

# Come to your **sensors**

This month Rob gets to grips with the Drakefield SensorMaster.

**T**he SensorMaster is Drakefield's latest development in EBS/ABS diagnostics. The tester eliminates the need to remove the wheel to carry out a check on a vehicle's EBS/ABS system.

The SensorMaster tests for the following EBS/ABS faults:

- Correct ohms resistance
- Open circuit
- Short circuit
- Pole ring tooth damage
- Pole ring mis-alignment
- Sensor gap measurement

The portable handset can be set up very quickly and all of the instructions required to operate it are printed on the front of the unit.

**There are three main tests that cover the faults:**

### Sensor test

Connect the sensor master to your sensor with the wheel stationary, and turn it on. The tester recognises if a sensor is connected and performs an ohms resistance test. If a sensor is between 1100-1700 ohms, the "OK" LED will light. If the sensor is faulty, or high/low ohms, the S/C, O/C, LO or HI LEDs will light identifying a fault. If no sensor is connected when the tester is turned on, the O/C LED will light.

### Gap test

Jack up the wheel you want to test, and spin at a minimum 1 rev per



second. The tester will automatically test the gap; one or more LEDs will light, telling you how far your sensor is set away from the exciter ring.

### Exciter test

The exciter test will show missing or damaged teeth, and any bends or alignment faults of the exciter ring. If the exciter ring is bent, the GAP TEST LEDs will identify the extent of the bend by lighting two LEDs.

### The verdict

The tester has several advantages in a busy workshop where work needs to be done as quickly and efficiently as possible. Prior to this we would have had to set up the diagnostics kit which takes time. Usually the problem with the EBS/ABS system is either with the gap or faulty sensors, so in most cases the SensorMaster is able to diagnose the problem without the need for using a diagnostics kit.

As a workshop, we see a variety of vehicles of different ages. One of the main advantages of this tester is that

it can be used on older coaches where it isn't possible to use our diagnostics equipment.

Overall, we have found the SensorMaster to be very useful, especially in a time saving capacity.

Keep an eye out for a more in-depth article on the Drakefield SensorMaster later in the year.



**For details on Drakefield SensorMaster, circle 101 on readerlink card**