

#### INSTALLATION INSTRUCTIONS

PART NUMBER D440-0045

APPLICATION: BMW with 2.0L & 3.0L turbo diesel engines:

2014-16 F30 328d

2015-16 F31 328d Sports Wagon

2010-11 E90 335d 2014-16 F10 535d 2015 F01 740Ld

2015-16 F25 X3 xDrive 28d

2009-13 E70 X5 2014-15 F15 X5

#### **PARTS LIST**

Qty	Part #	Description
L	D443-0116	DINANTronics SPORT Module
3		Zip ties

Congratulations for being selective enough to use DINANTronics SPORT Performance Tuner. We have spent many hours developing this kit to assure that you will receive maximum performance and durability with minimum difficulty in installation. Please take the time to read these instructions and call us if you have any difficulties during the installation.

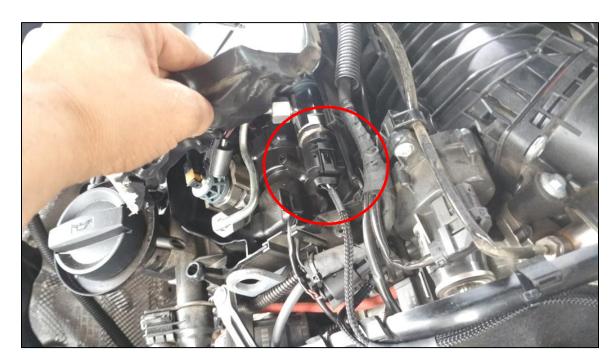
### **INSTALLATION:**

- I. Make sure ignition is OFF.
- The DINANTronics SPORT module is identified with a MAC address. Please note
  the last 4 characters. This will be needed by the <u>optional</u> smart phone app to
  establish a connection. The app allows live boost monitoring, as well as the ability to
  switch performance modes. The app is not needed to realize performance gains
  from DINANTronics SPORT.

- 3. Locate the pressure sensor mounted to the end of the fuel rail:
  - Remove the engine cover by pulling upward.



- Lift up the sound insulation to expose the pressure sensor.
- The pressure sensor will have a connector that is identical the ones on the DINANTronics SPORT module.

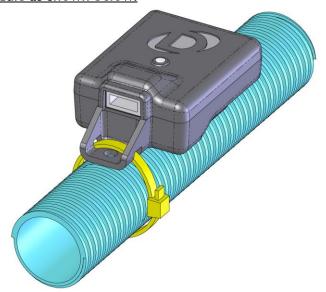


- 4. Disconnect the wiring harness from the pressure sensor.
- 5. Install the DINANTronics SPORT module in between the sensor, and the wiring harness. The connectors can only be installed one way. Make sure that the locking tangs on both connections are secure.

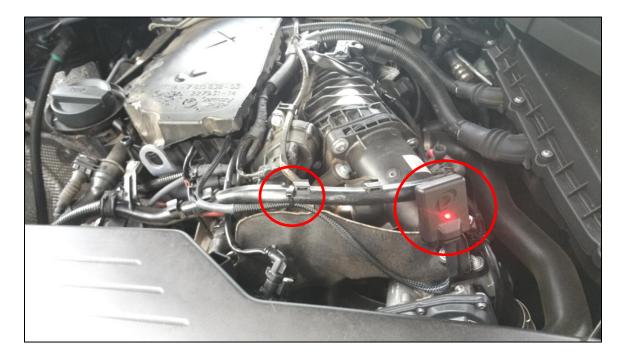


\*\* NOTE: Some E90 335d and E70 X5 vehicles were equipped with an alternate sensor, and the connector on the DINANTronics SPORT harness will not plug in. If this is the case with your vehicle, simply remove the "key" inside the DINAN plug, which will allow a connection with the sensor.

6. The SPORT module is secured using the included zip-ties. Please note -- DO NOT route the zip-tie over the harness at the SPORT module, as this could stress the internal circuit board and damage the module! Only insert a zip-tie thru the slots on the SPORT module as shown below.



7. Mount the module at the location shown below. Use a zip-tie to secure the harness as shown. Also ensure adequate slack in the wiring harness to allow for engine movement. It is best to orient the module vertically, with the wiring pointing downward.



- 8. Reinstall the sound insulation & engine cover.
- 9. Turn on the ignition, but do not start the engine. The LED on the module will illuminate.

10. The module has 5 settings -- in order of increasing performance, they are: VALET, STOCK, SPORT, SPORT+, and RACE. The modules are shipped in SPORT+ mode. The setting can be changed with the DINANTronics SPORT app (available from iTunes or the Google Play store).



- 11. Connect to your phone or tablet to your module using the app. Note that your device must be equipped with Bluetooth version 4.0.
  - \*\* If you experience issues with Bluetooth communication, you may wish to relocate the SPORT module closer to the passenger compartment, and/or further away from sources of electrical noise, such as the alternator and electric fans.
- 12. Adjust module for the desired level of performance. Your setting will be retained, so adjustment is not necessary at each engine start.
- 13. Enjoy!



# **APP WALKTROUGH & GENERAL FAQ**

#### **DINANTRONICS SPORT APP**

Congratulations for being selective enough to use a DINANTronics SPORT Performance Tuner. While not required to run the unit, in order to have full functionality of the tuner you will want to download the associated smart phone app which can be found on either the iTunes (iOS) or the Google Play store (Android).

Please note that images used in this document are of an Android device so your screen may be slightly different when using the iOS app.

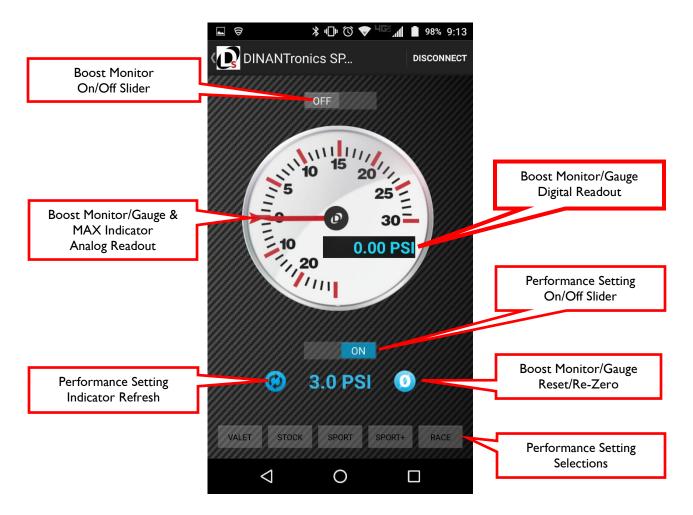
#### APP DOWNLOAD:

Please ensure that you download the correct app as there are 2 variants depending on what level of Dinan tuner is being used (SPORT or Elite). For SPORT applications you will want to use the app with the icon like the one shown to the right (Dinan logo with a red 'S'). The other app variant is for the Elite unit, and it will NOT work with the SPORT units.



#### APP CONNECTION:

Once the app is downloaded and opened you will be presented with a listing of found Bluetooth devices in the immediate area. The DINANTronics Sport will be labelled as such. Highlight the entry and click on 'connect' in the top right corner. Once connected you will be brought to the main interface of the DINANTronics Sport app.



# **APP GENERAL OVERVIEW:**

**Boost Monitor & Performance Setting Sliders:** There are 2 on/off sliders within the app. At any given time only 1 will be active -- they cannot be activated at the same time. The top slider controls activating the boost monitor and the bottom slider allows the different performance settings to be accessed.

**Performance Setting Selector:** Once the lower slider is activated you can select the various performance modes using the selections on the bottom of the app.

- 'Valet' mode is below stock performance.
- 'Stock' is essentially bypassing the SPORT unit altogether.
- 'Sport', 'Sport+', and 'Race' are increasing levels of power above and beyond stock.
  The 'Race' mode is the highest power setting available on the SPORT units and can
  be used with any fuel but we recommend at least 93 octane for optimum
  performance.

The last setting used will be retained so there is no need to reset the performance setting each time the car is driven.

Depending on the app environment (iOS or Android) you may get a pop-up indicator of the setting change and/or the button highlights indicating your selection.

PLEASE NOTE that you should only change the performance setting when the car is off (ignition on, engine off).

**Performance Setting Indicator Refresh:** If you need to see what mode / PSI level you are currently running, you can press this button to display what the currently active setting is, and the boost increase being applied.

Boost Monitor / Gauge Readouts & Reset: When the top slider is activated, the boost monitor will be displayed and begin to report readings. Before doing anything you will want to press the reset/re-zero button in the bottom right. Ideally, this should be done with the ignition on, engine off, for the most accurate readings. The monitor will display the corresponding boost readings from the intake pipe (NOT the manifold) in both an analog output as well as a digital readout. On the analog gauge a MAX indicator (red triangle) is present that will retain its position at peak boost during a pull for a short increment of time.

## DINANTRONICS SPORT APP TROUBLESHOOTING

**Problem:** Phone does not recognize the SPORT unit when attempting to connect. **Solution:** 

- Make sure the correct DINANTronics App is being used. See "App Download" section.
- Force close the app and restart.
- Ensure the DINANTronics unit is powering up by starting the car and seeing if the red light illuminates on the module. If it does not, contact Tech Support.
- Make sure your phone is Bluetooth 4.0 enabled and Bluetooth is turned on.
- In some cases the unit may be too close to a signal interfering part on the vehicle (alternator as an example). To ensure this is not the culprit, please get as close to the unit as possible and re-test.

**Problem:** Unable to change the performance settings/modes. **Solution:** 

- Settings/Modes can only be changed when the car is off (ignition on, engine off).
- On some phones the settings do not highlight and/or have a indicator pop-up to verify a change. Use the 'Performance Setting Indicator Refresh' to verify what mode the DINANTronics Sport is in.

**Problem:** The boost monitor/gauge does not seem to work. **Solution:** 

- Once the boost monitor/gauge slider is turned on the monitor will start to report. However the monitor needs to be calibrated before the car is turned on (ignition on, engine off) using the reset/re-zero button. This is the only way to ensure there is no pressure in the intake pipe and a true "0" baseline is achieved.

\_\_\_\_\_\_

## **DINANTRONICS SPORT INSTALLATION TROUBLESHOOTING**

\_\_\_\_\_

**Problem:** After install a check engine light is present. **Solution:** 

- 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 area. Proceed with install with key fob outside of the activation area. Alternatively the install can be performed with the negative battery cable disconnected.
- Ensure the DINANTronics unit is powering up by starting the car and seeing if the red light illuminates on the module. If it does not, contact Tech Support.
- Double check the unit being installed is correct for the application.
- Double check that the DINANTronics Sport unit is plugged into the correct sensor called out in the appropriate installation instructions. In some vehicles there are multiple sensors across the engine bay (MAP and TMAP primarily) that use the same plug.
- Ensure sensors plugs are properly seated in their connections. You should hear an audible click in most applications and then be able to secure the locking pin/mechanism. If the locking pin is not able to engage then the connector is not fully seated.