



Trio Motion Technology Ltd.  
Shannon Way, Tewkesbury,  
Gloucestershire. GL20 8ND  
United Kingdom  
Tel: +44 (0)1684 292333  
Fax: +44 (0)1684 297929

1000 Gamma Drive  
Suite 206  
Pittsburgh, PA 15238  
United States of America  
Ph: +1 412.968.9744  
Fx: +1 412.968.9746

**Doc No.:** TN20-78  
**Version:** 1.0  
**Date:** 22<sup>nd</sup> August 2002  
**Subject:** P503 Keypad modifications to alleviate shorted contacts in membrane.

---

## Technical Bulletin

### 1. Applicability:

P503 Membrane Keypads shipped prior to end of August 2002.

### 2. Background:

When operated for long periods in hot and humid environments, an internal short circuit can occur within the membrane panel. This results in one of the keys apparently being always on.

The keypad membrane was re-designed by Trio's supplier to make it more immune to moisture ingress. All keypads manufactured by Trio, after the dates and serial numbers show below, use the new keypad design.

It should be noted that serial number alone may not be enough to identify if the new membrane panel design has been used. An increasing number of older P503 keypads will have been re-worked at the request of customers over time, so before deciding that the membrane is at fault, it is advised that the date code on the keypad is checked as detailed below.

### 3. Changes and effective dates:

**Date:** Receipt of new design panels at Trio was from 14 August 2002 onwards. Therefore any P503 units shipped by Trio prior to 14 August 2002 used the old membrane.

**Serial Numbers:** The change became effective from serial number P503-02221. (except for P503-02256 which had an old style membrane).

**Identification:** Dismantle the keypad and look for a date code on the back of the membrane panel. If the date code is earlier than Week 32 / 2002 it will be to the old design.