

Injectronics

TECHNICAL BULLETIN

VARIOUS

#T0054

Make: Various

Model: Various

Subject: Air flow meter pin outs

Injectronics receives many calls on how to test air flow meters. Usually these items are trouble free and don't 'go' out of calibration unless the top has been removed and someone has adjusted the spring tension.

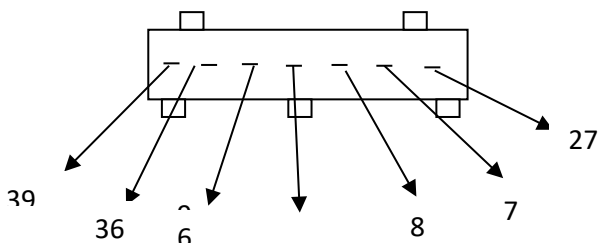
Some common problems are:

1. No output voltage
2. Intermittent output voltage –(worn circuit board)
3. Flat spots from binding flap or bearing
4. Calibration problems (Tampered with)

Injectronics can test and recalibrate Air flow meters using our computer operated Air flow test bench, however some quick basic tests that can be performed are:

- a. Check for binding flap throughout the full range
- b. Check there is an output voltage and that it increases at a steady rate as the flap is moved open (note: some systems decrease voltage as the flap opens). On some Bosch LE systems the tachometric relay will need to be bridged out to supply power to the Air flow meter
- c. If there is no output voltage, check the supply and earth's to the Air flow meter.

Some plug and wiring configurations are shown below



Early Bosch 7 pin

39,36 pump contacts

6 earth

9 supply in

8 reference voltage – approx 4v lower than supply

6 load/output signal

27 air temp sensor

injectronics.com.au

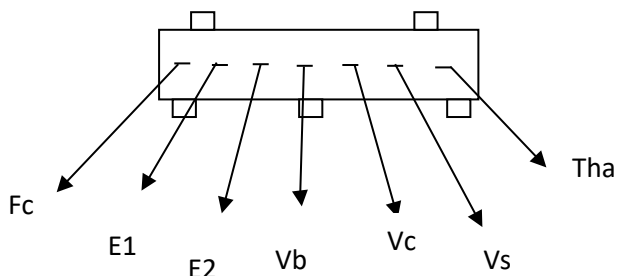
This information has been offered with the intent to provide a resource of reliable information; however no warranty (express or implied) is made as to the accuracy or completeness. No liability is assumed by Injelectronics for damage or loss resulting from reliance on this information or process.

Injectronics

TECHNICAL BULLETIN

VARIOUS

#T0054



Nippon denso (Toyota/Mazda)

Fc,E1 pump contacts

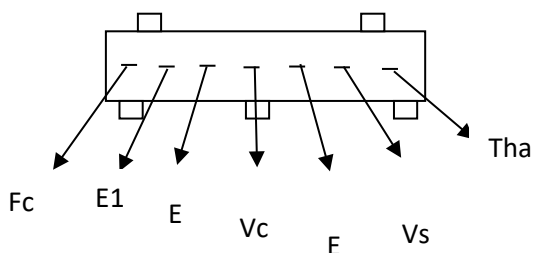
E1,E2 earth

Vc reference voltage – approx 4v than supply

Vb supply voltage

Vs load/output signal

Tha air temp sensor



Nippon denso 2 (Toyota/Mazda) note: some start with a high voltage and go lower

Fc,E1 pump contacts

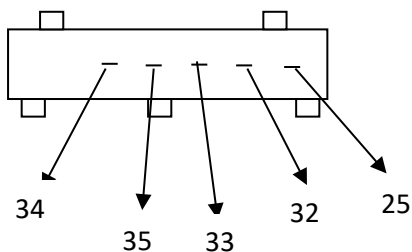
E earth

Vc reference voltage

Vb supply voltage

Vs load/output signal

Tha air temp sensor



Jecs 1 (Nissan/Subaru)

34 earth

35 12v supply

33 reference voltage –approx 4v lower than supply

32 loaed output signal

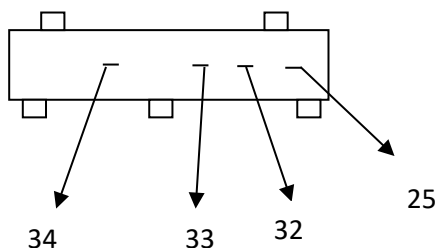
25 temp

Injectronics

TECHNICAL BULLETIN

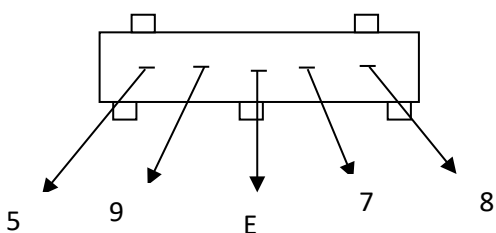
VARIOUS

#T0054



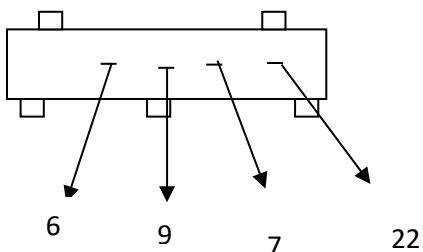
Jecs 2 (Nissan – N12 Turbo , some 280zx)

- 25 air temp
- 32 load/output signal
- 33 earth
- 34 8v power supply



Bosch LE 5 pin

- 5 earth
- 9 supply
- E not used
- 7 load/output signal
- 8 reference voltage (approx 4v lower than supply)



Bosch digital (also xf ford)

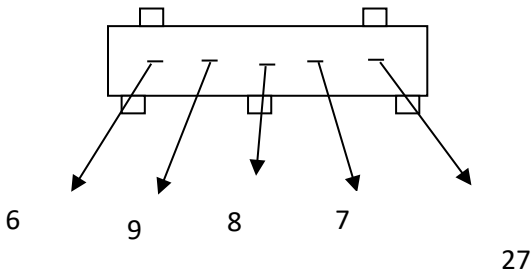
- 6 earth
- 9 supply in 5 v
- 7 load/output signal
- 22 air temp sensor

Injectronics

TECHNICAL BULLETIN

VARIOUS

#T0054



Bosch (Pintara)

- 6 earth
- 9 supply in
- 8 reference voltage
- 7 load/output signal
- 27 air temp sensor