

### **PURPOSE**

This document will provide information regarding the flat cable kit used to interface a crane's festooned flat cable system into a Harrington dual speed Trolley.

### **KIT INFORMATION**

The flat cable kit 70176 will provide a means for connecting to a dual speed trolley's control circuit at connection CN21/INPUT (located on the green circuit board) which provides trolley power, directional and speed inputs. As well, it will provide the necessary hardware to interface with the hoist for directional and speed controls via an in-line plug. This kit will consist of two plug assemblies that will have color coded wires designating their function (see designations below) and bullet connectors will be provided to create a means of quick connection. As well, the kit provides a cable fitting that will accommodate a 4 conductor power supply for gauges 10, 12 and 14 as well as an 8 conductor 14 or 16 gauge control cable.

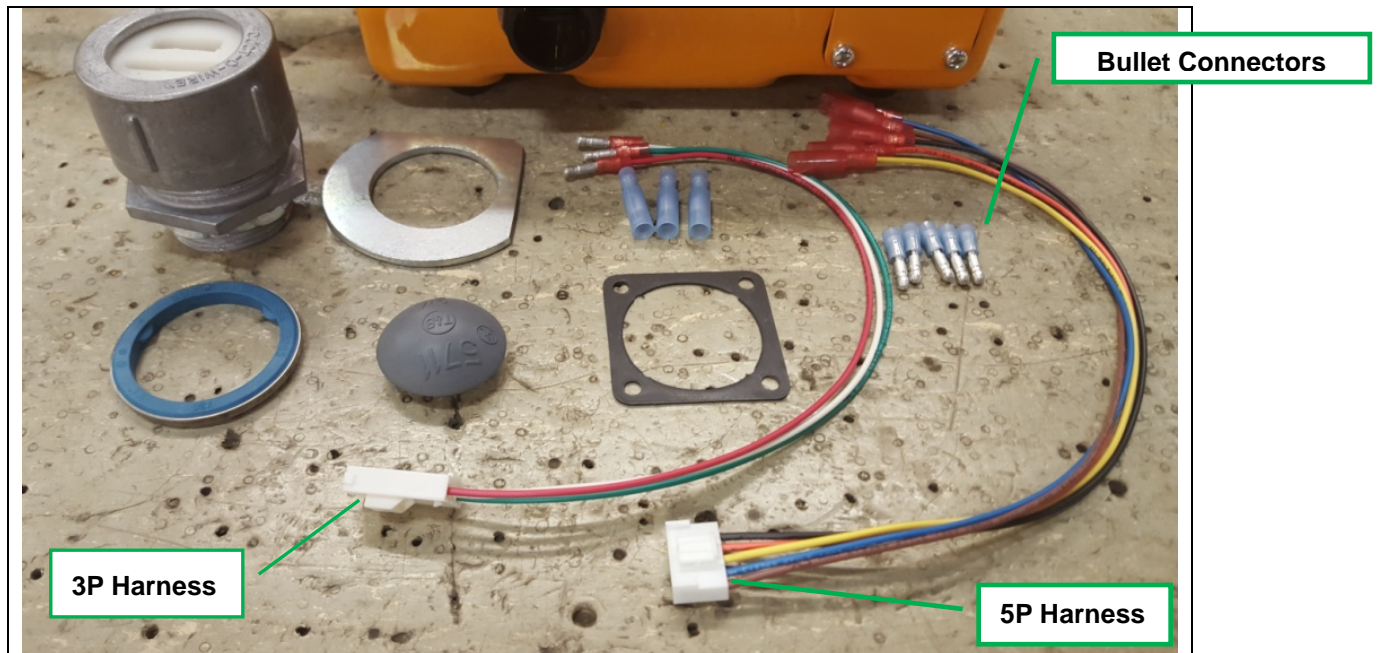


Figure 1

Kit Components (70176)

Note: Dual speed trolley control box not provided with Kit

### **KIT INSTALLATION**

When installing the flat cable kit, the 8 pin socket located on the upper right hand side of the trolley control box must be removed. The cable gland can be installed in either the lower right corner or the upper right hand corner of the control box (Figure 2). The flat cable gland must be installed with the custom washer (see figure 2) and the blue sealing ring should be placed between the custom washer and the cable gland. Then the flat cable power and control circuit should be wired through the cable gland and into the trolley. Next, the included 5P and 3P wiring harnesses should be plugged into their respective mating connectors (see Figures 3 and 4) and attached to the appropriate pendant control wires with the provided bullet connectors. Follow the color designations chart below for control circuit wiring configurations. The pendant may be wired through the black cable fitting (60704) secured to the trolley. Or, the black cable fitting (60704) can be removed and replaced with the provided rubber knock-out plug.

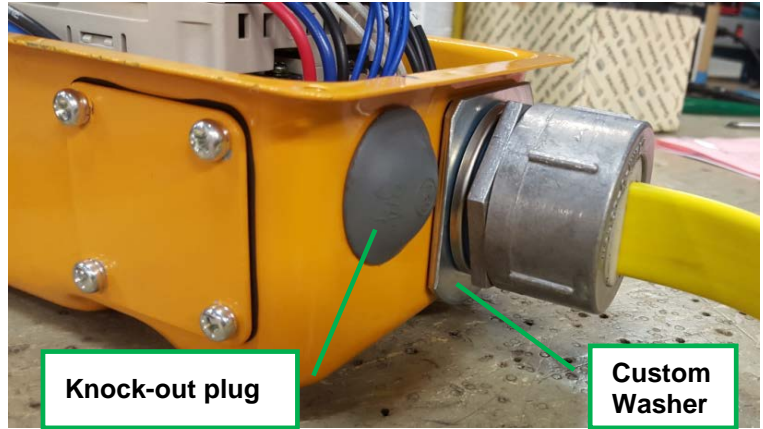
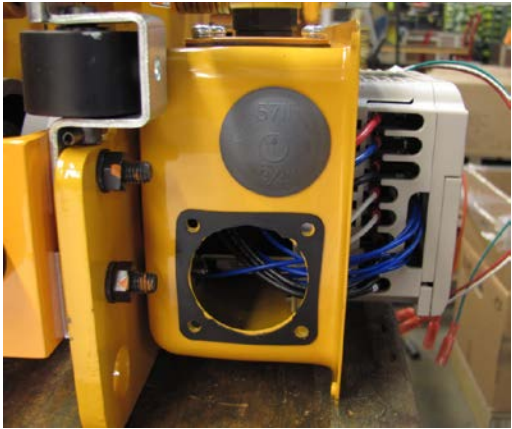


Figure 2

**COLOR DESIGNATIONS**

**5P Plug**

Brown: Trolley forward input.

Blue: Trolley reverse input.

Yellow: Trolley second speed input.

Orange: Trolley 'ON' circuit board power supply.

Black: X1 from Hoist transformer, X1 provides power for above inputs.

**3P In-line Plug** (Below inputs receive control voltage from X1 above)

Red: Hoist lift input.

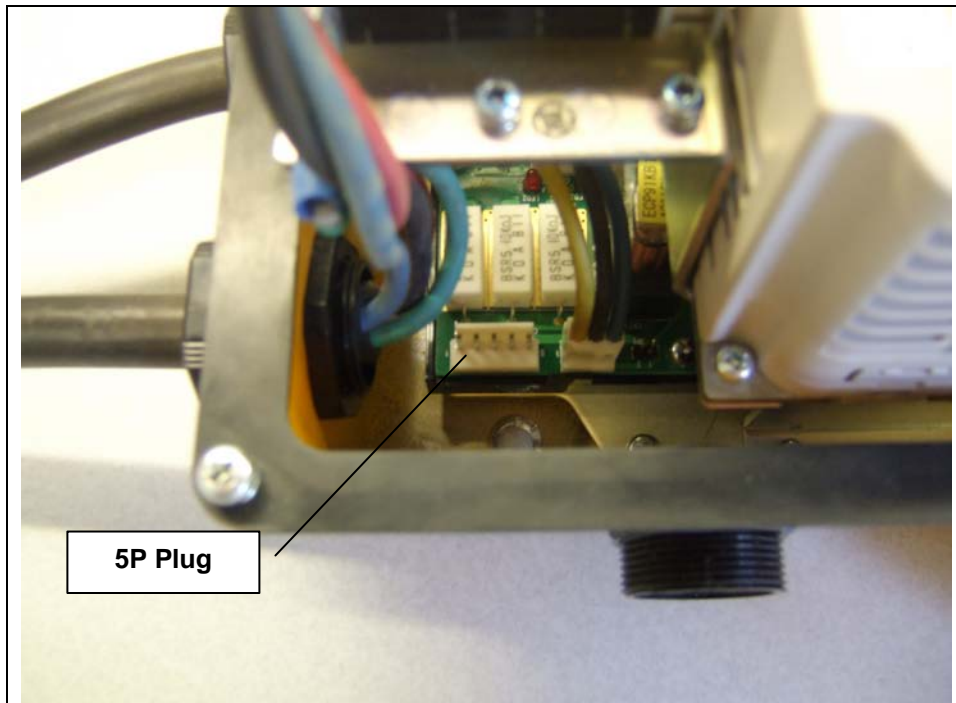
White: Hoist lower input.

Green: Hoist second speed input.

PARTS LIST		
PART NUMBER	DESCRIPTION	QUANTITY
7022704	MODIFIED CORD PACKING	1
60731	SPACER 8C FLAT CABLE CONNECTOR	1
9006517	T&B#5265 1 ¼" SEAL RING	1
FC4/8C	CABLE CONNECTOR	1
9015009	JST YL CONTACT HOUSING, 3P	1
9015106	5P VH N-TYPE CONNECTOR HOUSING	1
9015102	JST VH CONNECTOR CONTACT	5
9015003	JST YL CONNECTOR PIN	3
9006520	T&B 5711 ¾" KNOCK OUT PLUG	1
9012307	MALE BULLET CONNECTOR 18-16GA	3
9012308	FEMALE BULLET CONNECTOR 18-16GA	5
9012318	MALE BULLET CONNECTOR 14GA	5
9012319	FEMALE BULLET CONNECTOR 14GA	3
WIRE: 18AWG, VARIOUS COLORS, LENGTHS		

### **5P Plug**

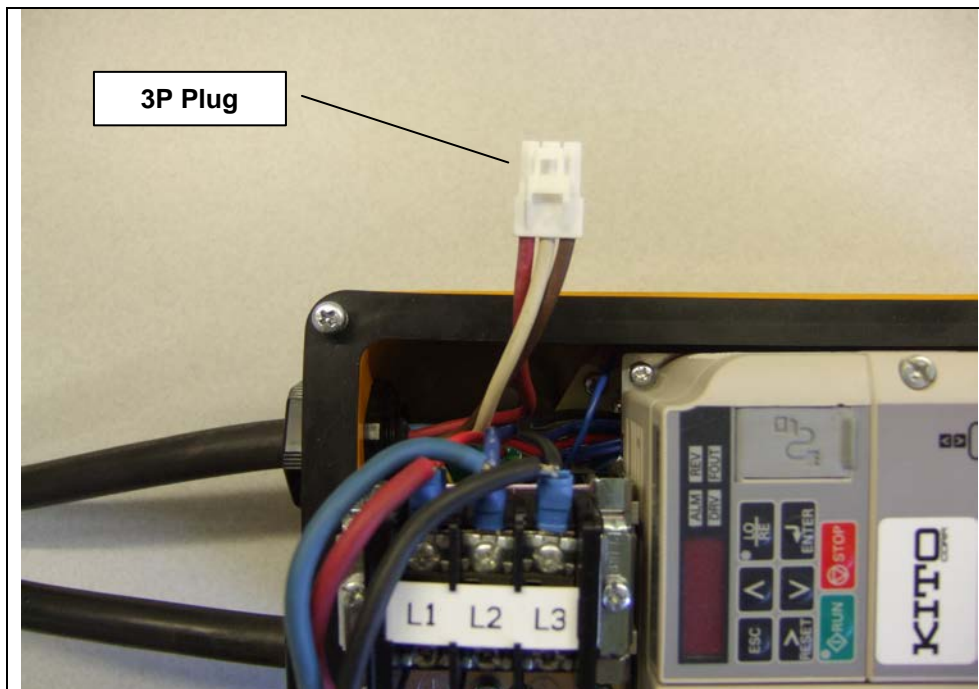
Plug 5 point wiring harness onto trolley circuit board as shown below. Follow the wiring chart (See previous page) for trolley control inputs. Ensure that the clip located on the harness plug is oriented correctly to engage the circuit board pins.



**Figure 3**

### **3P Plug**

Plug 3 point wiring harness into the hoist control plug as shown below, located on the hoist junction cable.



**Figure 4**