Replacing the ThermoFlex Wide II Table Interlock Switches
Document number 709-00216A

Ian Skinner March 11, 2004

Background

The load table uses two OMRON safety interlock switches, 15-3423, which have been discontinued by the manufacturer and replaced by 172-00031. The old switch has a plastic shaft which can crack with repeated use. The new switch has a metal shaft which fixes the problem. However, the new switch also has smaller electrical terminals, requiring the installation of a new cable, 10-5214B.

Parts Required

512-00114A (KIT,UPGRADE,TABLE SAFETY SWITCHES,SLV)

Units affected

Beta 1, Beta 2, Beta 3, Beta 4, Beta 5, Beta 6, EP1, EP2

Procedure

1) Power off the machine, and push the table towards the back of the machine.
2) Disconnect cable 10-5214A (near the HOME side of the machine) from the base machine cabling.
3) Remove the two OMRON switches and cable 10-5214A.
4) Loosely install the new cable 10-5214B, routing it through the holes and replacing the cable ties, but don't tighten them yet.
5) On the new switches, 172-00031, remove the red plastic faceplate which covers the top of the unit (see Figure 1), and install on the front (see Figure 2).



Figure 1: Default configuration



Figure 2: New configuration

6) Remove the cover on each switch.
7) Install the 16-3933 strain relief in the bottom of the switch.
8) On the AWAY side switch, install the short jumper wire between terminals 11 and 51. See the cable diagram for details.
9) Install the cable ends into the OMRON switches, connect the wires to the appropriate terminals, and replace the covers. Use the cable diagram for reference.
10) Secure the OMRON switches in place using the supplied M4 x 35mm screws.
11) Tighten down all the cable ties.
12) Reconnect the two ends of cable 10-5214B to the base machine cabling.
13) Power on the machine and test the table operation.

100 Label

This upgrade procedure requires a 100 Label change. If the machine doesn't have a 100 Label on it, a blank label has been included in the upgrade kit. See Figure 3.

IF THE MACHINE ALREADY HAS A 100 LABEL ON IT

Fill in position 1 on the 100 Label (see Figure 4 for location) using a black marker.

IF THE MACHINE DOES NOT HAVE A 100 LABEL ON IT

Apply the label and fill in position 1 using a black marker.

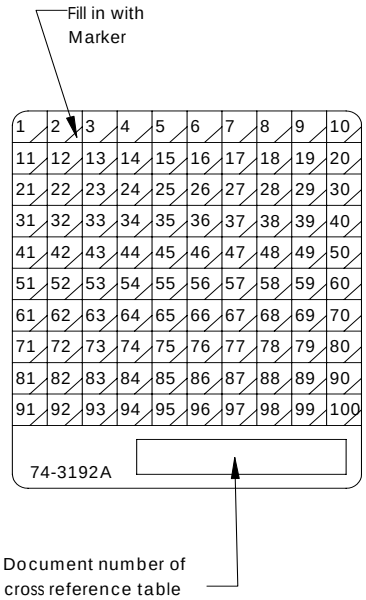
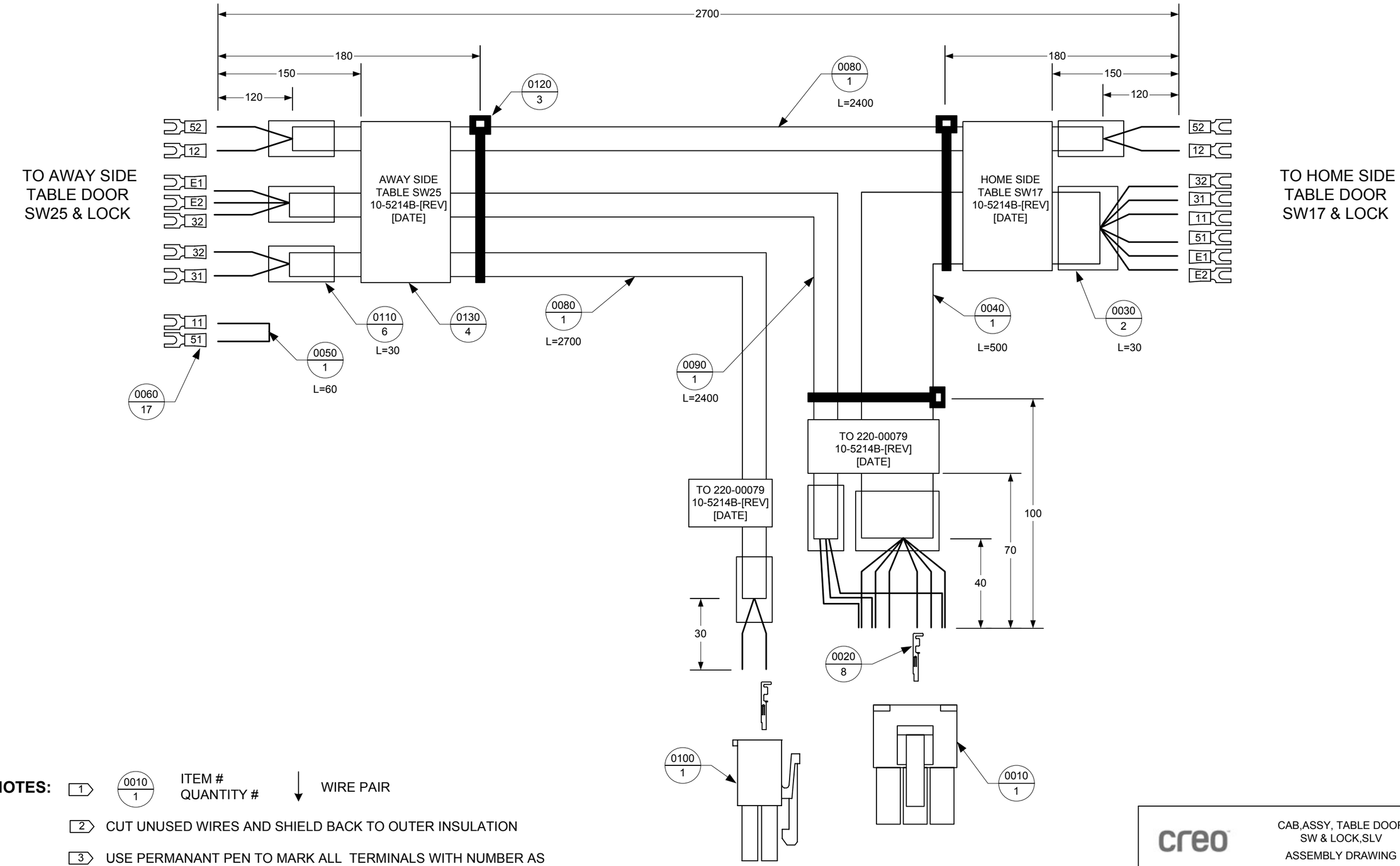


Figure 3: 100 Label



Figure 4: 100 Label Location



NOTES:

1. 0010 / 1 — ITEM # / QUANTITY # ; ↓ WIRE PAIR
2. CUT UNUSED WIRES AND SHIELD BACK TO OUTER INSULATION
3. USE PERMANANT PEN TO MARK ALL TERMINALS WITH NUMBER AS INDICATED IN CABLE SCHEMETIC.
4. TOLERANCE = +/- 20 FOR LENGTHS OVER 1000mm, +/- 10 FOR LENGTHS UNDER 1000mm

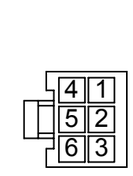
LAST REVISED ON Wednesday, February 25, 2004

creo

CAB,ASSY, TABLE DOOR
SW & LOCK,SLV
ASSEMBLY DRAWING

DESIGNED BY	DRAWN BY		
IAN SKINNER	IAN SKINNER		
MILLIMETERS UNLESS SPECIFIED	DATE: JAN 29, 2004	SIZE: B	SCALE: NTS

PART NO.	REV	DOC	SHEET	OF
10-5214B	— B	AD	1	2



VIEW FROM WIRE ENTRY

TO 220-00079 FLEXTRACK CABLE

1
2
3
4
5
6

HOME DOOR — RED 22 — 32
BLK 22 — 31
WHT 22 — 11
BLK 22 — 51
TABLE LOCK+ — GRN 22 — E1
RTN — BLK 22 — E2

3

GRN 22 — E1
BLK 22 — E2

3

RED 22 — 31
RED 22 — 32
BLK 22 — 32
BLK 22 — 12
RED 22 — 52

3

11
BLU 22
51

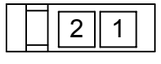
TO AWAY SIDE TABLE DOOR SW17 & LOCK

12
52

BLK 22
RED 22

MECH SAFE — RED 22 — 1
HOME DOOR — BLK 22 — 2

TO 220-00079 FLEXTRACK CABLE



VIEW FROM WIRE ENTRY

3

TO HOME SIDE TABLE DOOR SW17 & LOCK

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