

**Installation of cylinder control kit.**

**⚠ WARNING** Do not exceed maximum capacity of the chain container.

Before installing cylinder control kit, reference the parts list (page 7) to confirm that all the parts are in the kit.

1. **⚠ DANGER** Before proceeding, ensure that the electrical supply for the hoist or trolley has been de-energized (disconnected). Lock out and tag out in accordance with ANSI Z244.1 "Personnel Protection -Lockout/Tagout of Energy Sources".
2. **Dual speed hoist pendent socket replacement**
  - 2.1 Open hoist control cover. Unscrew 4 socket head cap screws. Control cover will open by rotating down on the hinges, it may require a slight tap of a rubber hammer. (Inside the cover will be a current schematic for your reference).
  - 2.2 Replace 5-pin socket with 8-pin socket. Unscrew 4 flat head screws that are securing the socket to the hoist.
  - 2.3 Unscrew 3 screws securing the electrical component mounting plate. The mounting plate will open by rotating to the left on the hinges. (This will give you better access for tracing and removing wires).
  - 2.4 Trace the wires from pendent socket to the component it connects to. Use the current schematic inside the cover to confirm wire locations.
  - 2.5 Disconnect wires and remove pendent control socket. (It may be necessary to cut some cable ties for ease of removal).
  - 2.6 Before installing the new 8-pin cylinder control socket, note the differences. The new socket has an (orange) wire that replaces the (gray) and an additional (green/yellow) wire, for grounding the cylinder control handle.
  - 2.7 Install the 8-pin socket; use the new wiring schematic provided with the kit or see (page 9) to route the wires. Wires should be connected to the same locations as 5-pin socket except the orange wire will be used instead of the gray and the green/yellow should attach to the ground screw on the Electrical Component mounting plate.
  - 2.8 Replace the cable ties that were removed.
  - 2.9 Secure Electrical Component mounting plate by rotating back in to position and tightening the screws.
  - 2.10 Attach new electrical schematic inside the control cover.

3 Gear	Drawing No:
ER003SDCC	EWC1J00H01
2 Gear	Drawing No:
ER001HDCC NER001HDCC NER003SDCC	EWC1I00H01

2.11 Close control cover and tighten the screws/bolts.

**3. Single speed hoist pendent socket replacement**

- 3.1 Open hoist control cover. Unscrew 4 socket head cap screws, control cover will open by rotating down on the hinges, it may require a slight tap of a rubber hammer. (Inside the cover will be a current schematic for your reference).
- 3.2 Replace 5-pin socket with the new 5-pin socket provided in the kit. Unscrew 4 flat head screws that secure the socket to the hoist.
- 3.3 Unscrew 3 screws securing the electrical component mounting plate. The mounting plate will open by rotating to the left on the hinges. (This will give you better access for tracing and removing wires).
- 3.4 Trace the wires from pendent socket to the component it connects to. Use the current schematic inside the cover to confirm wire locations.
- 3.5 Disconnect wires and remove pendent control socket. (It may be necessary to cut some cable ties for ease of removal).
- 3.6 Before installing the new 5-pin cylinder control socket, note the differences. The new socket has an additional (green/yellow) wire for grounding the cylinder control handle.
- 3.7 Install the 5-pin socket; use the new wiring schematic provided with the kit or see (page 8) to route the wires. Wires should be connected to the same locations as old 5-pin socket except the green/yellow wire should attach to the ground screw on the Electrical Component mounting plate.
- 3.8 Replace the cable ties that were removed.
- 3.9 Secure Electrical Component mounting plate by rotating back in to position and tightening the screws.
- 3.10 Attach new electrical schematic inside the control cover.

3 Gear	Drawing No:
ER003SDCC	EWC1J00H01
2 Gear	Drawing No:
ER001HDCC NER001HDCC NER003SDCC	EWC1I00H01

- 3.11 Close control cover and tighten the screws/bolts.

- 4 Cable holder installation. (item 14 and 15 on the page 6 and 7) single and dual speed**
- 4.1 Remove cotter and holding pin from Limit Lever pin ass'y.
  - 4.2 Slide lever shaft towards the motor, extension shaft will drop down.
  - 4.3 Slide lever shaft towards the gear case and remove it.
  - 4.4 Use new limit lever pin assembly and spacer (20) (21) that was provided in the kit for mounting existing limit lever and new cable holder "A." Note: new limit lever pin assembly is longer, to provide adequate support for limit lever and Cable Holder "A".
  - 4.5 Install Cable holder as shown on Fig. 1
  - 4.6 Install leveling screw and nut (item: 18, 19. On the parts list).
  - 4.7 Tighten the nut until it touches the cable holder (do not overtighten).
  - 4.8 Attach cable holder "B" (15) to cable holder "A"(14) by using Machine Screws (17) provided in the kit.  
Note: Load chain must pass through the big hole in the Cable Holder "B" (15). (ref. Figure 1)



Figure 1

### 5. Cylinder Control Switch Installation.

- 5.1 Pass the load chain on the load side through a rubber cushion (8).
- 5.2 Attach stopper (9) to 26<sup>th</sup> link and fasten them with socket head bolts.
- 5.3 Pass load chain on the load side through inside of the helical cable. Stretch and remove the curl around 25<sup>th</sup> coil of the helical cable from hook. (ref. Figure 2)

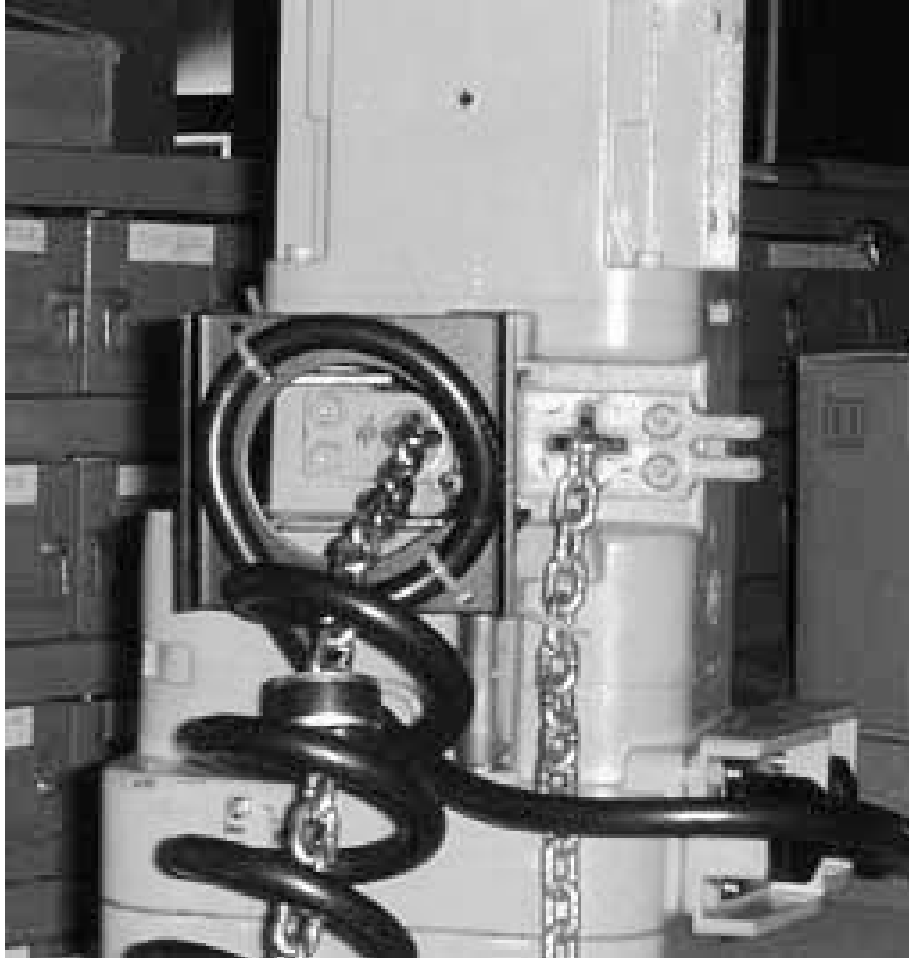


Figure 2

- 5.4 Fix 24<sup>th</sup> coil of the cable to the cable holder by using cable ties (16) in two places, as shown in the Figure 2. (For direct wiring secure 19<sup>th</sup> coil of cable to cable holder).

5.5 Secure the load chain to the cylinder switch with a chain pin (5) slotted nut (6) and cotter pin provided in the kit. Put slotted nut (6) on the right side of the nameplate. (ref. Figure 3)

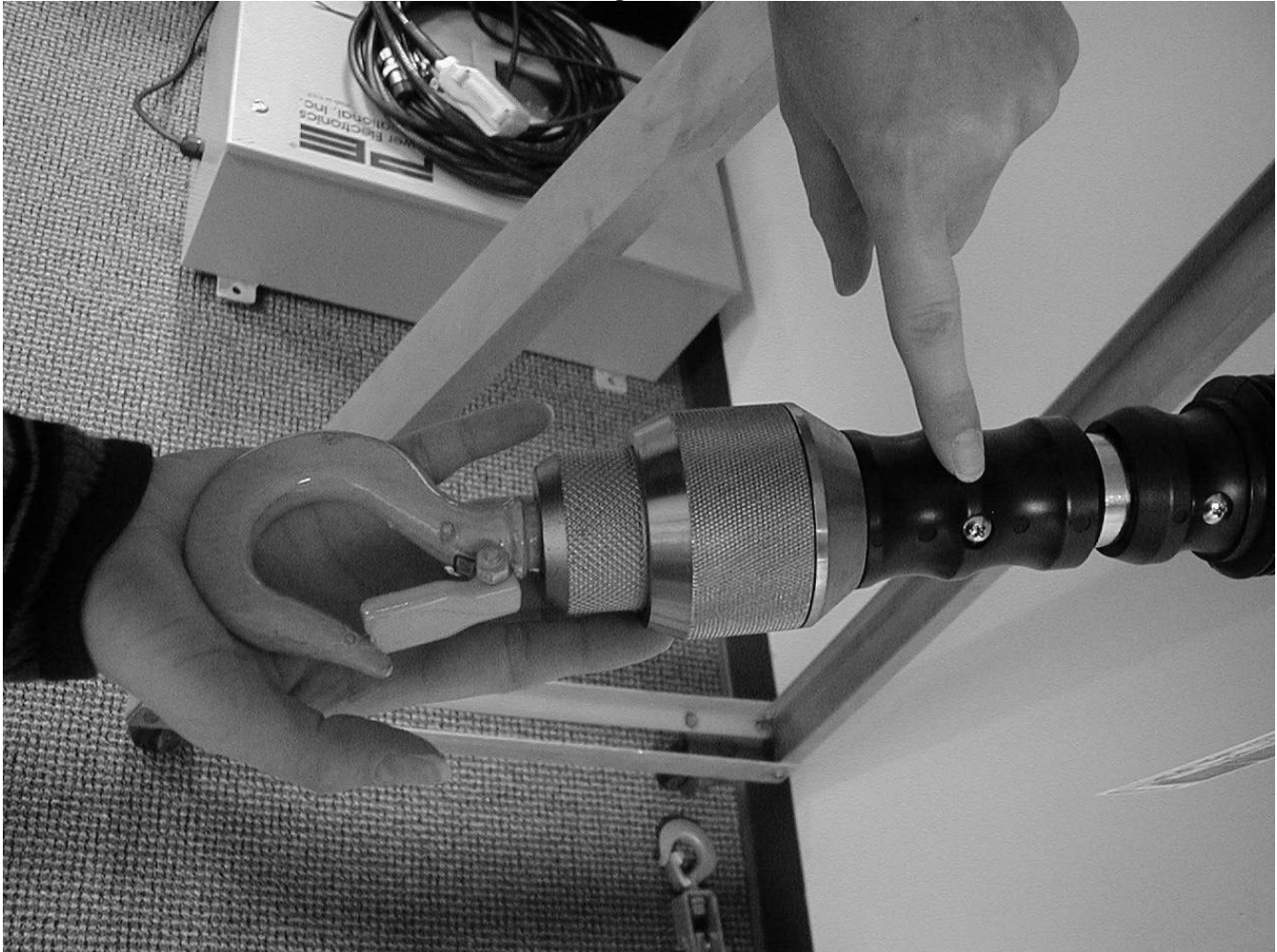


Figure 3

### 6. Detachable fitting "E" installation (3)

6.1 On the handle of cylinder control switch, remove the lower screw (4) as indicated. This will give access to the threaded hole in the handle. (ref. Figure 4)

Figure 4



- 6.2 Slide plastic cover up to expose threaded hole that will be used to secure the hook assembly.
- 6.3 Screw hook assembly into the handle and line up holes in the hook assembly with hole in the handle.
- 6.4 Use a flat head screw provided in the kit to secure the hook assembly from unscrewing.
- 6.5 Slide the plastic cover to original location.
- 6.6 Reinstall flat head screw to secure plastic cover.
- 6.7 Remove existing cushion rubber from the no load side of the chain.
- 6.8 Install a new cushion rubber that was included in the kit.
- 6.9 Attach "CC" label to the hoist label after the code number.

Note: For chain container installation see owner's manual

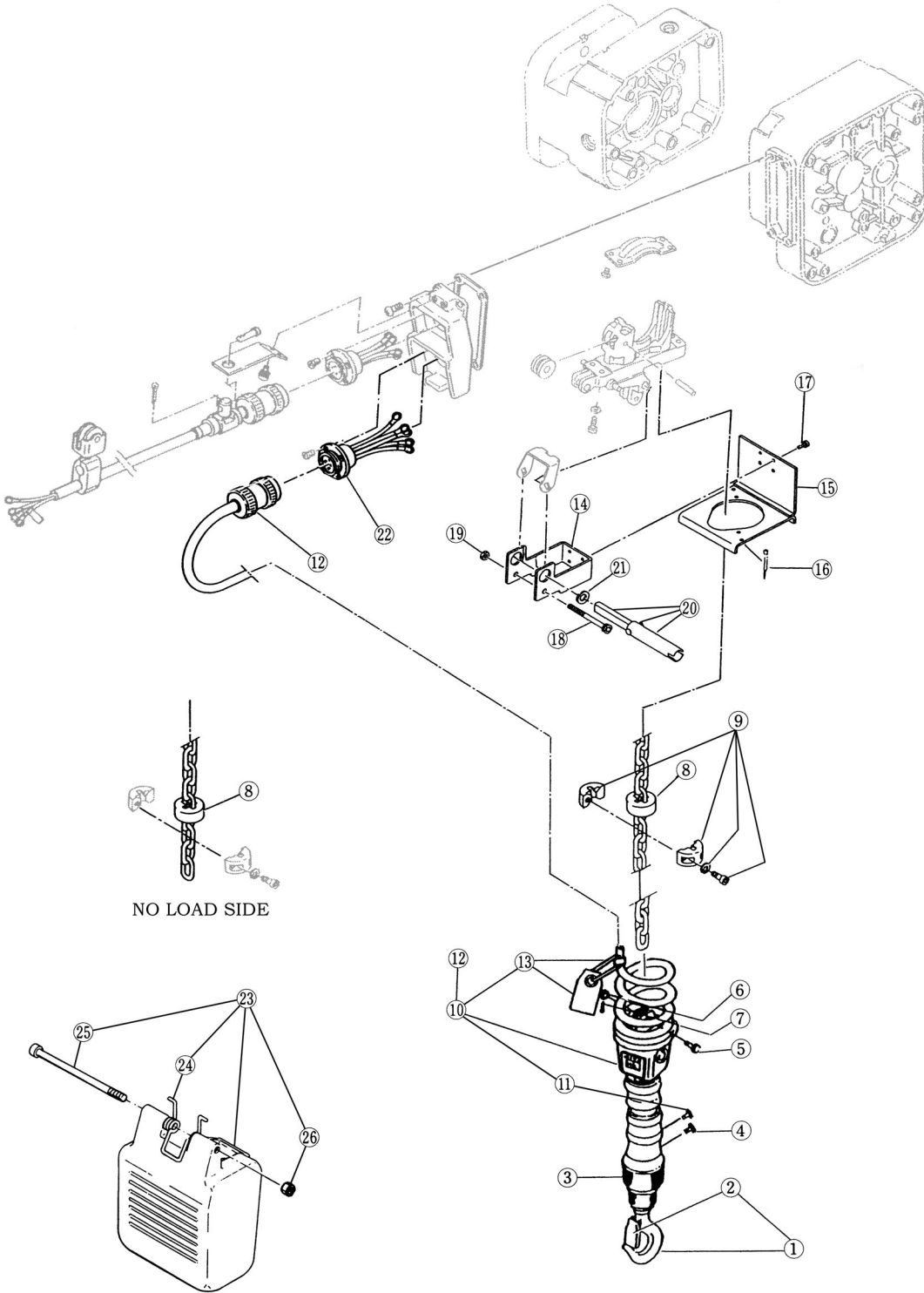
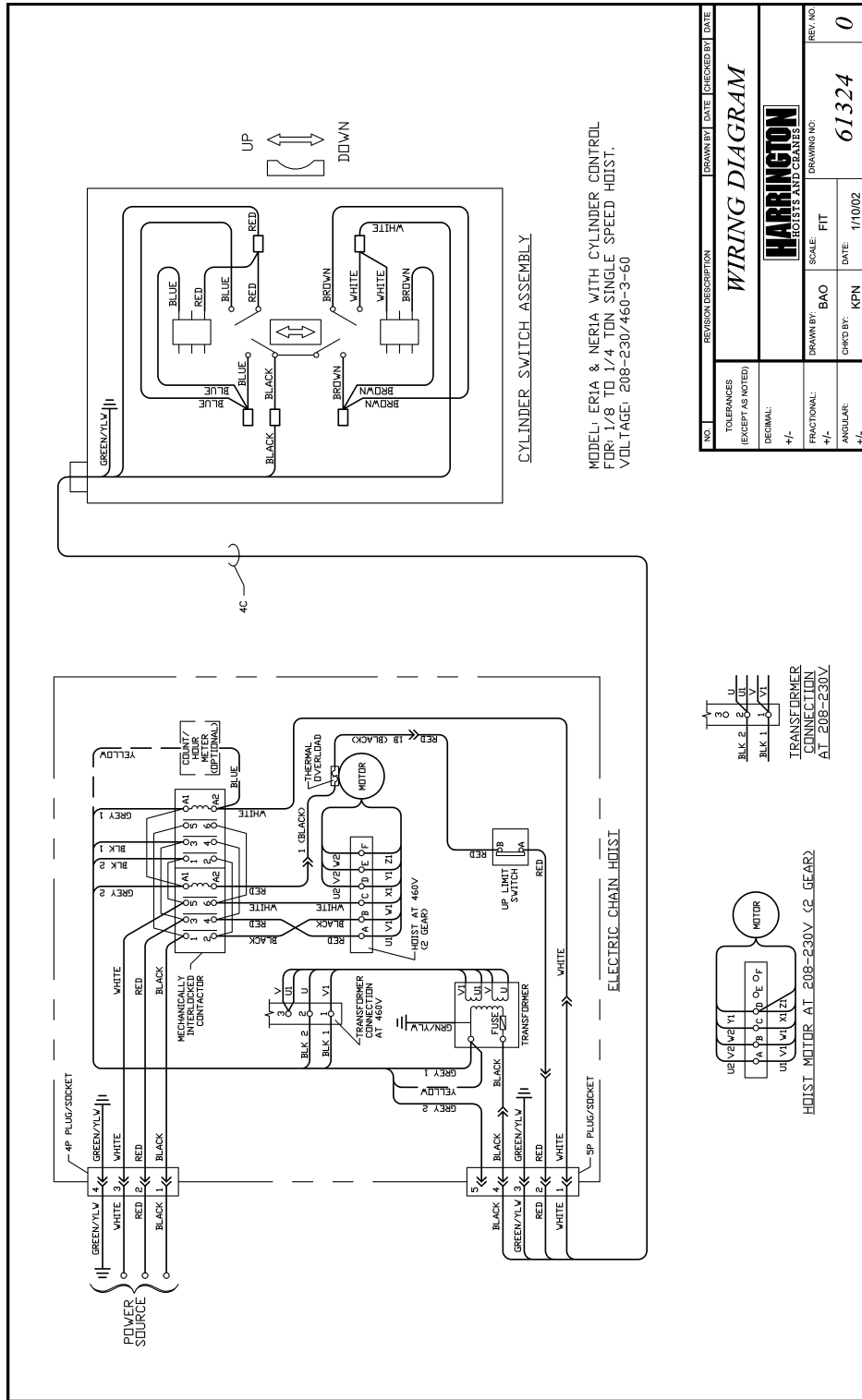


Figure 5

Figure No.	Part Name	Parts per Hoist		Part Number
1	Detachable Hook Assy		1	CD1BI1011
2	Latch Assembly		1	CF071005
3	Detachable Fitting E		1	E2D5041125
4	Flat Head Screw		1	9096528
5	Chain Pin		1	M3041005
6	Slotted Nut		1	M3049005
7	Split Pin		1	9009402
8	Cushion Rubber		2	E5FE003S9046
9	Stopper Assembly		2	ES1045003
10	Cylinder Switch Set	S	1	C10013H1020
		D	1	C20013H1020
11	Truss-Head Screw		1	TRUSSM4X10
12	5P Plug	S	1	ES613003
	8P Plug	D	1	ESM538010
13	Warning Tag		1	WTAG7
14	Cable Holder A		1	CD1BS9750
15	Cable Holder B		1	CD1BS9751
16	Cable Tie		2	9006602
17	Machine Screw w/Spring Washer		4	MS554010
18	Socket Bolt		1	9091259
19	Lever Nut		1	ES855003
20	Limit Lever Pin Assembly		1	CD1BS2757
21	Spacer		1	CD1BS9758
22	5P Socket	S	1	CD1BS1564
	8P Socket	D	1	CD1BB1564
23	Chain Container Kit		1	PBK-B
24	Chain Container Spring		1	ER1BS9416
25	Socket Bolt		1	JIBE10816513
26	Lever Nut		1	ES857005S





NO.		REVISION DESCRIPTION		DRAWN BY	DATE	CHECKED BY	DATE
TOLERANCES (EXCEPT AS NOTED)							
DECIMAL:							
FRACTIONAL:							
ANGULAR:							
SCALE		FIT		DATE		REV. NO.	
DRAWN BY: BAO		FIT		1/10/02		61324	
CHKD BY: KPN						0	

**WIRING DIAGRAM**

**HARRINGTON**  
HOISTS AND CRANES

