Minuteman International

Component Testing Guide

741037 - 5 second Time Delay

Where Used:

On 170, 200 and 260 Series Automatic Scrubbers.

Purpose:

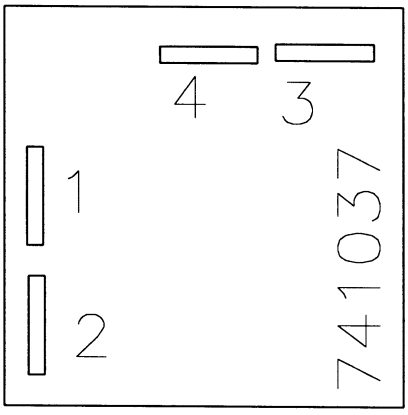
To allow vacuum motor to run 5 seconds after dead man switch is released to remove excess water from squeegee and floor. The delay also stops the brush 5 seconds after the dead man switch is released to prevent the brush from damaging the floor and/or finish.

How to Test:

To test this time delay you must have a volt meter and or continuity tester or OHM meter. You may also need a set of jump wires.

To Test Time Delay:

For the time delay to function, power must be delivered to the terminals 1 & 2. Since the delay is polarity sensitive, the positive (+) lead must go to terminal 2 and the negative (-) to terminal 1. This unit requires 18 to 28 volts to operate.



1). Remove all wires to the time delay and note their location.

2). Apply 24 volts to terminals 1 & 2 by either using jumper wires or the machines wiring.

3). Now connect an OHM meter or continuity tester to terminals 3 & 4.

4). With voltage present at terminals 1 and 2, you should have continuity across terminals 3 and 4. If you do not, check that you are supplying positive(+) to terminal 2 and negative(-) to terminal 1. If your voltage is correct and you do not have continuity between terminals 3 & 4, the delay is defective and must be replaced.

5). With the OHM meter still connected to terminals 3 & 4, remove power from terminals 1 & 2. You should have continuity between terminals 3 & 4 for approximately 5 seconds after power is disconnected. If you do not, the delay is defective and must be replaced. If continuity lasts longer than 10 seconds, the delay is also defective and must be replaced.

NOTE: Because this time delay is common to both the brush motor and the vacuum motor circuits, if it is defective, the symptoms will be common to both components, i.e.: both the brush motor and vacuum motor inoperative at the same time.

CAUTION: These tests should only be performed by a qualified technician. Working with electricity can be dangerous. When using jumper wires to help diagnosis an electrical component, care must be exercised to prevent a short circuit from occurring. Do not allow the two test leads (jumpers) to touch or personal injury or damage to the equipment will result.