



## MICRO-SWITCH JC120102

For vehicles which have Hydraulic braking, the system uses a four stage micro switch operated by the movement of the service brake pedal. The action of depressing the pedal will progressively actuate each stage of the Micro Switch.

**NOTE:** The CE range of retarders use only 3 stages.

The switch unit is set in a compression mode adjacent to the brake pedal and is operated by a striker plate.

**IMPORTANT:** Check that the microswitch is not acting as a "stop" for the brake pedal, as damage to the switch may occur. Also ensure that the striker does not hinder pedal travel.

Two of the stages should function before the threshold of the vehicle foundation braking.

An immediate response is imperative, but care must be taken that the switch does not operate intermittently when the road is uneven.

Once actuated a low current feed will close individual relays in the Telma Relay Box. The control system requires to be examined to ensure security and good working order.

### Procedure

Before commencing any fault finding exercise, or function check, override the Standstill Detector system.

With brake pedal progressively depressed, observe or hear the relays closing and opening in the Telma Relay Box.

If the functioning is not correct, check the adjustment of the switch and striker plate, remove rubber gaiter and grease the spring with a quality silicon grease.

### **TEST MICROSWITCH**

#### Using Test Lamp or Buzzer

Ensure a live feed is connected to Connection C on the microswitch. Connect the test lamp or buzzer to a suitable earth and to each connection 1 to 4 in turn. Operate the foot pedal, and if the test lamp does not light, or the buzzer sound, it would indicate a faulty foot switch.

#### Using an Ohmmeter

Disconnect the plug from the microswitch, and check the resistance across Connection C on the microswitch and each connection 1 - 4 in turn. Operate the foot pedal, and if the resistance is not zero, it would indicate a faulty foot switch.



## AIR PRESSURE SWITCHES JC180105

For vehicles which have "Air over Hydraulic" or full air brake systems, pressure switches are connected into the braking circuit down-stream of the pedal control unit. The pressure switches are pre-set at the factory and no adjustment or calibration is required.

The action of depressing the brake pedal will actuate each switch progressively. The first two switches are set at 3 and 5 psi respectively, and usually operate before the service brake threshold.

On depressing the brake pedal, the pressure switches will close at the preset pressure and a low current feed will close individual relays in the Telma Relay Box.

The control system requires to be examined to ensure security and good working order.

### Procedure

Before commencing any fault finding exercise or function check, test for any possible air leaks in the system.

Override the standstill detector system.

With the brake pedal progressively depressed, observe or hear relays closing and opening in the Telma Relay Box. If the functioning is not correct, remove protection boots and check each switch.

### TEST PRESSURE SWITCHES

#### Using Test Lamp or Buzzer

Ensure a live feed is connected to one side of each pressure switch. Connect the test lamp or buzzer to a suitable earth and to the other terminal of each pressure switch in turn. Operate the foot pedal, and if the test lamp does not light, or the buzzer sound, it would indicate a faulty pressure switch.

#### Using an Ohmmeter

Check the resistance on each pressure switch. Operate the foot pedal, and if the resistance of each pressure switch is not zero, it would indicate a faulty pressure switch.

Replacement switches:	3 psi	VF885103
	5 psi	VF885105
	7 psi	VF885107
	10 psi	VF885310

Before replacing boots, ensure that both terminals are dry, tight and protected with a silicon sealant.