

## **Rex's Speed Shop**

Robertsbridge - England

Skill rating:



## AM1 CDi Unit for SST175/250

Rex's manufacture modern electronics using state of the art manufacturing processes and OEM brand electronic components. Robust quality checks during assembly and a full test run of every CDi unit ensure our ignition units are amongst the most reliable and powerful in the world.

Our replacement CDi unit for the Harley Davidson SST175/250 models (Originally Aermacchi, later to become Cagiva) has internal electronics designed to exactly match the electronics of the original unit.

To keep installation simple the wires on our new CDi unit match the bike's. Simply match up the wire colours and plug in.

If you find problems persist, or the new unit appears not to work it is likely the the windings in the generator require attention. Windings over 20 years old should be considered as suspect in any case.

## Age Related Generator Faults.

The shop manual gives rudimentary information on testing the generator windings, this will only help where a total winding failure has occurred. It is less helpful in the case of the more common partial failure where age related weakening of the winding insulation is causing running issues.

Use a multimeter set to read resistance (follow the meter's instruction book for setting the right range)

Red to Black: 500-600  $\Omega$ . The reading should be steady, if it fluctuates or is lower than 500 or higher than 600 ohms the coil has failed. Note this test is not likely to show the most common failure, weakened insulation. Windings over 20 years old should be considered as suspect in any case.

Rex's rewound source coil. Note only applies to rewound parts repaired by our workshops:

Red to Black 587 $\Omega$  at 20 degrees C. Acceptable readings +/- 5% of 587 $\Omega$  = 560-615 $\Omega$  at 20 degrees C. The reading should be steady, if it fluctuates or is outside these limits at the stated temperature, there is a fault.

Pick-up Tests - The manual does not explain the way to tell early from late types. Measure between the insulated terminal and the metal body. The readings will be at 20 degrees C.

Early type  $120-150\Omega$ Late type  $85-90\Omega$ 

## HT Coil.

This must be a CDi type coil. The original had a  $0.5\Omega$  primary and a  $2.8K\Omega$  secondary. Our replacement HT coil - HTC4 is a good match. It is a CDi type coil with  $0.5\Omega$  primary and 2.2K secondary. HT coils over 20 years old must be considered as suspect and should be replaced.



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