(10)



To gain access to the serial communications board, the heat sink must first be removed, by undoing the four securing screws J, and lifting the heat sink out.

With the heat sink removed, the serial communications board is revealed. This allows the 24V link (figure below) in the supply power circuit to be cut. This would normally only be done if 'redundant' power supplies are to be used.

To remove the board, disconnect any remaining harnesses, looms or flexible cables, then undo the four hexagonal (5.5mm A.F.) stand-off pillars ('K').



### **RE-ASSEMBLY HINTS**

(11) The re-assembly of the instrument is achieved by carrying out the reverse of the disassembly procedure given in steps 1 to 10. When re-assembling, it should be remembered that the touch screen flexible cable (B) runs between the power cable (F) and the bottom wall of the chassis.

Care must be taken to ensure that all flexible cables are correctly and fully inserted into their connectors.

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# Service instructions Models 6100XIO, Eycon<sup>™</sup>-10 Visual Supervisor

### INTRODUCTION

This document gives disassembly details for the above instruments. This allows the replacement of the display unit and/or its backlighting, the inverter board, the main board and the serial comms board. The location of the link which shorts the two 24V input pins together is also given, so that the user may cut the link, to make the instrument suitable for use with redundant power supplies.

### SAFETY PRECAUTIONS

Ensure that the unit is isolated from supply voltage for at least 15 minutes before starting to work on it. This will allow the high voltages associated with the inverter board to dissipate safely and will also allow the power supply unit to cool down. The user should be aware, however, that areas of high temperature may exist even after this period has elapsed.

### STATIC ELECTRICITY



These procedures involve the handling of components which are susceptible to damage caused by the discharge of static electricity. All relevant personnel must be aware of static handling procedures. It is recommended that a static safe container be available, into which any circuit board(s) removed from the instrument may be placed.

### **DUST INGRESS**

When replacing the display or backlight, it is essential to keep the front face of the display and the rear face of the touch screen as clean as possible. The use of polythene or latex gloves is recommended when handling the display unit. If possible, the replacement should be carried out in a Clean Area. Particles of dust not only appear unsightly, but can also affect the performance of the touch screen, in extreme circumstances, causing a continuous 'press' to be perceived by the instrument.

### DISASSEMBLY PROCEDURE

With the unit removed from the panel:

## 1

Remove the two Torx-headed screws located, one-each, at the top and bottom of the instrument (Screws 'A').



Carefully lift the cover away from the chassis, disconnecting the Touchscreen flexible cable ('B') at the bottom right when it becomes accessible.

Remove the keyboard insert and put to one side for use in later re-assembly.

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#### CAUTION



### **DISASSEMBLY PROCEDURE (CONT.)**

3 Lift out the keyboard backing plate ('C')

Remove the two fixings 'D' and lift the display assembly away from the chassis, releasing the display flexible cable ('E') and the display power harness ('F') when these become accessible.



### 4

For units with status levels prior to 'J2' (Model 6100XIO) or 'L5' (Visual Supervisor), to replace the inverter board or backlight assembly, continue at instruction 5.

To replace the display (all models) continue at instruction 6.

To replace the main board, or the serial communications board, or to gain access to the power supply links, continue at instruction 9.

(5)



Remove the securing screws 'G' and lift the backing plate away from the display, disconnecting the backlight connectors 'H' from the inverter board when accessible.

This allows the inverter board or the backlights to be replaced as required. If the display unit is to be replaced, continue at instruction 7.

To remove the backlighting tubes, a small screwdriver should be used to depress the upper section of the brass clip, as shown in the detail.

### **DISPLAY REPLACEMENT (CONT.)**



(7)

If the new unit is not already assembled, use the four screws 'G', previously removed, to secure the replacement display screen to the new back plate, ensuring that the two looms ('E' and 'F') are routed correctly through the aperture in the plate, as shown.

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If no further work is to be done, the new display unit assembly can now be fitted to the chassis, connecting the looms 'E' and 'F' as shown and the instrument re-assembled, referring to instruction 11 as necessary.

### (9) From instruction 4.

To remove the main board (for replacement or to gain access to the serial communications board), disconnect all remaining harnesses, looms and flexible cables from the main board. The main board may now be removed by undoing the four securing screws 'l'.

HA029325U100 Issue 2 Aug 09 Remove the securing screws 'G' and retain for later use. Discard the remaining items.

