

OVERVIEW

PART NUMBER D440-16xx-xxx

APPLICATION: Various -- see chart below

Congratulations for being selective enough to use a DINANTRONICS Performance Tuner. We have spent many hours developing this system to assure that you will receive maximum performance and durability with minimum difficulty in installation.

Please take the time to read these instructions thoroughly before proceeding. When performing the installation, read the entire numbered instruction before working on the car. If you feel that you do not have the requisite skill, please arrange for a qualified repair facility to perform the installation.

** WARNING **

The DINANTRONICS ECU, harness, and software are designed for use in specific applications as detailed in the chart below. Do not install this product into a vehicle not listed for the specific ECU & software you have. Damage will occur if this kit is misapplied!

As indicated in the DINAN product catalog, certain DINANTRONICS software products were designed for use with additional high performance hardware components including, but not limited to, Free-Flow Exhaust systems, cold air intake systems, and intercooler systems. Use of such DINANTRONICS software products without the required associated hardware components voids any and all warranties. For any questions about compatibility, please contact DINAN at 408-779-8584.

** IDENTIFY TYPE OF WASTEGATE **

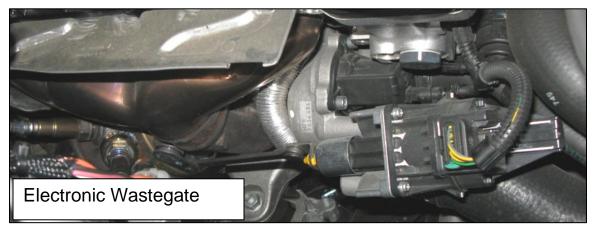
To ensure you have the correct kit for your vehicle, you must first identify the type of wastegate installed in your car.

Most BMW turbo engines are equipped with two styles of wastegates: mechanical diaphragm vs. electronic. The two wastegates styles require different software. Before installing DINANTRONICS, you must determine the type of wastegate attached to the turbocharger(s) on the vehicle. Use the following illustrations as a guide.

Check Wastegate on N20/N26 4-cylinder engines:

Look at the turbo to determine which type of wastegate is installed on your car. Look for a vacuum hose or electric wire connector.



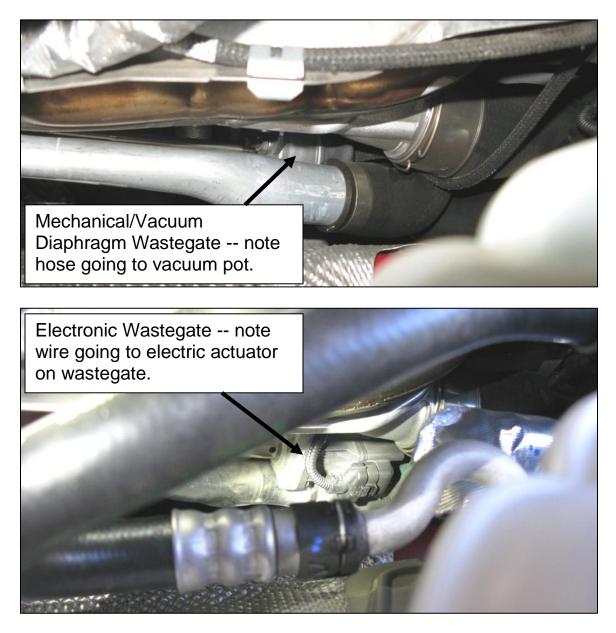


Wastegate on S55 6-cylinder engines (M3 & M4):

The S55 engine in the F8x M3 & M4 were only equipped with an electronic wastegates, so no visual identification is necessary.

Check Wastegate on N55 6-cylinder engines:

Look at the turbo to determine which type of wastegate is installed on your car. Look for a vacuum hose or electric wire connector.

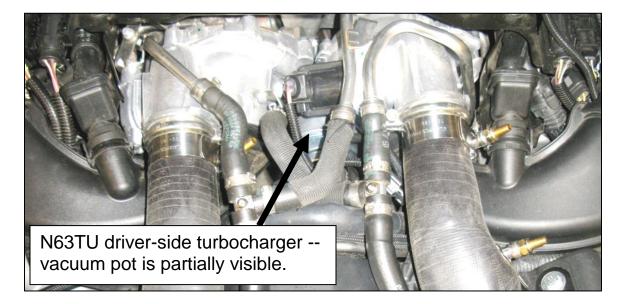


Check Wastegate on N63TU & S63 8-cylinder engines:

In the photos below, a portion of the vacuum pot that actuates the Wastegate is visible. If your turbochargers have electronic wastegates, please stop and contact Dinan.







**** CONFIRM CORRECT KIT FOR YOUR VEHICLE ****

Examine the kit part number shown on the outside of the packaging. See chart at the end of this section and confirm you have the correct kit for your application. Pay particular attention to the type of wastegate (vacuum vs. electric). Do not proceed if you do not have the correct kit for your application! Contact Dinan if you have any questions.

** DOWNLOAD INSTALLATION INSTRUCTIONS **

The latest instructions are available for download at the Dinan website:

- Open a web browser and navigate to www.dinancars.com
- Select your vehicle.
- Select the DINANTronics product.
- Click the "Download Installation Instructions" link.
- If desired, print the instructions and set aside.

**** PREPARE VEHICLE FOR INSTALLATION ****

During DINANTRONICS installation, the engine computer (ECU) will be disconnected from the vehicle. If the ECU is awake when it is disconnected, faults may be stored and the check engine light could be illuminated after installation. The vehicle may not function properly. To prevent this occurrence, it is essential to prepare the car correctly per the following procedure:

- 1. Park vehicle at the location where you will be installing DINANTRONICS.
- 2. 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.
 - <u>During DINANTRONICS installation, ALL keys must be completely outside</u> <u>this range.</u> If a key remains within range of the car, the vehicle may respond to the key and awaken unexpectedly, which could result in a stored fault and check engine light.
- 3. Unlock the car and open both the hood and trunk.
- 4. Close all the doors.
- 5. Move all keys beyond the range of the car.
- 6. After approximately one minute, you can hear the electronics in the engine compartment power down. This indicates that the electronics have gone to

sleep. If you should miss this event, you can wait five minutes, which ensures that all the electronics are asleep.

- 7. Disconnect negative terminal of battery.
- 8. Install the DINANTRONICS harness and ECU per the separate instructions. Note that harness installation in vehicles (such as the X1, X3, X4, X5, X6, and Z4) are covered in a supplement.
- 9. Reconnect negative battery cable.
- 10. Enjoy!

** Remember to submit a completed registration form to record your purchase with Dinan!

Chassis	Engine	Vehicle	Wastegate	Stage 1 kit	Stage 2 kit	Stage 3 kit
F22	N20	2014-2016 228i Coupe	Electric	D440-1632-ST1	<u></u>	D440-1632-ST3
F22	N20	2015-2016 228i xDrive	Electric	D440-1632-ST1		D440-1632-ST3
F30	N20	2013-16 320i	Electric	D440-1646-ST1		
F30	N20	2013-2016 320i xDrive	Electric	D440-1646-ST1		
F30	N20	2012-2016 328i	Vacuum	D440-1631-ST1		D440-1631-ST3
F30	N20	2012-2016 328i	Electric	D440-1632-ST1		D440-1632-ST3
F30	N20	2013-2016 328i xDrive	Vacuum	D440-1631-ST1		D440-1631-ST3
F30	N20	2013-2016 328i xDrive	Electric	D440-1632-ST1		D440-1632-ST3
F31	N20	2014-2016 328i xDrive Sports Wagon	Electric	D440-1632-ST1		D440-1632-ST3
F34	N20	2014-2016 328i xDrive Gran Turismo	Electric	D440-1632-ST1		D440-1632-ST3
F33	N20	2014-2016 428i Convertible	Electric	D440-1632-ST1		
F32	N20	2014-2016 428i Coupe	Electric	D440-1632-ST1		D440-1632-ST3
F36	N20	2015-2016 428i Gran Coupe	Electric	D440-1632-ST1		D440-1632-ST3
F32	N20	2014-2016 428i xDrive Coupe	Electric	D440-1632-ST1		D440-1632-ST3
F33	N20	2015-2016 428i xDrive Convertible	Electric	D440-1632-ST1		
F36	N20	2015-2016 428i xDrive Gran Coupe	Electric	D440-1632-ST1		D440-1632-ST3
F10	N20	2012-2016 528i	Vacuum	D440-1631-ST1		
F10	N20	2012-2016 528i	Electric	D440-1632-ST1		
F10	N20	2012-2016 528i xDrive	Vacuum	D440-1631-ST1		
F10	N20	2012-2016 528i xDrive	Electric	D440-1632-ST1		
E84	N20	2013-2015 X1 sDrive28i	Electric	D440-1632-ST1		
E84	N20	2013-2015 X1 xDrive28i	Vacuum	D440-1631-ST1		
E84	N20	2013-2015 X1 xDrive28i	Electric	D440-1632-ST1		
F25	N20	2014-2016 X3 sDrive 28i	Electric	D440-1632-ST1		
F25	N20	2013-2016 X3 xDrive 28i	Vacuum	D440-1631-ST1		
F25	N20	2013-2016 X3 xDrive 28i	Electric	D440-1632-ST1		

DINANTRONICS PERFORMANCE TUNER KIT APPLICATIONS

<u>Chassis</u>	<u>Engine</u>	<u>Vehicle</u>	<u>Wastegate</u>	<u>Stage 1 kit</u>	<u>Stage 2 kit</u>	<u>Stage 3 kit</u>
F26	N20	2015-2016 X4 xDrive 28i	Electric	D440-1632-ST1		
E89	N20	2012-2016 Z4 sDrive 28i Roadster	Vacuum	D440-1631-ST1		
E89	N20	2012-2016 Z4 sDrive 28i Roadster	Electric	D440-1632-ST1		
F22	N26	2014-2016 228i Coupe SULEV	Electric	D440-1633-ST1		
F22	N26	2015-2016 228i xDrive Coupe SULEV	Electric	D440-1633-ST1		
F30	N26	2012-2016 328i Sedan SULEV	Electric	D440-1633-ST1		
F30	N26	2013-2016 328i xDrive SULEV	Electric	D440-1633-ST1		
F34	N26	2016 328i xDrive Gran Turismo SULEV	Electric	D440-1633-ST1		
F32	N26	2014-2016 428i Coupe SULEV	Electric	D440-1633-ST1		
F33	N26	2014-2016 428i Convertible SULEV	Electric	D440-1633-ST1		
F36	N26	2015-2016 428i Gran Coupe SULEV	Electric	D440-1633-ST1		
F32	N26	2014-2016 428i xDrive Coupe SULEV	Electric	D440-1633-ST1		
F33	N26	2015-2016 428i xDrive Convertible SULEV	Electric	D440-1633-ST1		
F36	N26	2015-2016 428i xDrive Gran Coupe SULEV	Electric	D440-1633-ST1		
F30	N55	2012-2015 335i Sedan	Vacuum	D440-1638-ST1	D440-1638-ST2	D440-1638-ST3
F30	N55	2012-2015 335i Sedan	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F30	N55	2012-2015 335i Sedan (w/ M-Perf)	Vacuum	D440-1640-ST1	D440-1640-ST2	D440-1640-ST3
F30	N55	2012-2015 335i Sedan (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F30	N55	2013-2015 335i xDrive Sedan	Vacuum	D440-1638-ST1	D440-1638-ST2	D440-1638-ST3
F30	N55	2013-2015 335i xDrive Sedan	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F30	N55	2013-2015 335i xDrive Sedan (w/ M-Perf)	Vacuum	D440-1640-ST1	D440-1640-ST2	D440-1640-ST3
F30	N55	2013-2015 335i xDrive Sedan (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F34	N55	2014-2015 335i xDrive Gran Turismo	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F32	N55	2014-2016 435i Coupe	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F32	N55	2014-2016 435i Coupe (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F33	N55	2014-2016 435i Convertible	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F33	N55	2014-2016 435i Convertible (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F32	N55	2014-2016 435i xDrive Coupe	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F32	N55	2014-2016 435i xDrive Coupe (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F33	N55	2014-2016 435i xDrive Convertible	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F33	N55	2014-2016 435i xDrive Convertible (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F36	N55	2014-2016 435i Gran Coupe	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F36	N55	2014-2016 435i Gran Coupe (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F36	N55	2015-2016 435i xDrive Gran Coupe	Electric	D440-1639-ST1	D440-1639-ST2	D440-1639-ST3
F36	N55	2015-2016 435i xDrive Gran Coupe (w/ M-Perf)	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F10	N55	2011-2016 535i Sedan	Vacuum	D440-1638-ST1		
F10	N55	2011-2016 535i Sedan	Electric	D440-1639-ST1		
F10	N55	2011-2016 535i Sedan (w/ M-Perf)	Electric	D440-1641-ST1		
F07	N55	2011-2016 535i Gran Turismo	Vacuum	D440-1638-ST1		
F07	N55	2011-2016 535i Gran Turismo	Electric	D440-1639-ST1		
F10	N55	2011-2016 535i xDrive Sedan	Vacuum	D440-1638-ST1		
F10	N55	2011-2016 535i xDrive Sedan	Electric	D440-1639-ST1		
F10	N55	2011-2016 535i xDrive Sedan (w/ M-Perf)	Electric	D440-1641-ST1		

<u>Chassis</u>	Engine	<u>Vehicle</u>	<u>Wastegate</u>	<u>Stage 1 kit</u>	<u>Stage 2 kit</u>	<u>Stage 3 kit</u>
F07	N55	2011-2016 535i xDrive Gran Turismo	Vacuum	D440-1638-ST1		
F07	N55	2011-2016 535i xDrive Gran Turismo	Electric	D440-1639-ST1		
F12	N55	2012-2016 640i Convertible	Vacuum	D440-1642-ST1		
F12	N55	2012-2016 640i Convertible	Electric	D440-1643-ST1		
F13	N55	2012-2016 640i Coupe	Vacuum	D440-1642-ST1		
F13	N55	2012-2016 640i Coupe	Electric	D440-1643-ST1		
F06	N55	2013-2016 640i Gran Coupe	Vacuum	D440-1642-ST1		
F06	N55	2013-2016 640i Gran Coupe	Electric	D440-1643-ST1		
F12	N55	2014-2016 640i xDrive Convertible	Vacuum	D440-1642-ST1		
F12	N55	2014-2016 640i xDrive Convertible	Electric	D440-1643-ST1		
F13	N55	2014-2016 640i xDrive Coupe	Vacuum	D440-1642-ST1		
F13	N55	2014-2016 640i xDrive Coupe	Electric	D440-1643-ST1		
F06	N55	2014-2016 640i xDrive Gran Coupe	Electric	D440-1643-ST1		
F02	N55	2013-2015 740Li	Vacuum	D440-1642-ST1		
F02	N55	2013-2015 740Li	Electric	D440-1643-ST1		
F02	N55	2013-2015 740Li xDrive	Vacuum	D440-1642-ST1		
F02	N55	2013-2015 740Li xDrive	Electric	D440-1643-ST1		
F01	N55	2013-2015 740i	Vacuum	D440-1642-ST1		
F01	N55	2013-2015 740i	Electric	D440-1643-ST1		
F22	N55	2014-2016 M235i Coupe	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F22	N55	2015-2016 M235i xDrive Coupe	Electric	D440-1641-ST1	D440-1641-ST2	D440-1641-ST3
F87	N55	2016 M2 Coupe	Electric	D440-1649-ST1	D440-1649-ST2	
F25	N55	2013-2016 X3 xDrive 35i	Vacuum	D440-1638X-ST1		
F25	N55	2013-2016 X3 xDrive 35i	Electric	D440-1639X-ST1		
F26	N55	2015-2016 X4 xDrive 35i	Vacuum	D440-1638X-ST1		
F26	N55	2015-2016 X4 xDrive 35i	Electric	D440-1639X-ST1		
F15	N55	2015-2016 X5 sDrive 35i	Electric	D440-1639X-ST1		
F15	N55	2015-2016 X5 sDrive 35i (w/ M-Perf)	Electric	D440-1641X-ST1		
F15	N55	2015-2016 X5 xDrive 35i	Electric	D440-1639X-ST1		
F15	N55	2015-2016 X5 xDrive 35i (w/ M-Perf)	Electric	D440-1641X-ST1		
F16	N55	2015-2016 X6 sDrive 35i	Electric	D440-1639X-ST1		
F16	N55	2015-2016 X6 sDrive 35i (w/ M-Perf)	Electric	D440-1641X-ST1		
F16	N55	2015-2016 X6 xDrive 35i	Electric	D440-1639X-ST1		
F16	N55	2015-2016 X6 xDrive 35i (w/ M-Perf)	Electric	D440-1641X-ST1		
F10	N63TU	2014-2016 550i Sedan	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F07	N63TU	2013-2016 550i Gran Turismo	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F10	N63TU	2014-2016 550i xDrive Sedan	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F07	N63TU	2013-2016 550i xDrive Gran Turismo	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F12	N63TU	2013-2016 650i Convertible	Vacuum	D440-1634-ST1		D440-1634-ST3
F13	N63TU	2013-2016 650i Coupe	Vacuum	D440-1634-ST1		D440-1634-ST3
F06	N63TU	2013-2016 650i Gran Coupe	Vacuum	D440-1634-ST1		D440-1634-ST3
F12	N63TU	2013-2016 650i xDrive Convertible	Vacuum	D440-1634-ST1		D440-1634-ST3
F13	N63TU	2013-2016 650i xDrive Coupe	Vacuum	D440-1634-ST1		D440-1634-ST3

<u>Chassis</u>	Engine	Vehicle	<u>Wastegate</u>	<u>Stage 1 kit</u>	<u>Stage 2 kit</u>	<u>Stage 3 kit</u>
F06	N63TU	2013-2016 650i xDrive Gran Coupe	Vacuum	D440-1634-ST1		D440-1634-ST3
F01	N63TU	2013-2015 750i	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F02	N63TU	2013-2015 750Li	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F01	N63TU	2013-2015 750i xDrive	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F02	N63TU	2013-2015 750Li xDrive	Vacuum	D440-1634-ST1	D440-1634-ST2	D440-1634-ST3
F01	N63TU	2013-2015 Alpina B7	Vacuum	D440-1635-ST1	D440-1635-ST2	
F02	N63TU	2013-2015 Alpina B7 LWB	Vacuum	D440-1635-ST1	D440-1635-ST2	
F01	N63TU	2013-2015 Alpina B7 xDrive	Vacuum	D440-1635-ST1	D440-1635-ST2	
F02	N63TU	2013-2015 Alpina B7 xDrive LWB	Vacuum	D440-1635-ST1	D440-1635-ST2	
F06	N63TU	2015-2016 Alpina B6 xDrive Gran Coupe	Vacuum	D440-1635-ST1		
F15	N63TU	2015-2016 X5 xDrive 50i	Vacuum	D440-1634X-ST1		
F85	S63TU	2015-2016 X5 M	Vacuum	D440-1647-ST1		
F16	N63TU	2015-2016 X6 xDrive 50i	Vacuum	D440-1634X-ST1		
F86	S63TU	2015-2016 X6 M	Vacuum	D440-1647-ST1		
F80	S55	2015-2016 M3 Sedan	Electric	D440-1644-ST1	D440-1644-ST2	
F80	\$55	2015-2016 M3 Sedan Competition	Electric	D440-1644C-ST1	D440-1644C-ST2	
F82	\$55	2015-2016 M4 Coupe	Electric	D440-1644-ST1	D440-1644-ST2	
F82	S55	2015-2016 M4 Coupe Competition	Electric	D440-1644C-ST1	D440-1644C-ST2	
F83	\$55	2015-2016 M4 Convertible	Electric	D440-1644-ST1	D440-1644-ST2	
F83	S55	2015-2016 M4 Convertible Competition	Electric	D440-1644C-ST1	D440-1644C-ST2	
F10	S63TU	2013-2016 M5	Vacuum	D440-1636-ST1	D440-1636-ST2	
F10	S63TU	2014-2016 M5 Competition	Vacuum	D440-1637-ST1	D440-1637-ST2	
F12	S63TU	2013-2016 M6 Convertible	Vacuum	D440-1636-ST1	D440-1636-ST2	
F12	S63TU	2014-2016 M6 Convertible Competition	Vacuum	D440-1637-ST1	D440-1637-ST2	
F13	S63TU	2013-2016 M6 Coupe	Vacuum	D440-1636-ST1	D440-1636-ST2	
F13	S63TU	2014-2016 M6 Coupe Competition	Vacuum	D440-1637-ST1	D440-1637-ST2	
F06	S63TU	2014-2016 M6 Gran Coupe	Vacuum	D440-1636-ST1	D440-1636-ST2	
F06	S63TU	2014-2016 M6 Gran Coupe Competition	Vacuum	D440-1637-ST1	D440-1637-ST2	
F10	S63TU	2015 M5 30th Anniversary Edition	Vacuum	D440-1636-ST1	D440-1636-ST2	



The Dinan app for Android or Apple iOS smart phones & tablets allows you to connect to a DINANTronics ECU and easily change between Bypass mode, and any licensed Stage.

To obtain the free DINANTRONICS app, search for 'dinantronics' on either the iTunes or Google Play stores, and download for your specific platform.

Requirement:

The app must be used with an Android or Apple device equipped with Bluetooth version 4.0, such as:

- Apple iPhone 4s or newer
- Apple iPad 3 or newer
- Apple iPad Air or newer
- Apple iPad mini or newer
- Samsung Galaxy S3 or newer
- numerous other Android devices

Please use a reference such as www.phonearena.com to research the Bluetooth capabilities of your device. Connection to a DINANTronics ECU requires Bluetooth version 4.0.



Harness

INSTALLATION INSTRUCTIONS

PART NUMBER **D440-0027(B)**

APPLICATION: 2015-16 F80 M3 2015-16 F82/F83 M4 coupe/convertible

Congratulations for being selective enough to use a DINANTRONICS Performance Tuner (DPT). We have spent many hours developing this system to assure that you will receive maximum performance and durability with minimum difficulty in installation.

Please take the time to read these instructions thoroughly before proceeding. When performing the installation, read the entire numbered instruction before working on the car. If you feel that you do not have the requisite skill, please arrange for a qualified repair facility to perform the installation.

Notes:

- Evaluate and repair all faults stored in the ECU memories before installing any Dinan components.
- The harness must have an ORANGE BAND near the DPT ECU connectors as shown below.



Product Information. The DINANTronics performance tuner box is not sealed. The electronics board inside of the box is. It is coated with a special material to waterproof it.

Warning!

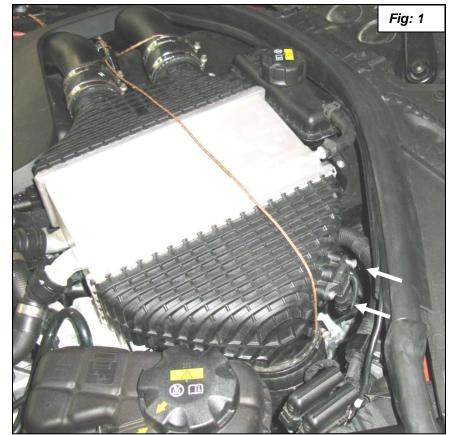
Damage will occur if you do not follow instructions and install harness correctly. Read and follow instructions step-by-step, making sure you plug harness in the correct position. Run the wires along the paths shown. The harness can be damaged if it is routed thru the wrong area.

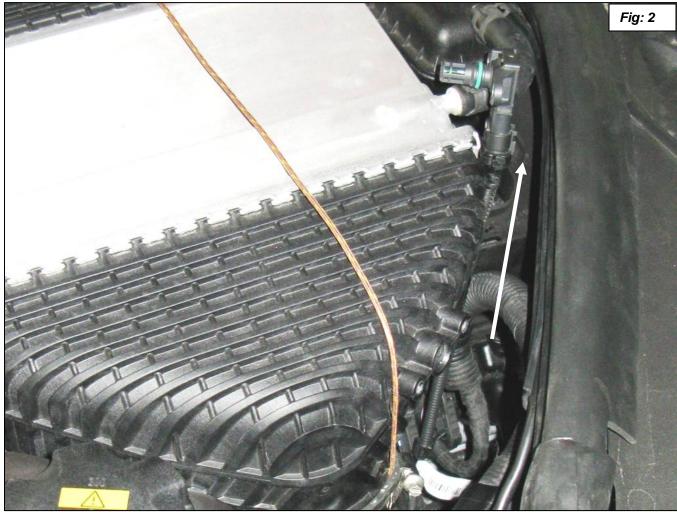
Installation:

- I. Disconnect the negative battery lead.
- 2. The engine control unit is attached to the driver's side of the engine, under the intake manifold. In order to get your arm to it you will need to remove the Pressure Sensor.

Remove the Pressure Sensor by taking out the 2 screws holding it to the intercooler manifold. See figure 1.

Push the Pressure Sensor back out of the way as shown in figure 2.





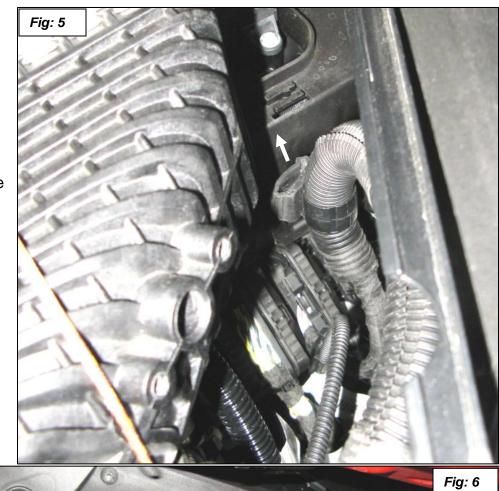
3. Unhook the cable from the holder as shown in figure 3.



4. Remove the rubber hood seal as shown in figures 4 and 5.

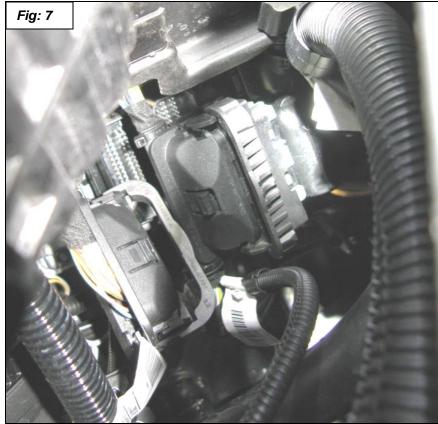


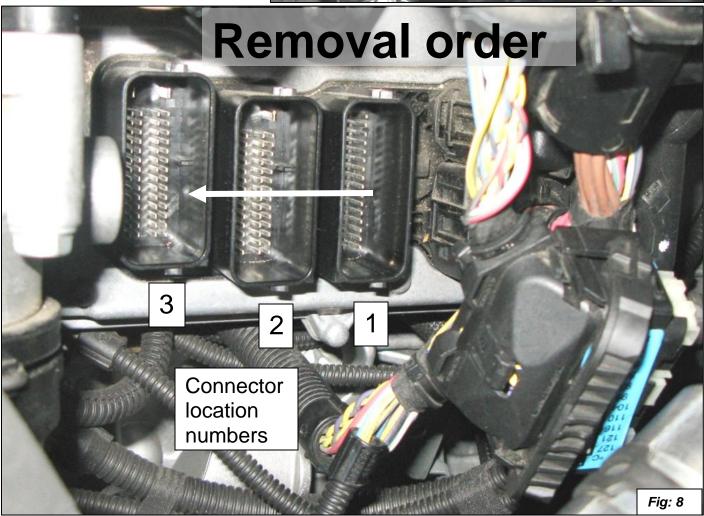
- 5. Remove the rubber grommet attached to the bracket to give the cable room to move. See figure 5.
- 6. Remove right side cover in engine compartment. Turn locks 90° counterclockwise. Unlock catch and pull cover up and outward. See figure 6. Note: 335i shown for photo clarity.





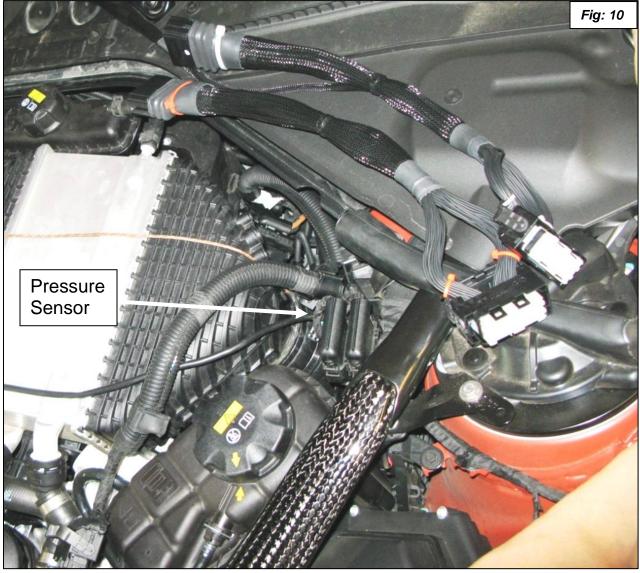
7. Reach down between the Intercooler tank and the firewall. Disconnect the first three large connectors on the engine control unit. See figure 7. You have to start with the back large connector (1) and work your way forward to connector (3). You will be connecting the **DPT** wire harness connectors between the stock ECU and the stock ECU connectors. See figure 8. Note: The intercooler was removed for photo clarity.



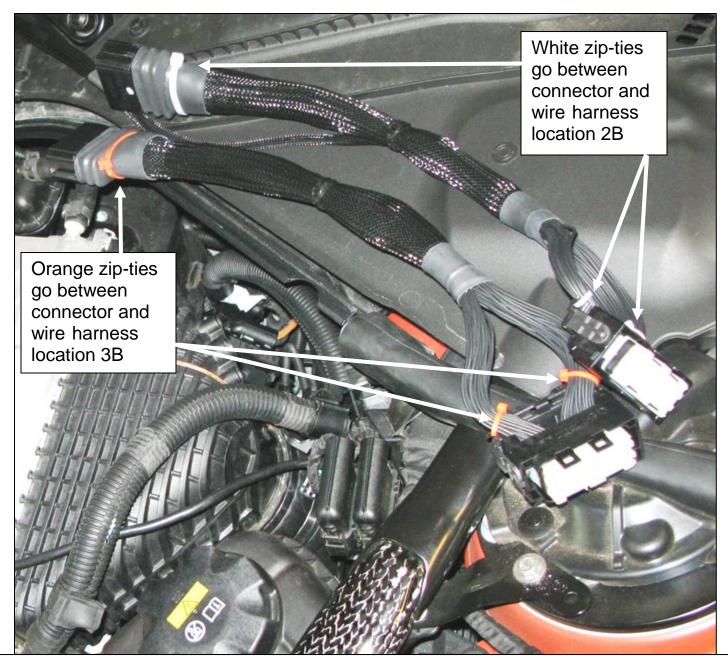


- 8. Pull the connector number 1 out of the way for now and move the pressure sensor to make room for you to install the Dinan Connectors to the ECU. See figures 9 and 10.
- 9. Lay the DPT Harness on the car as shown in figure 10 to identify the connectors so you can install them in the correct locations.



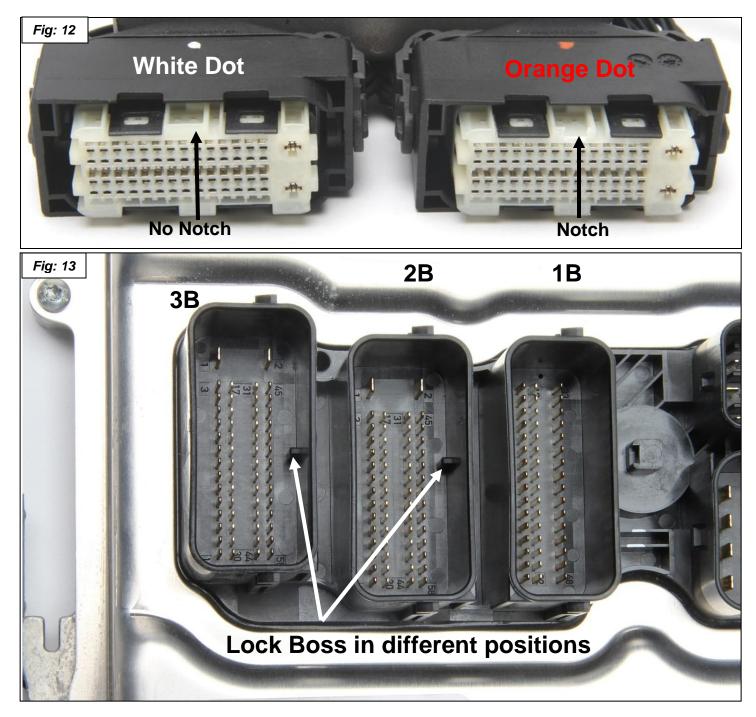


10. The DPT Harness has two interrupt sections that connect at the stock ECU. The two interrupt sections are color coded so you can put them in right locations. One set has Orange dots and zip-ties on the connectors, and the other set has White dots and zip-ties. See figure 11.



Dinan has supplied you with a spray can of connector lubricant. You will need to spray it on all the connectors you remove and all the Dinan connections as you install them. Start by spraying the pins inside the connector housings on the ECU. Spray inside each end of each connector as you install them. This is very important to spray every pin in every connector, it will help ease installation and inhibit corrosion. When installing the connectors push them together without using the locking lever. If you use the locking lever to pull them together the plug will <u>not</u> fully engage the pins. The plug <u>must</u> be fully pushed into the mating connector then locked with the lever!

11. The BMW connector ends of the Dinan interrupt sections are the same except for the color code. The Orange dot and zip-tie connector has a second lock notch so it will fit around Lock Boss that is in the connector receptacles on the ECU. They are in different locations between receptacle 2B and 3B. The Orange dot connector will physically fit in either 3B or 2B receptacles, but the White dot connector will only fit in the 2B receptacle. Care must be taken to attach the connectors in the proper locations -- damage will occur if done wrong. See figures 12 & 13.



- 12. The Orange Dot/Zip-Tie Interrupt section gets installed first. It goes between position (3B) on the ECU and the stock connector that has 4 rows of small connectors, two large connectors and is black in color. See figure 14.
- Install the Orange Dot/Zip-Tie Dinan interrupt connector to position 3B on the stock ECU. DO NOT connect to the stock wire connector yet. See figure 15.

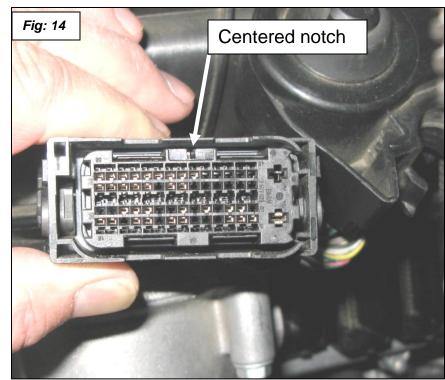
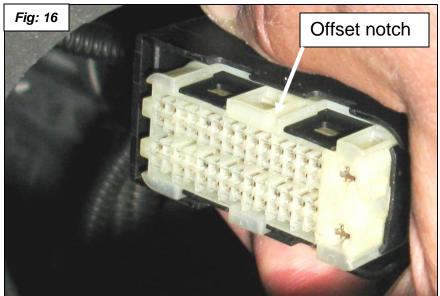


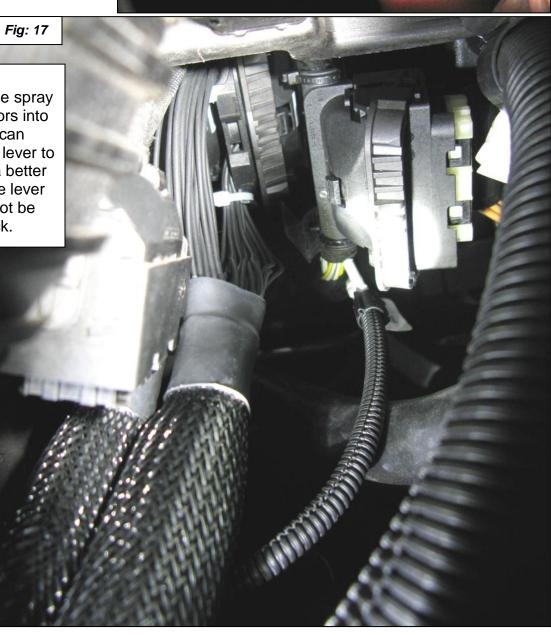
Fig: 15

When installing the connector, use the lube spray and push the connectors into position as far as you can without using the cam lever to pull it in. You will get a better deeper connection; the lever should be loose and not be pushing against its lock.

- 14. Install the Interrupt section that has the White Dot/Zip-Tie between position (2B) on the ECU and the stock connector that has 4 rows of small connectors, two large connectors and is White in color. See figure 16.
- Install the White Dot/Zip-Tie Dinan interrupt connector to position 2B on the stock ECU. DO NOT connect to the stock wire connector yet. See figure 17.



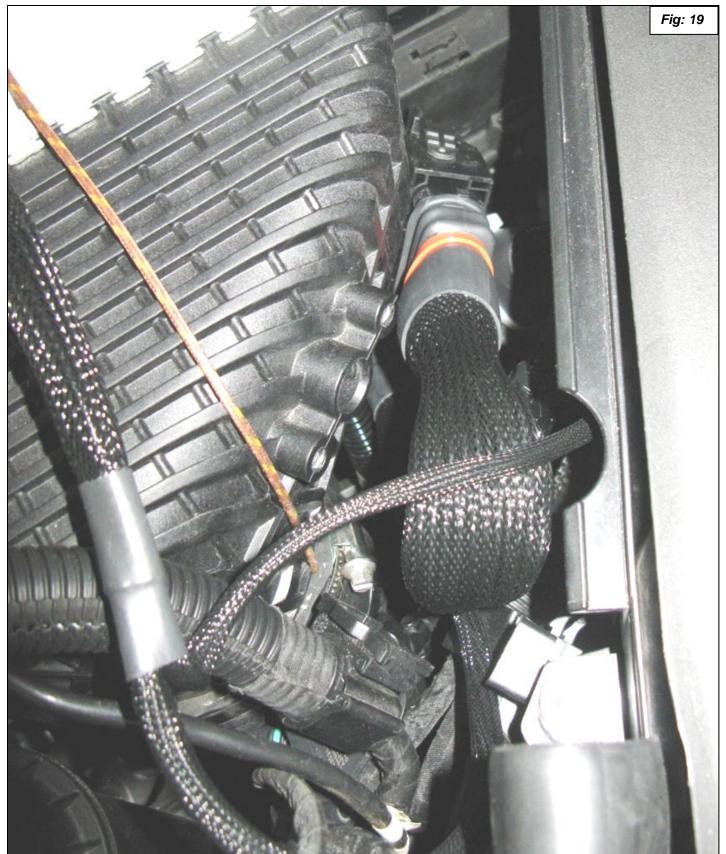
When installing the connector, use the lube spray and push the connectors into position as far as you can without using the cam lever to pull it in. You will get a better deeper connection; the lever should be loose and not be pushing against its lock.





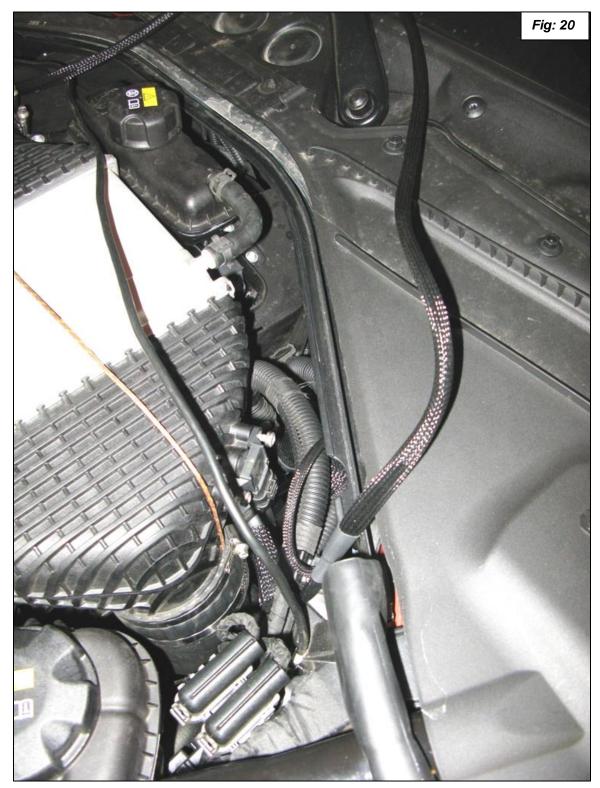
 Connect the White Dot Dinan interrupt connector to the stock 2B Wire Harness Connector (Fig: 16) as shown in figure 18.

INS440-0027(B)



17. Connect the Orange Dot Dinan interrupt connector to the stock 3B Wire Harness Connector (Fig: 14) as shown in figure 19.

- 18. Install the last large connector that is the three row plug. It has no interrupt and goes back on as stock in position (1B). Place its holders back on their clips.
- 19. Swing all the Interrupt sections down out of the way and position them as shown in figure 20. They tuck up between the intercooler and the top of the throttle body. Zip tie to secure connectors.



- 20. Install the Pressure Sensor back into the Intercooler. See figure 20.
- 21. Run the DPT Harness thru the rubber seal as shown in figure 21.
- 22. Pull the DPT Harness around and run it under the cowl seal as shown in figure 22. Fix the rubber seal back over the cowl seal.
- 23. Continue running the harness under the cowl seal as shown in figure 23.

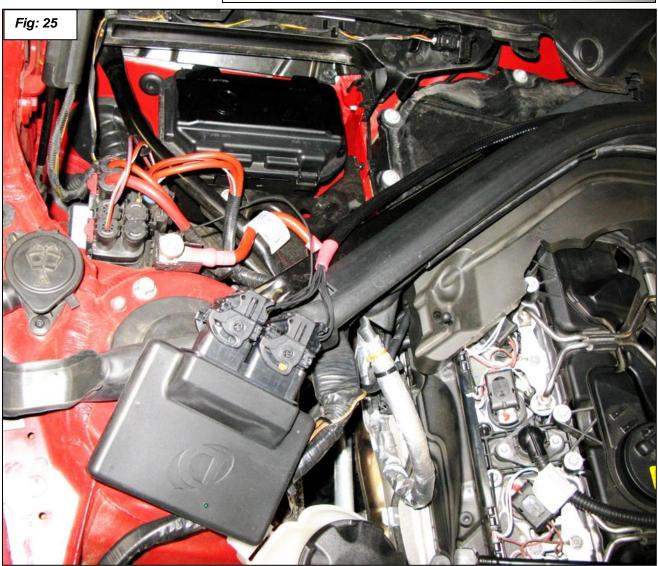




24. Attach Velcro strips using the double stick tape to the back of the DPT ECU. Attach the hard hook part to the box after cleaning the surface first. See figure 24.

25. Attach the connectors to the DPT ECU starting with the large one first. See figure 25.





26. Clean the Lid of the Power Distribution Box so the Velcro double stick tape will adhere. Peel the cover off the Velcro and adhere the DPT ECU to the Lid. See figures 25, 26 and 27. Connect the power wire to the positive battery lug.





27. If your harness has a external ground wire along with the power wire you need to route it as shown if figure 23. Zip tie it to the stock harness.



28. Reinstall the cowl cover over the DPT ECU as shown in figure 28. Note: 335i shown for photo clarity.



Steps Before Starting

- 29. If necessary, program the DPT ECU following the instructions supplied with it.
- 30. Check & clear faults before starting engine:
 - Turn the ignition on without starting by pressing start button without stepping on brake or clutch pedals.
 - Check for faults.
 - Clear any faults found.
 - Repeat process as necessary until no faults are found.
 - The engine may be started once the fault memory remains clear.



INSTALLATION INSTRUCTIONS

PART NUMBER Various -- see chart below

APPLICATION: Various -- see chart below

Congratulations for being selective enough to use a DINANTRONICS Performance Tuner. We have spent many hours developing this system to assure that you will receive maximum performance and durability with minimum difficulty in installation.

Please take the time to read these instructions thoroughly before proceeding. When performing the installation, read the entire numbered instruction before working on the car. If you feel that you do not have the requisite skill, please arrange for a qualified repair facility to perform the installation.

** WARNING **

This DINANTRONICS ECU and software is designed for use in specific applications as detailed in the chart below. Do not install this product into a vehicle not listed for the specific ECU & software you have. Damage will occur if this kit is misapplied!

As indicated in the DINAN product catalog, certain DINANTRONICS software products were designed for use with additional high performance hardware components including, but not limited to, Free-Flow Exhaust systems, cold air intake systems, and intercooler systems. Use of such DINANTRONICS software products without the required associated hardware components voids any and all warranties. For any questions about compatibility, please contact DINAN at 408-779-8584.

ECU Part Numbers & Applications:

Examine the kit part number shown on the packaging. See chart below and confirm you have the correct ECU & software for your application. Pay particular attention to the type of wastegate (vacuum vs. electric). Do not proceed if you do not have the correct ECU & software for your application! Contact Dinan if you have any questions.

<u>Chassis</u>	Engine	Vehicle	<u>Wastegate</u>	Stage 1 ECU	Stage 2 ECU	Stage 3 ECU
F22	N20	2014-2016 228i Coupe	Electric	D440-D20TE1		D440-D20TE3
F22	N20	2015-2016 228i xDrive	Electric	D440-D20TE1		D440-D20TE3
F30	N20	2013-2016 320i	Electric	D440-D21TE1		
F30	N20	2013-2016 320i xDrive	Electric	D440-D21TE1		
F30	N20	2012-2016 328i	Vacuum	D440-D20T1		D440-D20T3
F30	N20	2012-2016 328i	Electric	D440-D20TE1		D440-D20TE3
F30	N20	2013-2016 328i xDrive	Vacuum	D440-D20T1		D440-D20T3
F30	N20	2013-2016 328i xDrive	Electric	D440-D20TE1		D440-D20TE3
F31	N20	2014-2016 328i xDrive Sports Wagon	Electric	D440-D20TE1		D440-D20TE3
F34	N20	2014-2016 328i xDrive Gran Turismo	Electric	D440-D20TE1		D440-D20TE3
F33	N20	2014-2016 428i Convertible	Electric	D440-D20TE1		
F32	N20	2014-2016 428i Coupe	Electric	D440-D20TE1		D440-D20TE3
F36	N20	2015-2016 428i Gran Coupe	Electric	D440-D20TE1		D440-D20TE3
F32	N20	2014-2016 428i xDrive Coupe	Electric	D440-D20TE1		D440-D20TE3
F33	N20	2015-2016 428i xDrive Convertible	Electric	D440-D20TE1		
F36	N20	2015-2016 428i xDrive Gran Coupe	Electric	D440-D20TE1		D440-D20TE3
F10	N20	2012-2016 528i	Vacuum	D440-D20T1		
F10	N20	2012-2016 528i	Electric	D440-D20TE1		
F10	N20	2012-2016 528i xDrive	Vacuum	D440-D20T1		
F10	N20	2012-2016 528i xDrive	Electric	D440-D20TE1		
E84	N20	2013-2015 X1 sDrive28i	Electric	D440-D20TE1		
E84	N20	2013-2015 X1 xDrive28i	Vacuum	D440-D20T1		
E84	N20	2013-2015 X1 xDrive28i	Electric	D440-D20TE1		
F25	N20	2014-2016 X3 sDrive 28i	Electric	D440-D20TE1		
F25	N20	2013-2016 X3 xDrive 28i	Vacuum	D440-D20T1		
F25	N20	2013-2016 X3 xDrive 28i	Electric	D440-D20TE1		
F26	N20	2015-2016 X4 xDrive 28i	Electric	D440-D20TE1		
E89	N20	2012-2016 Z4 sDrive 28i Roadster	Vacuum	D440-D20T1		
E89	N20	2012-2016 Z4 sDrive 28i Roadster	Electric	D440-D20TE1		
F22	N26	2014-2016 228i Coupe SULEV	Electric	D440-D20TE1-N26		
F22	N26	2015-2016 228i xDrive Coupe SULEV	Electric	D440-D20TE1-N26		
F30	N26	2012-2016 328i Sedan SULEV	Electric	D440-D20TE1-N26		
F30	N26	2013-2016 328i xDrive SULEV	Electric	D440-D20TE1-N26		
F34	N26	2015-2016 328i xDrive Gran Turismo SULEV	Electric	D440-D20TE1-N26		
F32	N26	2014-2016 428i Coupe SULEV	Electric	D440-D20TE1-N26		

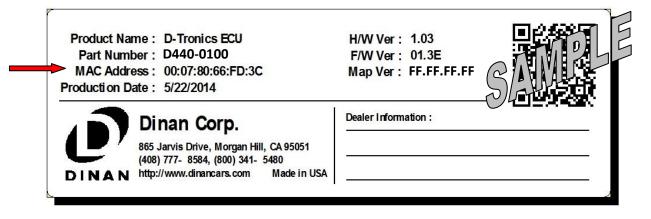
<u>Chassis</u>	Engine	Vehicle	<u>Wastegate</u>	<u>Stage 1 ECU</u>	Stage 2 ECU	Stage 3 ECU
F33	N26	2014-2016 428i Convertible SULEV	Electric	D440-D20TE1-N26		
F36	N26	2015-2016 428i Gran Coupe SULEV	Electric	D440-D20TE1-N26		
F32	N26	2014-2016 428i xDrive Coupe SULEV	Electric	D440-D20TE1-N26		
F33	N26	2015-2016 428i xDrive Convertible SULEV	Electric	D440-D20TE1-N26		
F36	N26	2015-2016 428i xDrive Gran Coupe SULEV	Electric	D440-D20TE1-N26		
F30	N55	2012-2015 335i Sedan	Vacuum	D440-D30T1	D440-D30T2	D440-D30T3
F30	N55	2012-2015 335i Sedan	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F30	N55	2012-2015 335i Sedan (w/ M-Perf)	Vacuum	D440-D32T1	D440-D32T2	D440-D32T3
F30	N55	2012-2015 335i Sedan (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F30	N55	2013-2015 335i xDrive Sedan	Vacuum	D440-D30T1	D440-D30T2	D440-D30T3
F30	N55	2013-2015 335i xDrive Sedan	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F30	N55	2013-2015 335i xDrive Sedan (w/ M-Perf)	Vacuum	D440-D32T1	D440-D32T2	D440-D32T3
F30	N55	2013-2015 335i xDrive Sedan (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F34	N55	2014-2015 335i xDrive Gran Turismo	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F32	N55	2014-2016 435i Coupe	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F32	N55	2014-2016 435i Coupe (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F33	N55	2014-2016 435i Convertible	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F33	N55	2014-2016 435i Convertible (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F32	N55	2014-2016 435i xDrive Coupe	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F32	N55	2014-2016 435i xDrive Coupe (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F33	N55	2014-2016 435i xDrive Convertible	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F33	N55	2014-2016 435i xDrive Convertible (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F36	N55	2014-2016 435i Gran Coupe	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F36	N55	2014-2016 435i Gran Coupe (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F36	N55	2015-2016 435i xDrive Gran Coupe	Electric	D440-D30TE1	D440-D30TE2	D440-D30TE3
F36	N55	2015-2016 435i xDrive Gran Coupe (w/ M-Perf)	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F10	N55	2011-2016 535i Sedan	Vacuum	D440-D30T1		
F10	N55	2011-2016 535i Sedan	Electric	D440-D30TE1		
F10	N55	2011-2016 535i Sedan (w/ M-Perf)	Electric	D440-D30TM1		
F07	N55	2011-2016 535i Gran Turismo	Vacuum	D440-D30T1		
F07	N55	2011-2016 535i Gran Turismo	Electric	D440-D30TE1		
F10	N55	2011-2016 535i xDrive Sedan	Vacuum	D440-D30T1		
F10	N55	2011-2016 535i xDrive Sedan	Electric	D440-D30TE1		
F10	N55	2011-2016 535i xDrive Sedan (w/ M-Perf)	Electric	D440-D30TM1		
F07	N55	2011-2016 535i xDrive Gran Turismo	Vacuum	D440-D30T1		
F07	N55	2011-2016 535i xDrive Gran Turismo	Electric	D440-D30TE1		
F12	N55	2012-2016 640i Convertible	Vacuum	D440-D31T1		
F12	N55	2012-2016 640i Convertible	Electric	D440-D31TE1		
F13	N55	2012-2016 640i Coupe	Vacuum	D440-D31T1		
F13	N55	2012-2016 640i Coupe	Electric	D440-D31TE1		
F06	N55	2013-2016 640i Gran Coupe	Vacuum	D440-D31T1		
F06	N55	2013-2016 640i Gran Coupe	Electric	D440-D31TE1		
F12	N55	2014-2016 640i xDrive Convertible	Vacuum	D440-D31T1		

<u>Chassis</u>	Engine	<u>Vehicle</u>	<u>Wastegate</u>	Stage 1 ECU	Stage 2 ECU	Stage 3 ECU
F12	N55	2014-2016 640i xDrive Convertible	Electric	D440-D31TE1		
F13	N55	2014-2016 640i xDrive Coupe	Vacuum	D440-D31T1		
F13	N55	2014-2016 640i xDrive Coupe	Electric	D440-D31TE1		
F06	N55	2014-2016 640i xDrive Gran Coupe	Electric	D440-D31TE1		
F02	N55	2013-2015 740Li	Vacuum	D440-D31T1		
F02	N55	2013-2015 740Li	Electric	D440-D31TE1		
F02	N55	2013-2014 740Li xDrive	Vacuum	D440-D31T1		
F02	N55	2013-2014 740Li xDrive	Electric	D440-D31TE1		
F01	N55	2013-2015 740i	Vacuum	D440-D31T1		
F01	N55	2013-2015 740i	Electric	D440-D31TE1		
F22	N55	2014-2016 M235i Coupe	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F22	N55	2015-2016 M235i xDrive Coupe	Electric	D440-D30TM1	D440-D30TM2	D440-D30TM3
F87	N55	2016 M2 Coupe	Electric	D440-D30TM21	D440-D30TM22	
F25	N55	2013-2016 X3 xDrive 35i	Vacuum	D440-D30T1		
F25	N55	2013-2016 X3 xDrive 35i	Electric	D440-D30TE1		
F26	N55	2015-2016 X4 xDrive 35i	Vacuum	D440-D30T1		
F26	N55	2015-2016 X4 xDrive 35i	Electric	D440-D30TE1		
F15	N55	2015-2016 X5 sDrive 35i	Electric	D440-D30TE1		
F15	N55	2015-2016 X5 sDrive 35i (w/ M-Perf)	Electric	D440-D30TM1		
F15	N55	2015-2016 X5 xDrive 35i	Electric	D440-D30TE1		
F15	N55	2015-2016 X5 xDrive 35i (w/ M-Perf)	Electric	D440-D30TM1		
F16	N55	2015-2016 X6 sDrive 35i	Electric	D440-D30TE1		
F16	N55	2015-2016 X6 sDrive 35i (w/ M-Perf)	Electric	D440-D30TM1		
F16	N55	2015-2016 X6 xDrive 35i	Electric	D440-D30TE1		
F16	N55	2015-2016 X6 xDrive 35i (w/ M-Perf)	Electric	D440-D30TM1		
F10	N63TU	2014-2016 550i Sedan	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F07	N63TU	2013-2016 550i Gran Turismo	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F10	N63TU	2014-2016 550i xDrive Sedan	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F07	N63TU	2013-2016 550i xDrive Gran Turismo	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F12	N63TU	2013-2016 650i Convertible	Vacuum	D440-D44T1		D440-D44T3
F13	N63TU	2013-2016 650i Coupe	Vacuum	D440-D44T1		D440-D44T3
F06	N63TU	2013-2016 650i Gran Coupe	Vacuum	D440-D44T1		D440-D44T3
F12	N63TU	2013-2016 650i xDrive Convertible	Vacuum	D440-D44T1		D440-D44T3
F13	N63TU	2013-2016 650i xDrive Coupe	Vacuum	D440-D44T1		D440-D44T3
F06	N63TU	2013-2016 650i xDrive Gran Coupe	Vacuum	D440-D44T1		D440-D44T3
F01	N63TU	2013-2015 750i	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F02	N63TU	2013-2015 750Li	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F01	N63TU	2013-2015 750i xDrive	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F02	N63TU	2013-2015 750Li xDrive	Vacuum	D440-D44T1	D440-D44T2	D440-D44T3
F01	N63TU	2013-2015 Alpina B7	Vacuum	D440-D44TB1	D440-D44TB2	
F02	N63TU	2013-2015 Alpina B7 LWB	Vacuum	D440-D44TB1	D440-D44TB2	
F01	N63TU	2013-2015 Alpina B7 xDrive	Vacuum	D440-D44TB1	D440-D44TB2	
F02	N63TU	2013-2015 Alpina B7 xDrive LWB	Vacuum	D440-D44TB1	D440-D44TB2	

<u>Chassis</u>	Engine	Vehicle	<u>Wastegate</u>	Stage 1 ECU	Stage 2 ECU	Stage 3 ECU
F06	N63TU	2015-2016 Alpina B6 xDrive Gran Coupe	Vacuum	D440-D44TB1		
F15	N63TU	2015-2016 X5 xDrive 50i	Vacuum	D440-D44T1		
F85	S63TU	2015-2016 X5 M	Vacuum	D440-D44TXM1		
F16	N63TU	2015-2016 X6 xDrive 50i	Vacuum	D440-D44T1		
F86	S63TU	2015-2016 X6 M	Vacuum	D440-D44TXM1		
F80	\$55	2015-2016 M3 Sedan	Electric	D440-D30TM41	D440-D30TM42	
F80	\$55	2015-2016 M3 Sedan Competition	Electric	D440-D30TM4C1	D440- D30TM4C2	
F82	S55	2015-2016 M4 Coupe	Electric	D440-D30TM41	D440-D30TM42	
F82	S55	2015-2016 M4 Coupe Competition	Electric	D440-D30TM4C1	D440- D30TM4C2	
F83	S55	2015-2016 M4 Convertible	Electric	D440-D30TM41	D440-D30TM42	
F83	\$55	2015-2016 M4 Convertible Competition	Electric	D440-D30TM4C1	D440- D30TM4C2	
F10	S63TU	2013-2016 M5	Vacuum	D440-D44TM1	D440-D44TM2	
F10	S63TU	2014-2016 M5 Competition	Vacuum	D440-D44TMC1	D440-D44TMC2	
F12	S63TU	2013-2016 M6 Convertible	Vacuum	D440-D44TM1	D440-D44TM2	
F12	S63TU	2014-2016 M6 Convertible Competition	Vacuum	D440-D44TMC1	D440-D44TMC2	
F13	S63TU	2013-2016 M6 Coupe	Vacuum	D440-D44TM1	D440-D44TM2	
F13	S63TU	2014-2016 M6 Coupe Competition	Vacuum	D440-D44TMC1	D440-D44TMC2	
F06	S63TU	2014-2016 M6 Gran Coupe	Vacuum	D440-D44TM1	D440-D44TM2	
F06	S63TU	2014-2016 M6 Gran Coupe Competition	Vacuum	D440-D44TMC1	D440-D44TMC2	
F10	S63TU	2015 M5 30th Anniversary Edition	Vacuum	D440-D44TM1	D440-D44TM2	

Installation:

- I. Important:
 - Evaluate and repair all faults stored in the ECU memories before installing any Dinan components.
 - Do not install this product on a vehicle that is not running properly!
- 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 (see below). Verify that the MAC address on the ECU matches the address shown on identical stickers shipped loose in the package.



- Install ECU per instructions included with the Dinan wiring harness for your specific vehicle. <u>Do note the harness serial number which is on a</u> <u>sticker near the ECU plugs.</u>
- 4. Affix a loose sticker to the driver's door jamb near the VIN sticker. This allows easy identification of the MAC address of the DINANTRONICS ECU, after installation.

TIP: Scanning the QR code (on the ECU itself, or on the door jamb) with a QR reader on a smartphone will open a web page which shows what software was loaded & activated in this ECU.

- 5. Affix the final loose sticker onto the DINANTRONICS Product Registration page at the end of this section.
- 6. Completely fill out the remainder of the registration page. Submit this information to Dinan by either scanning the QR code, or visiting the webpage at "<u>http://decus.dinancars.com/decusinfo.php</u>" Alternatively, you may fax or email the registration page instead.
- 7. This ECU has been preloaded with software for this car. No further action is needed.

PRODUCT REGISTRATION FORM	DEALER / DEVICE INFORMATION
	DEALER ID**
	ORDER #
	DEVICE MAC ADDRESS**
PERFORMANCE TUNER	WIRING HARNESS SERIAL NUMBER** VEHICI E INFORMATION
CUSTOMER INFORMATION	
CUSTOMER NAME**	
CUSTOMER ADDRESS	YEAR/MAKE/MODEL
CUSTOMER ADDRESS CONT. (City, State, ZIP)	ANY OTHER MODIFICATIONS **REQUIRED FIFT DS
CUSTOMER COUNTRY	REGISTRATION FORM MUST BE FILLED OUT IN FULL AND RETURNED TO Dinan BY Fax or email within 2 weeks from date of installation, or product warranty will be void.
CUSTOMER PHONE NUMBER**	BE EMAIL: techsupport@dinancars.com with the subject of "D-TRONICS Registration Form"
CUSTOMER EMAIL ADDRESS**	BY FAX: 408-779-6927
DINAN CORPORATION 865 JARVIS DRIVE MORGAN HILL, CA 95037 800-341-5480	MORGAN HILL, CA 95037 800-341-5480



The Dinan app for Android or Apple iOS smart phones & tablets allows you to connect to a DINANTronics ECU and easily change between Bypass mode, and any licensed Stage.

To obtain the free DINANTRONICS app, search for 'dinantronics' on either the iTunes or Google Play stores, and download for your specific platform.

Requirement:

The app must be used with an Android or Apple device equipped with Bluetooth version 4.0, such as:

- Apple iPhone 4s or newer
- Apple iPad 3 or newer
- Apple iPad Air or newer
- Apple iPad mini or newer
- Samsung Galaxy S3 or newer
- numerous other Android devices

Please use a reference such as www.phonearena.com to research the Bluetooth capabilities of your device. Connection to a DINANTronics ECU requires Bluetooth version 4.0.