

# Nissan MAF Pinouts

The following pinouts are used for assisting with upgrading your MAF sensor. Some notes:

- See our **MAF Technical notes** document for MAF placement and installation before fitting your MAF
- Only connect the Power, Signal and Sensor Ground wires. Chassis ground is generally not used.
- If extending the wires, make sure the Signal wire is shielded all the way. Electrical noise getting into the MAF signal will cause issues!
- If unsure with wiring, soldering and heat shrinking (or other insulation) or you have issues after MAF wiring, then then take to an auto electrician. We will not assist with your MAF wiring or fault finding
- Check your wiring is correct at the MAF plug before connecting the MAF! Use your multimeter when to check the 12V and Ground pins on your new MAF connector shows battery voltage (12V) with ignition on.
- After the new MAF is connected, the Nistune MAF gauge with a voltage of about 0.3-0.5V when the ignition is switched on. If it does not, then check the voltage at the MAF connector. The Ground and Signal pins should show 0.3-0.5V range of voltage when measured.
- When starting the vehicle, the MAF voltage should normally be about 1V with idle airflow passing through the MAF sensor. If it is not, then check your wiring.
- Markings are usually on sensor. Pinouts indicate looking into sensor

## CR31 / \*VL RB30 (2 -7 volt)

Pin 1. Signal ground (black)

~~Pin 2.~~ Chassis ground (black / \*dark brown – NOT USED)

Pin 3. Signal output (white / \*grey/yellow shielded- 2-7 volts)

~~Pin 4.~~ Hot wire cleaning (red / \*blue - NOT USED)

Pin 5. 12V ECCS Power (thick white / \*orange/black - ignition)

~~Pin 6.~~ Calibration pot (yellow/red / \*tan - NOT USED)

\* Sensor and Chassis grounds are the same and are connected together

\* When updating from RB30 MAF to later model MAF, ECU will require modification (Refer Type 1 manual)

## Z31 VG30 (2 - 7 volt)

~~Pin A~~ = Calibration pot (NOT USED)

Pin B = Signal output (black shielded 2-7 volts)

~~Pin C~~ = Ground (black - hot wire – NOT USED)

Pin D = Signal ground (black)

Pin E = 12V ECCS power (black striped)

~~Pin F~~ = Hot wire cleaning (NOT USED)

\* Sensor and Chassis grounds are the same and are connected together

\* When updating from VG30 MAF to later model MAF, ECU will require modification (Refer Type 1 manual)

## Z32 VG30 (80mm)

~~Wire A~~ - N/C

Wire B - Signal output (shielded white)

~~Wire C~~ - Hotwire Ground (black) **[Not used - do not connect]**

Wire D - Signal Ground (shielded black)

Wire E - 12v ECCS Power (white)

~~Wire F~~ - N/C

## S13 CA18 (65 mm)

~~Wire A~~ - N/C

Wire B - 12v ECCS power

Wire C – Signal round

Wire D – Signal output

### S14 SR20 (65mm)

~~Wire A~~ - N/C  
Wire B - 12v ECCS power  
Wire C – Signal ground  
Wire D – Signal output

### R32 RB20 (80mm)

~~Wire A~~ - N/C  
Wire B – Signal output  
~~Wire C~~ - Chassis Ground (NOT USED)  
Wire D - Signal Ground  
Wire E - 12v ECCS Power

### R33 RB25 Series 1 (80mm)

~~Wire A~~ - N/C  
Wire B – Signal output  
~~Wire C~~ – Chassis Ground (NOT USED)  
Wire D - Signal Ground  
Wire E - 12v ECCS Power

### R33 S2 / R34 / WC34 RB25 (80mm)

White with Blue Trace - Signal Ground  
Orange with Black Trace- Signal output  
Black with White Trace - 12v ECCS Power

### Y61 TB45

Wire 2 (Black/Red) – 12v ECCS Power  
Wire 3 (Black) – Signal Ground  
Wire 4 (White) – Signal output

### R35 GTR MAF Insert

#### Z33 350Z VQ35DE Insert

~~Wire A~~ – No pin. N/C  
Wire B (Red) –12V ECCS Power  
Wire C (Black) – Signal ground  
Wire D (White) – Signal output  
~~Wire E~~ (Brown) – AIT signal N/C  
~~Wire F~~ (Black) - AIT ground N/C

### PMAS HPX-N1 MAF

~~Wire 1~~ – Input Air Temp N/C  
~~Wire 2~~ – Input Air Temp N/C  
Wire 3 – Signal output  
Wire 4 – Signal ground  
~~Wire 5~~ – Chassis ground  
Wire 6 – 12V ECCS Power

N/C = Not connected

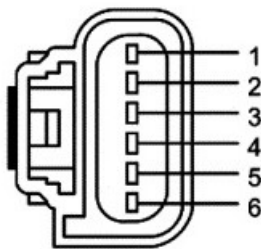
### Q45 VH45 (90mm)

Wire 1 (White) – Signal output  
Wire 2 (Black) – Signal Ground  
Wire 3 (Red/White & Black) - 12v ECCS Power

### Ford Cobra MAF

*Note: that these MAFs are originally used with JWT applications with a level converter for Z31 ECUs.*

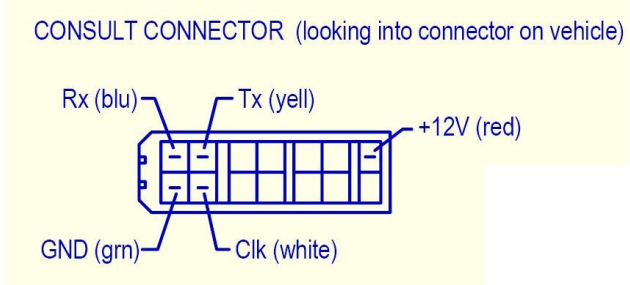
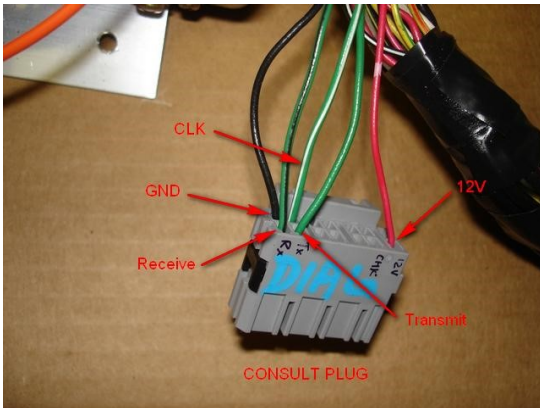
Wire A - 12V ECCS Power  
Wire B - Ground  
Wire C - Ground  
Wire D – Signal output



Pin	Circuit
1	IAT
2	SIGRTN IAT
3	MAF OUT
4	MAF RTN GND
5	GND
6	VPWR +12V

# Consult Port Wiring

**Important:** When wiring a consult plug to your ECU plug, connect the **RX, TX and CLK** (clock) lines **directly** to the ECU plug. Do NOT splice into the existing loom lines, as it may cause problems with connecting. The CHK (check pin) is not used by CONSULT, so does not need to be connected.



Following pinouts are **looking at the plug going into the ECU** (bolt and wiring facing towards you). Your consult cable RX light should flicker briefly when attempting connection, TX will respond flashing if ECU is connected properly. Check our 'Communications and Diagnostics' document if it does not.

## S13 CA18, S14 SR20DET, HCR32 RB20, BNR32 RB20, Z32 VG30 etc

101	102	103	104	105	106	107	108	1	2	3	4	5	6	7	8	9	10	21	22	23	24	25	26	27	28	29	30	41	42	43	44	45	46	47	48	49	50
109	110	111	112	113	114	115	116	11	12	13	14	15	16	17	18	19	20	31	32	33	34	35	36	37	38	39	40	51	52	53	54	55	56	57	58	59	60

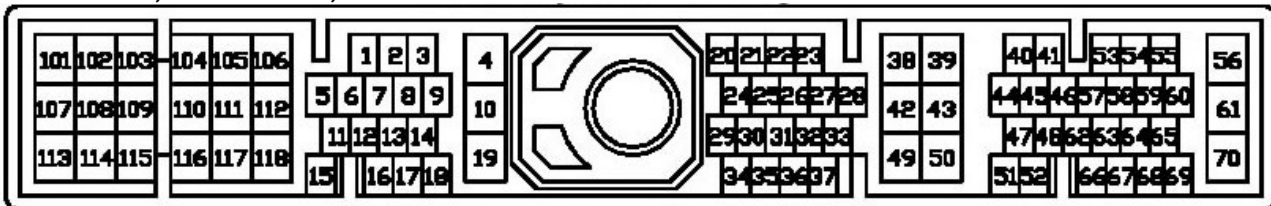
21 = RX, 22 = TX, 31 = CLK, 32 = CHK  
 Check you have power on +12V and grounding to GND: 49/59 = 12V Ignition, 50/60 = GND

## S13/S14A/S15 SR20DET, B13 SR20DE, S13 KA24DE etc



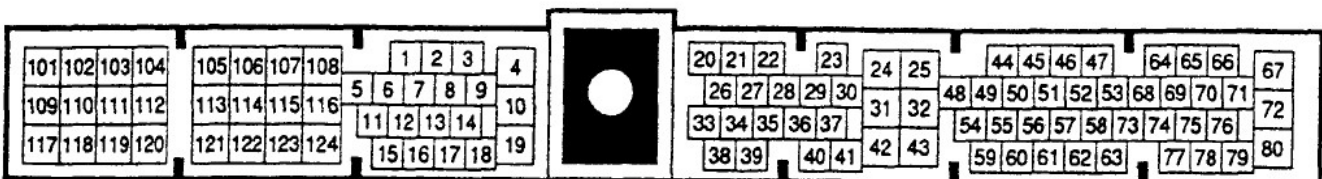
7 = RX, 15 = TX, 14 = CLK, 23 = CHK  
 Check you have power on +12V and grounding to GND: 38/47 = 12V Ignition, 39/48 = GND

## B14 SR20DE, S14 KA24DE, N15 GA16DE etc



64 = RX, 65 = TX, 68 = CLK  
 Check you have power on +12V and grounding to GND: 56/61 = 12V ignition, 39/43 = GND

## ER34/WC34 RB25DET, Z32 VG30DETT 300ZX (1996), A32 Maxima VQ30DE



75 = RX, 76 = TX, 78 = CLK (only on Z32)  
 Check you have power on +12V and grounding to GND: 67/72 = 12V Ignition, 32 = GND