
OWNER'S MANUAL

LOAD LIMITER for ER2 and NER2 SERIES ELECTRIC CHAIN HOIST

1/8 Ton through 5 Ton Capacity

⚠ WARNING

This equipment should not be installed, operated or maintained by any person who has not read and understood all the contents of this manual. Failure to read and comply with the contents of this manual can result in serious bodily injury or death, and/or property damage.

HARRINGTON
HOISTS AND CRANES

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1.0 Important Information and Warnings

1.1 Terms and Summary

1.1.1 Definition of Terms

This manual provides important information for personnel involved with the installation, operation and maintenance of this product. Although you may be familiar with this or similar equipment, it is strongly recommended that you read this manual before installing, operating or maintaining the product.

Danger, Warning, Caution and Notice

Throughout this manual there are steps and procedures that can present hazardous situations. The following signal words are used to identify the degree or level of hazard seriousness.

⚠ DANGER Danger indicates an imminently hazardous situation which, if not avoided, **will** result in **death or serious injury**, and property damage.

⚠ WARNING Warning indicates an imminently hazardous situation which, if not avoided, **could** result in **death or serious injury**, and property damage.

⚠ CAUTION Caution indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury** or property damage.

NOTICE Notice is used to notify people of installation, operation, or maintenance information which is important but not directly hazard-related.

1.1.2 Warnings

⚠ WARNING

The equipment covered by this manual is a Load Limiter for use with Harrington's ER2/NER2 electric chain hoists. It is the responsibility of the owner/user to ensure that the Load Limiter is used in accordance with this manual, and the Owner's Manual for the ER2/NER2 and any other appropriate manuals.

⚠ DANGER


HAZARDOUS VOLTAGES ARE PRESENT IN THE CONTROL BOX, OTHER ELECTRICAL COMPONENTS, AND CONNECTIONS BETWEEN THESE COMPONENTS.

Before performing ANY mechanical or electrical maintenance on the equipment, de-energize (disconnect) the main switch supplying power to the equipment; and lock and tag the main switch in the de-energized position. Refer to ANSI Z244.1, "Personnel Protection – Lockout/Tagout of Energy Sources".

Only trained and competent personnel should inspect and repair this equipment.

1.2 Product Overview

The product covered by this manual is Harrington's Load Limiter (LL) for use with Harrington's ER2/NER2 Series of electric chain hoists. The LL is an optional accessory that employs a load sensing device and electric switch. Actuation causes the hoist's lifting circuit to be disabled, while still allowing the hoist to be used in the lower mode. The purpose of the LL is to protect the hoist from damage associated with lifting loads that exceed the hoist's capacity.

 WARNING The Load Limiter does not prevent loads greater than the hoist's rated capacity from being applied to the hoist. The Load Limiter functions only to prevent lifting a load that exceeds the hoist's rated capacity. It does not indicate or prevent the application of such loads. The Operator of the hoist must ensure that the load applied does not and will not exceed the hoist's rated capacity. The principle is illustrated by the following:

A one ton hoist equipped with a Load Limiter is used to lift an empty container weighing 500 lbs. While suspended from the hoist, the container is filled full. After filling is completed, the container weighs 2,500 lbs., which exceeds the 2000-lb. rating of the hoist. The load limiter will not indicate or prevent this condition. It will only prevent lifting the filled container higher.

2.0 Technical Information

2.1 Product Identification

Table 2-1 LL Identification	
Hoist Capacity Code*	Load Limiter Type
001H	01H
003S	03S
003H	03H
005L	05S
005S	
010L	10S
010S	
015S	15M
020L	20S
020S	
025S	25M
030C	30S
050L	50R

*Refer to ER2, NER2 Owner's Manual.

2.2 Specifications

Adjustable Range: 90% to 135% of hoist's rated capacity

Accuracy: +/- 8% of setting

Factory Set: 115% of hoist's rated capacity

Enclosure Rating: IP55

2.3 Dimensions

2.3.1 Load Limiter

Table 2-2 Load Limiter Dimensions											
<p>The image contains four technical drawings of load limiter components. The first drawing shows a side view with dimensions a, b, 2.15, 4.49, 2.32, 2.28, and 2.40. The second drawing shows a top view with dimensions d, c, 2.76, and e. The third drawing shows a side view with dimensions a, b, 2.38, 4.49, 2.32, 1.38, and 2.56. The fourth drawing shows a top view with dimensions d, c, 2.76, and e. A label 'LL type' with an arrow points to a component in the top views.</p>											
Load Limiter Type	01H	03S	03H	05S	10S	15M	20S	25M	30S	50R	
Dimensions (in)	a	0.94							0.39	0.47	
	b	0.83							0.47	0.51	
	c	7.60							7.81	7.93	
	d	0.48							0.43	0.51	
	e	0.43							0.43	0.51	
Weight (lb)	9.26					9.48			9.70		

2.3.2 Hoist

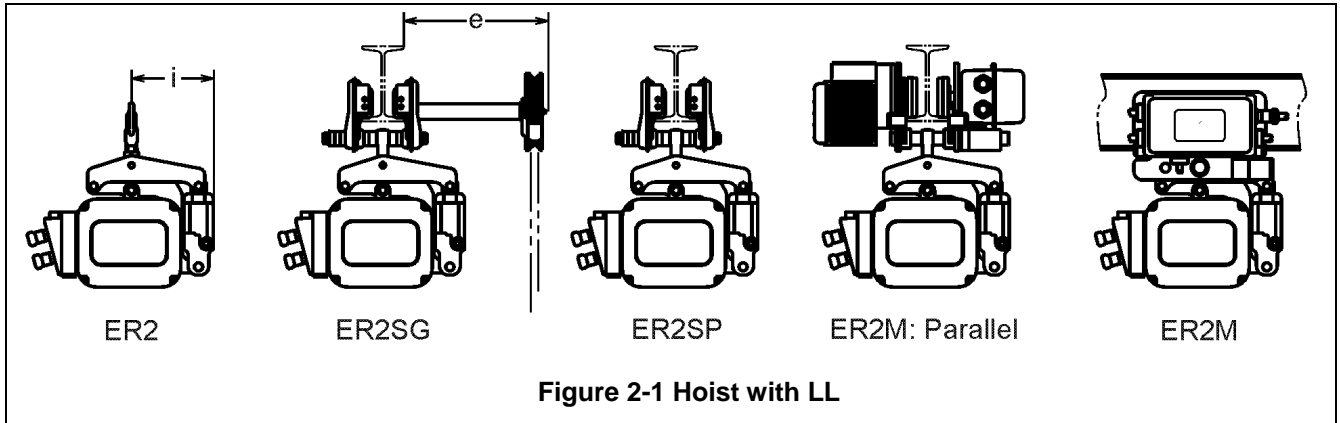


Table 2-3 Comparison to Standard Model (Without Load Limiter)																																	
Hoist Cap	Capacity (Tons)	Additional Weight* (lb)					Additional Headroom (in)					Additional i (in)	Additional e (in)																				
		ER2	ER2G	ER2P	ER2M Parallel Susp.	ER2M Standard Susp.	ER2	ER2G	ER2P	ER2M Parallel Susp.	ER2M Standard Susp.																						
001H	1/8	+21.5					+22.5					+3.98	+7.32																				
003S	1/4													+4.32	+2.05		+0.68																
003H	1/4											+21.5					+22.5					+3.48											
005L	1/2																					+21.5					+22.5					+3.50	
005S																																+4.33	+1.97
010L	1	+21.5					+22.5					+3.03																					
010S												+4.13	+2.17		+0.59																		
015S	1 1/2	+31.7					+35.2					+3.05	+9.63																				
020L	2													+31.7					+35.2					+3.05									
020S												+6.50												+3.15		+3.15							
025S	2 1/2	+29.5					+34.6					+2.85	+9.67																				
030C	3	+9.8					-					+0.36	-																				
050L	5											+9.8					-					+0.26											

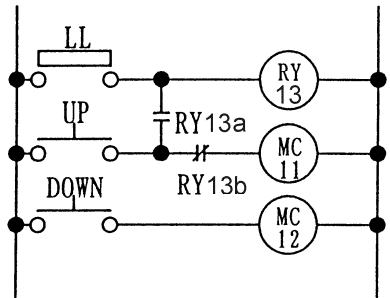
* Additional weight is an approximate measurement.

2.4 Principle of Operation

Refer to Section 5.0 Parts List for diagram and parts names.

When a load is applied between the Plunger and the Casing, the Plunger acts to compress the Belleville Spring. As the spring compresses, the Adjuster mounted on the Plunger Arm moves toward the Switch. If the load is great enough, the spring will compress enough for the Adjuster to actuate the Switch. When the Switch is actuated, it breaks the hoist's lifting contactor control circuit.

2.5 Electrical Circuit



LL --- Load Limiter Switch
RY13 --- Self-hold relay
MC11 --- Lifting contactor coil
MC12 --- Lowering contactor coil

Note: MC contactors are mechanically interlocked.

Figure 2-2 LL Electrical Circuit

When the load applied to the hoist exceeds the setting of the LL, the LL's Switch will actuate. When the LL Switch actuates, its contacts close. This energizes RY13. When RY13 energizes, contact RY13a closes latching RY13, and RY13b opens disabling MC11. This interrupts the control circuit for the lifting contactor coil MC11, which prevents any further lifting. The lowering contactor coil is unaffected by this, and lowering the load is still possible.

3.0 Installation

3.1 Load Limiter and Suspension Plate

- 3.1.1 **1/8 to 2 1/2 Ton* ER2/NER2** – For installation of the LL, LL Suspension Assembly is used instead of the Standard Suspension Assembly. Install the LL Assembly as follows:

For 025S, follow the instruction in section 3.1.2 when removing the top hook (refer to Figure 3-3). After the removal of the top hook, follow the instruction below (beginning with step 5).

- 1) Refer to Fig. 3-1**.
- 2) Remove the Shaft Retainer Clip from the two Connection Shafts.
- 3) Remove the Socket Bolt from the Shaft Retainer.
- 4) Remove the two Connection Shafts.
- 5) Remove the Top Hook and replace it with the LL Suspension Assembly.
- 6) Re-insert the two Connection Shafts, so that both pass through the main body and the shaft holes of the LL Suspension Assembly.
- 7) Re-install the Shaft Retainer, Socket Bolt, and Shaft Retainer Clip.
- 8) Attach the LL to the LL Suspension Assembly with the Yoke Bolt, Slotted Nut, Split Pin, Chain Pin, Plain Washer, Slotted Nut, and Split Pin. .
- 9) For hook mounted hoists install the Top Hook onto the Suspension Plates. For Connection Yoke/Suspender mounted hoists, install the suspender onto the Suspension Plates. Note the Connection Yoke is no longer required.
- 10) Pass the LL Cable over the hoist body on the control cover side of the suspension plate as shown in Figure 3-2.

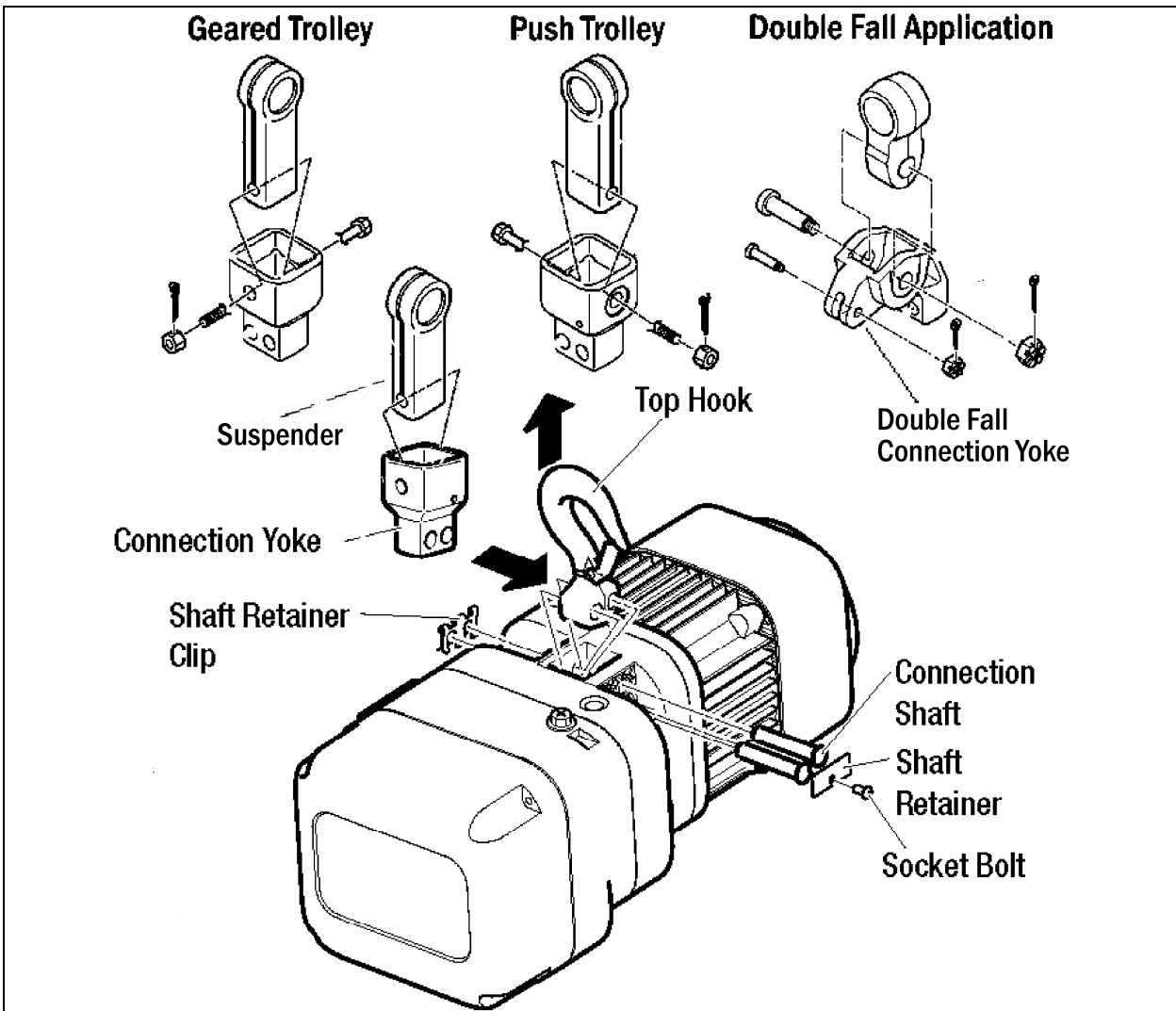


Figure 3-1 Installation of Standard Suspension Assembly for ER2 (1/8 Ton – 3 Ton Except 2 1/2 Ton)

For installation of the LL, LL Suspension Assembly is used instead of the Standard Suspension Assembly shown above.

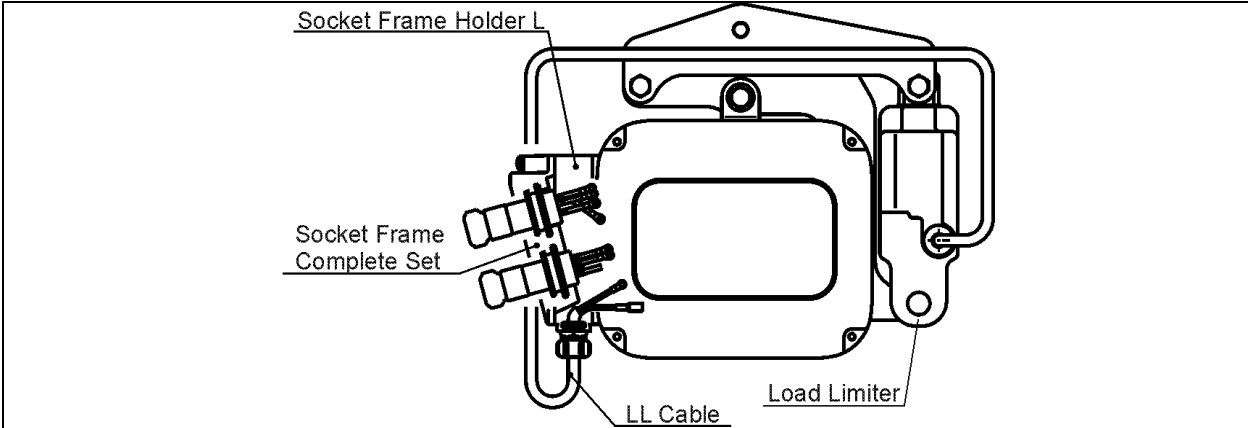
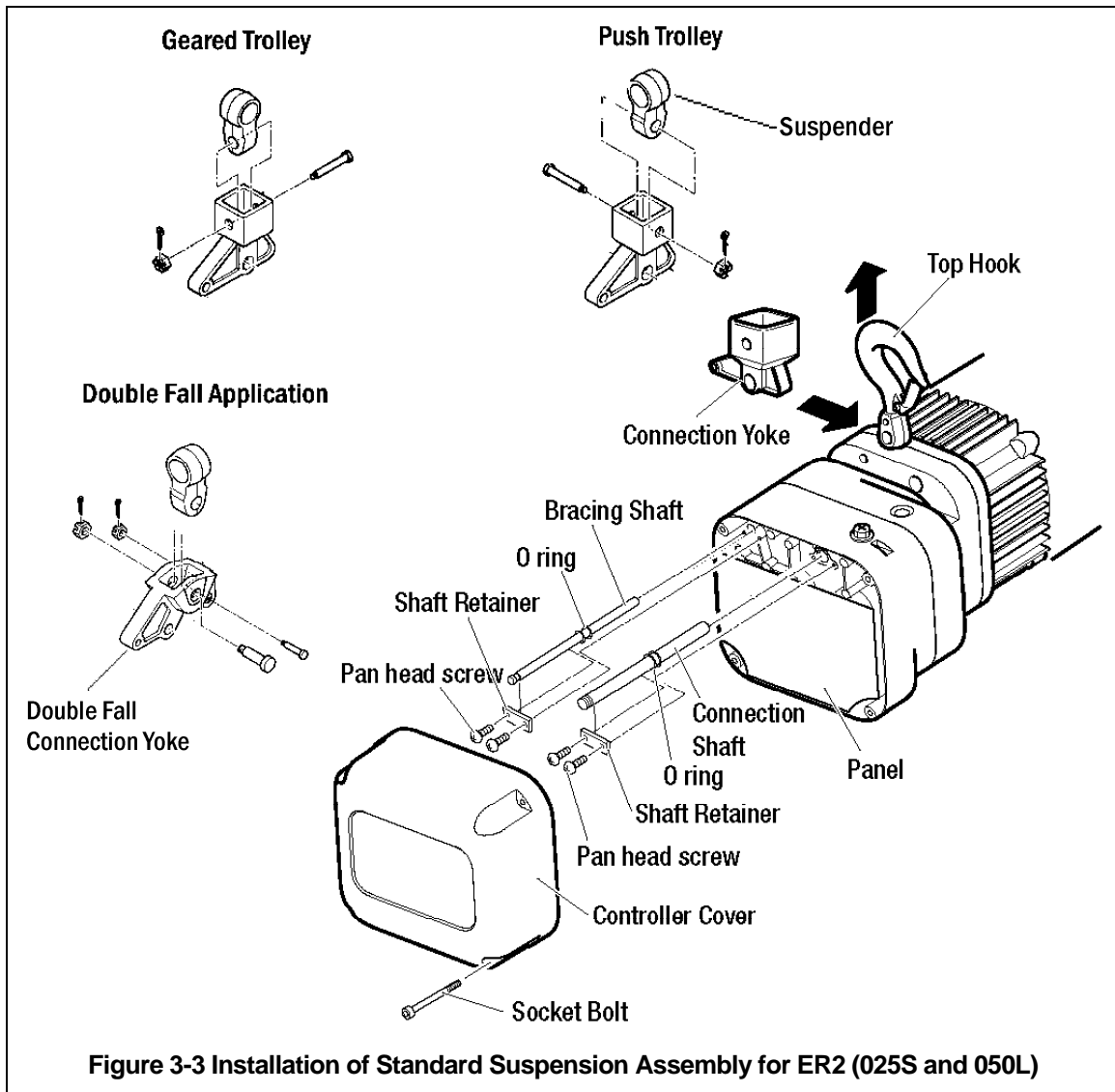


Figure 3-2 LL Cable Placement

3.1.2 **3 to 5 Ton ER2/NER2** – These applications retain the standard suspension configuration. LL Suspension Plates and LL Connection Yokes are not required. The LL is installed between the hoist's Connection Yoke and the Load Chain as follows:

****For 030C, follow the instruction in section 3.1.1 when removing the top hook (refer to Figure 3-1). After the removal of the top hook, follow the instruction below (beginning with step 9).****

- 1) Refer to Fig. 3-3* and 3-4.
- 2) Remove the four Socket Bolts that hold the Controller Cover to the hoist body. Now the Controller Cover can be lowered and left to hang by the cover belt.
- 3) Remove the four pan head screws and the two Shaft Retainers. This will allow the Bracing Shaft and the Connection Shaft to be removed by sliding them out of the hoist body.
- 4) With the Connection Shaft and Bracing Shaft removed, the Top Hook can be removed and replaced with the appropriate Connection Yoke.
- 5) Re-insert the Connection Shaft and Bracing Shaft ensuring both pass through the Connection Yoke flange.
- 6) Fix the Connection Shaft and Bracing Shaft with their respective Shaft Retainer and pan head screws.
- 7) Install appropriate Suspender for the application, securing it to the Connection Yoke with the Yoke Bolt, Slotted Nut, and Slit Pin. **Note: (See Fig. 3-3) Double Fall applications require a Chain Pin, small Slotted Nut, and small Split Pin, in addition to the Yoke Bolt, Slotted Nut, and Split Pin.**
- 8) Re-install Controller Cover with the four Socket Bolts.
- 9) Remove the split pin, slotted nut and chain pin that connect the Load Chain to the Connection Yoke.
- 10) Bolt the LL to the Connection Yoke, orienting the LL Case Cover toward the hoist motor.
- 11) Connect the Load Chain to the LL using the Chain Pin, Slotted Nut and Split Pin. Make sure that the load chain is not twisted. Make sure that the Bottom Hook is not capsized (refer to Figure 3-5 and 3-6 in section 3-2 of the ER2 and NER2 Owner's Manual)
- 12) Remove the Chain Stopper from the load Chain 8 links below the LL. This Stopper is not used when the hoist is equipped with the LL. The other Chain Stopper, on the no-load end of the Load Chain, is still needed. Do NOT remove the Chain Stopper from the no-load end of the Load Chain!
- 13) Pass the LL Cable over the hoist body on the control cover side of the suspension plate as shown in Figure 3-2. Keep the electrical component mounting Plate free and control cover open for the installation of the Socket Frame Holder L and to make the necessary electrical connections.



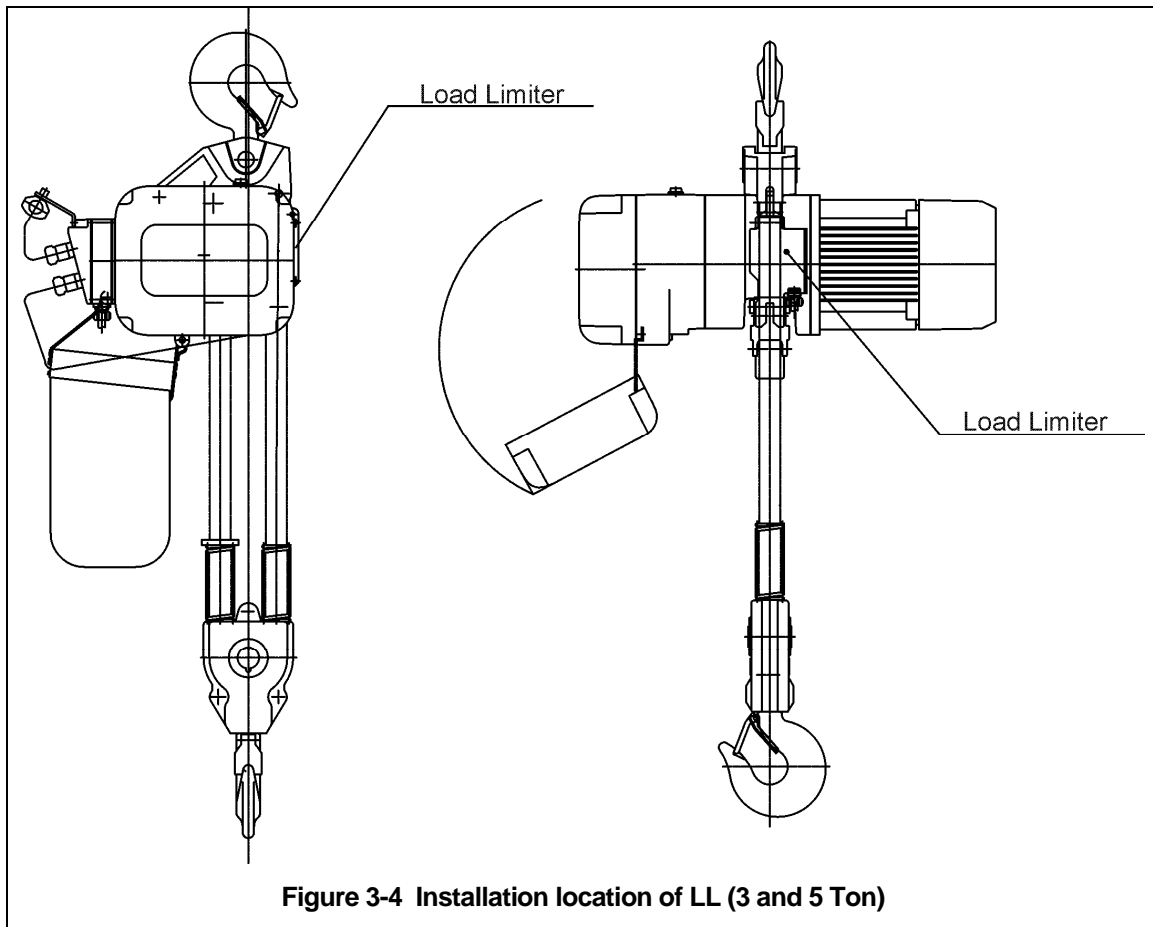
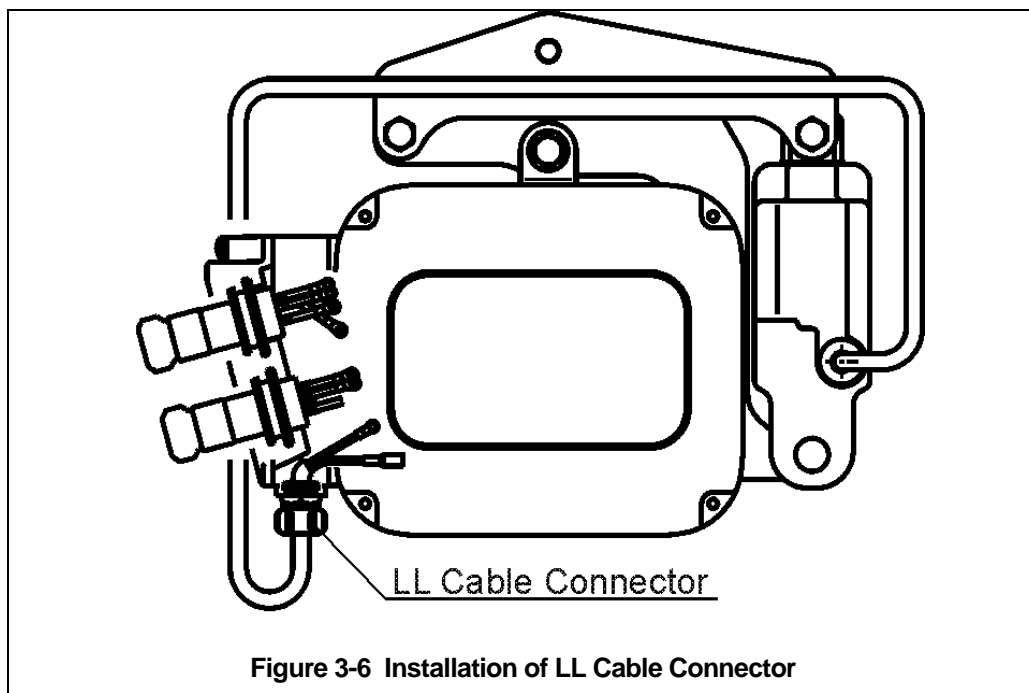
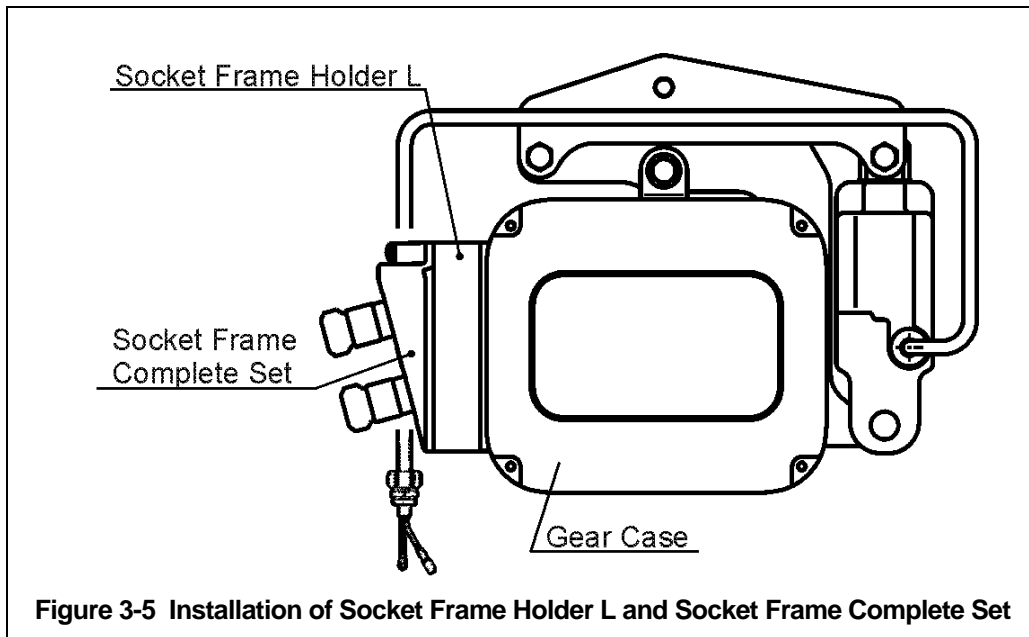


Figure 3-4 Installation location of LL (3 and 5 Ton)

3.2 Socket Frame holder and Load Limit Relay

3.2.1 The Socket Frame Holder L mounts between the Socket Frame Complete Set and the Gear Case. Refer to Figures 3-5 and install as follows:

- 1) Remove the Socket Frame Complete Set with 4 & 8 Pin Socket Assemblies by:
 - a) Disconnecting the leads coming from the both Socket assemblies.
 - b) Remove the socket frame mounting screws.
- 2) Install the Socket Frame Holder L and the Socket Frame Complete Set supplied with the Load Limiter Kit. This Socket Frame Complete Set has longer leads required to make the electrical connections. Be sure to place the packing/gaskets between the Gear Case and Socket Frame Holder L, and between the Socket Frame Holder L and Socket Frame Complete Set.
- 3) Attach the LL cable to the Socket Frame Holder L. Refer to Figure 3-6.



3.2.2 Install the Load Limiter Relay as follows:

- 1) Refer to Figure 3-7 for the location of installation. Be sure to review Figure 3-8 for the correct orientation of LL Relay.
- 2) Refer to Figure 3-9 or 3-10 for the electrical connection of LL Relay.

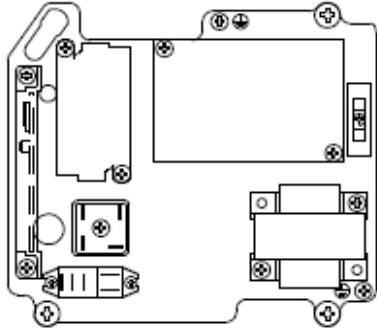
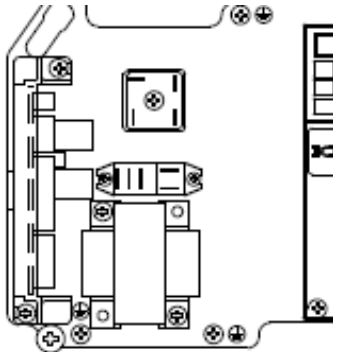
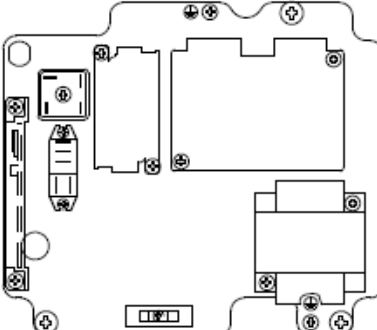
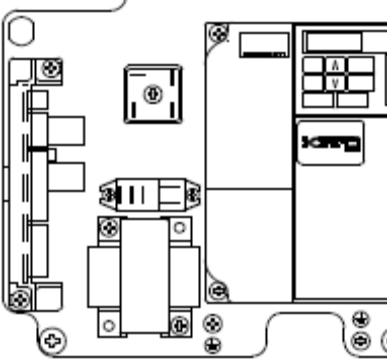
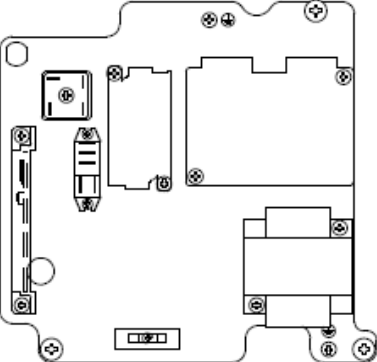
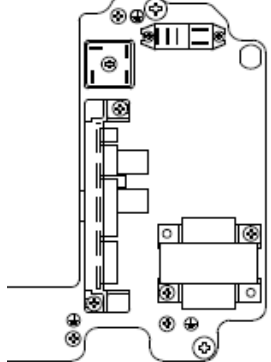
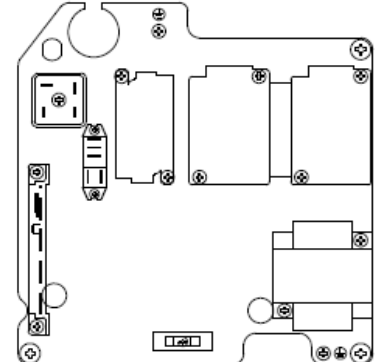
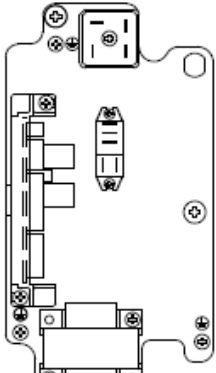
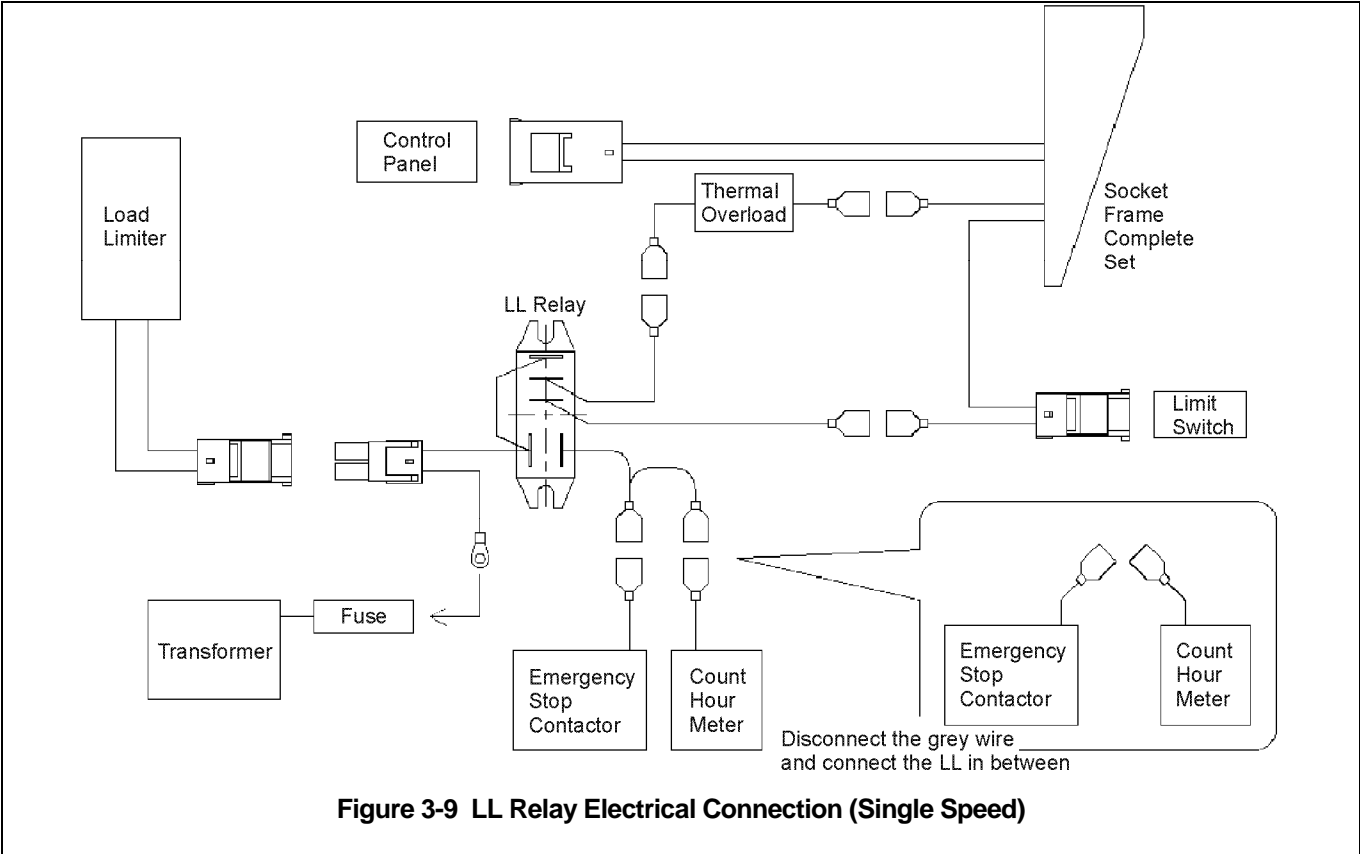
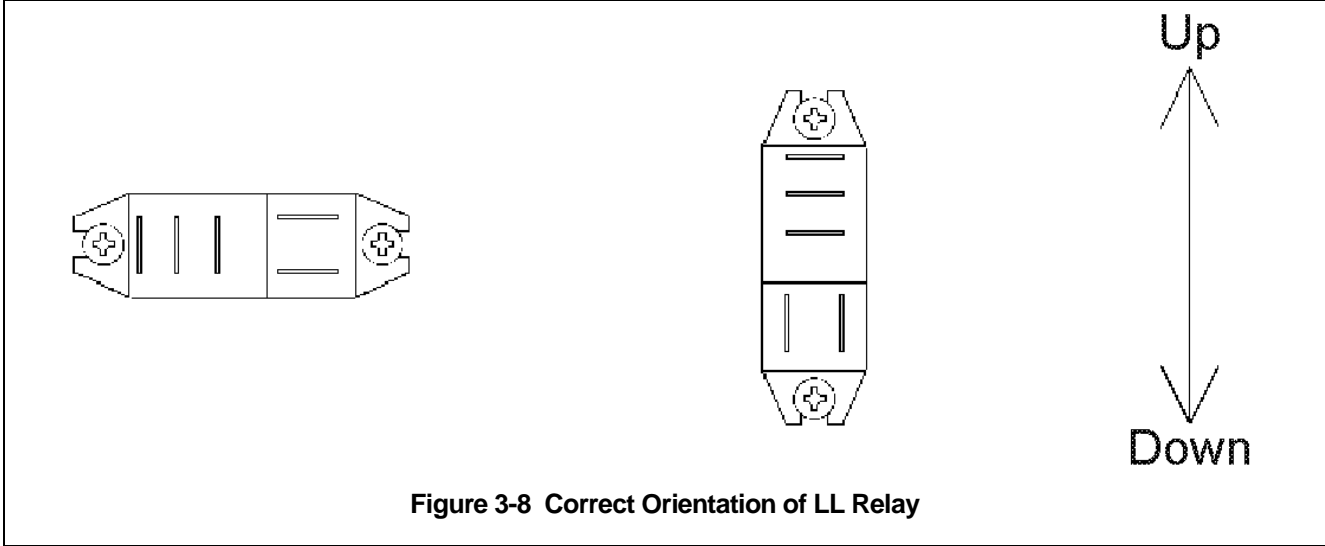
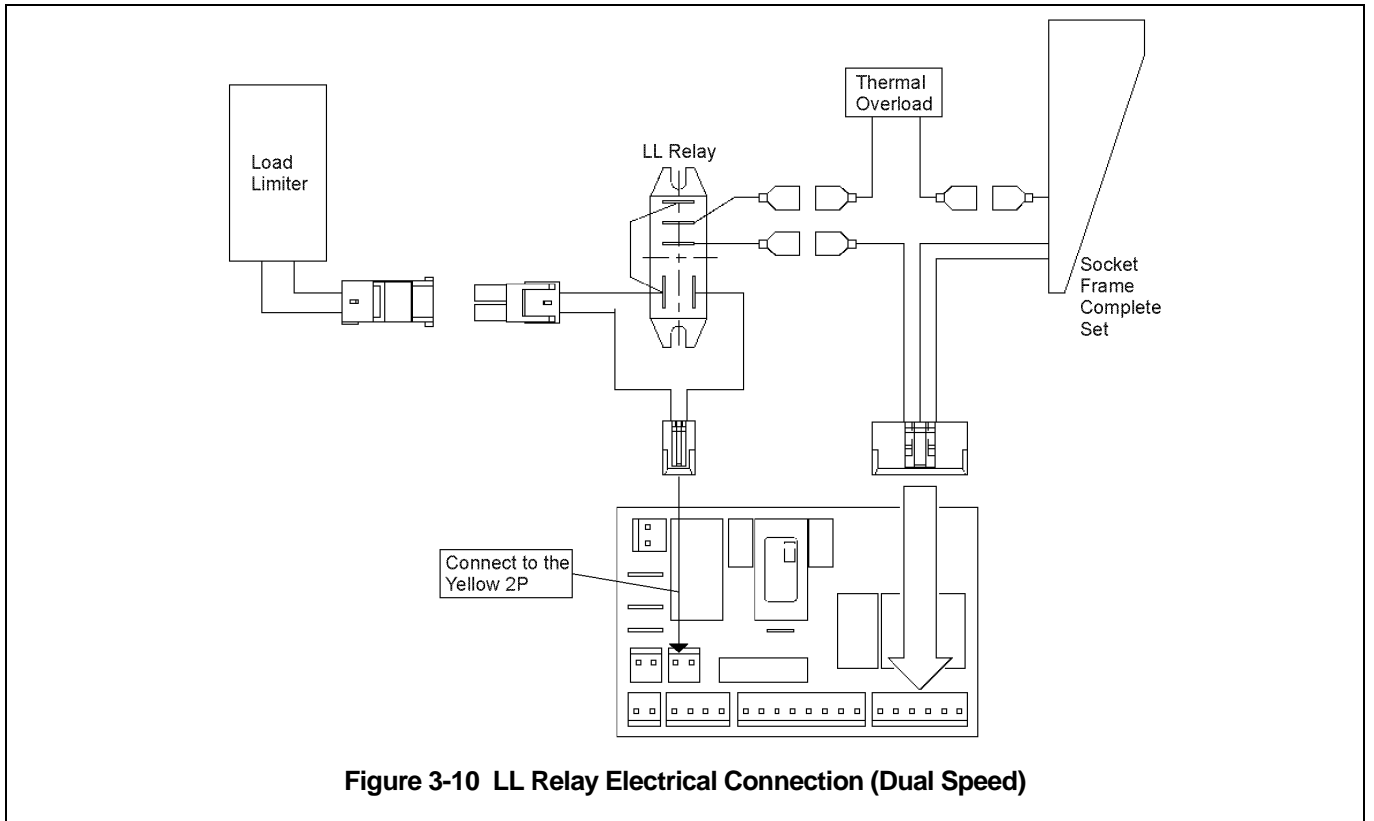
Model	Single Speed	Dual Speed
B	 <p>Diagram showing the placement of the LL Relay in a Single Speed configuration for Model B. The relay is located in the lower right quadrant of the control panel.</p>	 <p>Diagram showing the placement of the LL Relay in a Dual Speed configuration for Model B. The relay is located in the lower right quadrant, with additional components on the right side.</p>
C	 <p>Diagram showing the placement of the LL Relay in a Single Speed configuration for Model C. The relay is located in the lower right quadrant.</p>	 <p>Diagram showing the placement of the LL Relay in a Dual Speed configuration for Model C. The relay is located in the lower right quadrant, with a terminal block on the right side.</p>
D	 <p>Diagram showing the placement of the LL Relay in a Single Speed configuration for Model D. The relay is located in the lower right quadrant.</p>	 <p>Diagram showing the placement of the LL Relay in a Dual Speed configuration for Model D. The relay is located in the lower right quadrant.</p>
E, F	 <p>Diagram showing the placement of the LL Relay in a Single Speed configuration for Models E and F. The relay is located in the lower right quadrant.</p>	 <p>Diagram showing the placement of the LL Relay in a Dual Speed configuration for Models E and F. The relay is located in the lower right quadrant.</p>

Figure 3-7 Placement of LL Relay





3.3 Electrical Connections

- 3.3.1 Refer to wiring diagram for ER2/NER2 71023 and 71024, provided here for basic single and dual speed hoist connections. For other applications, refer to the diagram provided with the hoist or system. Refer to figure 3-13 for installation of LL wiring diagram.
- 3.3.2 After confirming all electrical connections are made correctly, reassemble the hoist making sure that wires are not pinched.

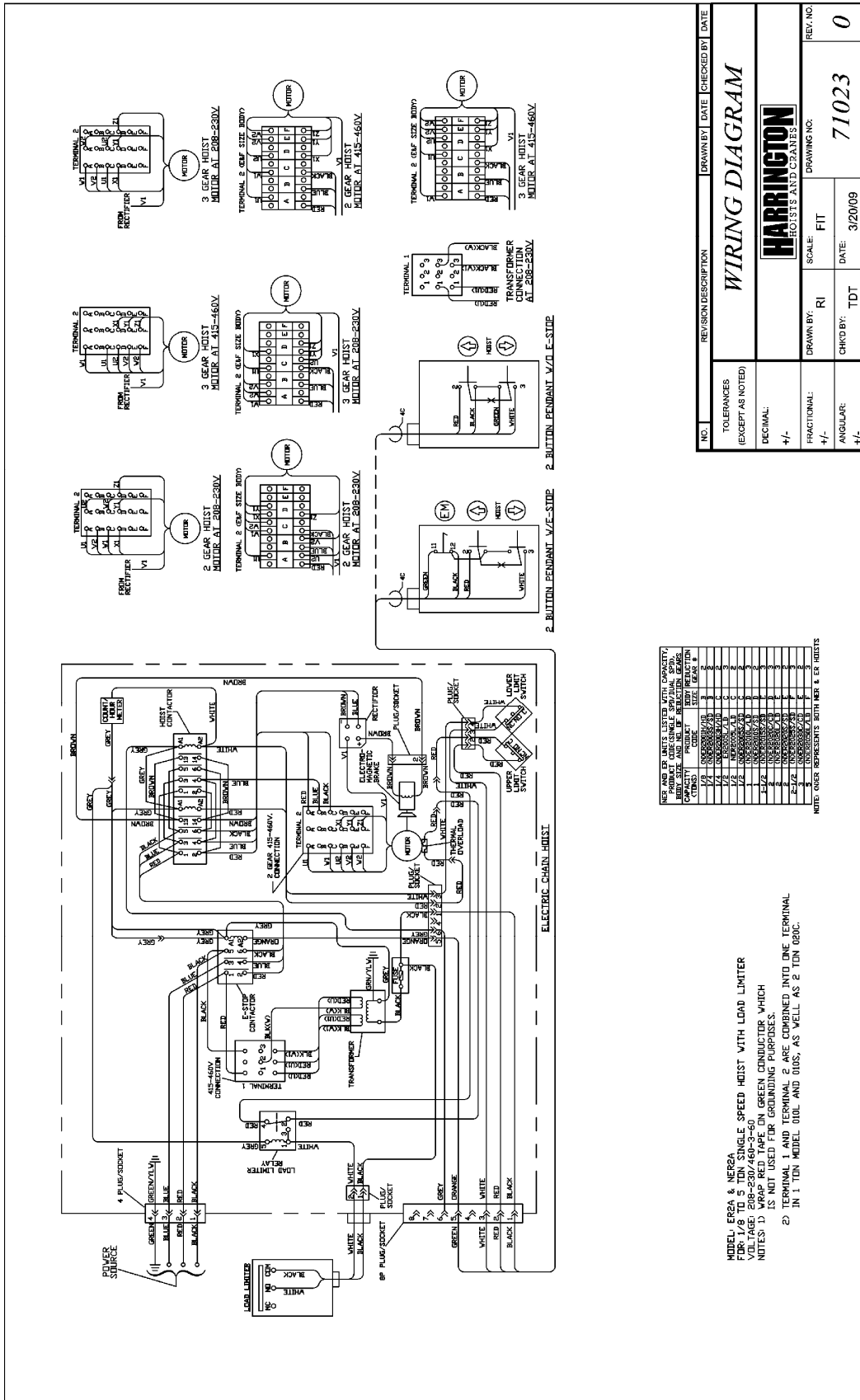
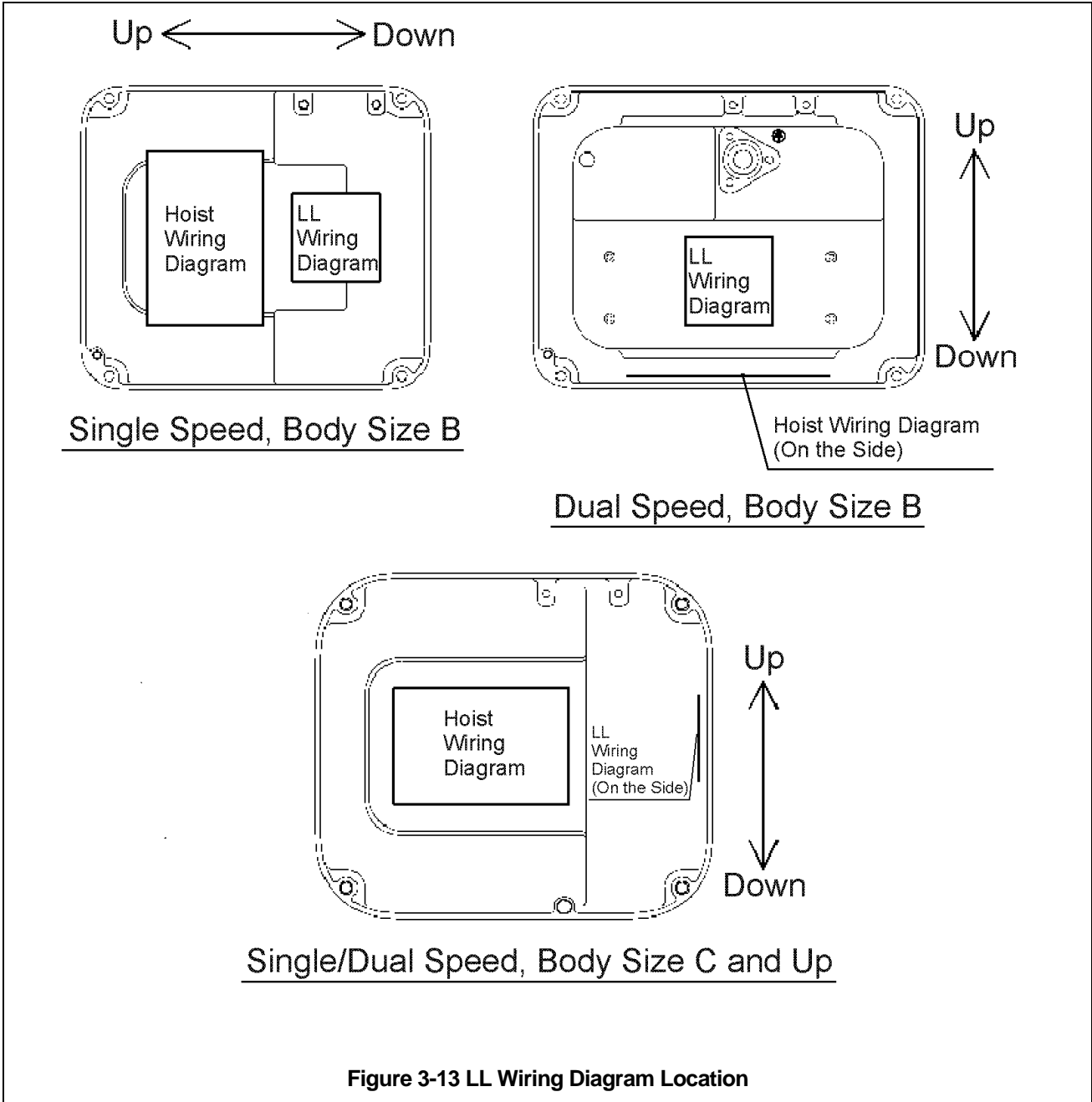


Figure 3-11 Single Speed Wiring Diagram



3.4 Performance Test

Confirm via load testing that the LL actuates within approximately +/- 8% of its setting.

4.0 Adjustment

4.1 General:

The general sequence for adjusting is to determine the Static Set Load (SSL), then use the SSL to adjust the Load Limiter (LL).

4.2 Determine Static Set Load

4.2.1 General

The general formula for determining the SSL is

$$SSL = RC \times SP \times f$$

Where

RC is Rated Capacity of either LL or hoist. (see sections 4.2.2 or 4.2.3)

SP is the percentage of the hoist's rated capacity at which the LL is to actuate (Factory set at 1.15%)

f is the Dynamic Load Factor to account for small load increases due to acceleration while lifting.

4.2.2 Prior to Load Limiter installation:

If the LL is to be adjusted prior to installation on the hoist, then determine SSL using f and the LL's RC from Table 4-1.

4.2.3 After Load Limiter installation:

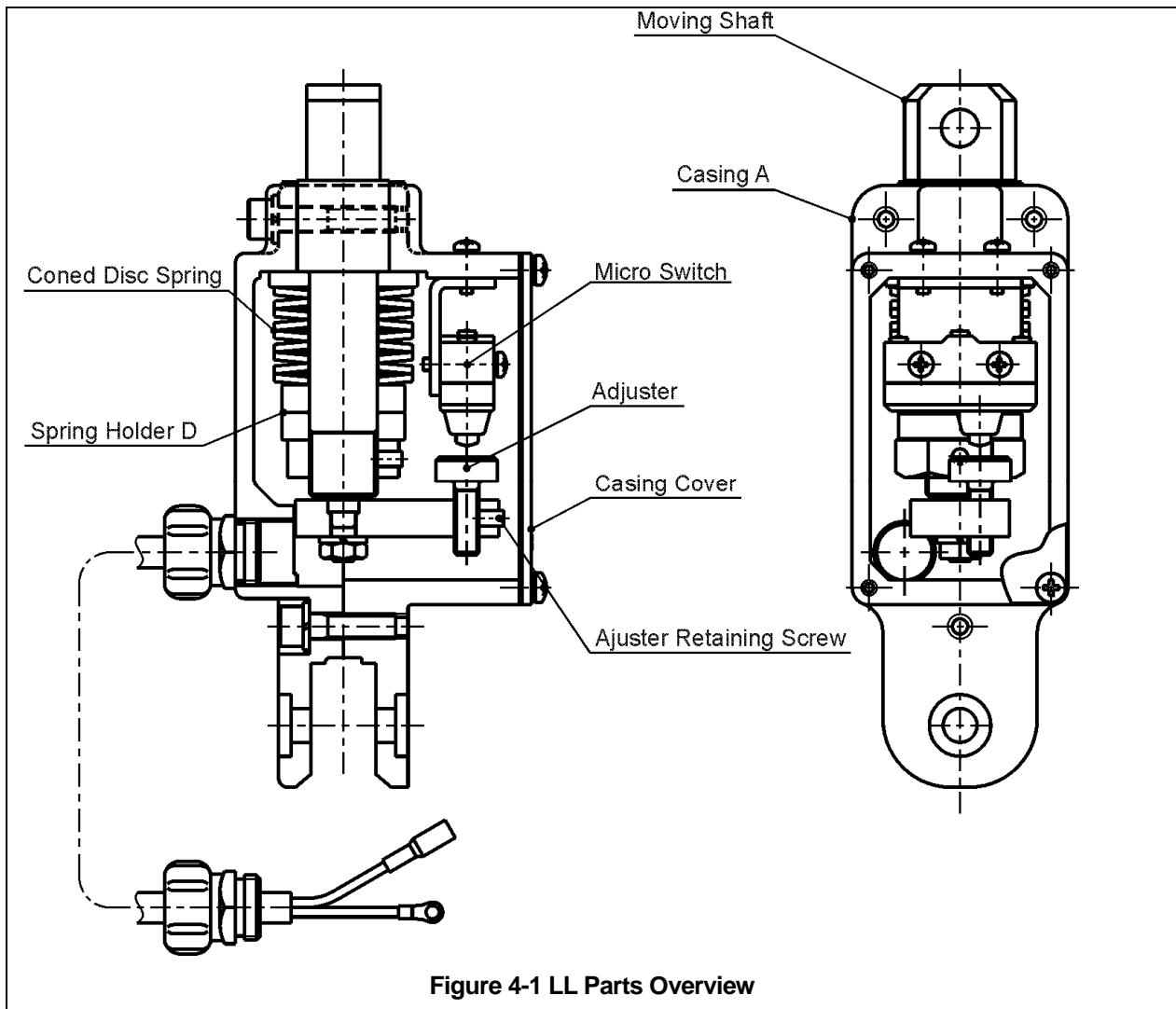
If the LL is to be adjusted after installation on to the hoist, then determine the SSL using f and the hoist's RC from Table 4-1.

Hoist Capacity Code*	Load Limiter Type	Rated Capacity		f
		LL (lbs.)	Hoist (Tons)	
001H	01H	176	1/8	1.55
003S	03S	331	1/4	1.45
003H	03H	375		1.64
005L	05S	595	1/2	1.30
005S				
010L	10S	1190	1	1.30
010S				
015S	15M	1279	1 1/2	1.14
020L	20S	1962	2	1.32
020S				
025S	25M	2359	2 1/2	1.27
030C	30S	4145	3	1.09
050L	50R	6945	5	1.10

*Refer to ER2/NER2 Owner's Manual.

4.3 Adjust the Load Limiter

- 4.3.1 Refer to Figure 4-1.
- 4.3.2 Remove the LL's case cover.
- 4.3.3 Loosen the setscrew with a hex wrench and Rotate the adjuster clockwise to obtain a sufficient gap between the adjuster and the electrical switch plunger.
- 4.3.4 Apply the Static Set Load determined in section 4.2 above.
- 4.3.5 Rotate the adjuster counter clockwise until the electrical switch is activated or clicks to make contact. A circuit tester may be used to verify the making of contact.
- 4.3.6 Tighten the setscrew to lock the adjuster to the plunger arm.
- 4.3.7 Test the LL setting. Place a test load equivalent to the Set Point Load ($RC \times SP$) on the floor directly beneath the hoist. Connect the load to the hoist's bottom hook such that there is no slackness in the hoist's load chain. Operate the hoist in the up direction to verify that the Load Limiter actuates and prevents the hoist from lifting the load. Readjust if necessary.
- 4.3.8 Replace the casing cover.



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5.0 Parts List

5.1 Internal Parts List

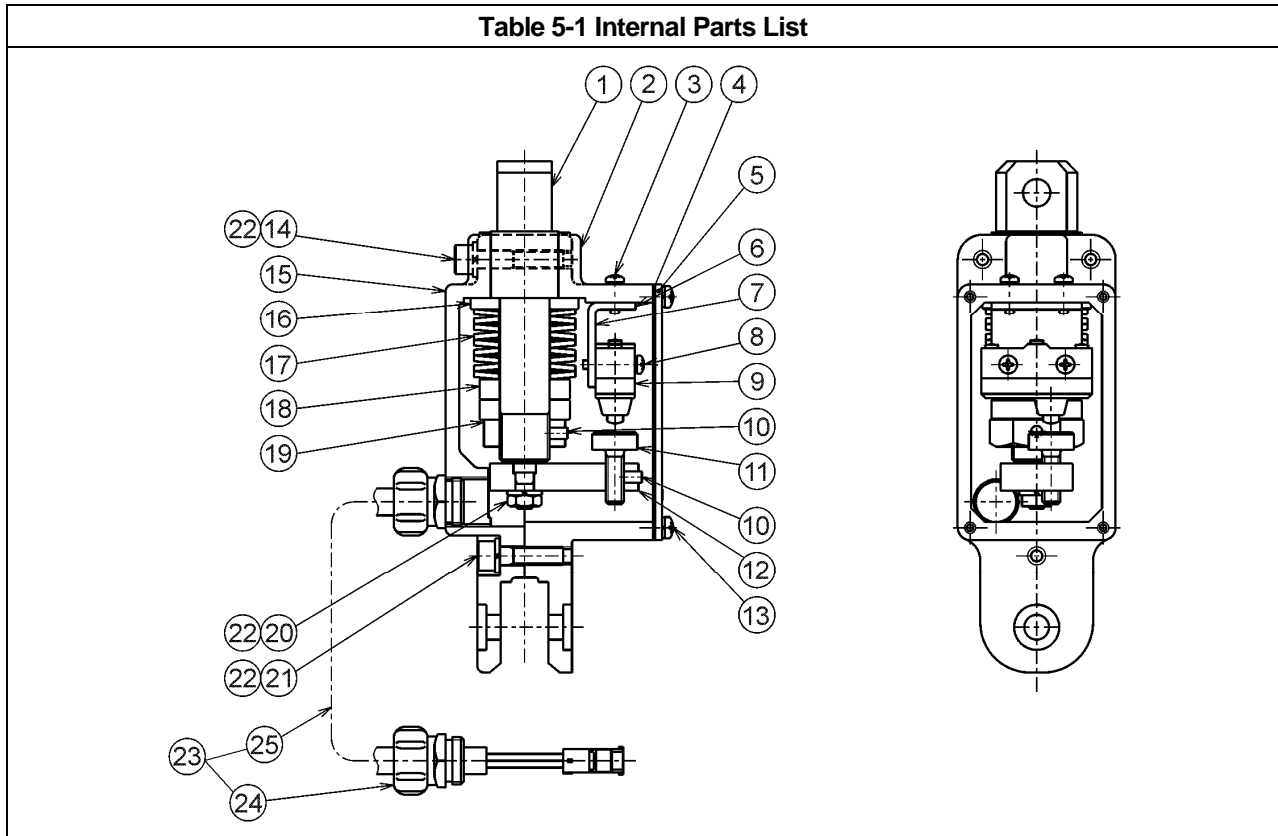
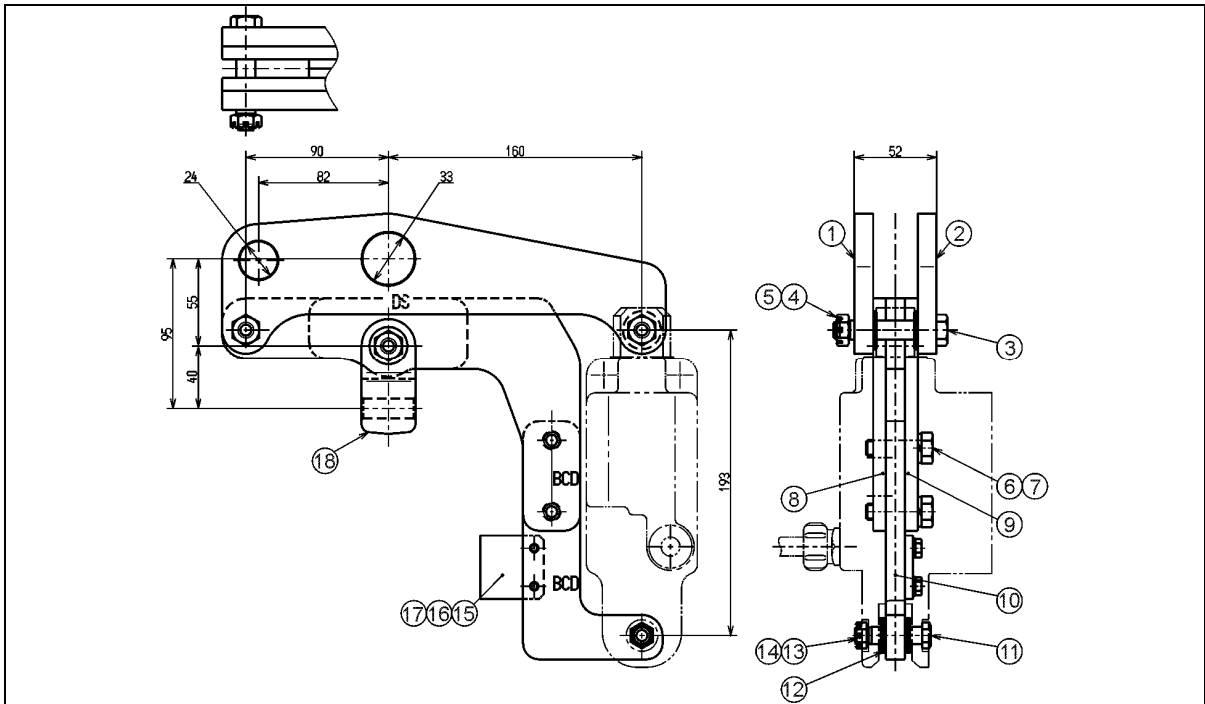


Fig. No.	Part Name	Qty	Load Limiter Type									
			01H	03S	03H	05S	10S	15M	20S	25M	30S	50R
1	Moving Shaft	1	Y1LE010S9203					Y1LE020S9203			Y1LE030S9203	Y1LE050S9203
2	Casing A	1	Y1LE020S9201								YL2ER9201	YL2FR9201
3	Machine Screw	2	MS556010									
4	Casing Packing	1	Y1LE020S9215									
5	Casing Cover	1	Y1LE020S9216									
6	Switch Holder	1	Y1LE020S9210									
7	Insulation Plate	1	Y1LE020S9212									
8	Machine Screw	2	J1AP24002424									
9	Micro Switch	1	Y1LE020S9211									
10	Adjuster Retaining Screw	2	J1TB01150008									
11	Adjuster	1	Y1LE020S9209									
12	Moving Shaft Holder	1	Y1LE020S9208									
13	Machine Screw	4	E2D555125									
14	Socket Bolt	2	9091276									
15	Casing B	1	Y1LE020S9202								YL2ER9202	YL2FR9202
16	Spring Holder U	1	Y1LE010S9205					Y1LE020S9205				

Fig. No.	Part Name	Qty	Load Limiter Type									
			01H	03S	03H	05S	10S	15M	20S	25M	30S	50R
17	Coned Disc Spring	14	Y1LE005S9204									
		7				Y1LE005 S9204						
		9				Y1LE010 S9204						
		10					Y1BE01 5C9034					
		8						Y1BE015 C9034				
		6							Y1BE015 C9034			
		12								Y1BE01 5C9034		
		15									Y1BE015 C9034	
18	Spring Holder D	1	Y1LE010S9206					Y1LE02 0S9206			Y1LE02 0S9206	Y1LE050 S9206
		3				Y1LE010 S9206				Y1LE020 S9206		
		2					Y1LE010 S9206		Y1LE020 S9206			
19	Adjust Nut	1	Y1LE010S9207				Y1LE020S9207					
20	Nut	1	9093424									
21	Socket Bolt	1	9091274									
22	Spring Lock Washer	4	9012711									
23	LL Cable 2C Assembly	1	YL2CS1214				YL2ES1214					
24	Connector	2	YL1BS9213									
25	LL Cable 2C	1	16/3									

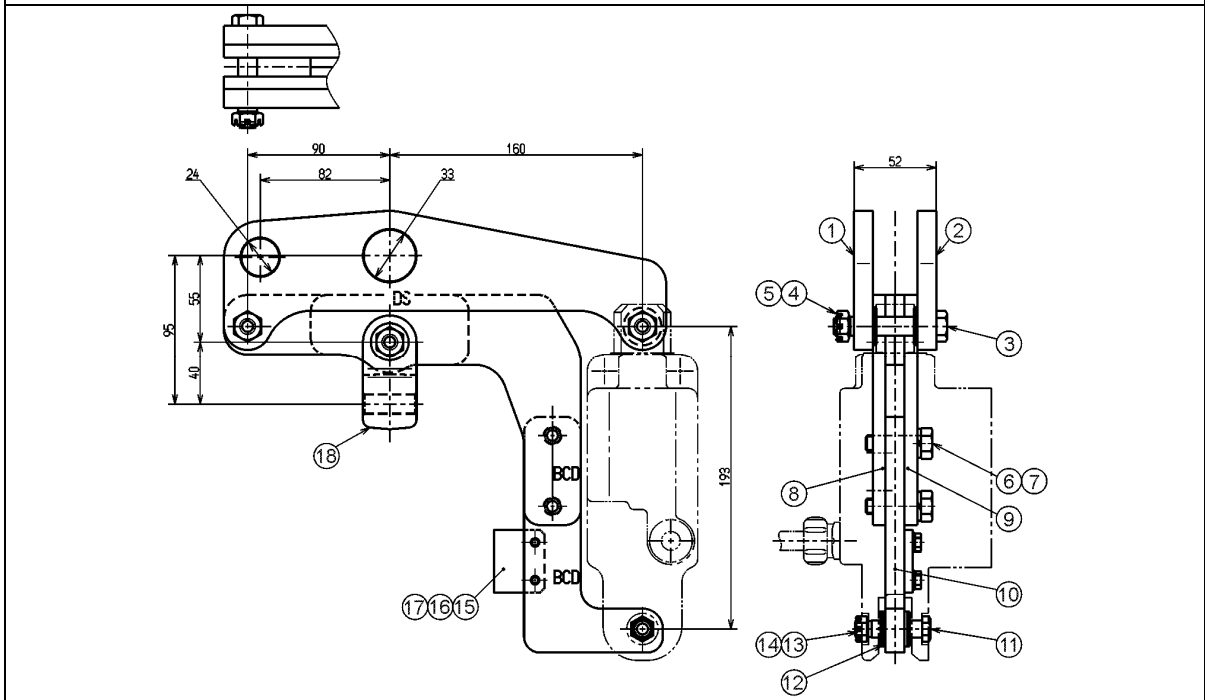
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5.2 Assembly Parts List



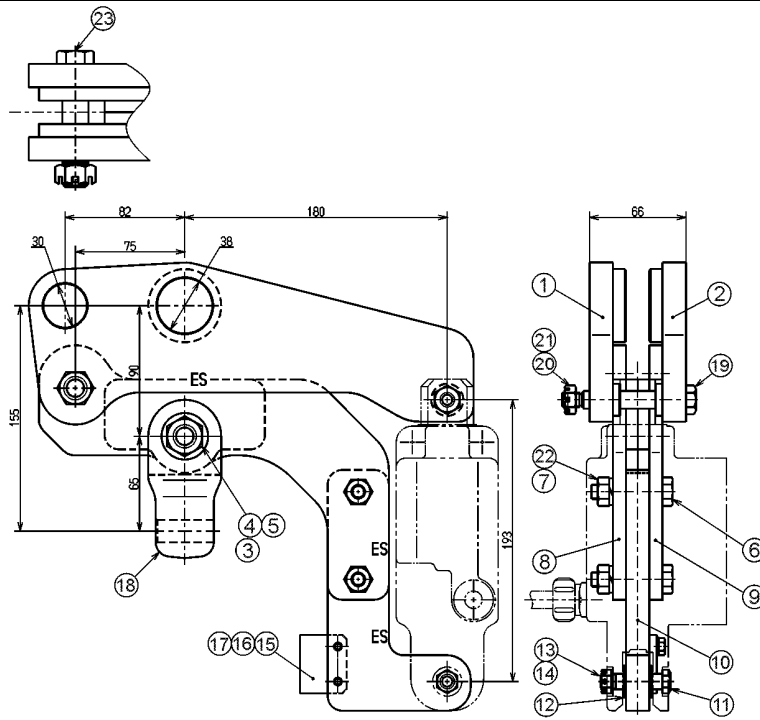
1/8 Ton – 1/4 Ton S
ER2M LL Suspension Assembly

Figure 5-1 YL2BS1102



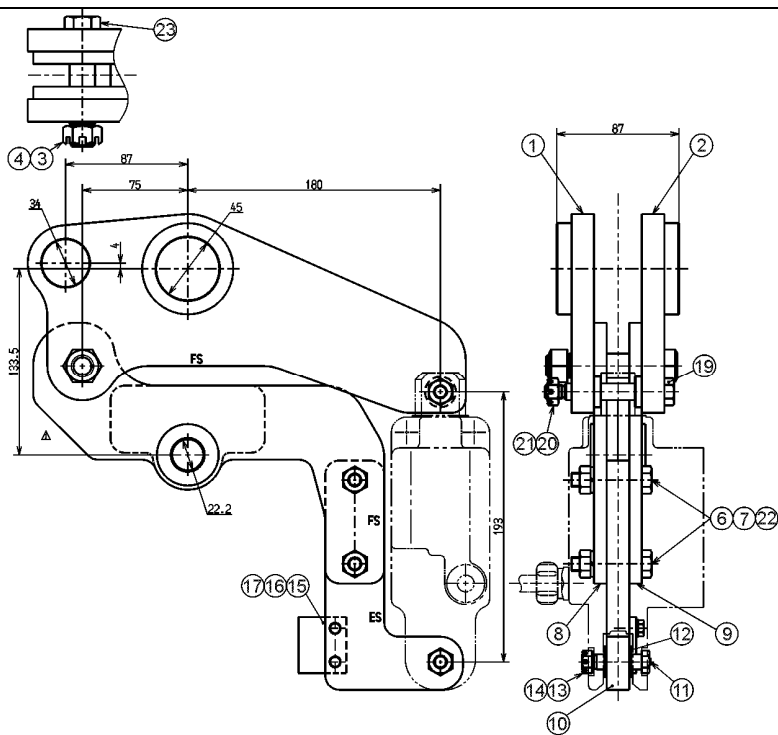
1/4 Ton H – 1 Ton
ER2M LL Suspension Assembly

Figure 5-2 YL2DS1102



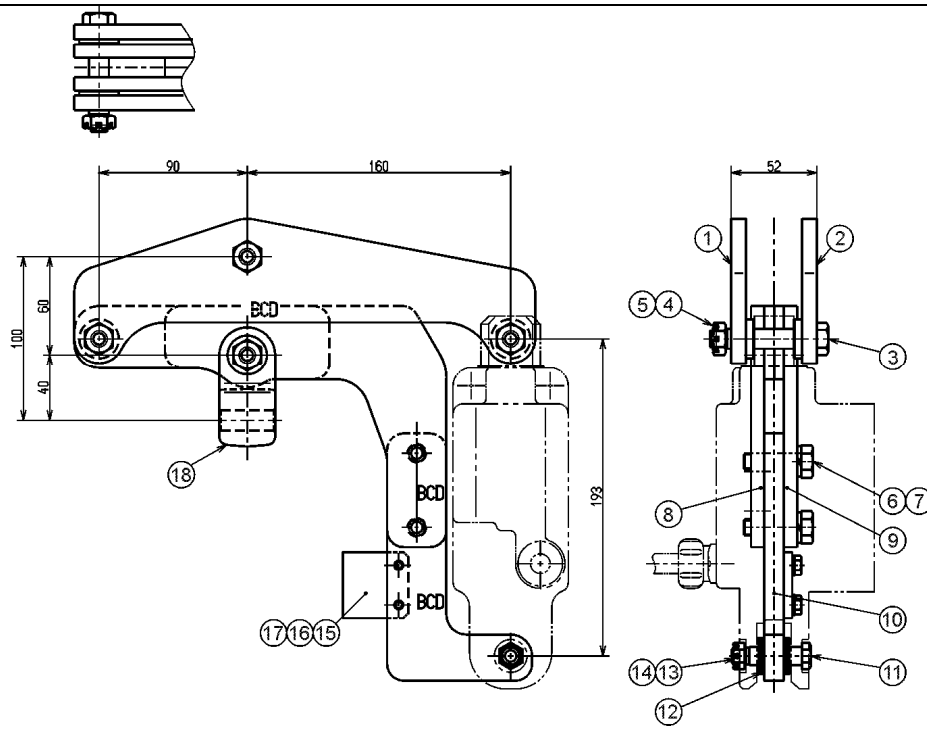
1 1/2 Ton – 2 Ton
ER2M LL Suspension Assembly

Figure 5-3 YL2ES1102



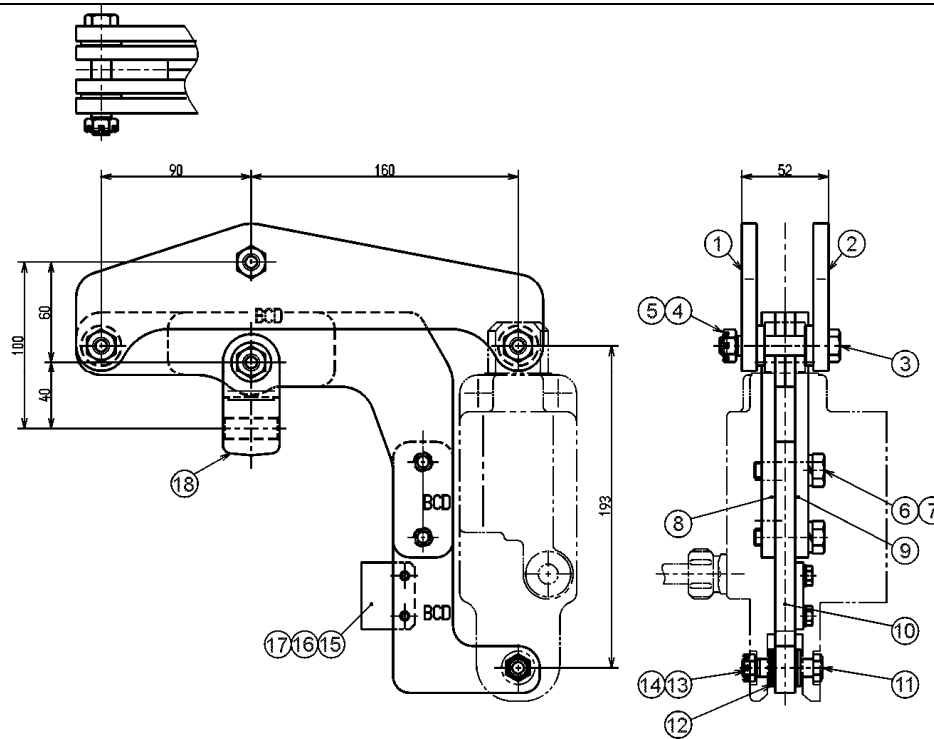
2 1/2 Ton
ER2M LL Suspension Assembly

Figure 5-4 YL2FS1102



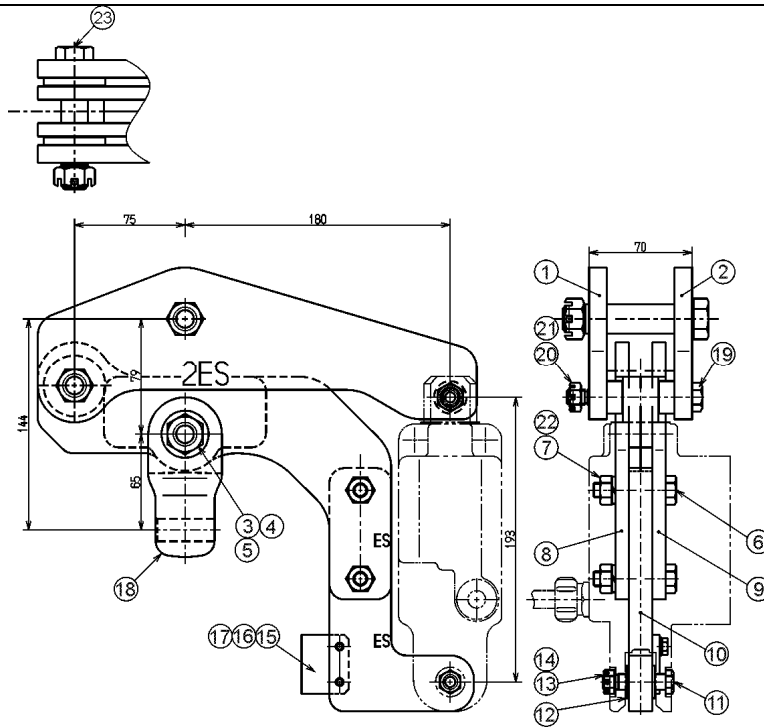
1/8 Ton – 1/4 Ton S
Hook-Mounted ER2, ER2P, ER2G, and ER2M (Parallel) LL Suspension Assembly

Figure 5-5 YL2BS1108

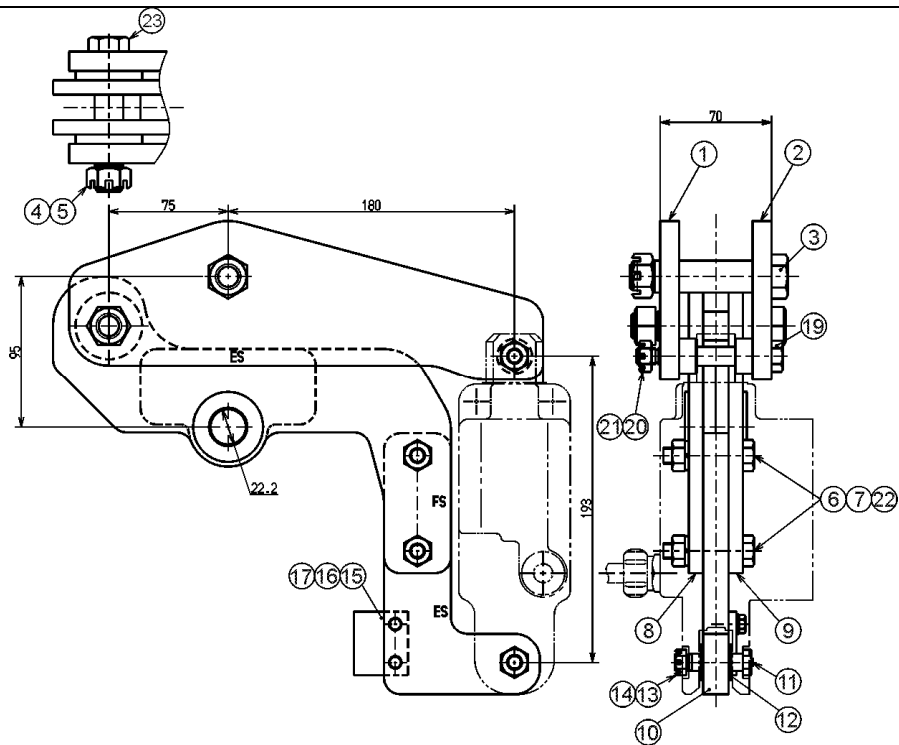


1/4 Ton H – 1 Ton
Hook-Mounted ER2, ER2P, ER2G, and ER2M (Parallel) LL Suspension Assembly

Figure 5-6 YL2CS1108



1 1/2 Ton – 2 Ton
 Hook-Mounted ER2, ER2P, ER2G, and ER2M (Parallel) LL Suspension Assembly
Figure 5-7 YL2ES1108



2 1/2 Ton
 Hook-Mounted ER2, ER2P, ER2G, and ER2M (Parallel) LL Suspension Assembly
Figure 5-8 YL2FS1108

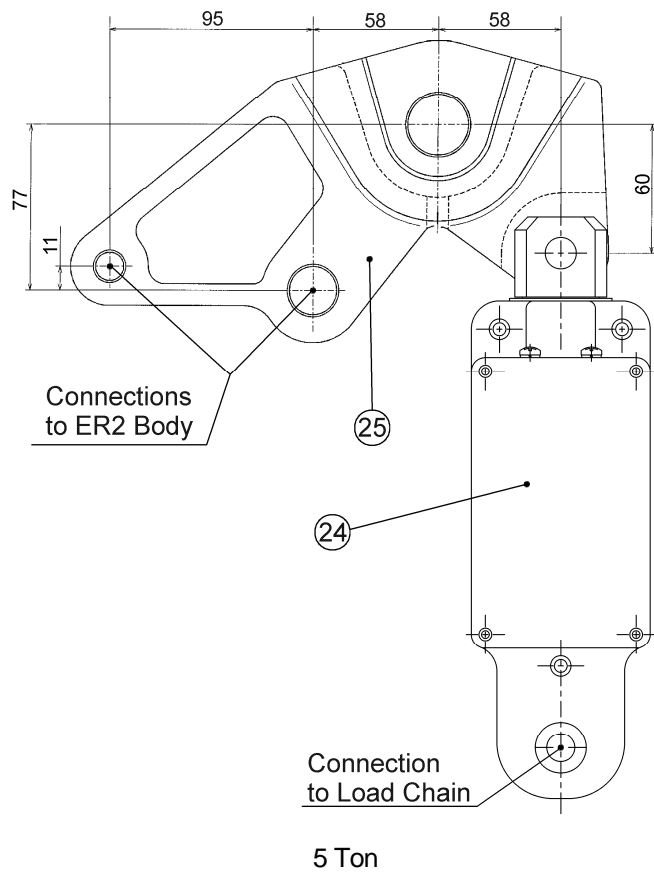
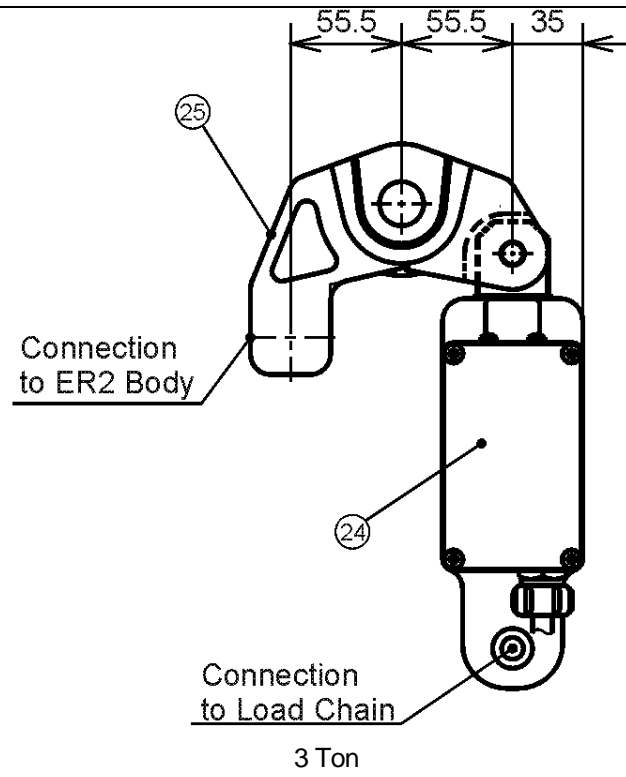


Figure 5-9 Connection Yoke D

Table 5-2 Assembly Parts List

Fig. No.	Part Name	Suspension Type*	Qty	Hoist Capacity									
				001H	003S	003H	005L/005S	010L/010S	015S	020L/020S	025S	030C	050L
1	Suspension Plate A	M	1	YL2DS9102				YL2ES9102	YL1FS9102				
		H/P/G/MP		YL2CS9108				YL2ES9108	YL1ES9108				
2	Suspension Plate B	M	1	YL2DS9103				YL2ES9103	YL1FS9103				
		H/P/G/MP		YL2CS9109				YL2ES9109	YL1ES9109				
3	Connection Yoke Bolt	M	3	YL2CS9111	YL1BS9111								
			1						ER1ES9032				
		H/P/G/MP	4	YL1BS9111									
			2						ER1ES9032				
			1								ER1ES9032		
4	Slotted Nut	M	3	L3183008									
			2						ES088020L				
			1								ES088020L		
		H/P/G/MP	4	L3183008									
			3						ES088020L				
			2								ES088020L		
5	Split Pin	M	3	9009415-5									
			2						9009436				
			1								9009436		
		H/P/G/MP	4	9009415-5									
			3						9009436				
			2								9009436		
6	Bolt	M/H/P/G/MP	2	9093123				9093126					
7	Spring Lock Washer	M/H/P/G/MP	2	9012712									
8	Connection Yoke A	M/H/P/G/MP	1	YL2CS9104				YL2ES9104	YL2FS9104				
9	Connection Yoke B	M/H/P/G/MP	1	YL2CS9105				YL2ES9105	YL2FS9105				
10	Connection Yoke C	M/H/P/G/MP	1	YL2CS9106				YL1ES9106					
11	Chain Pin	M/H/P/G/MP	1	ES041030									
12	Plain Washer	M/H/P/G/MP	4	9012514									
		M/H/P/G/MP	2						9012514				
13	Slotted Nut	M/H/P/G/MP	1	M2049020									
14	Split Pin	M/H/P/G/MP	1	9009413									
15	Buffer	M/H/P/G/MP	1	YL2BS9107	YL2CS9107								
16	Bolt	M/H/P/G/MP	2	9093304									
17	Spring Lock Washer	M/H/P/G/MP	2	9012709									
18	Connection Yoke Bolt C	M/H/P/G/MP	1	YL2CS9115				YL2ES9115					
19	Connection Yoke Bolt A	M/H/P/G/MP	1						Y1LE020S9112				
20	Slotted Nut	M/H/P/G/MP	1						L3183008				
21	Split Pin	M/H/P/G/MP	1						9009415-5				
22	Nut	M/H/P/G/MP	2						J1NA00110100				

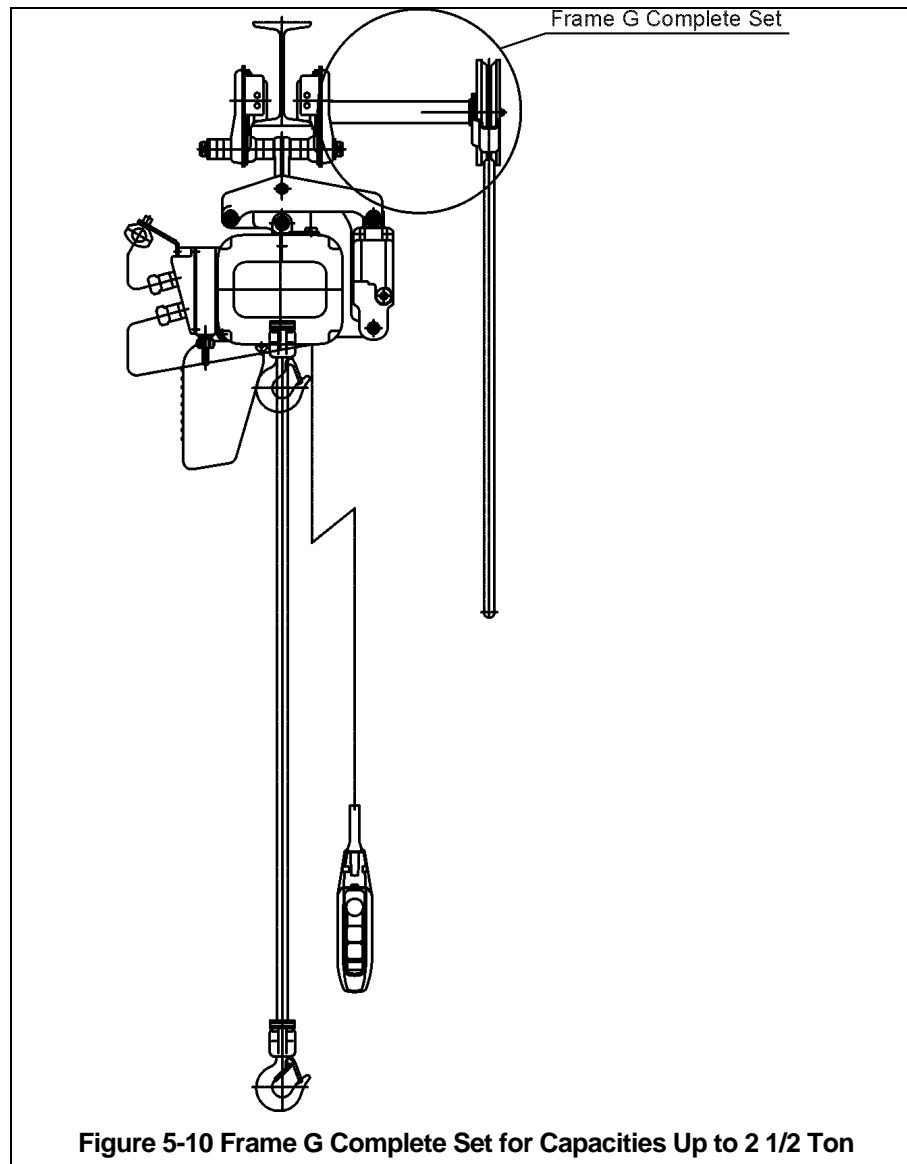
Fig. No.	Part Name	Suspension Type*	Qty	Hoist Capacity									
				001H	003S	003H	005L/005S	010L/010S	015S	020L/020S	025S	030C	050L
23	Connection Yoke Bolt B	M	1							YL1ES9113			
		H/P/G/MP								YL1ES9114			
24	Load Limiter Assembly	M/H/P/G/MP	1	YL2BH1201	YL2BS1201	YL2CH1201	YL2CS1201	YL2DS1201	YL2EM1201	YL2ES1201	YL2FS1201	YL2ER1201	YL2FR1201
25	Connection Yoke D	M/H/P/G/MP	1									†	

*Suspension Type: M = ER2M, H = Hook-Mounted ER2, P = ER2P, G = ER2G, MP = ER2M (Parallel)

†Supplied with the hoist.

5.3 Load Limiter for ER2G

1. ER2G hoists with Load Limiter for 1/8 Ton to 2 1/2 ton use the extended hand wheel trolley that has the special Frame G complete set.
2. Load Limiter-equipped ER2G hoists for 3 and 5 Ton use the standard GT.



6.0 Warranty

All products sold by Harrington Hoists, Inc. are warranted to be free from defects in material and workmanship from date of shipment by Harrington for the following periods:

Manual Hoists & Trolleys - 2 years

Air and Electric Powered Hoists, Trolleys, and Crane Components - 1 year

Spare / Replacement Parts - 1 year

The product must be used in accordance with manufacturer's recommendations and must not have been subject to abuse, lack of maintenance, misuse, negligence, or unauthorized repairs or alterations.

Should any defect in material or workmanship occur during the above time period in any product, as determined by Harrington Hoist's inspection of the product, Harrington Hoists, Inc. agrees, at its discretion, either to replace (not including installation) or repair the part or product free of charge and deliver said item F.O.B. Harrington Hoists, Inc. place of business to customer. Customer must obtain a Return Goods Authorization as directed by Harrington or Harrington's published authorized repair center prior to shipping product for warranty evaluation. An explanation of the complaint must accompany the product. Product must be returned freight prepaid. Upon repair, the product will be covered for the remainder of the original warranty period. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Harrington's warranty, the customer will be responsible for the costs of returning the product.

Harrington Hoists, Inc. disclaims any and all other warranties of any kind expressed or implied as to the product's merchantability or fitness for a particular application. Harrington will not be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages, loss or expense arising in connection with the use or inability whatever, regardless of whether damage, loss or expense results from any act or failure to act by Harrington, whether negligent or willful, or from any other reason.

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