MaxxECU

engine management

MaxxECU Plugin - Engine Specifics Nissan S13 CA18
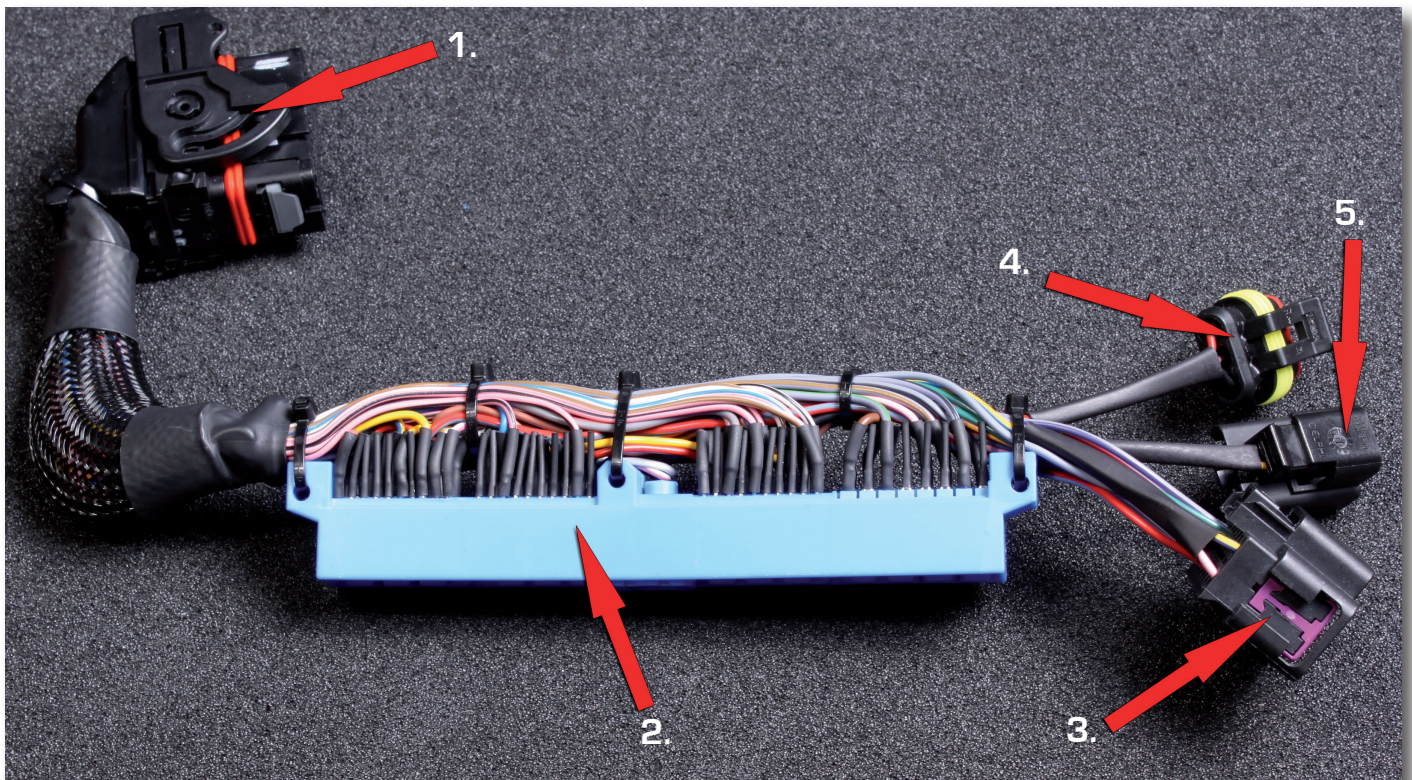
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Fig 1 - MaxxECU Plugin kit consist of the following parts:
1. MaxxECU CMC connector
2. Vehicle harness adapter.
3. 16-pin extra connector.
4. 3-pin connector for extra 0-5v sensor (ex. pressure sensor).
5. 2-pin connector for external intake temperature 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.

- 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.
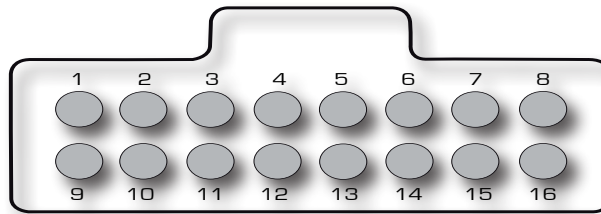
16-pin connector

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

1: Wideband.
2: Wideband.
3: Wideband.
4: Wideband.
5: GPO 7 / DIN 3
6: INJ 6.
7: INJ 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**).
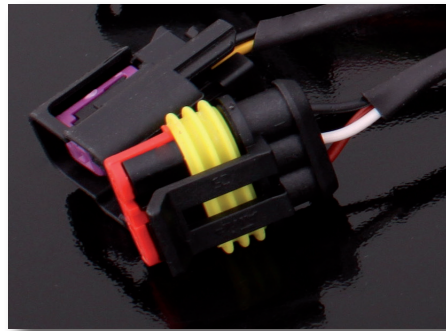Normal state of GPO 7 is output, but can be configured as digital input!
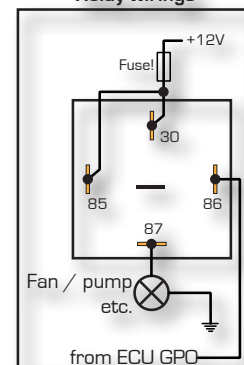

Fig 3 - 3-pin Superseal connector.
1: Signal GND.
2: AIN 4 (0-5V) input.
3: +5V from ECU.

Extra outputs.
MaxxECU Nissan Plugin offers extra output for flexible control like boost control, fan control.
GPO 7, INJ 6, INJ 7, 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.

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