

MaxxECU

engine management

MaxxECU Plugin - Engine Specifics Nissan S14 SR20 (76-pin)

2016-06-21

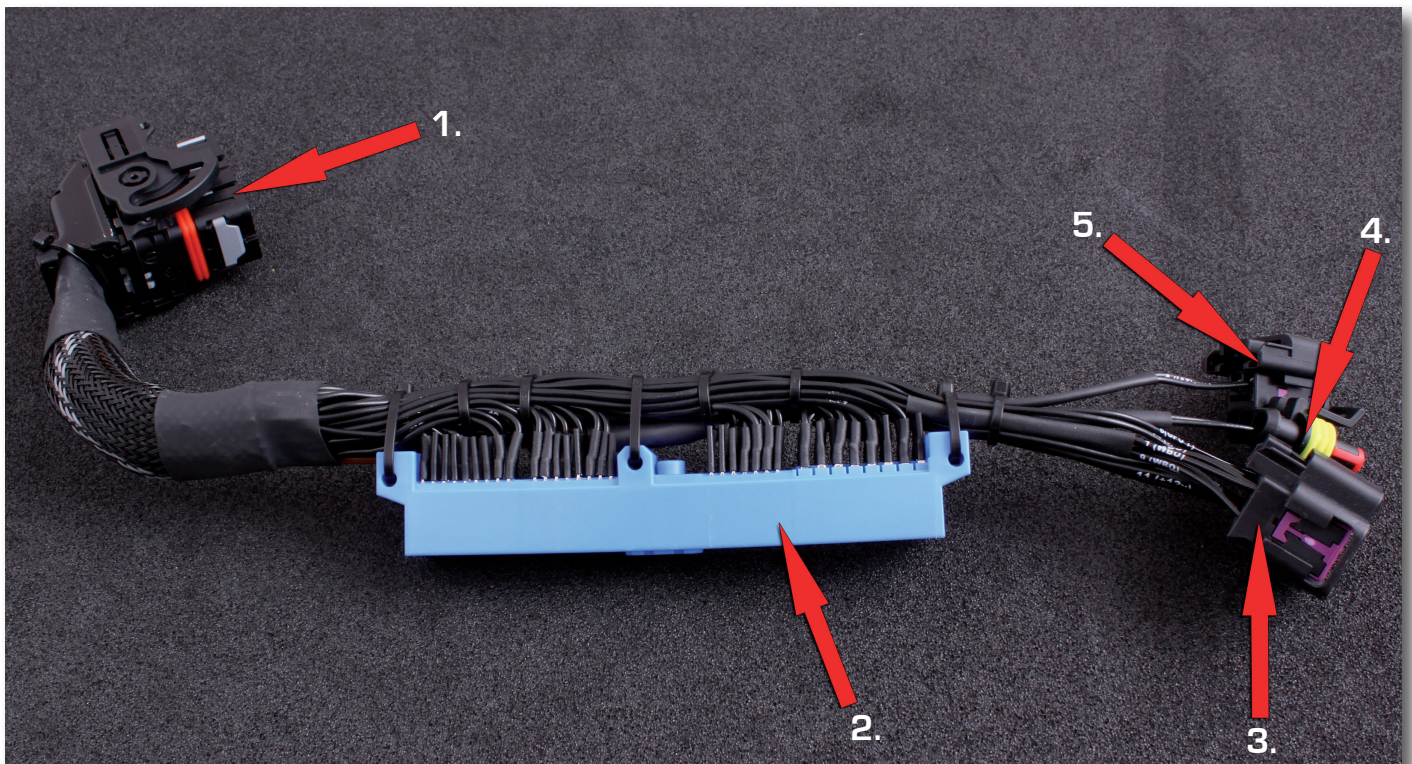


Fig 1 - MaxxECU Plugin kit consist of the following parts:

1. MaxxECU CMC connector
2. Vehicle harness adapter.
3. 16-pin extra connector.
4. 3-pin connector for extra 0-5v sensor (ex. pressure sensor).
5. 2-pin connector for external intake temperature sensor (IAT). **Sensor not included!**

ECU installation

Stock Engine Control Unit (ECU) on this vehicle is mounted on passenger side floor, behind the plastic guard on the right side.

- Remove the black large plastic guard, where the ECU is located.
- Disconnect the stock ECU from vehicle harness connector.
- Install MaxxECU harness into vehicle harness connector. **Be sure to tighten connectors!**
- Install included MAP-sensor into engine manifold with included hose kit.
- Vehicle is not equipped with an intake temperature sensor. Optional external sensor and cable is recommended.

16-pin connector

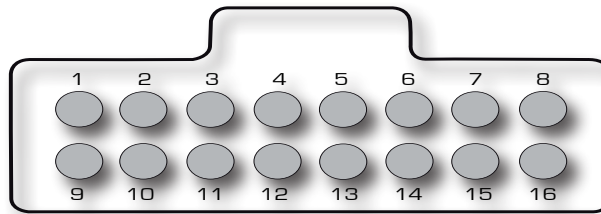


Fig 2 - Extra connector (3) seen from cable side.

1: Wideband.
 2: Wideband.
 3: Wideband.
 4: Wideband.
 5: GPO 7 / DIN 3
 6: GPO 8
 7: -
 8: INJ 8

9: Wideband.
 10: Wideband.
 11: Wideband.
 12: +12V (output).
 13: GND.
 14: AIN 1 (temperature / switch) (input).
 15: AIN 2 (temperature / switch) (input).
 16: AIN 3 (0-5V) (input).

Extra inputs.

MaxxECU Nissan Plugin has extra flexible inputs.
 AIN 1, temp sensor or switches.
 AIN 2, temp sensor or switches.
 AIN 3, 0-5V input.
 AIN 4, 0-5V input. Extra 3-pin connector (4).
 Normal state of GPO 7 is output, but can be configured as digital input!

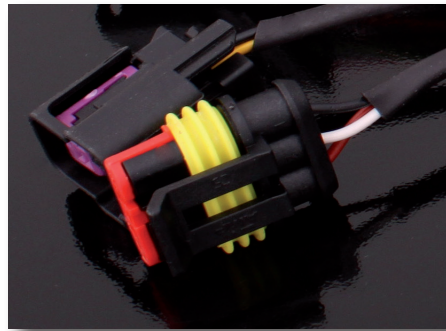
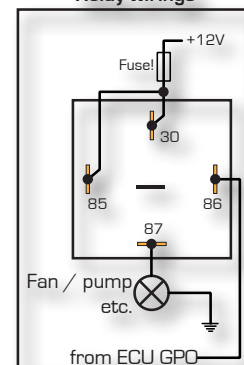


Fig 3 - 3-pin Superseal connector.
 1: Signal GND.
 2: AIN 4 (0-5V) input.
 3: +5V from ECU.

Extra outputs.

MaxxECU Nissan Plugin offers extra output for flexible control like boost control, fan control.
 GPO 7, GPO 8, INJ 8 (GND switched outputs).

Relay wirings



Plugin Trigger

Nissan uses a particular trigger sensor, called CAS, mounted on the front of one pulley. CAS sensor is similar in many Nissan models, but different cars uses different "Sync window size".
 Nissan S14a / S15 SR20 uses "sync window size" to be 16.
 Sometimes the CAS system generates strange trigger pulses which gives Trigger-Errors at start-up or low speed, this can usually be remedied by changing "Trigger polarity".
 Since the CAS is mounted on the camshaft, instead of crank (where it should be mounted) a precise ignition spark angle can not be guaranteed because of the flexibility in the system. Over 500WHP, go for a crank trigger kit.
 Be sure to check the ignition timing with a timing light, to ensure a correct ignition angle. **READ chapter 5 in Handbook!**

Notes

MaxxECU has some built in output test and diagnostics, see [Diagnostics](#) → [Output test](#) to test certain outputs.