

Injectronics

Remanufactured Automotive Electronics Components

TECHNICAL BULLETIN

Document number: T0017

For further technical information regarding testing, repairs or to search for New or Remanufactured Automotive electronic products, please visit www.injectronics.com.au, call our office on (+613) 8792 6999, or email sales@injectronics.com.au

Make: Nissan

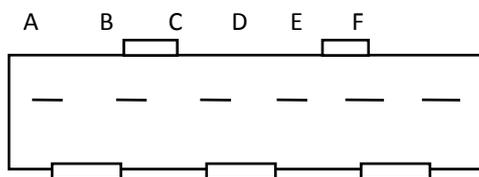
Model: R31 Skyline / 300C

Subject: Hot wire air mass sensors

Generally speaking, early hot wire air mass sensors made by JECS or Bosch had aluminium bodies and the later air mass sensors had plastic bodies.

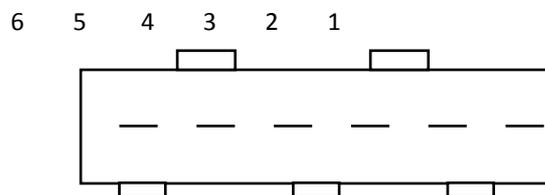
Both units have a 6-pin connector plug which are almost identical in size and shape yet are wired very differently. Consequently, plastic body air mass sensors have been fitted to vehicles which are supposed to have aluminium body air mass sensors and vice versa. This inturn can cause malfunction of the air mass sensor, the electronic control module or both.

One such unit, which is commonly, yet incorrectly replaced, with the other is the Nissan 300c air mass sensor and the Nissan R31 Skyline air mass sensor. The diagrams below are the wiring pin outs for both types of air mass sensors (looking into the plug).



Nissan 300c AMM (aluminium)

- A - ECM pin 30 (idle mixture adjustment)
- B - ECM pin 31 (load signal to ECM)
- C - Earth
- D - ECM pin 26 (air temp sensor earth)
- E - Power supply (12 volt supply)
- F - ECM pin 12 (burn off signal)



Nissan R31 Skyline AMM (plastic)

- 6 - ECM pin 30 (idle mixture adjustment)
- 5 - Power supply (12 volt supply)
- 4 - ECM pin 12 (burn off signal)
- 3 - ECM pin 31 (load signal to ECM)
- 2 - Earth
- 1 - ECM pin 26 (air temp sensor earth)

As you can see from the above diagram, both air mass sensors have their power supply and earth terminals in different locations, which can cause unreparable damage if fitted incorrectly.

Often the reason that the two are incorrectly interchanged is that the 300c air mass sensor may have a number 22680-V5002 printed on the body, which is actually a production number. The R31 Skyline Nissan part number is identical to this however they must not be interchanged. As always Injectronics suggests you refer to manufacturers testing procedures.

T0017.doc

This publication is distributed with the understanding that the authors, editors and publishers are not responsible for the results of any actions or works of whatsoever kind undertaken on the basis of information contained in this publication, nor for any errors or omissions contained herein. The publishers, authors and editors expressly disclaim all and any liability to any person whomsoever whether a purchaser of this publication or not in respect of anything and of the consequences of anything done or omitted to be done by any such persons in reliance, whether whole or partial upon the whole or any part of the contents of this publication. Injectronics Australia Pty Ltd. © Copyright 2001.