



ANYTHING ELECTRONIC (NZ) LTD.

MODULE TEST UNIT

Part No: MTU-12



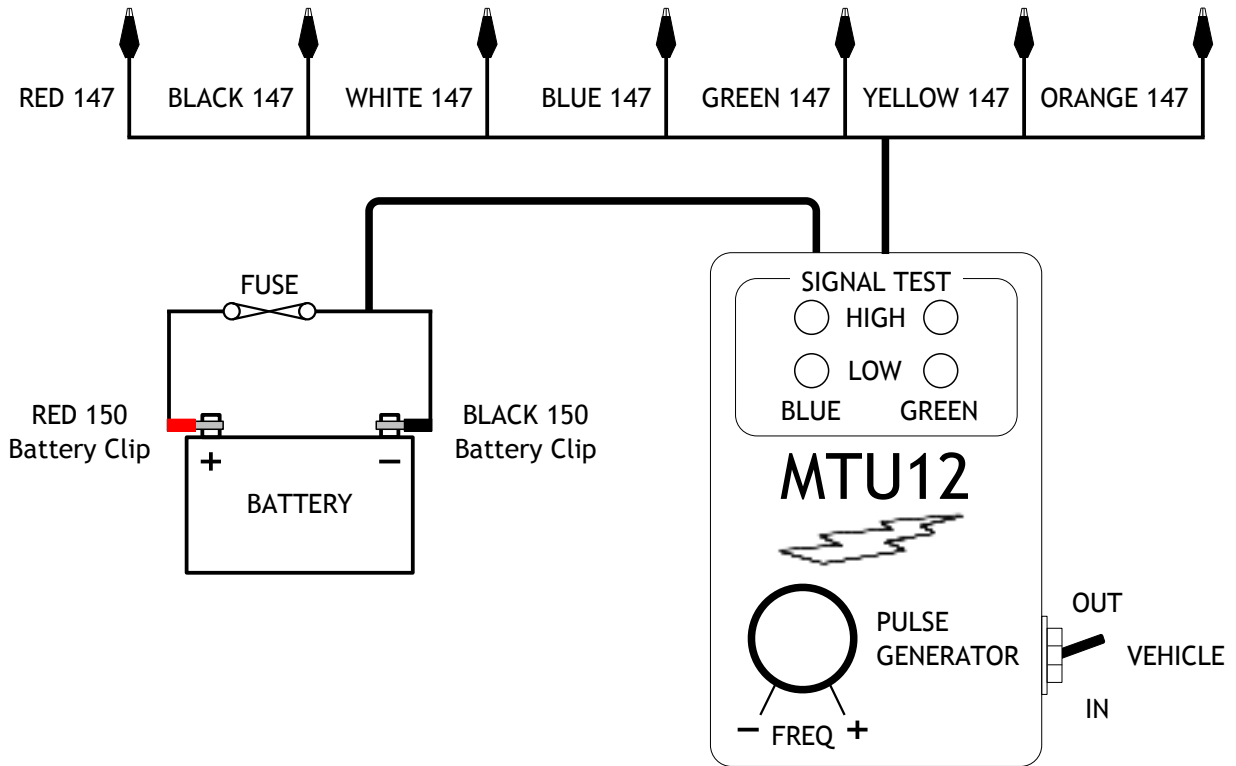
ANYTHING ELECTRONIC (NZ) LTD.

7 Bullen Street, PO Box 273, Nelson, New Zealand

Phone : 03 548 5336 - Fax : 03 548 5636

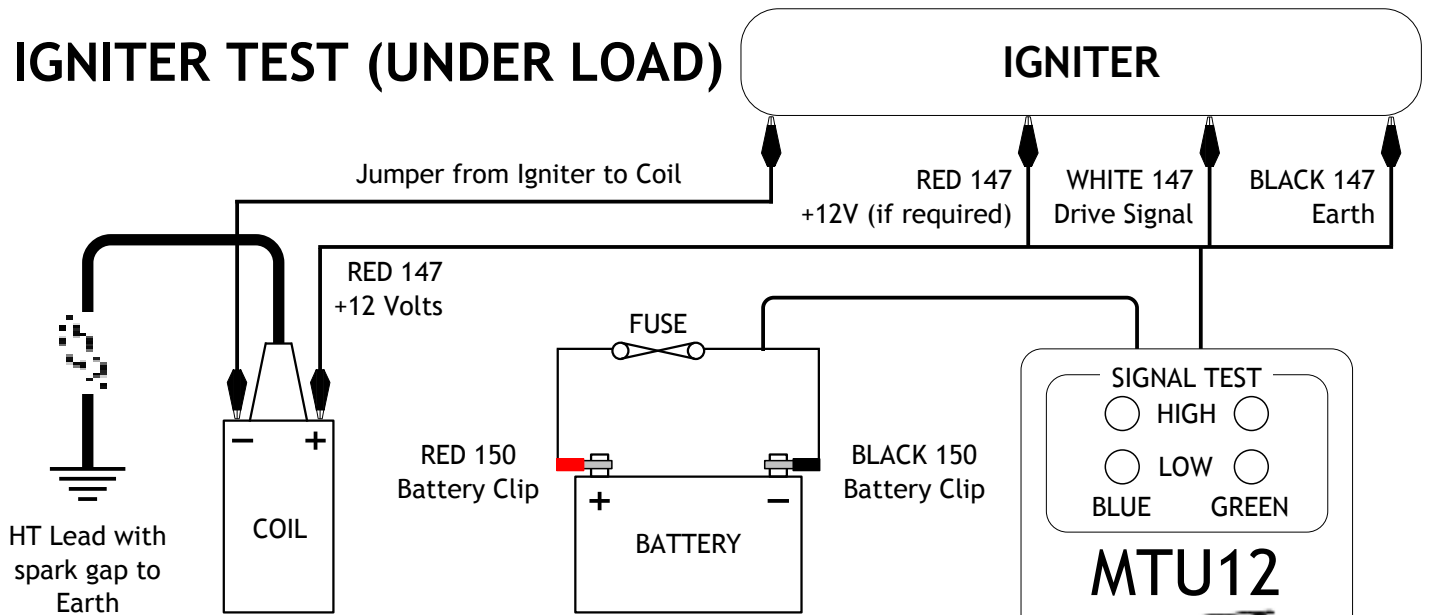
Email : sales@anythingelectronic.co.nz

MTU12 - Instructions



| | | |
|---------------|-----|---|
| RED | 150 | Fused + 12 Volt |
| BLACK | 150 | Earth |
| RED | 147 | + 12 Volt Out |
| BLACK | 147 | Earth Out |
| WHITE | 147 | Output Pulse (FREQ adjustable by pot) |
| BLUE | 147 | Left High LED will light over 4.5 V Left Low LED will light under 0.5 V |
| GREEN | 147 | Right High LED will light over 4.5 V Right Low LED will light under 0.5 V |
| YELLOW | 147 | Ignitor output switched to Earth (FREQ Adjustable by pot) |
| ORANGE | 147 | + 5 Volt Output |
| VEHICLE - OUT | | Switch to simulate OUT of vehicle testing |
| VEHICLE - IN | | Switch to simulate IN vehicle testing - pull-up resistor provided by ECU |

IGNITER TEST (UNDER LOAD)



The **MTU** can be used to test the Igniter Coil circuit by driving the Igniter and in turn the Coil.

The extra **RED 147 + 12V** is not always required depending on the specific igniter being tested.

If the Igniter is testing okay a spark should be observed at the spark gap.

The sparking rate is adjustable via the Pulse Generator knob on the **MTU**.

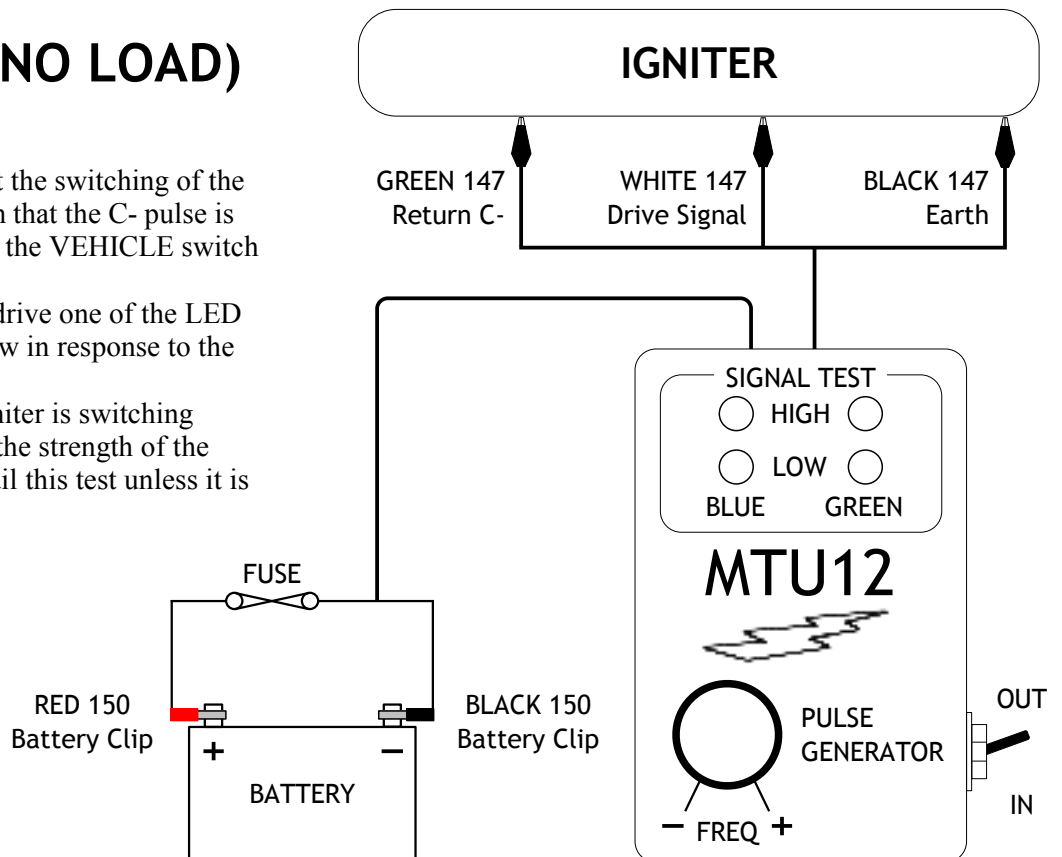
PLEASE BE CAREFUL!!

IGNITER TEST (NO LOAD)

The **MTU** can be used to test the switching of the Igniter. This test will confirm that the C- pulse is being sent to the coil (ensure the **VEHICLE** switch is set to the **OUT** position).

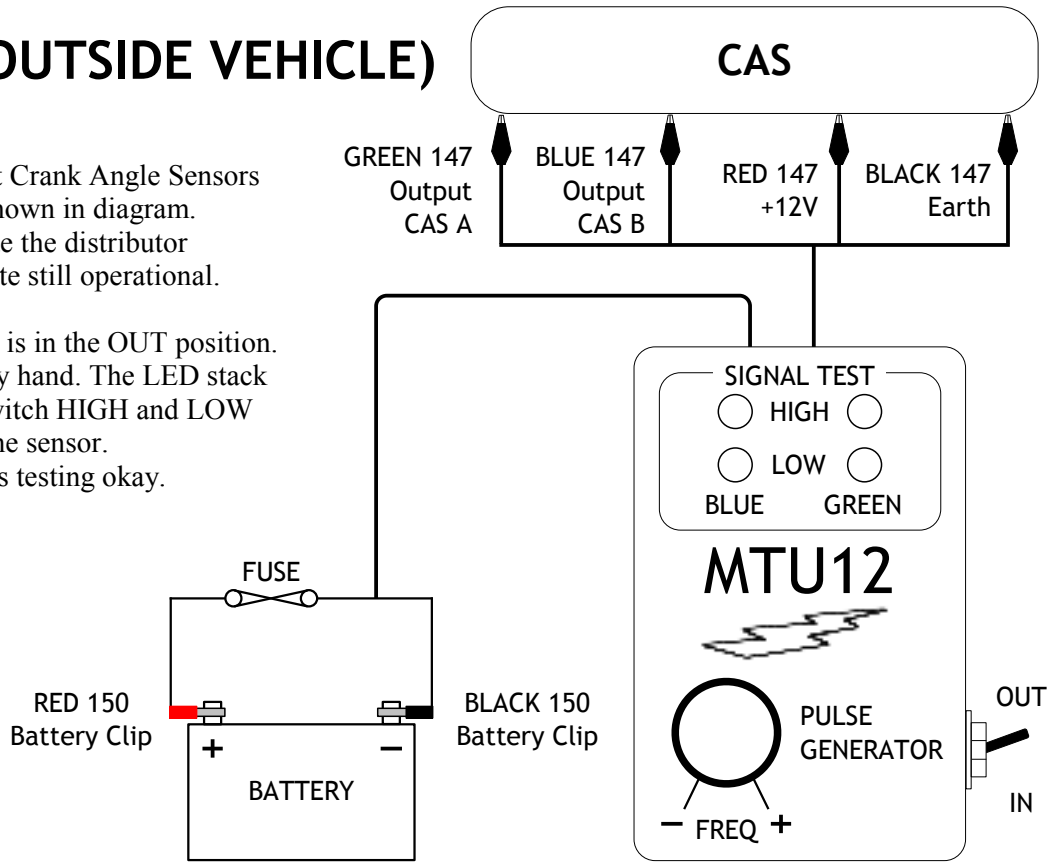
In this setup the Igniter will drive one of the LED indicator stacks High and Low in response to the pulse generator.

This will confirm that the igniter is switching cleanly but will not indicate the strength of the spark – the Igniter will not fail this test unless it is totally dead.



CAS TESTING (OUTSIDE VEHICLE)

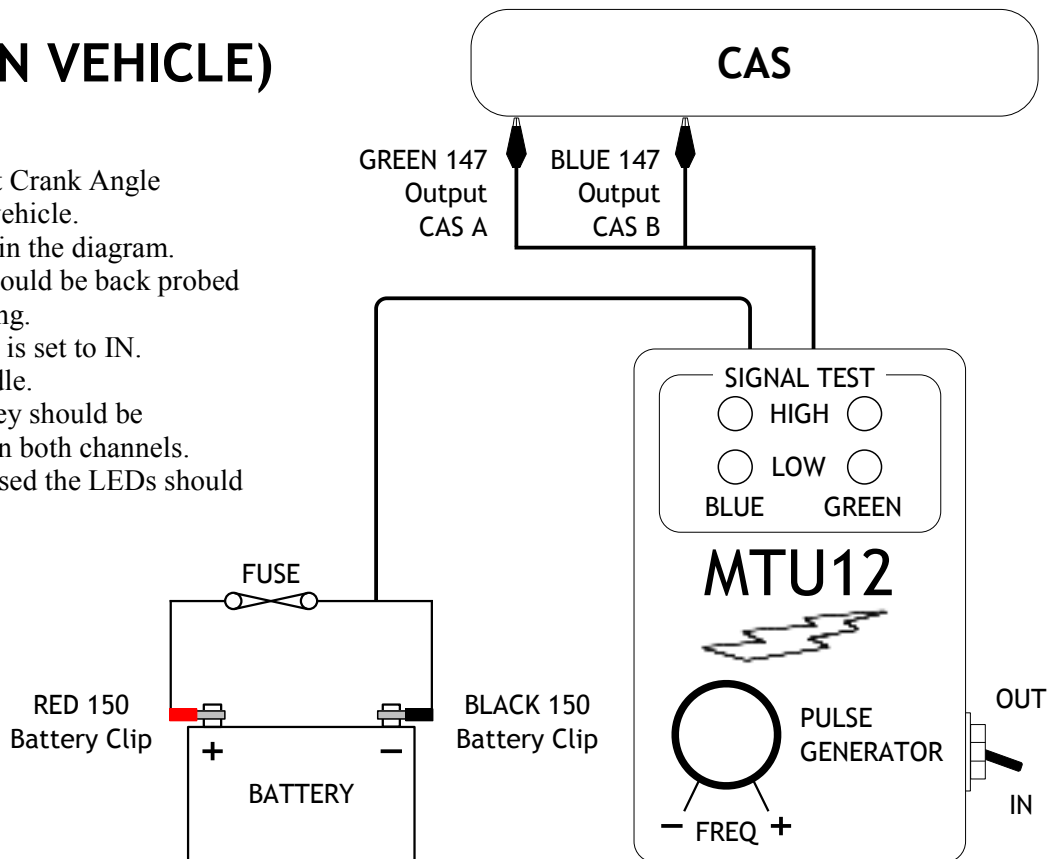
The **MTU** can be used to test Crank Angle Sensors (CAS) outside a vehicle as shown in diagram. The CAS should be left inside the distributor housing with the chopper plate still operational. Connect the **MTU** as shown. Ensure the **VEHICLE** switch is in the **OUT** position. Rotate the distributor shaft by hand. The LED stack lights on the **MTU** should switch **HIGH** and **LOW** as the chopper plate passes the sensor. This indicates that the CAS is testing okay.



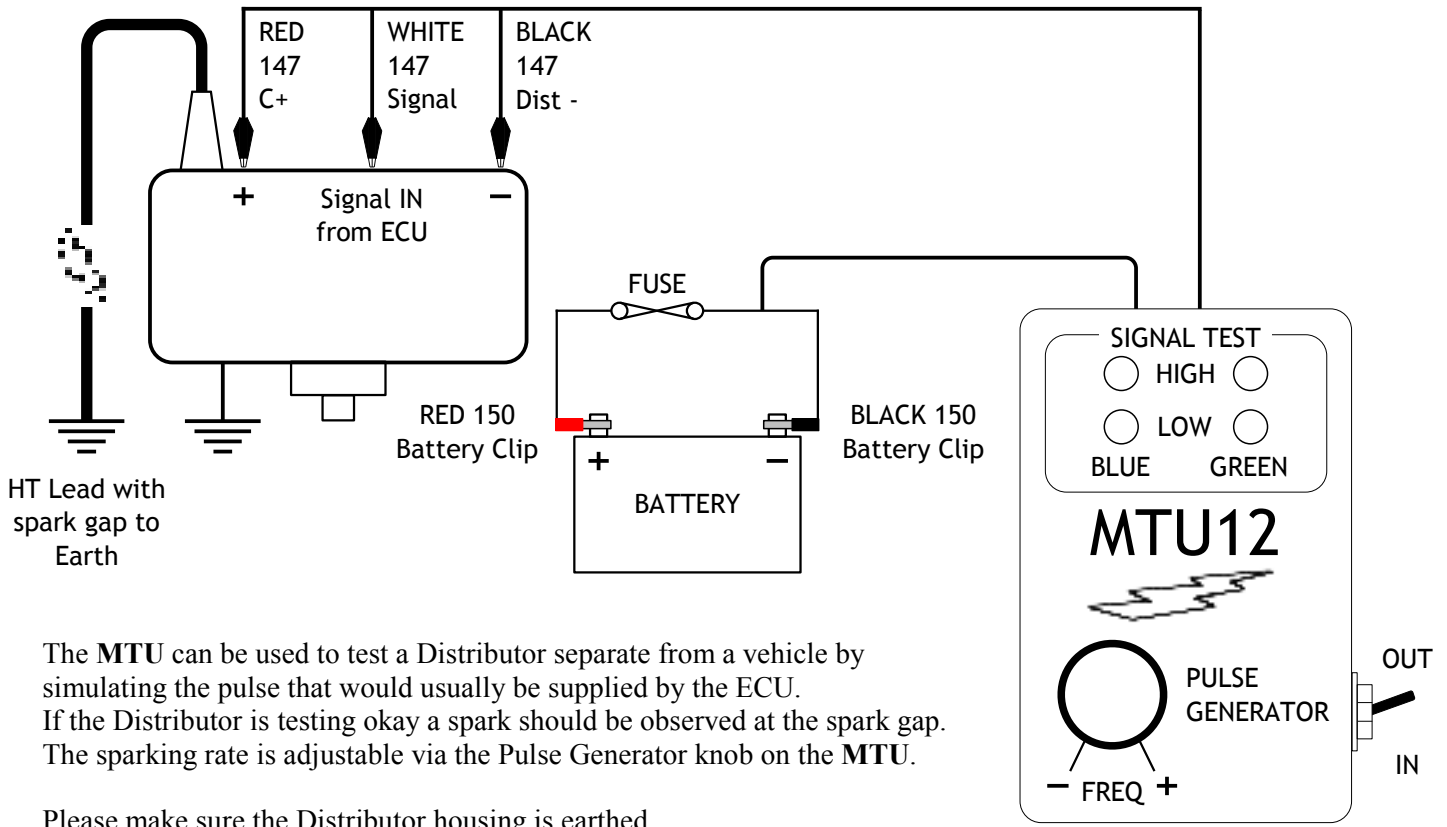
CAS TESTING (IN VEHICLE)

The **MTU** can be used to test Crank Angle Sensors (CAS) while in the vehicle. Connect the **MTU** as shown in the diagram. The Blue and Green wires should be back probed into the existing vehicle wiring. Ensure the **VEHICLE** switch is set to **IN**. Start the vehicle and run at idle. Observe the LED stacks – they should be switching **HIGH** and **LOW** on both channels. As the engine revs are increased the LEDs should switch at a higher frequency.

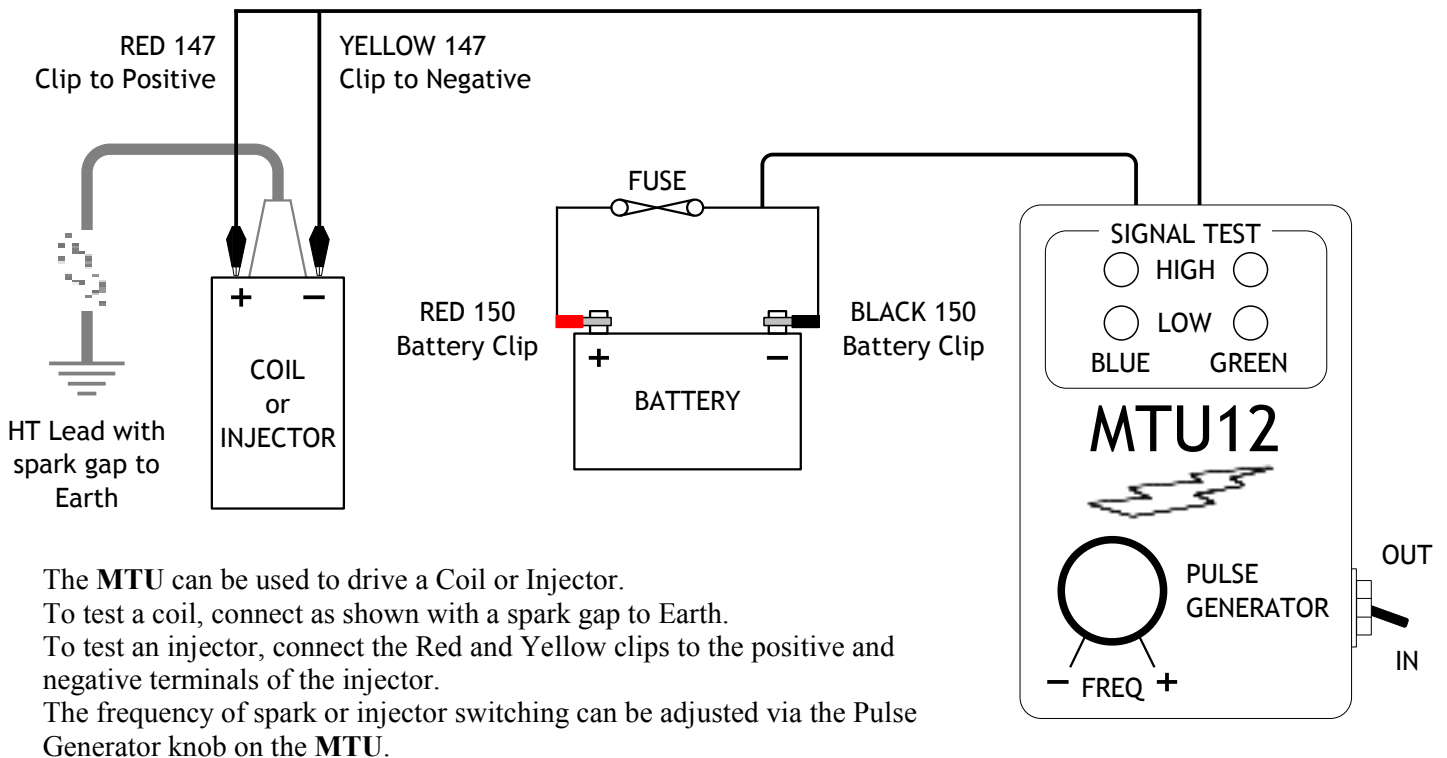
NOTE : At high frequency it may appear that the LEDs on the **MTU** are on constantly when in fact they are flashing so quickly that the eye cannot detect the switching. In either case the CAS will be testing okay.



COIL / IGNITER TEST IN DIST. (OUTSIDE VEHICLE)



COIL / INJECTOR TEST




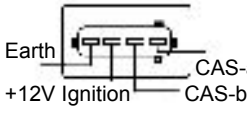
Module Datasheet

J955




-12V Earth
Sig.In
Sig.Earth
+12V Ign.
CAS-a
CAS-b

J822


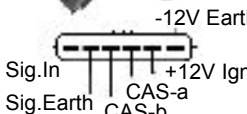
Earth
+12V Ignition
CAS-a
CAS-b

J852 / J862 / J882




-12V Earth
Sig.In
Sig.Earth
+12V Ign.
CAS-a
CAS-b

J881 / J885

-12V Earth
Sig.In
Sig.Earth
+12V Ign.
CAS-a
CAS-b

E12-83




Earth
Exhaust
Batt.
Cut
Inlet

RSB-13




-12V Earth
Sig.In
Sig.Earth
+12V Ign.
CAS-a
CAS-b

RSB-04




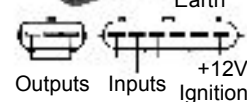

Earth
+12V Ignition
CAS-a
CAS-b

RSB-056




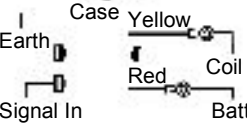

-12V Earth
Sig.In
Sig.Earth
+12V Ign.
CAS-a
CAS-b

J723T


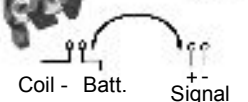
Earth
Outputs
Inputs
+12V Ignition

IG-219


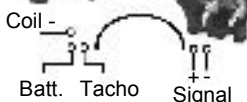
Earth
Case
Yellow
Red
Signal In
Coil -
Batt.

J170

Coil -
Batt.
Signal

J263T


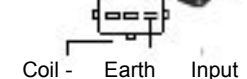
Coil -
Batt.
Tacho
Signal

22020




Coil -
Input
Earth

J121



Coil -
Earth
Input

OKI 301




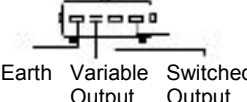

Input
Batt.
Coil -
Tacho

J134


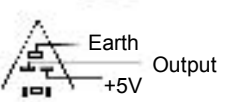
Earth
Inputs
Outputs

TPS

Earth
Variable Output
Switched Output

APS

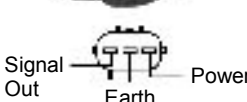
Earth
+5V
Output

MAGNETIC PICKUP




+12V
Output
Earth

ISUZU SPEED SENSOR

Signal Out
Earth
Power