

INSTALLATION INSTRUCTIONS

PART NUMBER D440-0052

APPLICATIONS:

 12/14-2017
 F55
 Mini Cooper S (5-door with 2.0L B46/B48 engine)

 12/14-2017
 F56
 Mini Cooper S (3-door with 2.0L B46/B48 engine)

PARTS LIST

Qty	Part #	Description
I	D443-0041	DINANTronics Elite ECU
I	D442-0036	Harness; B48 Elite, Late
I	D443-0042	Bypass Plug
10	D502141	Zip ties
4	DT441-0022	HD Velcro Strips
		-

Congratulations for being selective enough to use DINANTronics Elite 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.

NOTE: This kit does not fit all combinations of vehicles & engines. Please pay careful attention to the vehicles listed above. <u>Note - this kit is NOT suitable for JCW vehicles</u>. Do not install this kit if your specific vehicle configuration is not shown. Please contact your Dinan representative if you have any questions.

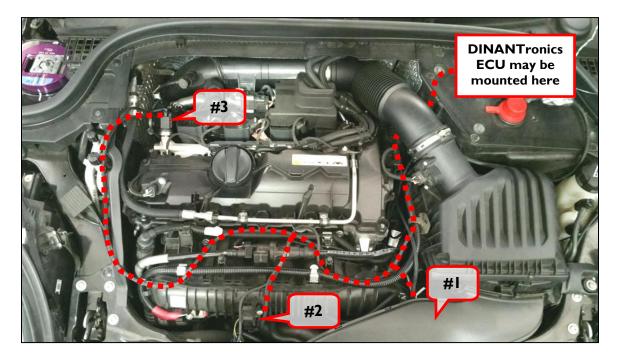
PREPARE VEHICLE FOR INSTALLATION:

- a) Park vehicle at the location where you will be installing DINANTronics.
- b) Determine the range of the keys.
 - Step away from the vehicle and attempt to lock or unlock the car using the remote.
 - Continue to move away until the car no longer responds to the key. This is the range of the key.

- During DINANTronics installation, ALL keys must be completely outside this range. If a key remains within range of the car, <u>the vehicle may respond to the key and awaken unexpectedly</u>, which could result in a stored fault and check engine light.
- c) Unlock the car and open both the hood and trunk.
- d) Close all the doors.
- e) Move all keys beyond the range of the car.
- f) Leave the vehicle undisturbed for about 10 minutes. This allows adequate time for the electronics to go to sleep.
- g) Disconnect negative terminal of battery.

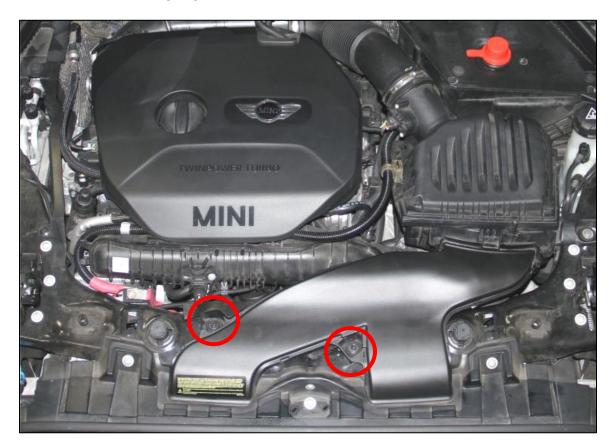
DINANTronics INSTALLATION:

- 1. Remove the engine cover by tugging upwards to release the clips, then set cover aside.
- 2. The DINANTronics ECU communicates with 3 pressure sensors in the engine compartment, shown in the layout photo below.



NOTE: There are two possible connector styles for Sensor #3. You may wish to glance at steps 11& 12, to confirm that the connector on the Dinan harness is correct for your vehicle, before continuing with this installation.

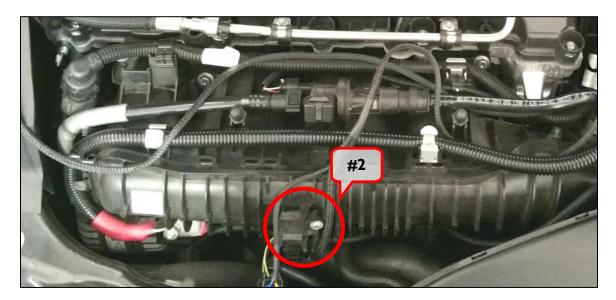
- 3. Sensor #1 is mounted to the charge air tube, just in front of the throttle body.
- 4. To access the charge air tube sensor, remove the two 10mm hex nuts and set aside the air intake duct going to the airbox:



5. The charge air tube pressure sensor is shown below. It will have a connector that is identical to the ones on the DINANTronics harness.



- 6. Study the locking system on the new DINANTronics connectors until you are familiar with how the two connector halves are released. Some locks will require the use of a small flat blade screwdriver to release the tang.
- 7. Disconnect the wiring harness from the pressure sensor.
- 8. Install the DINANTronics harness in between the charge air tube pressure sensor, and the factory wiring harness. The connectors are unique, and can only be installed one way. Make sure that the locking tangs on both connections are secure.
- 9. Route the DINANTronics harness to sensor #2, located on the intake manifold as shown below.



10. Like the previous sensor, install the DINANTronics harness in between the manifold pressure sensor and the factory wiring harness. The connectors are unique, and can only be installed one way. Make sure that the locking tangs on both connections are secure. II. Route the DINANTronics harness to sensor #3, located at the end of the fuel rail.



12. The fuel rail pressure sensor connection could be one of two configurations. Please examine your harness connector and compare it to the photos below. <u>One style is a D-shape, while the other style is an oval-shape.</u> If you do not have the correct harness for your vehicle, please contact Dinan for an exchange -- do not continue with installation



- 13. Like the previous sensors, install the DINANTronics harness in between the fuel rail pressure sensor and the factory wiring harness. The connectors are unique, and can only be installed one way. Make sure that the locking tangs on both connections are secure.
- 14. The DINANTronics ECU may be mounted at the location shown in the first photo.

- 15. Route the DINANTronics harness to the desired ECU location, taking care to:
 - Avoid all moving engine components or areas of extreme heat.
 - Ensure adequate slack in the wiring harness to allow for engine movement.
 - Use some of the included zip-ties to secure the harness as needed.
- 16. Connect harness to DINANTronics ECU. Take care to ensure that the connection is securely latched.
- 17. Use the included double-sided Velcro tape to attach the ECU to the plastic cover.
- 18. Reinstall the air intake duct & engine cover.
- 19. Reconnect negative terminal of battery.

DINANTronics **BYPASS PLUG**:

- 20. A bypass plug is included in this kit. This plug allows you to return the car to stock tuning, without removing the DINANTronics harness from the vehicle.
 - Should stock tuning be desired, follow the steps in the "Prepare Vehicle for Installation" section; disconnect the DINANTronics ECU; and attach bypass plug to the Dinan harness.

DINANTronics REGISTRATION:

- 21. On the DINANTRONICS ECU is a white identification label which displays the MAC address of this ECU. The MAC address is a series of 16 letters & numbers. Take note of the MAC address, as it will be needed to register your ECU with Dinan.
- 22. Completely fill out the DINANTronics Product Registration page at the end of this section. Submit this information to Dinan by visiting the webpage, or you may fax or email the registration page instead.
- 23. Enjoy!