

Wiring Specialties

SR20DET - RB25DET - CA18DET- KA24DE
You install the engine, we wire it up.



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S13 SR20DET to S13 240sx Engine Harness Installation instructions

Thank you for purchasing the Wiring Specialties pre-made S13 SR to S13 240sx Engine wiring harness. Please read these instructions carefully before attempting the installation.

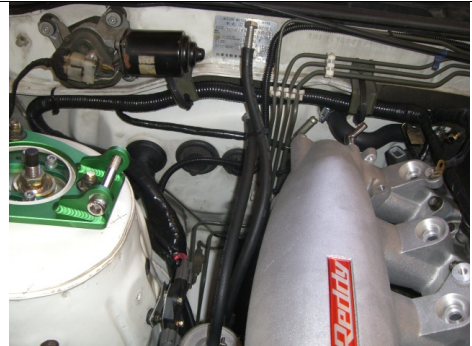
This Engine harness is designed to work with all S13 240sx chassis from 1989 through 1994, including the convertible models. You will find a number of duplicate connectors located on the harness to accommodate for different manufacturing years of the chassis and engine configuration. In most cases, unused connectors should be removed.

DO NOT CONNECT THE ECU OR THE INTERIOR INTERFACE CONNECTORS UNTIL ALL ENGINE CONNECTORS HAVE BEEN INSTALLED AND UNNECESSARY CONNECTORS REMOVED

NOTE! We will begin by connecting all the engine components first then proceed to the interior of the car to connect the ECU and the interface connectors.

Step1 (Feeding the harness in)

Feed the harness through the firewall with the ECU and the interior interface plugs leading the way.



Step 2 (Aligning)

Once through the firewall, align the main engine branch to point towards the engine and running back towards the firewall. This will ensure the needed connectors reach the engine.



Step 3 (Ignitor Chip)

Connect the Ignitor Chip into the two designated OEM connectors (5-wire and 4-wire with Red/Color wires). Additional 2-wire connectors seen in the image are for the Boost Control Solenoid and the Carbon Canister Purge Valve, located on the ignitor chip plate. If you don't have these devices, simply tape up the connectors and leave them disconnected.

The ignitor chip should be bolted down to the shock tower on the US passenger side of the car, away from heat.



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Step 3A (ABS Wiring Installation)

S13 240sx ABS wiring is part of the Wiring Specialties pre-made S13 to S13 harnesses. If your car is equipped with ABS, please connect the passenger side wheel speed sensor (seen in the image) to the harness. The ABS control module wiring is connected through the interior dash connector (Step #11), behind the glove box, which will complete the ABS wiring installation. For cars without ABS – simply tape-up this 2-pin connector.



Step 4A ******(Main Power Interface Routing)

IMPORTANT! DO NOT connect these Power interface plugs until STEP #11. Simply route this harness section towards the passenger side headlight/battery area. Leave the connectors unhooked.



Step 5 (Oxygen Sensor and Coilpacks)

Connect the oxygen sensor by routing the extended O2 wiring along the firewall, past the engine and to the sensor. Please secure the O2 wiring to the brake lines by zip-ties to avoid burning the wires. Then, connect the Coilpack interface connector (Grey 6-pin) to the Coilpack sub-harness on the engine.



Step 6 (Injectors)

Connect the Injector clips to their respective injectors. Each connector should only reach the correct injector for proper installation.



Step 7 (Idle Air, Engine Grounds and Knock Sensor)

Connect the knock sensor (2-pin) and the Idle Air (4-pin) connectors to the OEM SR20DET sub-harness (not provided with this kit) mounted to the intake manifold. Then, secure the 2 engine grounds to the back side of the intake manifold and make sure the ground coils make a tight connection.



Step 8 (Throttle Body and Temp)

Now proceed to connect the Throttle Position Sensor (TPS) connector.

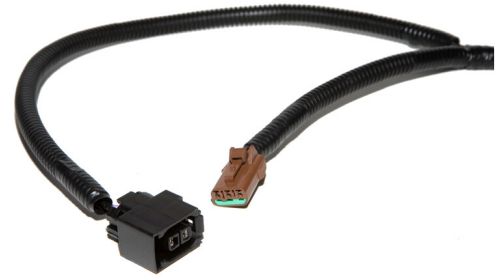
NOTE! You will notice 2 connectors for the TPS. The 6-pin connector (taped) is for an Automatic throttle body and the 3-pin is for a 5-speed unit. Connect the proper one to the throttle body (Auto TPS will work with a 5-speed setup as well) and REMOVE the unused connector by cutting the clip off and taping up the exposed wires.



Step 9 (CAS, MAFS and Power Steering)

On the front end of the harness three connectors are found. The Cam Angle Sensor (CAS) connector (Grey 4-pin), the MAFS universal quick-connect connector (Brown 3-pin) and the Power Steering connector (Black 2-pin). Route the wiring harness along the front of the engine and connect it to the respective sensors.

Specific MAFS connectors are provided in a separate bag. The Power Steering chassis connector is found on US driver's side of the vehicle, on the high pressure ps line.



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Step 10 (MAFS)

Proceed to install the Mass Airflow Sensor (MAFS) connector to the sensor just past the front of the engine.

NOTE: There are 3 connectors supplied with the harness; The Z32, SOHC 240sx and the OEM S13 SR20DET connectors are provided. Choose the one to be used with your swap and install onto the harness with the quick-connect clip.

MAFS Signal wire – RED
MAFS Ground - GREEN
Power – Black/Yellow



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Step 11 (Main Power Interface)

IMPORTANT! Make sure that all the unused connectors have been removed from the harness or taped up before connecting the two power interface connectors.



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Step 12 (back in the car)

At this point, we should be done with all the wiring in the engine bay. Back in the passenger foot-well we find the dash connectors (white and brown). The White connector is used for the SOHC 240sx (1989 and 1990) and the Brown connector is used for the DOHC 240sx (1991-1994).

Connect the correct interface plug to the dash connector behind the glove box (remove the glove box for easier install). Connect the ECU and tighten the mounting bolt lightly.

WE ARE DONE!



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