SNP Speed Innovations
2RZ/3RZ Complete Harness Kit Installation Instructions
#SNP-1826-153-1/#SNP-1826-153-2/#SNP-1826-153-3
[#SNP-RZ-1500-C]

_____

Do Not Call LCE for Tech Support!
Do Not Call Haltech for Tech Support!

This ECU is preloaded with a base start up tune that is tailored to your harness and system set up based on the information provided to us when the order was placed, but check that your injector size is correct in the software. You can do this after you have connected to the ECU by looking to the far left of your screen at the ECU Navigator menu and scrolling down to "Injection system". Once you locate it, doubleclick on it, then proceed to doubleclick the "Stage 1" tab, and then click on "Flow". The size of the injector is crucial to the tune, make sure this is accurate!

Tech support is available for installation questions and for online support in regards to no start or calibration issues. Online remote tech support will need to be scheduled.
Please call (928) 854-1320 Mon-Fri 8 A.M. to 5 P.M. Arizona time.

Remote Tuning is available for an added fee and will need to be scheduled in advance. A Windows based laptop and an active wireless internet connection will be required. To use remote access support you will need to download "ANYDESK". This is a free service and can be found at.
WWW.ANYDESK.COM

Online remote tuning available by appointment only, contact us for more information.

For tech support or tuning questions please contact Gabe Salazar at
SNP Speed Innovations
Phone: (928) 854-1320
Email: tunedbygabe@gmail.com

SNP Speed Innovations
2RZ/3RZ Complete Harness Kit Installation Instructions
#SNP-1826-153-1/#SNP-1826-153-2/#SNP-1826-153-3
[#SNP-RZ-1500-C]

Product Installation

Ensure the vehicle is in park/neutral, set the emergency brake, and disconnect the negative cable from the battery

1. **Harness Removal:** Remove the factory engine harness by unplugging each connector, and take note of the connectors/wire colors that plug into the starter, oil pressure, coolant temp, and transmission. Once the engine harness is removed from the vehicle, you will need to open the harness and remove these wires with the connectors, as you will need these to build your own dash/gauge sub harness. If, for any reason, the wires/connectors cannot/will not be used, we offer a dash/gauge sub harness. The part number will be SNP-1826-41198.

2. **ENGINE HARNESS ROUTING:** Take the supplied engine harness and run it through the firewall using the factory wiring grommet (usually will have to cut the bottom of the grommet), feed into the cab area, then proceed to connect the ECU. Now run the harness along the back of the intake manifold and bolt down the ground wire to the intake manifold. Plug in the injectors as labeled, then plug in the ATS, CTS, and DIST.

3. **Mounting the ECU:** You can now go inside the vehicle to remove the right kick panel, and remove the factory ECU. Mount the new ECU to the supplied mounting plate and mount the plate in place of the old factory ECU.

4. **MAP Sensor Hose:** Once the ECU is plugged in, connect the supplied plastic hose into the plenum side of the intake manifold, NOT in the throttle body (for supercharger applications, attach below the super charger), then connect the other end onto the ECU. With the hose connected, the ECU will read the manifold pressure, so there will no longer be any need for the stock MAF.

5. **ATS "Air Temperature Sensor":** The included Air Temperature Sensor is optional, not 100% necessary, but it is recommended. This air temp sensor can be mounted before or after the Throttle Body for Naturally Aspirated or turbo applications. Supercharger applications, this sensor should be mounted between the supercharger "lower supercharger manifold" and the cylinder head. It will be important for this sensor to be in the air stream after the supercharger.

6. **Fuel pump relay wiring:** When you have finished connecting the plugs into their respective sensors, you can then use the supplied Black/Yellow wire from the new engine harness to activate your fuel pump relay ground. Once that is completed, you can now attach the supplied large Red power wire directly to the battery positive, and then attach the supplied Black ground wire directly to the battery negative. Afterwards, you now need to attach the Red/White wire to a switched 12

volt source. Make sure this source is energized while the "KEY" is in the run position and in the start position. **Do** **NOT** wire it directly to the battery.

Wideband Controller

7. Weld the supplied O2 sensor bung into the exhaust, ensuring the sensor is mounted in the 9-3 o'clock range just past the collector flange. If a turbo has been installed on your vehicle, mount the bung on the downpipe just before the bottom bend. The sensor may also be threaded into a factory O2 sensor bung if one is available.

8. Using the supplied cables and hardware in the box, locate a suitable mounting spot for the module itself with clear access to the connectors. Velcro strips are suitable for mounting. Using the cable labeled as #HT-130025, attach the ECU to the wideband module. Find a suitable location to route your O2 sensor wiring from the inside of the cab to the exhaust mounting location. Keep wiring clear of any heat, moving parts from pinching and/or chaffing points to prevent premature failure.

Wiring connector label abbreviations

ATS: Air Temp Sensor
CTS: Coolant Temp Sensor
DIST: Distributor
CAM: Camshaft
CRK: Crankshaft
TPS: Throttle Position Sensor
CAN: CAN Bus Communications
IGN: Ignition
I/O: Inputs/Outputs
INJ: Injectors
BAT: Battery
GND: Ground
KEY: Ignition Key Switch On

SNP Speed Innovations
2RZ/3RZ Complete Harness Kit Installation Instructions
#SNP-1826-153-1/#SNP-1826-153-2/#SNP-1826-153-3
[#SNP-RZ-1500-C]

Finish work

9. Reconnect the battery.Download the latest Haltech **NSP** software and install it on a **Windows** based laptop. Google, MAC, and Android operating systems will NOT work. You can find the current software at WWW.HALTECH.COM/DOWNLOADS. Open the Haltech software. Once the NSP software is open, use the communication cable supplied in the kit, connect the ECU to your laptop. Turn the key on and you should see the ECU "Power" LED indicator is on. Press F5 and your computer will connect to the ECU. This ECU is preloaded with a base start up tune that is tailored to your harness and system set up based on the information provided to us when the order was placed, but check that your injector size is correct in the software. You can do this after you have connected to the ECU by looking to the far left of your screen at the ECU Navigator menu and scrolling down to "Injection system". Once you locate it, doubleclick on it, then proceed to doubleclick the "Stage 1" tab, and then click on "Flow". The size of the injector is crucial to the tune, make sure this is accurate!

Next, in main set up-Engine-Ignition you will see at the bottom "Lock Mode" make sure it's always on and the firing angle is set to 8 degrees.

Start your engine and with your timing light set your timing to 8 degrees by moving the distributor. When timing is confirmed go back to "Lock mode" and set to "disable"

Now you can begin tuning or call SNP Speed Innovations for online tuning (fees apply)