



# Caerbond Automotive Instruments

*"The original makers of SMITHS instruments"*

## Instructions for 80mm 12volt Smiths Chronometric Motorcycle Tachometers

### **Caution**

***Disconnect the negative battery cable  
prior to any installation***

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Products designed and manufactured under ISO  
9001:2008 quality standard.

### INSTALLATION INSTRUCTIONS

To fit the tachometer, either an 80mm clearance hole is required—appropriate to the model.  
The harness provided should be connected as follows.

#### Negative Earth Applications

Wire	Connect To
Blue	Used to Change Calibration
Green	Switched 12v supply
Black	Ground
Red/blue	Switched side of ignition coil of contact breaker ignition system
White/black	ECU or electronic ignition tachometer signal
Red/black	Ground (for illumination)
Red/white	Illumination +ve supply, connect to sidelight feed

**Note :- Brown Slate and Red wire not Used**

#### Positive Earth Applications

Wire	Connect To
Blue	Used to Change Calibration
Green	Vehicle Ground Battery Positive
Black	Switched Negative Supply
Red/blue	Switched side of ignition coil of contact breaker ignition system
White/black	ECU or electronic ignition tachometer signal
Red/black	To illumination 12v Negative supply
Red/white	Vehicle Ground Battery Positive

**Note :- Brown Slate and Red wire not Used**

### OPERATION

#### Tachometer Setup

The tachometer is supplied calibrated for a twin cylinder engine. To change the calibration setting, follow this procedure:

With the ignition off, connect the blue wire temporarily to 0 volts.

Turn the ignition on, and then remove the blue wire connection. The unit is now in 'calibration mode'.

The needle will sweep to "2" - the default setting. Each touch of the blue wire to 0 volts will move the needle up "1000rpm" to the next digit, up to the maximum of "6" (6 cylinders) and back down to "1" (single cylinder).

When the required cylinder number is selected, hold the blue wire to 0 volts for about 3 seconds. The tachometer will go to full-scale and reset to zero, to show acceptance of the new setting. Turn the ignition off and then back on, to return to normal operation.

For all twins with single coil wasted spark and twin coil, use "1".

Triple cylinder bikes should also use "1"

Systems with multiple coils and lost spark (such as 4 cylinder machines with dual output coils), should use number "2".

In all other cases use "1" in the setup procedure

### **'Chronometric' (Pointer Ticking) Mode**

With the ignition turned on (engine running or not), momentarily touch the blue wire to ground. The pointer will reset and 'chronometric' mode set.

To revert to smooth operation, simply repeat as above.

The tachometer will remember which mode has been set on ignition switch off and will remain in that mode unless reset.

If a more positive switching mechanism is required, connect the blue wire to one terminal of a momentary push-button/toggle switch. Connect the other terminal to ground.

For Technical assistance please email  
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