

FOOT CONTROL SYSTEM

AIR PRESSURE SWITCHES

For vehicles with 'Air over Hydraulic' or full air brake systems, a pressure switch manifold may be connected into the braking circuit down-stream of the foot pedal valve unit. The pressure switches are pre-set at the factory and no adjustment or calibration is required.

On pressing the brake pedal, the pressure switches will close at the preset pressures; the first two switches will usually operate before the vehicle service brakes. As the pressure switches close, a low current feed will close the individual relays for each stage in the Telma Relay Box.

CHECKPROCEDURE

- Check the system for any possible air leaks
- If the vehicle is fitted with ABS, ensure that the ABS Fault Indicator Lamp is extinguished
- Check the Ignition is ON and the foot-control isolating switch is ON; override the Standstill Detection system in the Telma Universal Speedswitch or the Telma ABS Interface
- Slowly operate the brake pedal and observe or listen for the relays closing and opening in the Relay Box

If the functioning is not correct:

- Remove protective rubber boots from pressure switches
- Test each switch using either a test lamp, buzzer or digital ohm meter
- Replace any faulty pressure switches with the same value switch
- Ensure terminals are dry, corrosion-free, and connections are tight
- Replace the rubber protective boots, sealed with silicone sealant.

FOOT BRAKE MICRO-SWITCH

For vehicles which have hydraulic braking, the system uses a four stage microswitch operated by the movement of the service brake pedal. The switch unit is set in a compression mode adjacent to the brake pedal and is operated by a striker plate or directly by the foot pedal itself.

Pressing the brake pedal will progressively release the microswitch plunger and actuate each stage of the microswitch; the low current circuit will then close the individual relays in the Telma Relay Box.

The first two stages usually function before the vehicle foundation brakes.

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

NOTE : The CE range of retarders has only 3 stages.

CHECKPROCEDURE

- Check that the microswitch is not acting as a 'stop' for the brake pedal
- Ensure that the striker does not hinder the travel of the brake pedal
- If the vehicle is fitted with ABS, ensure that the ABS Fault Indicator Lamp is extinguished
- Check the Ignition is ON and the foot-control isolating switch is ON; override the Standstill Detection system in the Telma Universal Speedswitch or the Telma ABS Interface
- Slowly operate the brake pedal and observe or listen for the relays closing and opening in the Relay Box

If the functioning is not correct:

- Disconnect the 5-way connector
- Test each stage of the microswitch using a buzzer, lamp or ohmmeter between terminal C and each terminal 1-4 in turn.
- If faulty, replace with new switch. Do NOT overtighten as this may damage the unit
- Check correct setting of microswitch and striker
- Refit 5-way connector and re-test.