

GReddy Emange Ultimate Update Kit

Installation Manual

Please read the entire manual before installing this kit.

Application:

Make	Model	Chassis	Year
Mazda	RX-8	LA-SE3P	2003

- This ***GReddy Turbo Kit*** is designed only for the vehicles specified above.
- Premium grade gasoline (91 octane or higher) is required with this Kit.
- Make sure that the vehicle is not equipped with any ECU upgrade chips.
- This kit is designed for High Power 6 speed manual transmission Vehicle only.

Important

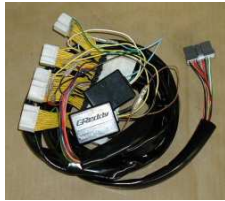
1. This installation should only be performed by a trained specialist who is very familiar with the automobile's mechanical, electrical and fuel management system.
2. If installed by an untrained person, it may cause damage to the kit as well as the vehicle.
3. GReddy Performance Products Inc. is not responsible for any damage to the vehicle's electrical system caused by improper installation.
4. Make sure to follow the instruction and pay attention to the "Important", "Warning!" and "Caution!" notice through out the instruction.
5. Improper installation can be **dangerous!** Please make sure to inspect the installation before operating the vehicle.
6. Call your GReddy Authorized dealer or GReddy Performance Products if there are any problems or questions regarding this product.

1. Parts List

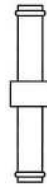
1.	<u>E-Manage Ultimate (US-RX8 6MT)</u>	<u>1</u>
2.	<u>“ Plug-In Harness</u>	<u>1</u>
3.	<u>Orifice Hose Fitting</u>	<u>1</u>
4.	<u>Intake Manifold Blocking Plate</u>	<u>1</u>



1



2



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4

2. Factory Parts Removal

When removing the stock parts, please refer to the factory RX8 Workshop manual for proper procedures.

2-1 Factory Parts Removal

1. Remove the engine cover and the battery cover. Disconnect the negative terminal of the battery.

3. Update Kit Installation

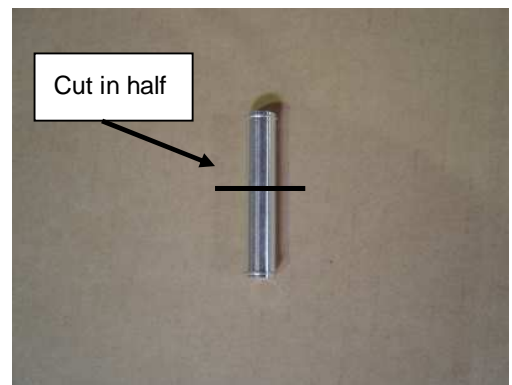
3-1 Intake Manifold Plate Installation

1. Remove the extension manifold (upper).
Please refer to RX8 workshop manual pages 01-13-4 to 01-13-11.
 - * Make sure to prevent any dirt or objects from entering the intake manifold.
2. Install the Intake Manifold Blocking Plate onto the manifold as shown in the picture.
(Parts Used #4)
3. Apply silicone gasket to the manifold surface shown in the picture. Make sure the manifold is clean before installing. You do not need to apply silicone gasket to factory o rings. Replace O rings if necessary.
4. Install extension manifold back onto intake manifold. Refer to RX8 workshop manual.



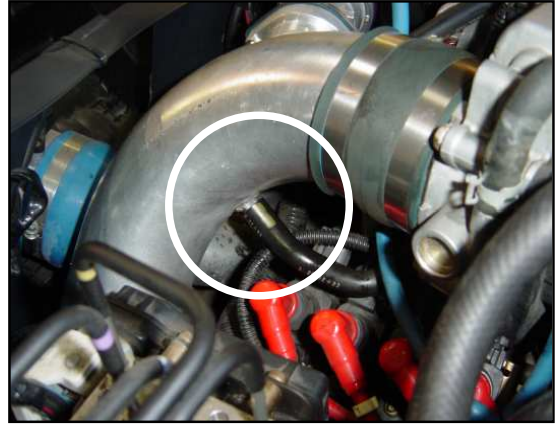
3-2 Compression Pipe (C-6) Modification

1. Remove the compression (C-6) pipe from the throttle body and (C-5) pipe.
2. Remove the 10Ø hose adapter from the jet air fuel mixing hose and cut in half.
3. Open a 10Ø hole in the compression pipe and weld the 10Ø hose adapter to the pipe as shown in the picture.
 - * If you cannot perform this, please contact us and we will weld the fitting on for you.



3-4 Compression Pipe Installation

1. Install the compression pipe (C-6) between the intercooler and throttle using the provided hoses and hose bands. Connect the Jet Air Fuel Mixing sir hose to the fitting on the back of C-6 pipe. This hose has a large amount of suction when idling and is the top hose that routes behind the alternator. It is important to connect this hose properly to this location.



3-5 e-manage Ultimate installation and vacuum hose connection for the pressure sensor.

1. Remove the PCM cover and disconnect the Emanage harness from the PCM and remove from the vehicle. Connect the provided Emanage Ultimate plug-in harness between the Main harness and the PCM. Route the harness along the fender in to the passenger compartment through the hole that was cut. Connect the e-manage Ultimate to the harness.

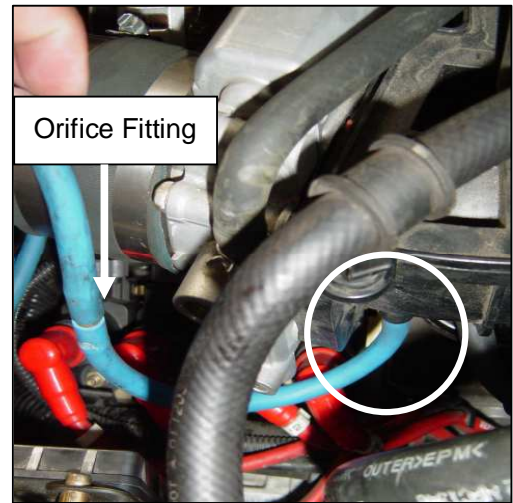
(Parts Used #1, 2)

2. Install a vacuum hose to the port on the intake manifold (right after the throttle) that was connected to the VFAD actuator (removed with the Air cleaner box) and connect it to the provided pressure sensor with the provided orifice hose fitting in line. Install the fitting with the orifice facing toward the manifold. Route the harness with the e-manage harness and connect it to the e-manage Ultimate Option Port #1.

***You may have engine damage if the pressure sensor is not connected properly to Option Port 1.**

*secure vacuum hose with provided zip ties.

(Parts Used #3)



3. Stick the e-manage emblem on the e-manage Ultimate unit and mount the unit.
*Avoid mounting the e-manage unit in a place where it can get wet or wet. Also, avoid exposing it to direct sun light.

Starting the Engine

1. Inspect the hoses and wire connection, then connect the negative terminal of the battery.
2. Turn the ignition to "ON" position and confirm that the "ACTIVE" L.E.D. lights up GREEN.
3. While idling, check for any oil, coolant, or air leaks.
4. After inspection, reinstall any stock parts that were removed.
5. On the initial run, be sure to have a boost gauge to check the turbo-actuator setting. This turbo kit is preset to boost between 0.4kg/cm² to 0.45kg/cm² .
It is very important that you monitor the boost pressure, and make sure not to over boost.
Over boosting can cause engine damage.

This completes the Turbo Kit Update installation.

- **Important!**
- **It is very important that you monitor the boost pressure, and make sure not to over boost. Over boosting can cause engine damage.**
- **Please ensure that the vehicle is in proper working order before installing this kit. This kit will not operate properly if the vehicle is not in optimum operating condition.**
- **GReddy Performance Products, Inc. is not responsible for any engine damage caused by over boosting (increased boost), modification to the kit, and/or misuse of the product. NO WARRANTY is offered.**
- **Due to lack of control over proper installation and use of this product, NO WARRANTY is offered for this kit.**

e-manage Ultimate Information

Important!

- **The e-manage Ultimate included in this kit is preprogrammed for this turbo kit.**
- **Do not attempt to adjust any of the settings or dip switches on the e-manage Ultimate.**
- **Any adjustments made can cause damage to the e-manage Ultimate, engine and the factory ECU.**