEM: The Boost Gauge doesn't work.**

### POSSIBLE SOLUTION:

- Once the Boost Monitor Switch is turned on, the gauge will start to report. However the monitor needs to be calibrated before the car is started (i.e., with ignition ON and engine OFF) using the Calibration button, to ensure there is no pressure in the intake pipe and attain a 0 PSI baseline.

**PROBLEM: CHECK ENGINE lights after the unit has been installed.**

**POSSIBLE SOLUTIONS:**

- During install the car may have “woken up.” Prior to install, turn off the car and wait 10 minutes with the key fob outside of the activation radius. Then perform the install with key fob outside of the activation area. Alternatively the install can be performed with the negative battery cable disconnected.
- Verify that the Tuner leads are connected to the correct sensor as called out in these instructions. Some vehicles more than one sensor in the engine bay that use the same kind of connector.

**IMPORTANT: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE**

