

MX4428 / F4000 / F3200 / NDU / RDU / ADU KEYPAD CONNECTOR FAULTS

IDENTIFICATION & FIELD CHANGEOVER PROCEDURE

In late 2006/early 2007 a small number of newly-manufactured MX4428 panels, F3200 panels, NDUs, RDUs, Nurse Station Annunciators and Compact FFs started exhibiting keypad faults.

These faults have been traced to a batch-specific keypad connector manufacturing issue. Due to a manufacturing fault in the terminals used in the connector on the end of the keypad tail where it plugs onto the circuit board, it is possible for a short circuit to develop between two adjacent terminals. Depending on which terminals are shorted this either appears to the panel's software as if a key has been permanently pressed, or corrupts the reading of whichever keys are pressed.

IDENTIFICATION

The affected keypads were manufactured between 1st March 2006 and 30th October 2006, and were used in production from 1st July 2006 until the end of January 2007.

All MX4428, F4000, F3200, NDU, ADU Nurse Station Annunciator and ADU Compact FF panels (including upgrade kits and spare keypads) manufactured between 1 July 2006 and 26 January 2007 are potentially affected.

To determine whether a particular panel contains an affected keypad it is necessary to open up the panel and look for the manufacturer's batch label on the keypad tail. This is a white stick-on label with the manufacturing date in the format YYYY-MM-DD printed on it (other information will also be present) as per Fig 1.



Fig 1 – Typical Batch Label (this one dated 24th May 2006)

If the batch label date is in the range 1st March 2006 (2006. 03. 01) to 30th October 2006 (2006. 10. 30), then the keypad is potentially affected, however the actual failure incidence appears to be small and also appears to drop off rapidly with time (i.e. most failures are detected in factory test or during system commissioning).

Based on to-date failures and warranty return rates, keypad replacement whenever a fault is observed is the recommended action.

All stock in the warehouse has been re-worked to replace the keypad with a known good one. The outside of the carton will for a period have a prominent yellow label indicating the keypad is OK.

AS 4428-BASED-PRODUCTS

For MX4428, AS 4428 versions of F3200 panels and rack-mount NDUs, the following part is stocked in Australia and is available free of charge from Tyco Safety Products Melbourne via the standard warranty procedure to make the field changeover straight forward:

ME0444 ME F3200/F4000 4U CHASSIS & AS 4428 MEMBRANE KEYBRD

This replacement part consists of a new membrane keypad mounted on a metal 19" rack 4U inner door. Changeover consists of dismantling the existing LCD/controller circuit board from the faulty keypad and metalwork, removal and discarding of the faulty keypad and metalwork, fitting of the replacement keypad and metalwork assembly, and finally re-installation of the LCD/controller circuit board and cabling. As all existing circuit boards are retained in this process, there is no need to transfer any databases or change any configurations.

For slimline AS 4428 NDUs it is necessary to peel off the existing keypad and fit a replacement membrane keypad to the NDU metalwork. You need to remove any residual adhesive from the metal to ensure a smooth surface. Replacement keypads are also available free of charge (this is the preferred NZ option for AS 4428-based products):

FA2150 FAB 1931-112 F3200 AS 4428 MEMBRANE KEYBOARD

AS 1603.4-BASED PRODUCTS

For AS 1603.4-based products (F4000, F3200, NDU, RDU), the following parts are stocked in Australia and are available free of charge from Tyco Safety Products Melbourne via the standard warranty procedure:

ME0091 ME, F3200, 4U CHASSIS AND MEMBRANE KEYBOARD ONLY

ME0103 ME, F3200, SLIMLINE DOOR AND MEMBRANE KEYBOARD ONLY

Units that are in 19" rack cabinets require ME0091, and units that are in slim-line cabinets (flush or surface) require ME0103.

Both replacement parts consist of a new membrane keypad mounted on the appropriate metalwork. Changeover consists of dismantling the existing controller circuit board from the faulty keypad and metalwork, removal and discarding of the faulty keypad and metalwork, fitting of the replacement keypad and metalwork assembly, and finally re-installation of the controller and wiring. As the existing controller circuit board is retained there is no need to transfer components or databases over. Full details of this process are contained in LT0260 (supplied with the above items).

For New Zealand customers only, the preferred option is to simply fit a replacement membrane keypad to the existing RDU/NDU metalwork. You need to remove any residual adhesive from the metal to ensure a smooth surface. Replacement keypads are available free of charge from the Auckland Warehouse:

FA1312 FABRICATION, NO NAME F3200/RDU/NDU KEY PAD

ADU NURSE STATION ANNUNCIATORS & COMPACT FFS

For Nurse Station Annunciators and Compact FFS, it is necessary to peel off the existing keypad and fit a replacement keypad to the ADU metalwork. You need to remove any residual adhesive from the metal to ensure a smooth surface. Replacement keypads are available free of charge from Tyco Safety Products via the standard warranty procedure as follows:

FA2359 FAB 1979-4 ADU MEMBRANE KEYBOARD NURSE STATION

FA2360 FAB 1979-11 ADU MEMBRANE KEYBOARD FIREFIGHTER FAC.