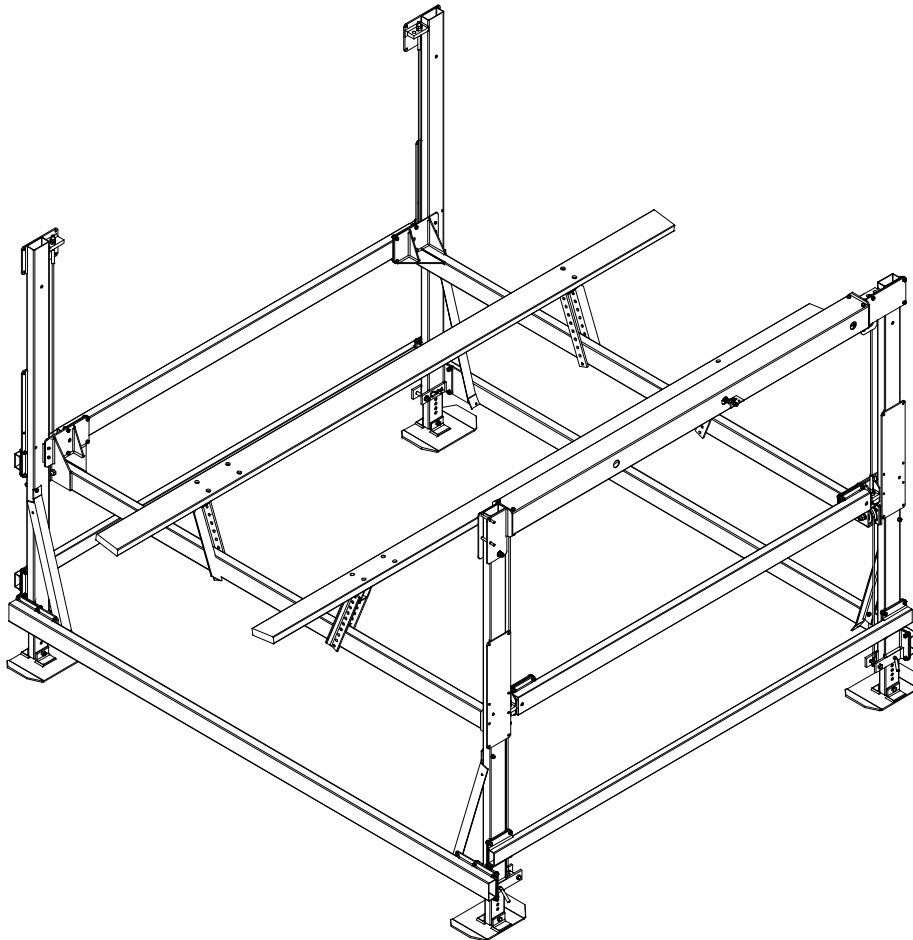




# HVL4000 HYDRAULIC VERTICAL LIFT INSTRUCTIONS



REIMANN & GEORGER CORPORATION  
MARINE PRODUCTS  
P/N 6112234

BUFFALO, NY  
07/25/14

## 7 PARTS LISTS

Each reference number or letter in the following parts lists can be matched with the reference number or letter referred to in both the text and illustrations of Chapter 3, Installation and Setup.

### 7.1 #3641030 HVL 40108 BOAL LIFT BUNDLES – see figure 3-1, 7-4

#### 7.1.1 #3641104 HVL Common Bundle #1

REF #	PART #	QTY	DESCRIPTION
1	3603809	4	FOOT PLATE ASSY 9x14-1/4
2	3689702	4	LOWER DIAGONAL BRACE 31- 1/4
3	3641445	1	HVL VERTICAL LEG (A) WLDMT 4K
4	3641322	1	HVL VERTICAL LEG (B) ASSY 4K
5	3641450	1	HVL VERTICAL LEG (C) WLDMT 4K
6	3608006	1	VERTICAL LEG (D) WLDMT 4K

#### 7.1.2 #3641107 HVL 40108 Bundle 2 of 3

REF #	PART #	QTY	DESCRIPTION
7	3603853	3	VL HORIZONTAL TUBE 108” 3-4K
8	3689708	2	VL HORIZONTAL TUBE 116” 3-4K 6x10-1/2
9	3641395	1	HVL SPREADER TUBE ASSY (BC) 4K
10	3603784	1	SPREADER TUBE ASSY (AD) 4K

#### 7.1.3 #3641135 HVL 40108 Bundle 3 of 3

REF #	PART #	QTY	DESCRIPTION
11	3641302	1	HVL LOAD TUBE (AB) ASSY 40108
12	3641304	1	HVL LOAD TUBE (CD) ASSY 40108
15	3641344	1	HVL CYL/HOSE ASSY 4K

### 7.2 #3641035 HVL 40116 BOAT LIFT BUNDLES – see figure 7-4

#### 7.2.1 #3641104 HVL Common Bundle #1

REF #	PART #	QTY	DESCRIPTION
1	3603809	4	FOOT PLATE ASSY 9x14-1/4
2	3689702	4	LOWER DIAGONAL BRACKET 31- 1/4
3	3641445	1	HVL VERTICAL LEG (A) WLDMT 4K
4	3641322	1	HVL VERTICAL LEG (B) ASSY 4K
5	3641450	1	HVL VERTICAL LEG (C) WLDMT 4K
6	3608006	1	VERTICAL LEG (D) WLDMT 4K

#### 7.2.2 #3641111 HVL 40116 Bundle 2 of 3

REF #	PART #	QTY	DESCRIPTION
7	3603853	3	VL HORIZONTAL TUBE 108” 3-4K
8	3689711	2	VL HORIZONTAL TUBE 124” 4-7K 6x10-1/2
9	3641395	1	VL SPREADER TUBE ASSY (BC) 4K
10	3603784	1	VL SPREADER TUBE ASSY (AD) 4K

#### 7.2.3 #3641145 HVL 40116 Bundle 3 of 3

REF #	PART #	QTY	DESCRIPTION
11	3641312	1	VL LOAD TUBE ASSY A-B 40116
12	3641314	1	VL LOAD TUBE ASSY C-D 40116
15	3641344	1	HVL4K CYLINDER /HOSE ASSEMBLY see section 7.6

### 7.3 VL EXTENSION LEGS

REF #	PART #	QTY	DESCRIPTION
13	as ordered	4	VL EXTENSION LEGS 29-1/2"-10'

### 7.4 VL BUNKS 1.6-4K

REF #	PART #	QTY	DESCRIPTION
	<b>3603778</b>	<b>1</b>	<b>VL WOOD BUNDLE 1.6-4K</b>
	<b>3679355</b>	<b>1</b>	<b>VL SS CARTON 1.6-4K</b>
	3603936	4	VL/AR CRADLE BRACKET-STD
	3603937	4	VL CRADLE BRACKET FLAT 15-7/8
	3603938	4	VL CRADLE BRACKET ANG 15-7/8
	3605977	1	VL BUNK SS BAG OF BOLTS 1.6-4K

### 7.5 #3641211 HVL4K HARDWARE CARTON – see figure 3-9, 3-10, 3-11

REF #	PART #	QTY	DESCRIPTION
	<b>3641215</b>	<b>1</b>	<b>HYDRAULIC MOUNTING S.S. BAG OF BOLTS</b> consisting of;
A	5896257	2	3/8-16 X 3-1/2 HHCS
B	5896406	2	3/8 WASHER SAE
C	5806243	2	3/8 WASHER SPLIT LOCK
D	5896377	2	3/8-16 NUT HEX
E	5896290	1	1/2-13 X 3-1/2 HHCS
F	5896400	1	1/2 WASHER SAE
G	5806244	1	1/2 WASHER SPLIT LOCK
H	5896379	1	1/2-13 NUT HEX
AA	5896309	2	5/8-11 X 2" HHCS
AB	5896414	2	5/8 WASHER SAE
AC	5806246	2	5/8 WASHER SPLIT LOCK
AD	5896380	2	5/8-11 NUT HEX
AH	5800867	8	HOSE CLAMP 1"
<b>17</b>	<b>3641405</b>	<b>2</b>	<b>ANCHOR WELDMENT</b>
	<b>3641275</b>	<b>1 Pkg.</b>	<b>HVL CAP BAG</b> consisting of;
S	6403794	6	PLUG PLASTIC—2 X 4 X 1/8W
R	3641620	2	CAP PLASTIC 2 X 4 X 1/8W -HOLE
I	<b>3629961</b>	<b>1 Pkg.</b>	<b>3" LEG PIN &amp; HAIRPIN SET (4 EACH)</b>
	<b>3689357</b>	<b>4 Pkgs.</b>	<b>VL CORNER HARDWARE 1.6-5K</b> consisting of;
J	5896247	18	3/8-16 X 1" HHCS
K	5896268	1	3/8-16 X 2-3/4" HHCS
L	5896288	1	1/2-13 X 3" HHCS
M	5840103	19	3/8-16 LOCKNUT NYLOCK ALUM
N	5836107	1	1/2-13 LOCKNUT NYLOCK
	<b>3641235</b>	<b>1 Pkg.</b>	<b>HVL CABLE HARDWARE 4K</b> consisting of;
P	5896248	8	3/8-16 X 1-1/4" HHCS
T	5896290	2	1/2-13 X 3-1/2" HHCS
U	5896400	2	1/2 WASHER SAE
V	5806244	2	1/2 WASHER SPLIT LOCK
W	5896379	2	1/2-13 NUT HEX
O	5896397	8	9/16-12 NUT HEX

**7.6 HVL POWER UNITS – see figure 7-4**

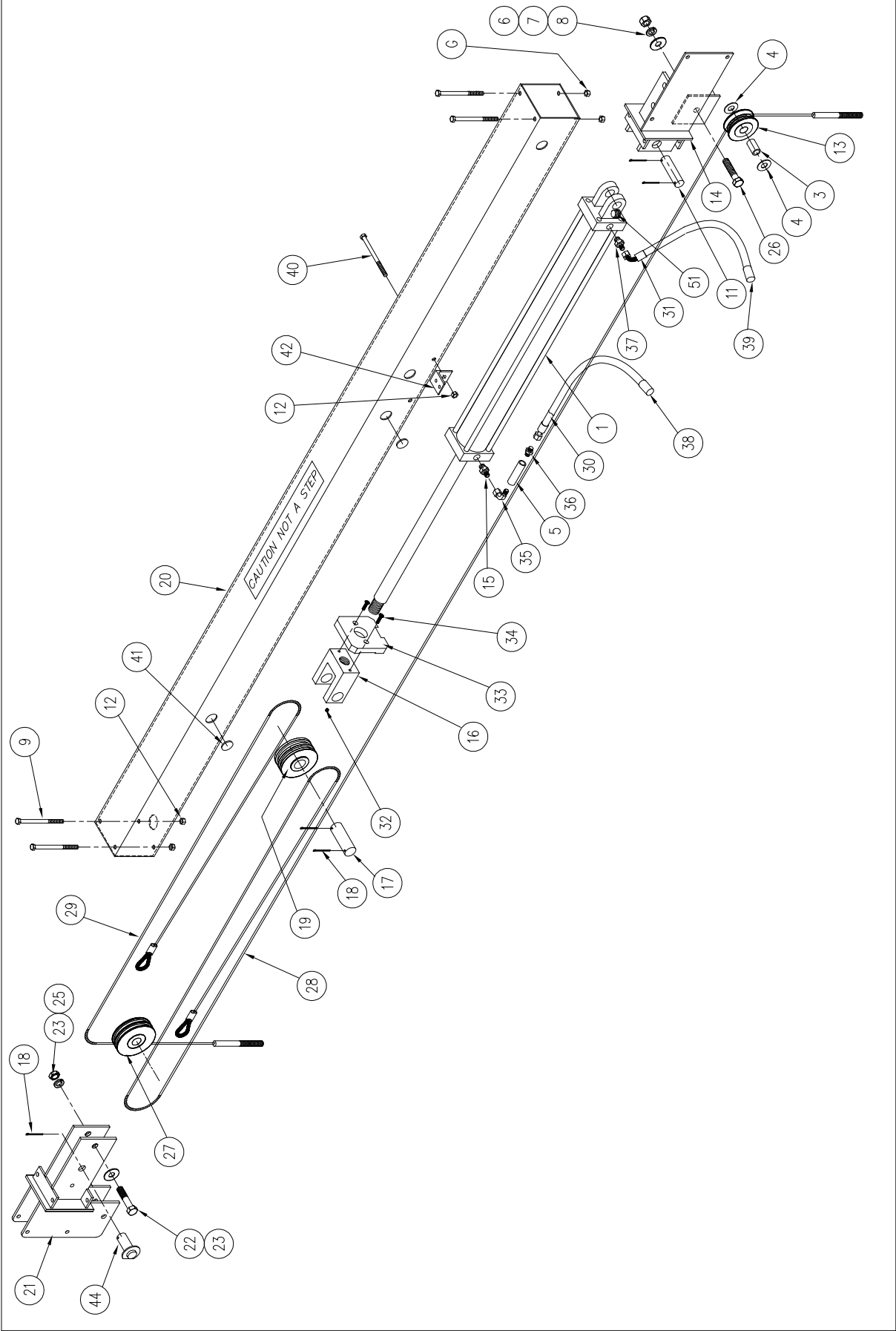
REF#	PART#	QTY	DESCRIPTION
19	3641326	1	HVL CONTROL BOX 12V
19	3641329	1	HVL CONTROL BOX 24V
19	3641336	1	HVL CONTROL BOX 120V AC
	4110020	1	HVL AC CHARGER KIT (OPTIONAL)
	4105785	1	HVL SOLAR PANEL KIT (OPTIONAL)
	4100595	1	HVL LIGHTING KIT (OPTIONAL)

**7.7 3641220 HVL POWER UNIT SHELF & HARDWARE (OPTIONAL) –see figure 3-10, 7-4**

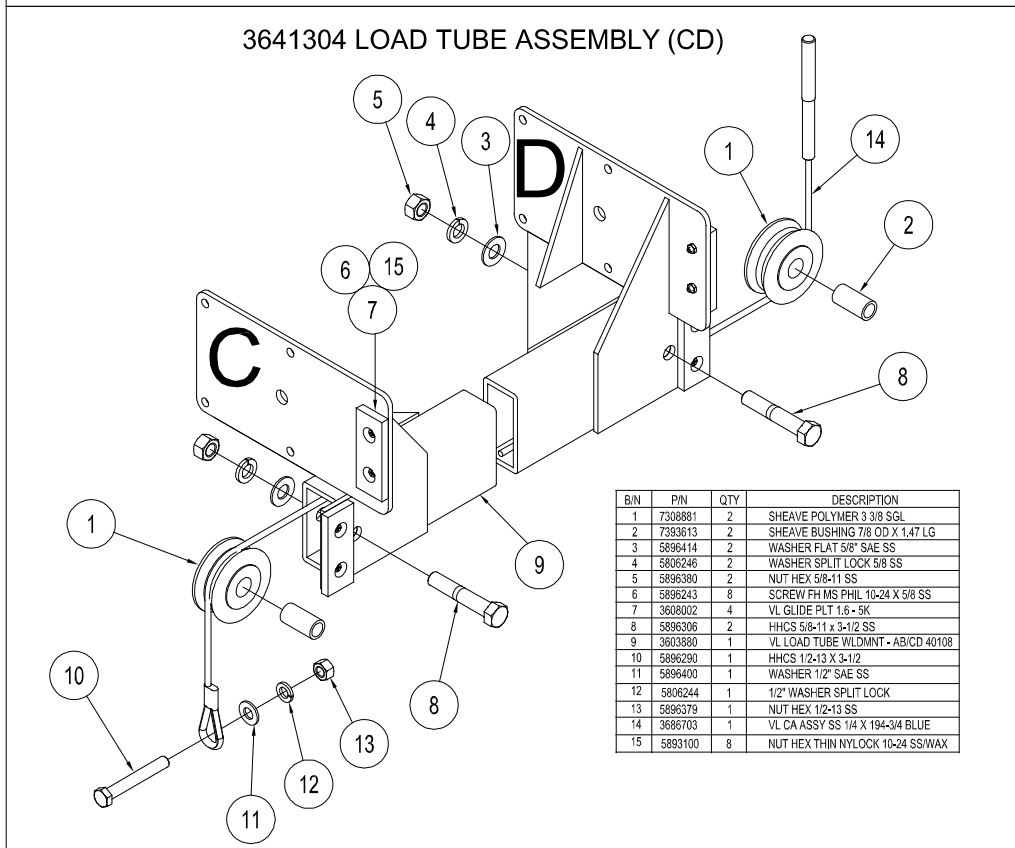
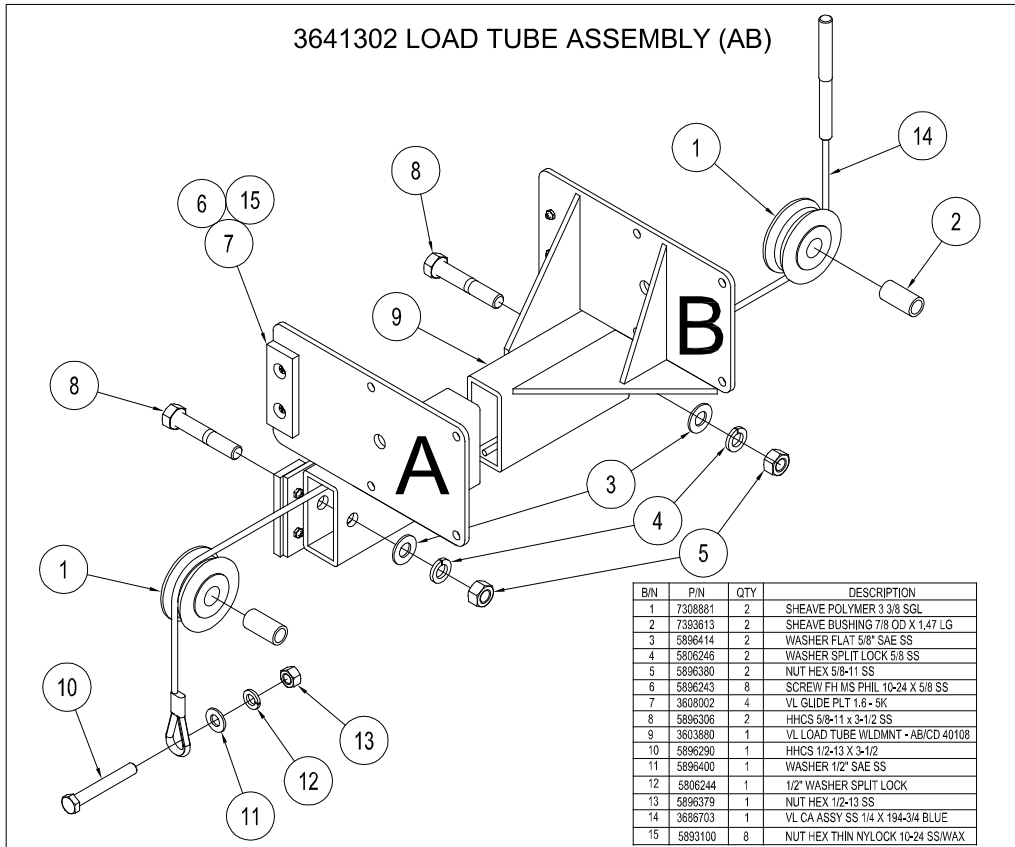
REF #	PART#	QTY	DESCRIPTION
20	3641415	1	HVL SHELF FRAME
21	3641525	1	HVL SHELF DIAG. BRACE
22	4100583	1	HVL SHELF BRACKET
	<b>3641225</b>	<b>1</b>	<b>HVL SHELF BAG OF BOLTS consists of following:</b>
AE	5896248	4	3/8-16 X 1-1/4" HHCS
AF	5840103	8	3/8-16 LOCKNUT NYLOCK ALUM
AG	5896247	4	3/8-16 x 1" HHCS

**7.8 #3641344 HVL4K HYDRAULIC CYLINDER & HOSE ASSEMBLY – See Figure 7.1**

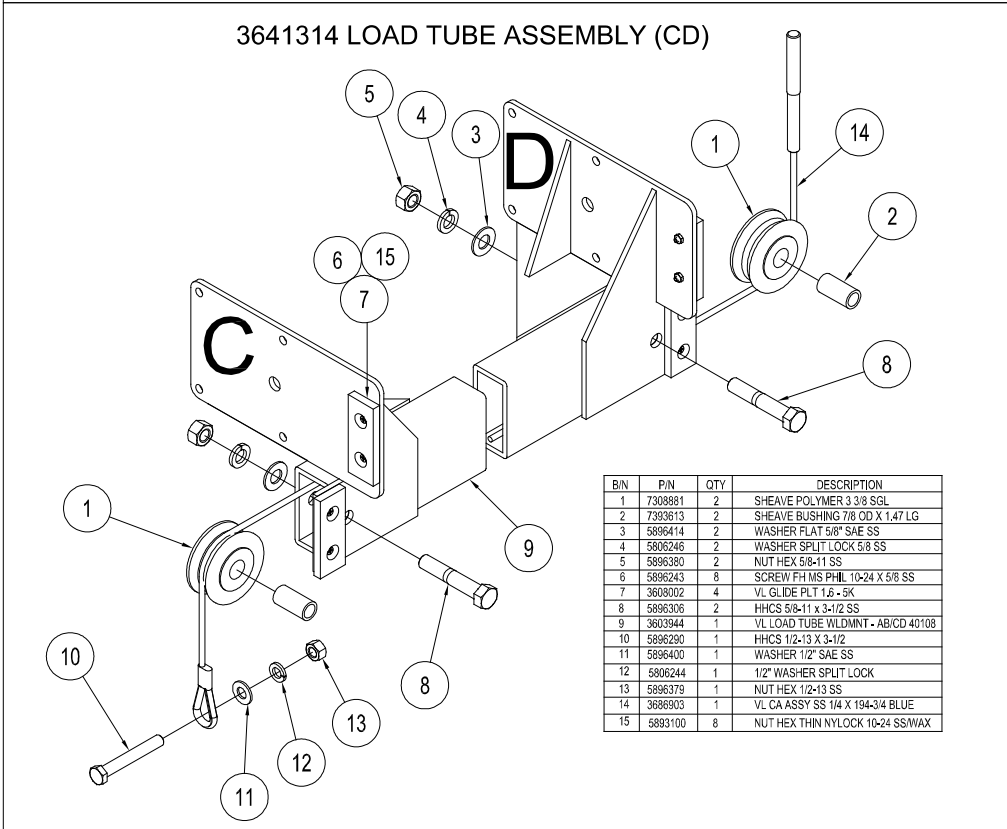
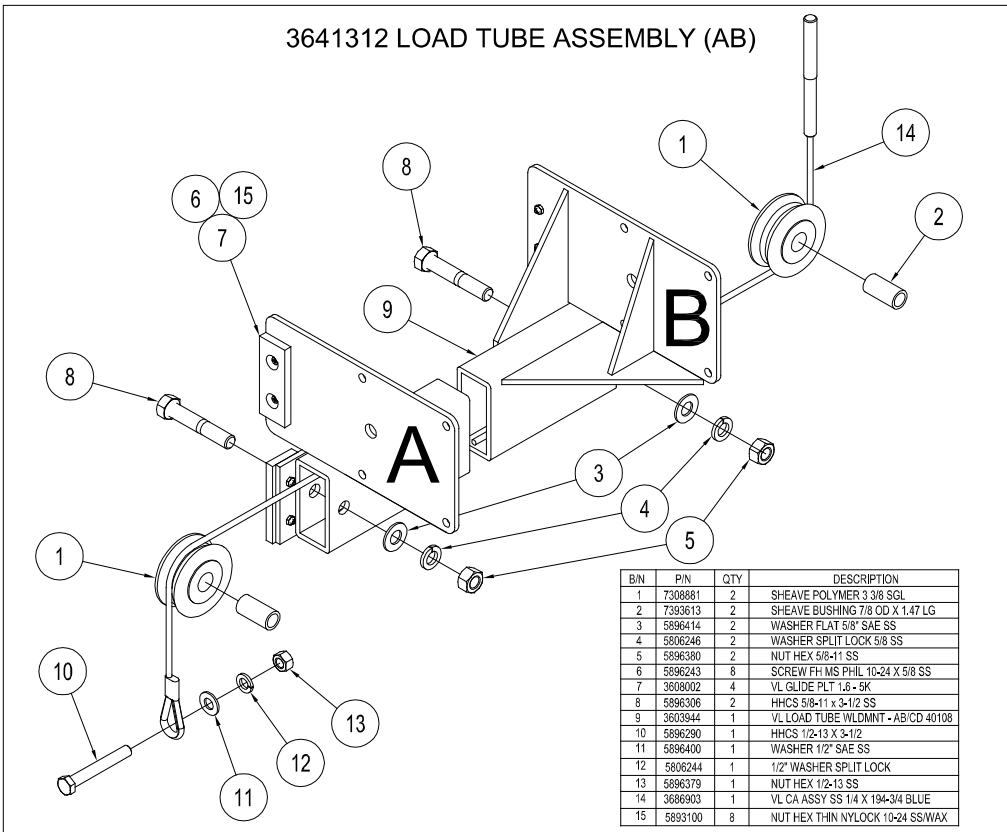
REF #	PART #	QTY	DESCRIPTION
1	6036419	1	HYDRAULIC CYLINDER 3" BORE X 30" STROKE
3	7393613	1	SHEAVE BUSHING 7/8" OD X 1.47" LG
4	5896415	2	5/8" USS WASHER
5	6036418	1	FLOW REGULATOR
6	5896414	1	5/8" SAE WASHER
7	5806246	1	5/8" LOCKWASHER
8	5896380	1	5/8-11 HEX NUT
9	5896264	4	3/8-16 X 5-1/2" LG HHCS
10	5616803	1	SAE-8 HOLLOW PLUG
11	3641765	1	CYLINDER CLEVIS PIN 3-7/8" LG
12	5897016	5	3/8-16 HEX LOCKNUT
13	7308881	1	SHEAVE 3-3/8 SGL
14	3641324	1	MOUNTING BRACKET (D) POWDER COAT
15	5636414	1	3/8" TUBE 37-DEGREE TO SAE -12 STRAIGHT FITTING
16	3641775	1	CYLINDER ROD CLEVIS
17	3641770	1	CYLINDER CLEVIS PIN 4" LG
18	5893645	5	1/8" X 2" COTTER PIN
19	7341935	1	SHEAVE 4-1/8 DBL 1-1/4" BORE
20	3641535	1	COVER TUBE 92"
21	3641330	1	MOUNTING BRACKET (A) POWDER COAT
22	5896121	1	HHCS 3/4-10 X 3-1/2 SS
23	5896417	2	WASHER FLAT SAE 3/4 SS
25	5897014	1	NUT HEX NYLOCK 3/4-10 SS
26	5896305	1	5/8-11 X 3" LG HHCS
27	7341945	1	SHEAVE 4-7/16 DBL- 1" BORE
28	3641390	1	HVL CABLE ASSEMBLY SS 5/16" X 202
29	3641385	1	HVL CABLE ASSEMBLY SS 5/16" X 109
30	3641945	1	HYDRAULIC HOSE ASSY 29-1/2' X 1/4" (STRAIGHT)
31	3641950	1	HYDRAULIC HOSE ASSY 27-1/2' X 1/4" (90-DEGREE)
32	5806308	1	1/4-20 X 3/16 LG SET SCREW
33	3641920	1	CYLINDER GUIDE PLATE
34	5892801	2	1/4-20 X 1" PHILLIP FLAT HEAD SCREW
35	5636412	1	3/8 TUBE 37-DEGREE TO 1/4 PIPE 90-DEGREE FITTING
36	5636411	1	1/4 PIPE TO 1/4 TUBE 37-DEGREE STRAIGHT FITTING
37	5636413	1	1/4 TUBE 37-DEGREE TO SAE-12 STRAIGHT FITTING
38	6041364	1	COUPLING 1/4 NPT FEMALE (SCREW TO CONNECT)
39	6041365	1	COUPLING 1/4 NPT MALE (SCREW TO CONNECT)
40	5896267	1	3/8-16 X 6" LG HHCS
41	6436411	2	PLASTIC CAP 1-1/2 DIA
42	3641545	1	HVL CYL HOSE SUPPORT BRACKET
44	3641485	1	SHEAVE (A) PIN



**Figure 7-1**  
**HVL 4K Hydraulic Cylinder Assembly- exploded view**



**Figure 7-2**  
**HVL 40108 Load Tube Assemblies**



**Figure 7-3**  
**HVL 40116 Load Assemblies**

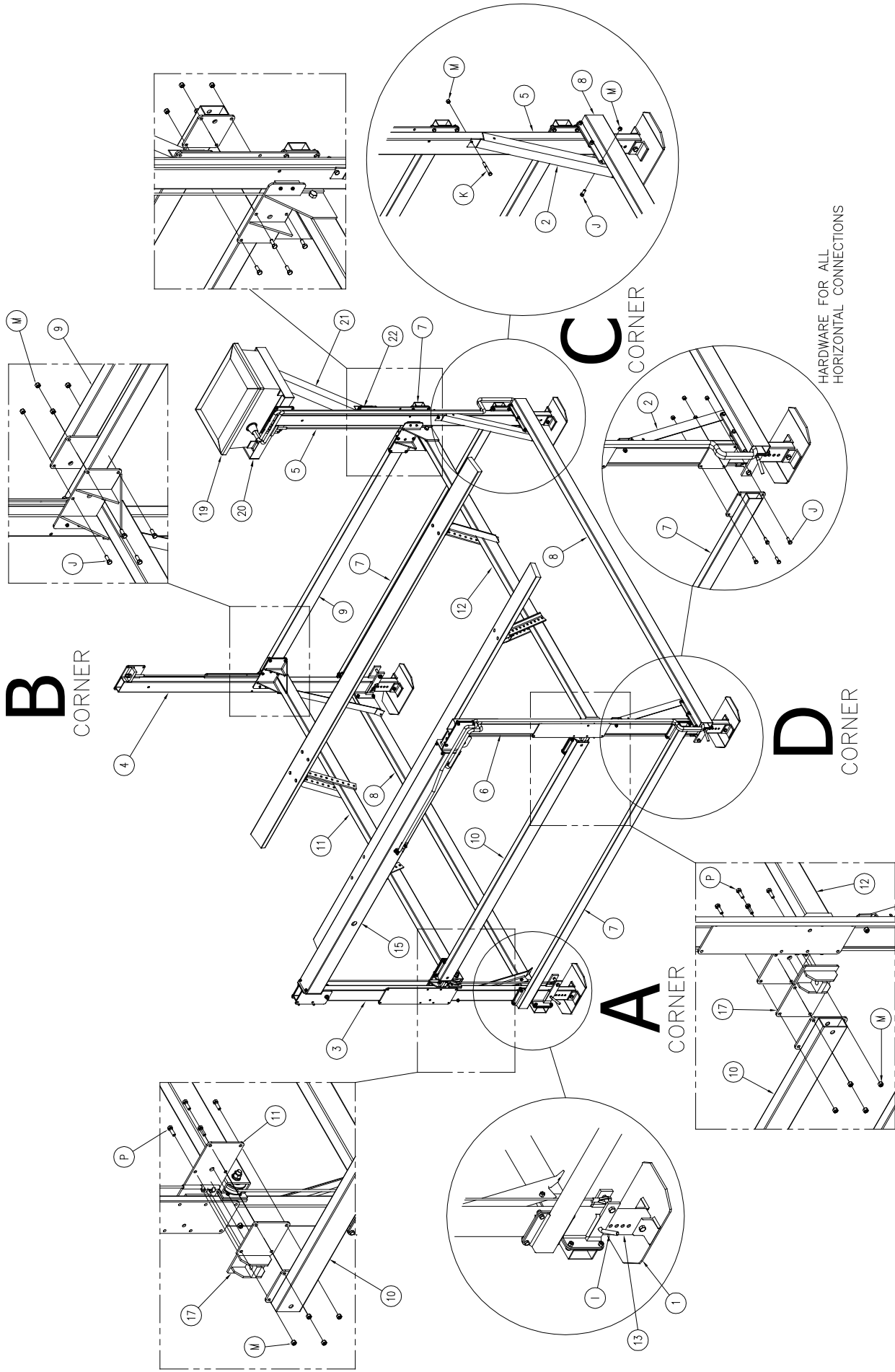


Figure 7-4  
Complete HVL 4K Assembly