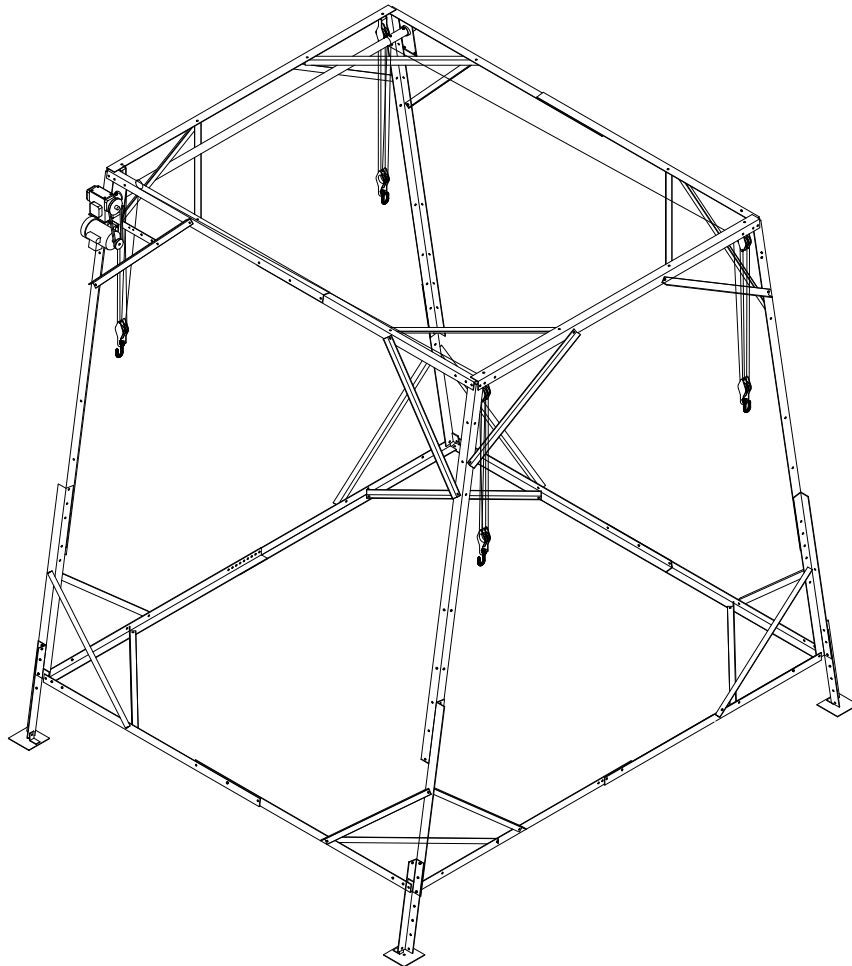


**RGC**<sup>®</sup>  
**REIMANN & GEORGER CORP.**  
**HOISTING - MARINE - CONSTRUCTION**

# IB4500E OVERHEAD LIFT INSTRUCTIONS



**REIMANN & GEORGER CORPORATION**  
**MARINE PRODUCTS**  
P/N 6112160

**BUFFALO, NY**  
05/27/08

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
<b>1</b>	<b>SAFETY .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Safety Definitions .....	1
1.3	Equipment Safety Labels.....	1
1.4	Equipment And Personnel Safety .....	1
1.5	Installation Safety .....	2
1.6	Operating Safety.....	2
1.6.1	General .....	2
1.6.2	Safety When Raising the Boat.....	3
1.6.3	Safety When Lowering the Boat .....	3
1.7	Maintenance and Storage Safety .....	3
<b>2</b>	<b>SPECIFICATIONS .....</b>	<b>4</b>
2.1	Technical Data.....	4
2.2	Nameplate and Serial Number Tag.....	4
<b>3</b>	<b>INSTALLATION AND SETUP .....</b>	<b>6</b>
3.1	Pre-Installation Checks.....	6
3.2	Prior To Setup .....	6
3.3	Frame Assembly.....	7
3.4	Electric Drive Assembly.....	10
3.5	IB-4500 & IB-3600 Reeving.....	11
<b>4</b>	<b>INSPECTION AND MAINTENANCE .....</b>	<b>13</b>
4.1	General Maintenance Rules.....	13
4.2	Wire Rope Inspection Procedure.....	13
4.3	Annual Inspection.....	14
4.4	Annual Winch Maintenance .....	14
4.5	Storage Procedure.....	15
<b>5</b>	<b>PARTS LISTS.....</b>	<b>16</b>
5.1	#3203028 IB4500E Boat Lift Bundles .....	16
5.1.1	#3203091 IB Common Bundle #1 .....	16
5.1.2	#3203092 IB Common Bundle #2.....	16
5.1.3	#3203093 IB4500 Bundle #3 .....	16
5.2	#3203090 IB4500 Carton of Parts .....	16
5.3	#3206507 IBE Bag of Bolts .....	17
5.4	#3213110 IBE Electric Drive .....	17

## TABLE OF CONTENTS (CONTINUED)

CHAPTER	TITLE	PAGE
---------	-------	------

### LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
2-1	Typical Product Nameplate .....	4
3-1	Determine Frame Height .....	6
3-2	End Frame Assembly.....	7
3-3	IB Frame Assembly .....	8
3-4	Drum & Drive Assembly.....	9
3-5	Power Drive Assembly .....	10
3-6	IB4500 & IB3600 Cable Reeving .....	11
3-7	IB4500 & IB3600 Complete Assembly.....	12
4-1	Wire Rope Components .....	14

## PRE-LIFTING CHECKLIST

The lift and related equipment must be thoroughly inspected prior to each use. Only those who have read and understood this entire manual and related equipment manuals are qualified to do this inspection. This checklist is to be used as a guideline in conjunction with the maintenance and inspection procedures outlined in this manual. It is recommended that this checklist be maintained as a permanent record.

- Ensure the lift installation will clear all power lines and obstructions.
- Ensure all structural members of the lift are free of defects and damage that may affect the integrity.
- Ensure that an electric drive, if used, has been inspected and installed by a certified electrician in accordance with local electrical codes. A Ground Fault Circuit Interrupter (G.F.C.I.) must be installed by your electrician and work properly.
- Ensure that any user or dealer installed locking devices have been removed before operating the lift.
- Operate the lift first without, and then with, your boat on the platform to test the operation of both the lift and the winch.
- Ensure the boat is properly positioned on the lift before doing any raising or lowering.
- Ensure the lift is not being used beyond its rated capacity.
- Ensure any drain plug is in place on the boat before launching.
- Conduct the wire rope inspection procedure described in Chapter 5 at least monthly.
- Ensure the leg height has been properly adjusted according to the water depth.
- Ensure the frame fastenings are tight.
- Ensure the lower diagonal braces are installed in each corner.
- Ensure the frame is level and square according to the dimensions shown in Figure 3-6, Chapter 3.
- When facing the front of the handwheel, ensure that the wire rope winds and unwinds from the right side of the winch. This reeving will raise the platform when the handwheel is turned clockwise, and lower the platform when the handwheel is turned counterclockwise. The brake pawl must click, meaning the brake is operative.
- Ensure all guards are in place before operating the winch.

**INSPECTOR:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

# 1 SAFETY

## 1.1 INTRODUCTION

Your Reimann & Georger Corporation Marine Products IB Lifts has been engineered to provide lifting performance, long term economics and safety advantages that no other type can match. However, even a well-designed and well-built lift can malfunction or become hazardous in the hands of an inexperienced and/or untrained user. Therefore, read this manual and related equipment manuals thoroughly before operating your lift to provide maximum safety for all operating personnel, and to get the maximum benefit from your equipment.



### **WARNING:**

**DO NOT OPERATE THIS LIFT WITHOUT STUDYING THIS ENTIRE MANUAL. FAILURE TO DO THIS CAN LEAD TO EQUIPMENT MISUSE WITH RESULTING DAMAGE AND/OR SERIOUS PERSONAL INJURY. CONTACT YOUR RGC® MARINE DEALER IF YOU HAVE ANY QUESTIONS.**

## 1.2 SAFETY DEFINITIONS

A safety message alerts you to potential hazards that could hurt you or others or cause property damage. The safety messages or signal words for product safety signs are **DANGER**, **WARNING**, and **CAUTION**. Each safety message is preceded by a safety alert symbol and is defined as follows:

**DANGER:** Indicates an imminently hazardous situation which, if not avoided, **will** cause death or serious injury. This safety message is limited to the most extreme situations.

**WARNING:** Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.

**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury. It may also be used to alert against unsafe practices and property-damage-only accidents.

## 1.3 EQUIPMENT SAFETY LABELS

These labels warn you of potential hazards that could cause injury. Read them carefully. If a label comes off or becomes illegible, contact a Reimann & Georger Corporation dealer for a free replacement.

## 1.4 EQUIPMENT AND PERSONNEL SAFETY

1. Do not use the lift if it shows any signs of damage.
2. Do not exceed the rated maximum lifting capacity of this equipment.
3. When using a direct drive or motorized friction drive, understand the use of all controls and connections provided with it.



### **WARNING:**

**ALL ELECTRIC DRIVES MUST BE INSTALLED AND INSPECTED BY A CERTIFIED ELECTRICIAN IN ACCORDANCE WITH LOCAL ELECTRICAL CODES. THIS INSTALLATION MUST INCLUDE A PROPERLY WORKING GROUND FAULT CIRCUIT INTERRUPTER. (G.F.C.I.)**

4. Never try lifting anything other than a boat with this equipment.
5. Never allow people in the boat any time it is suspended above the water on the platform.



## **WARNING:**

**DO NOT STAND OR WALK ON THE PLATFORM WHILE IT IS IN ANY RAISED POSITION. THIS CAN CAUSE SERIOUS PERSONAL INJURY.**

6. Do not allow anyone to swim or play under, near or on the lift at any time.

### **1.5 INSTALLATION SAFETY**

1. Ensure that all bolts and nuts are fastened securely prior to operation.
2. Do not weld or otherwise modify the lift. Such alterations may weaken the structural integrity of the lift and void the warranty.
3. Ensure that the frame is level and square.
4. The following precautions must be observed when lifting any part of this equipment:
  - a. Be sure of your footing.
  - b. Bend your knees and lift with your legs.
  - c. Hold the equipment section close to your body when lifting.
5. Wear heavy leather gloves when handling wire rope. Insufficient hand protection when handling wire rope can cause personal injury.

### **1.6 OPERATING SAFETY**

#### **1.6.1 General**

1. Never use this equipment beyond its rated capacity. This can damage the lift and/or boat with resulting serious personal injury.
2. Before allowing anyone to operate the lift, be certain they fully understand the proper operating procedure.
3. Completely remove any user or dealer installed locking devices before operating the lift.
4. Follow the Pre-Lifting Checklist before operating.
5. Do not try lifting or launching your boat in rough water conditions. This can damage your boat and/or the lift.
6. The boat must be secured on the lift before raising or lowering. Failure to do this can cause equipment damage and/or serious personal injury.
7. Keep people and pets clear during operation of the lift.
8. Keep fingers and clothing clear of all moving parts.
9. Check the lift periodically for frayed cables.
10. Do not attempt to make any adjustments on the lift while it is being operated.
11. Contact your dealer if the winch mechanism fails to perform as described in the Operation chapter of this manual.
12. Never tamper with the winch mechanism. This can cause equipment damage.
13. Do not operate the lift under the influence of drugs, alcohol, or medication.
14. Never use the lift to hang or store any auxiliary equipment such as boating hardware.

### 1.6.2 Safety When Raising the Boat

1. The handwheel or power drive must turn clockwise when raising the platform. The brake pawl must click, indicating that the brake is operative.
2. Do not try to raise the boat beyond the maximum lifting height of the platform.



**WARNING:**

**IF YOU HAVE TO TURN THE HANDWHEEL COUNTERCLOCKWISE TO RAISE THE PLATFORM, YOU HAVE REEVED THE WINCH INCORRECTLY. YOU WILL IMMEDIATELY ENCOUNTER STRONG RESISTANCE WHICH CAN LEAD TO WINCH DAMAGE AND/OR CABLE BREAKAGE.**

### 1.6.3 Safety When Lowering the Boat

1. The handwheel or power drive must turn counter-clockwise when lowering the platform.



**WARNING:**

**IF YOU HAVE TO LOWER THE PLATFORM BY TURNING THE HANDWHEEL CLOCKWISE, YOU HAVE REEVED THE WINCH INCORRECTLY. THE BRAKE PAWL WILL NOT BE EFFECTIVE WHICH CAN CAUSE AN UNCONTROLLED SPIN-DOWN OR “FREEWHEEL” OF THE HANDWHEEL. IF FREEWHEELING OCCURS, NEVER TRY TO STOP IT.**

2. Counter-clockwise rotation of the handwheel allows the self-activating brake mechanism to provide a controlled lowering of the platform.



**WARNING:**

**NEVER RELEASE THE BRAKE PAWL OF THE WINCH. THIS CAN TRIGGER AN UNCONTROLLED SPIN-DOWN OR “FREEWHEEL” OF THE HANDWHEEL.**

3. Do not continue lowering the platform after the boat floats freely. Excessive slack in winch cable may cause binding.

### 1.7 MAINTENANCE AND STORAGE SAFETY

1. At least once a year, the lift must be thoroughly inspected as described in the Maintenance chapter of this manual.
2. Completely lower the platform before performing any type of maintenance or repair.



**WARNING:**

**NEVER ALLOW ANYBODY TO WORK IN OR ON THE BOAT WHEN IT IS SUSPENDED ABOVE THE WATER ON THE LIFT.**

3. Immediately replace any components found to be defective as described in Chapter 5—Inspection and Maintenance.



### 3 INSTALLATION AND SETUP

#### 3.1 PRE-INSTALLATION CHECKS

1. Do not assemble the lift if any part shows any sign of damage.
2. Do not weld or otherwise modify the lift. Such alterations may weaken the structural integrity of the lift and void the warranty.



**CAUTION:**

**DO NOT EXCEED THE MAXIMUM TORQUE RATING ON ALL BOLTS OF 20 FT-LBS.**



**WARNING:**

**FAILURE TO APPLY A SUITABLE LUBRICANT TO THE MATING SURFACES OF STAINLESS STEEL THREADED FASTENERS MAY CAUSE GALLING AND/OR SEIZING OF ASSEMBLY.**

3. All lifting accessories such as pontoon brackets, pivoting bunks, guide-ons, and slings shall be commercially manufactured, have a rated load capacity equal to that of the lift, and be properly maintained and installed. Consult the manufacturer's separate instructions provided for these accessories.

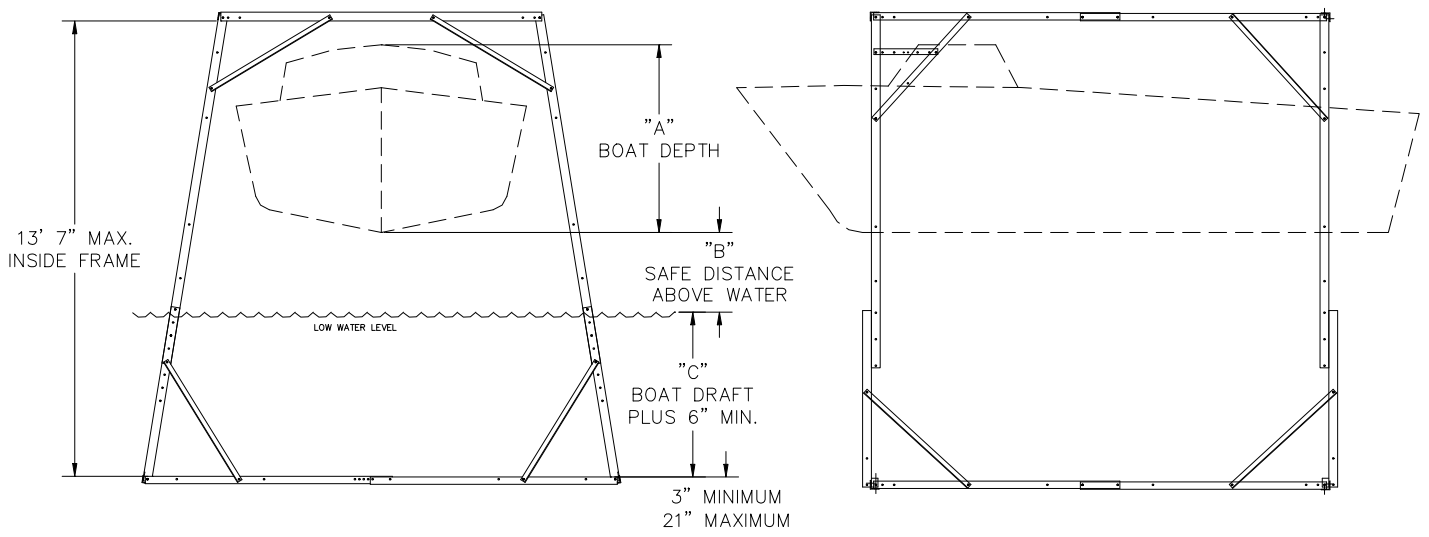


**WARNING:**

**ALL ELECTRIC DRIVES MUST BE INSTALLED AND INSPECTED BY A CERTIFIED ELECTRICIAN IN ACCORDANCE WITH LOCAL ELECTRICAL CODES. THIS INSTALLATION MUST INCLUDE A PROPERLY WORKING GROUND FAULT CIRCUIT INTERRUPTER. (G.F.C.I.)**

#### 3.2 PRIOR TO SETUP

The part reference numbers and letters used in the subassembly drawings of sections 3.3 through 3.5 are the same as those shown in Figure 3-2 and listed in the parts lists.



**Figure 3-1.  
Determine Frame Height**

### 3.3 FRAME ASSEMBLY

1. Refer to figure 3-1. Determine the required frame height by adding dimensions “A”, “B” and “C”. Allow for any expected changes in water level that may occur during the boating season.
2. Refer to figure 3-2. For ease of erection, assemble End frames (2) as shown laying on the ground with two bottom side bars (#8 & #9) projecting vertically. Use the parts as indicated. Be sure to bolt the #1 upper legs and #2 Right & 2 Left lower legs together using the holes which give the nearest dimension to the frame height, as determined in step #1.

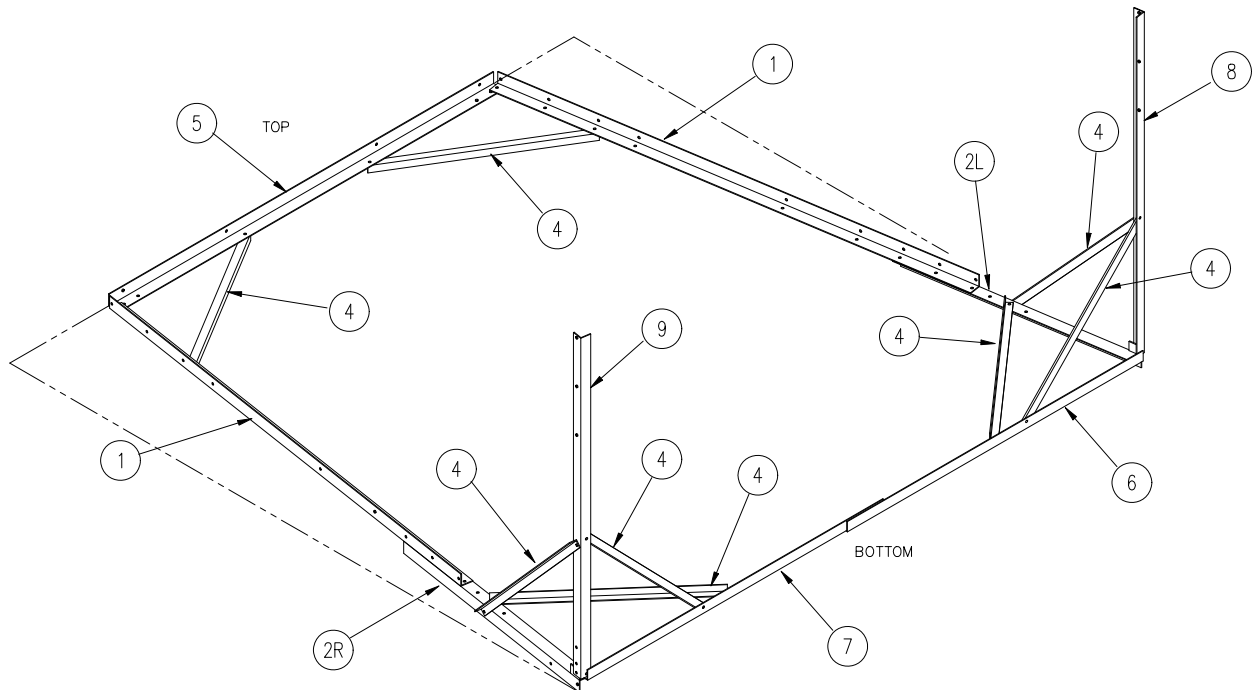
NOTE: It is imperative that the #1 upper leg is attached to the #2 Right & #2 Left lower legs correctly. The end with the second hole being at the 12-3/4” dimension is at the top. Overlap the same number of holes on #7 as are overlapped on #2R & 2L. Assemble #5 end bar top, with #1 upper leg angle on top of the #5 angle. Assemble #4 corner braces and #8 & #9 side bars as indicated.

3. Refer to Figure 3-3. After both end frame assemblies are constructed, set both assemblies upright with the #8 & #9 side bars resting on the ground. Slide the assemblies together so the side bars can be bolted thru the holes giving the proper dimension for the frame length. Add the upper side bars and braces, as shown to complete the frame.
4. Refer to Figure 3-4. At this time determine at which corner you wish to mount the drive unit. Install #16 drive brace and #15 drive support at this corner.
5. Now tighten all bolts on the frame.

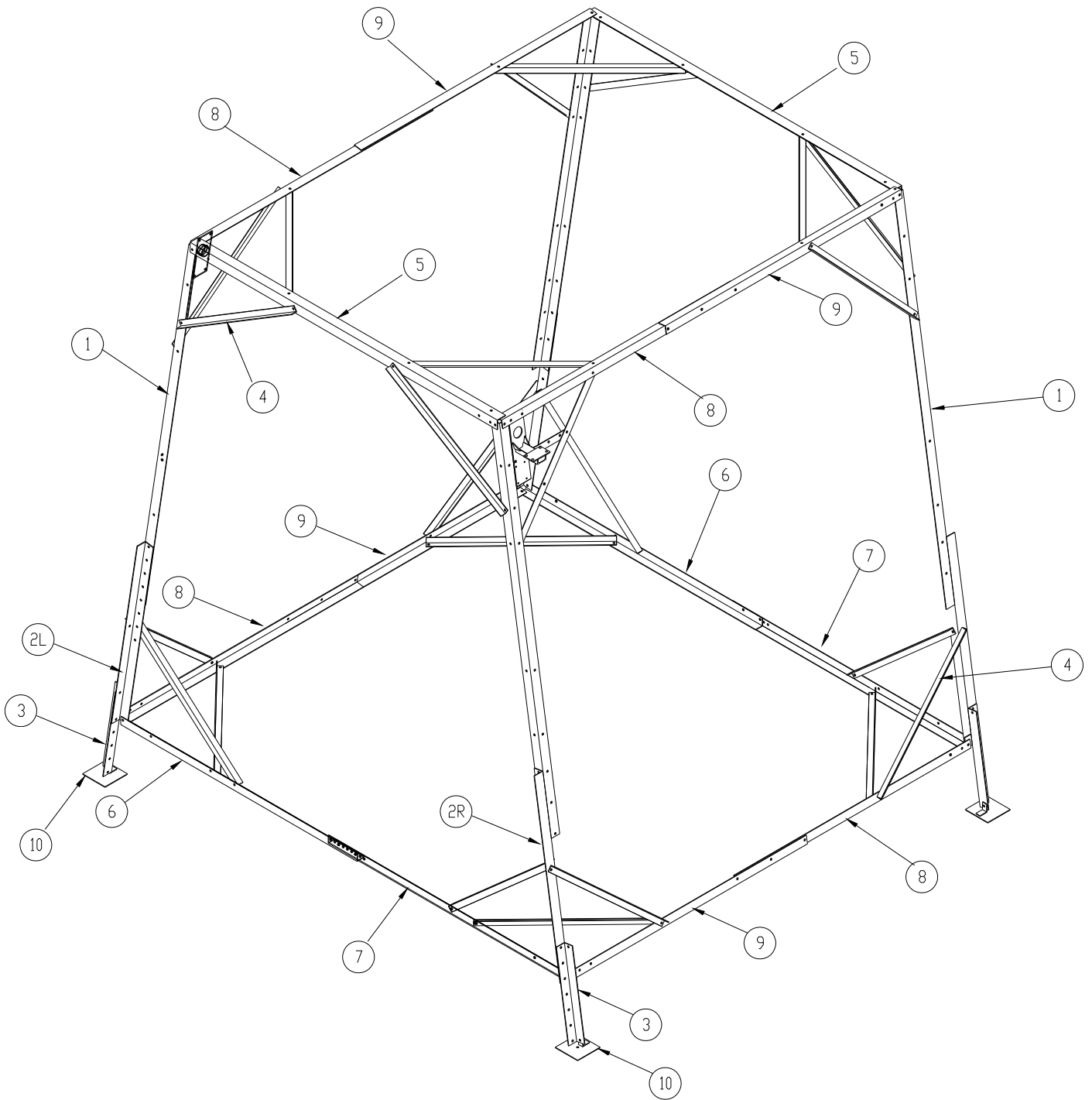


#### **CAUTION:**

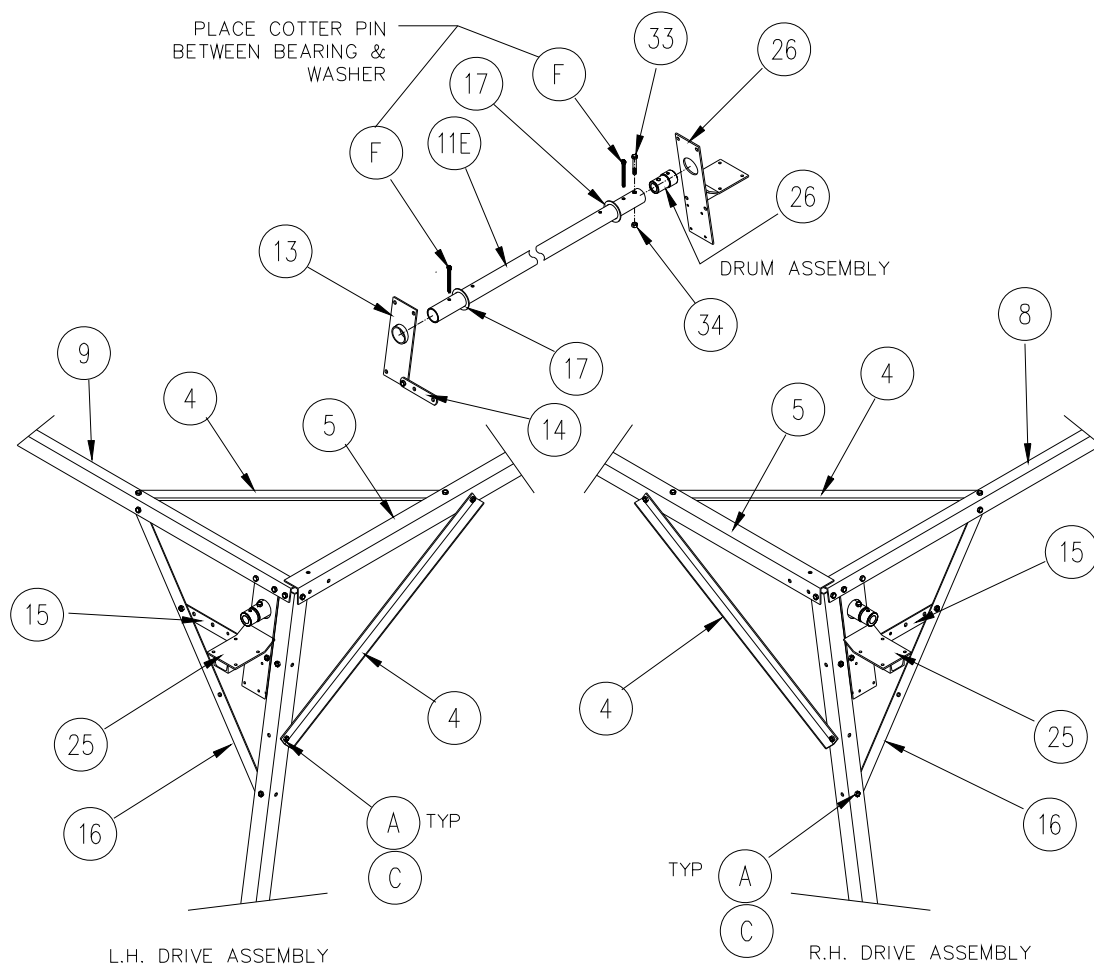
**INSERT ALL BOLTS USED TO FASTEN FRAME TOGETHER FROM THE OUTSIDE OF THE LIFT. THE NUTS FASTEN ONTO THE INSIDE FACE OF THE LIFT.**



**Figure 3-2**  
**End Frame Assembly**



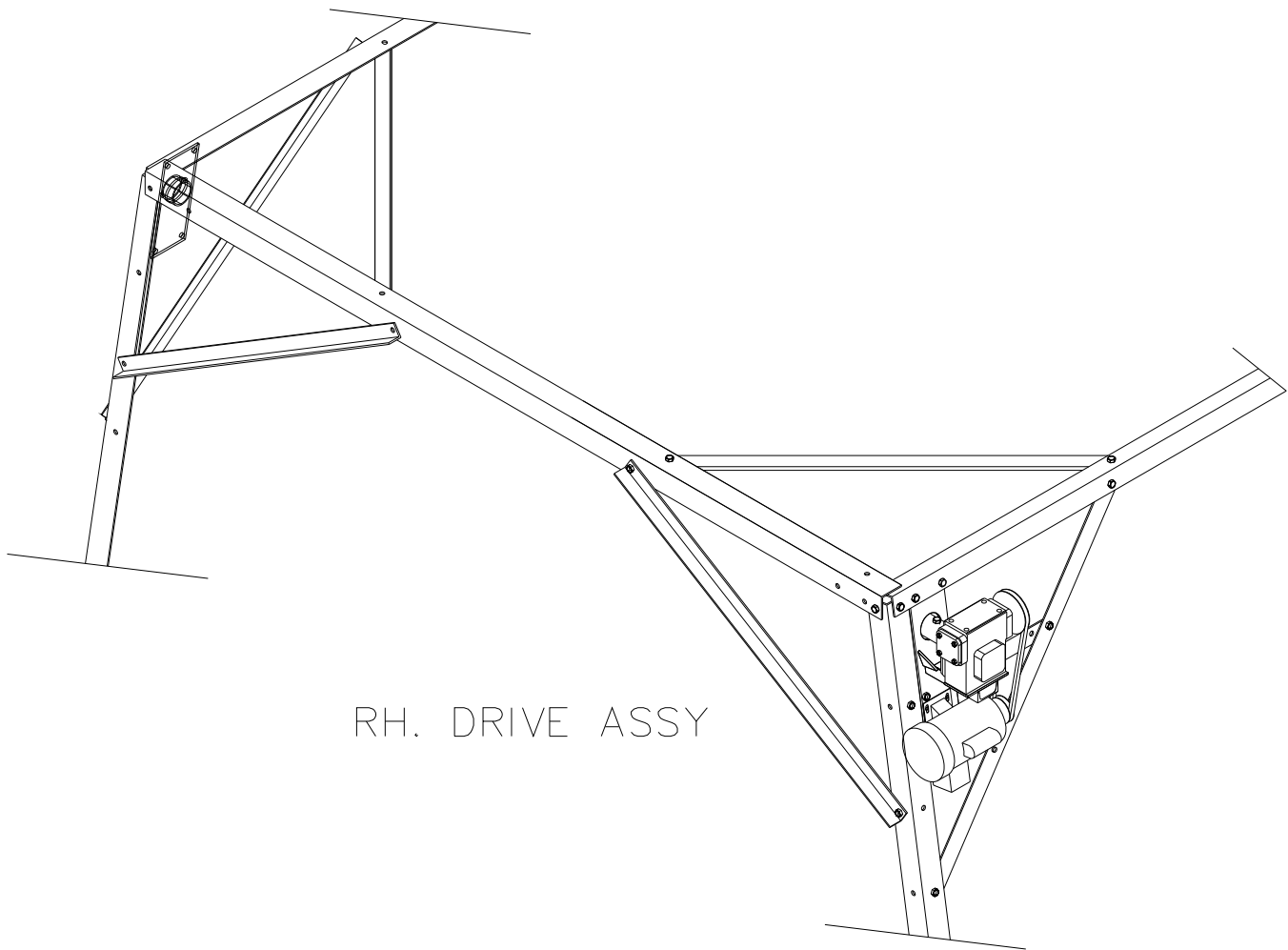
**Figure 3-3  
IB Frame Assembly**



**Figure 3-4**  
**Drum & Drive Assembly**

### 3.4 POWER DRIVE ASSEMBLY

1. Refer to Figure 3-4 and figure 3-5. The power drive assembly is pre-assembled. Attach the power drive assembly to the IB frame to details 8 or 9, and 15.
2. Assemble the IB drum detail 11E to the coupling detail 26.



**Figure 3-5**  
**Power Drive Assembly**

### 3.5 IB-4500 & 3600 REEVING

1. Refer to figure 3-6. Assemble the balance of the hoist mechanism and reeve the blocks with the hoist cable shown. To keep twists out of the cable, lay out fully on the ground before reeving. Be sure that lines leading to the far end wind towards the center of the drum.

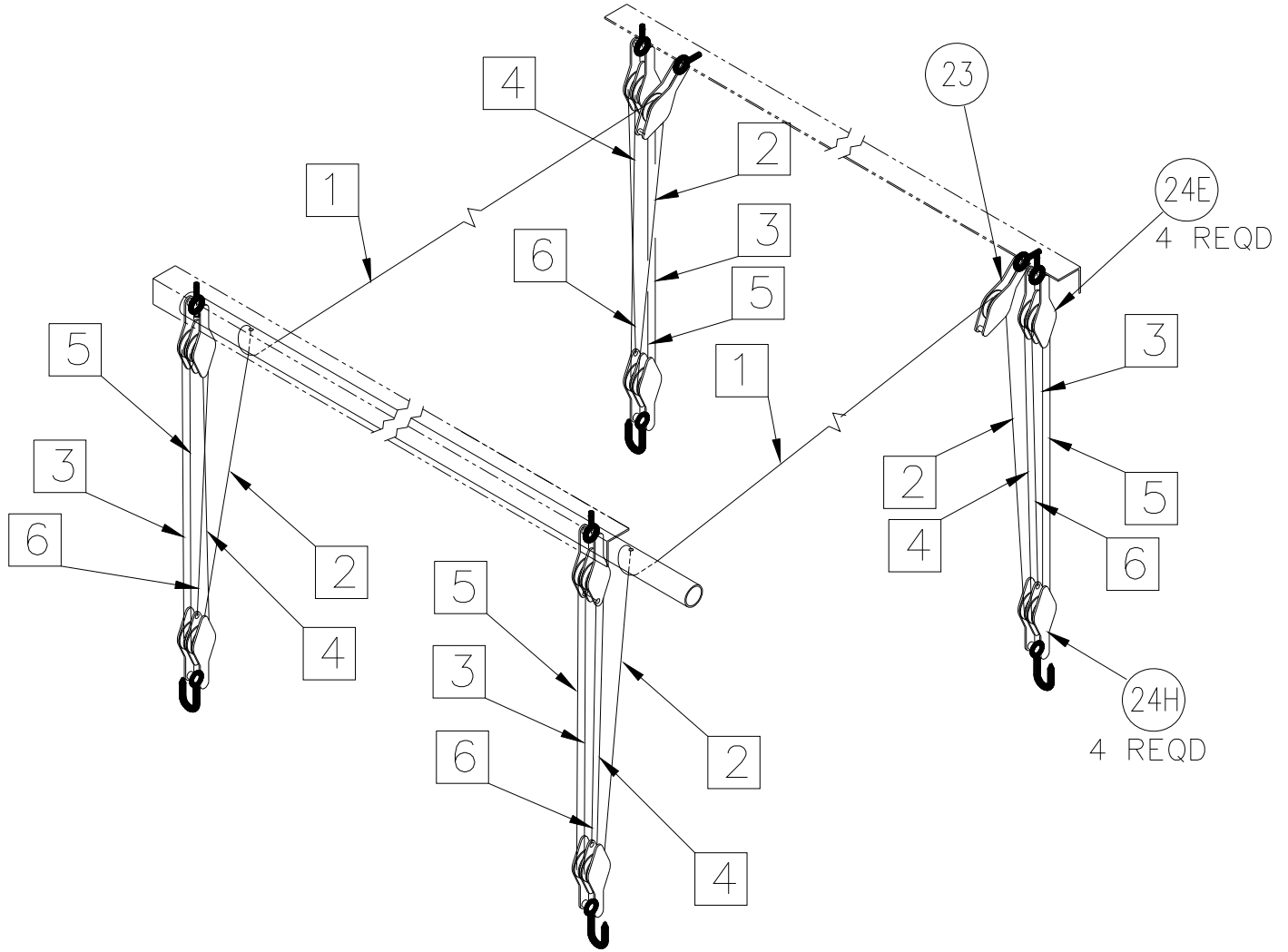
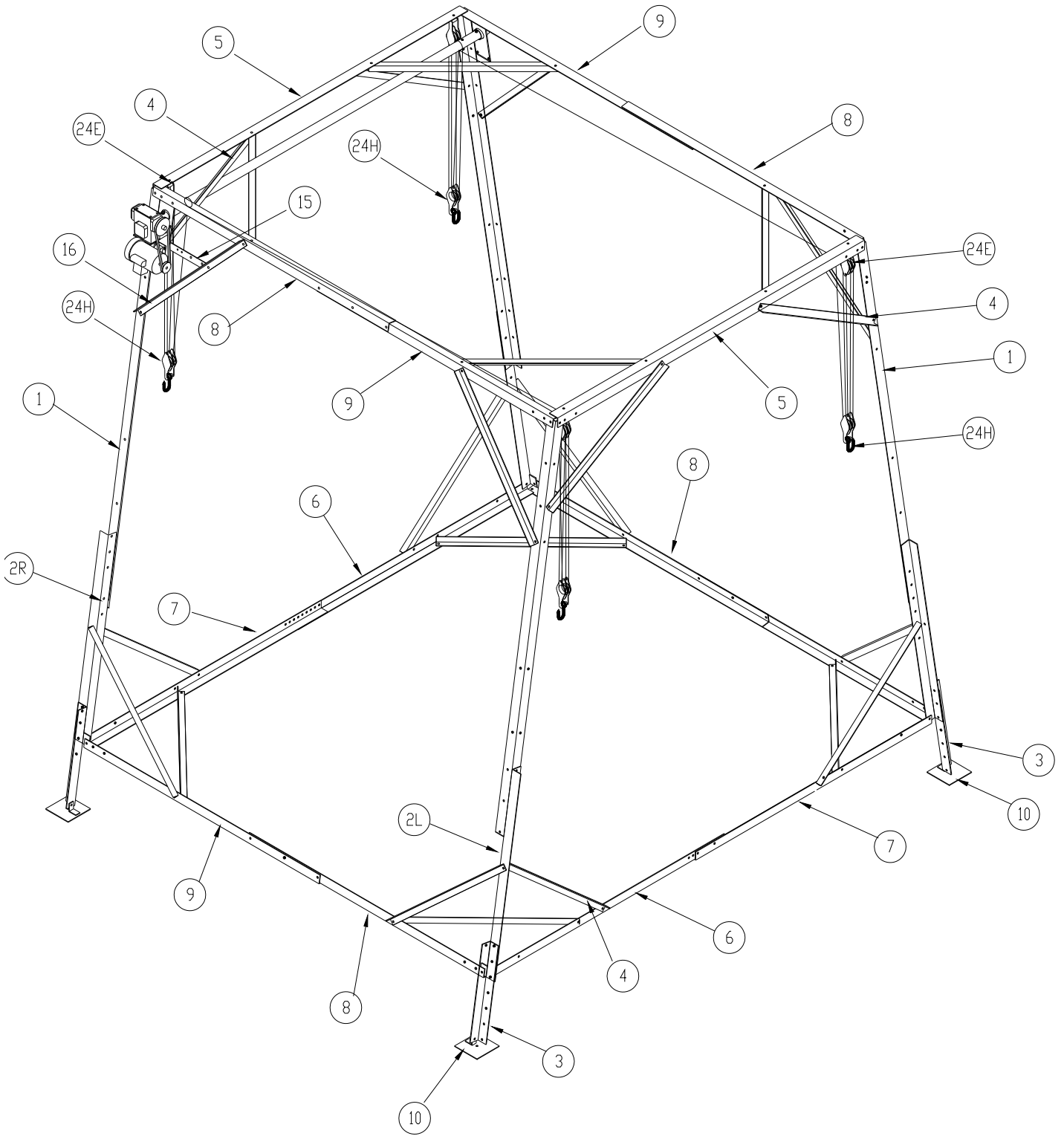


Figure 3-6  
IB-4500 & 3600 Cable Reeving



**Figure 3-7**  
**IB-4500 & 3600 Complete Assembly**

## 4 INSPECTION AND MAINTENANCE

### 4.1 GENERAL MAINTENANCE RULES

1. Do not allow persons other than authorized service personnel to repair this equipment.
2. If slings are used, inspect them for deterioration. Replace them immediately if they are worn.
3. Do not weld or otherwise modify the lift. Such alterations may weaken the structural integrity of the lift and invalidate your warranty.
4. Completely lower the lift before performing any type of maintenance or repair.



#### **WARNING:**

**NEVER ALLOW ANYBODY TO WORK IN OR ON THE BOAT WHEN IT IS SUSPENDED ABOVE THE WATER ON THE LIFT. IF THE HANDWHEEL ON THE WINCH SHOULD START FREEWHEELING, SERIOUS INJURY OR DEATH COULD RESULT.**

**IF FREEWHEELING STARTS, NEVER TRY TO STOP IT. ALTHOUGH A SPIN DOWN OR “FREEWHEELING” CAN CAUSE LIFT OR BOAT DAMAGE, TRYING TO STOP FREEWHEELING CAN CAUSE SERIOUS PERSONAL INJURY.**

### 4.2 WIRE ROPE INSPECTION PROCEDURE

Inspect the wire rope prior to each use for signs of wear, damage, or pinching. Inspect the entire wire rope working length. Thoroughly inspect the rope sections that pass over sheaves or drums, or that make opposing turns. Inspect wire rope and end attachments carefully. While inspecting, examine sheaves, guards, guides, drums, flanges, and other surfaces contacting wire rope during operation. Correct any condition harming the rope in use or other damage or worn surfaces at this time.

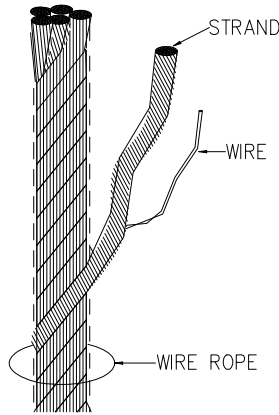


#### **CAUTION:**

**WEAR HEAVY LEATHER GLOVES WHEN HANDLING WIRE ROPE. INSUFFICIENT HAND PROTECTION WHEN HANDLING WIRE ROPE CAN CAUSE PERSONAL INJURY.**

Remove and immediately replace wire rope with one or more of the following defects:

1. Corrosion
2. Broken wires:
  - (a) One or more valley breaks. A valley break is a wire break occurring in the valley between two adjacent strands.
  - (b) Six randomly distributed broken wires in one rope lay. A rope lay is the length of rope along which one strand makes a complete revolution around the rope. See Figure 4-1. Keeping the rope clean and wound evenly on the winch drum will increase its life and efficiency.
3. Abrasion: Scrubbing, flattening or peening causing loss of more than one-third of the original diameter of the outside wires.
4. Kinking: Severe kinking, crushing, bird caging or other damage causing distortion of the rope structure. Bird caging is a bulging in the cable caused by the individual wires becoming untwisted. This untwisting of individual wires is usually caused by impact loading on the cable (such as a sudden stop).



**Figure 4-1**  
**Wire Rope Components**

5. Heat damage: Evidence of any heat damage caused by a torch or by contact with electrical wires.
6. Reduction of more than 1/64 inch from a nominal 5/16-inch or less diameter cable. Reduction of more than 1/32 inch from a nominal 3/8-inch to 1/2-inch diameter cable.

#### **4.3 ANNUAL INSPECTION**

At least once a year, the lift must be thoroughly inspected using the following procedure.



**WARNING:**  
**DO NOT ALLOW ANYBODY TO USE THE LIFT UNTIL THIS MAINTENANCE IS COMPLETED.**

1. Tighten all bolts.
2. Check the sheaves to insure that they spin freely. If they bind, replace them immediately.
3. Check frame thoroughly for defects.
4. Perform the winch maintenance as described in Section 5.4.

#### **4.4 ANNUAL WINCH MAINTENANCE**

1. The winch maintenance schedule must be followed to avoid possible equipment failure or personal injury.
2. Before removing the winch cover to inspect or work on the winch, be sure the platform is completely lowered. Do not reach through the wheel and manipulate any of the winch mechanisms when the platform is raised.
3. Grease cables, sheaves and drum bearings.



**WARNING:**  
**AFTER EVERY WINCH MAINTENANCE, TEST THE WINCH MECHANISM AS DESCRIBED IN CHAPTER 4 BEFORE LETTING ANYONE USE THE LIFT.**

#### 4.5 STORAGE PROCEDURE



**CAUTION:**

**DO NOT STORE THE LIFT IN THE WATERWAY IF FREEZING TEMPERATURES ARE EXPECTED. THIS WILL CAUSE EQUIPMENT DAMAGE.**

1. Position boat in lift so the center of gravity of the motor is inside of lift frame.
2. A boat that has water in it from a rain storm could exceed the recommended weight capacity for the lift. Just 1 gallon of water weighs over 8 pounds. Be sure to remove the plug while the boat is up on the lift. Make sure you replace the plug prior to launching your boat.
3. Protect your lift as far as possible from damage caused by environmental factors such as airborne fallout, chemicals, tree sap, and weather hazards.
4. Never use the lift to hang or store any auxiliary equipment such as boating hardware.
5. Do not allow anyone to swim or play near the lift at any time.
6. Padlock the handwheel to the post and disconnect the power to any electric motor when your boat lift is unattended. Never assume you will find the lift in the same condition that you left it.

## 5 PARTS LISTS

Each item number or letter in the following parts lists can be matched with the item number or letter referred to in both the text and illustrations of Sections 3.1 through 3.9 of Chapter 3, Installation and Setup.



### **WARNING:**

**FAILURE TO APPLY A SUITABLE LUBRICANT TO THE MATING SURFACES OF STAINLESS STEEL THREADED FASTENERS MAY CAUSE GALLING AND/OR SEIZING OF ASSEMBLY.**

### 5.1 #3203028 IB4500E BOAT LIFT BUNDLES

#### 5.1.1 #3203091 IB Common Bundle #1

REF #	PART #	QTY	DESCRIPTION
3	3202706	4	IB EXTENSION LEG 28-1/2"
4	3202707	10	IB CORNER BRACE
5	3202708	2	IB END BAR TOP
6	3202709	2	IB END BAR BOTTOM 7-HOLE
7	3202710	2	IB END BAR BOTTOM 14-HOLE
15	3202717	1	IB DRIVE SUPPORT
16	3202718	1	IB DRIVE BRACE

#### 5.1.2 #3203092 IB Common Bundle #2

REF #	PART #	QTY	DESCRIPTION
4	3202707	13	IB CORNER BRACE
8	3202711	4	IB SIDE BAR OUTER
9	3202712	4	IB SIDE BAR INNER

#### 5.1.3 #3203093 IB4500E Bundle #3

REF #	PART #	QTY	DESCRIPTION
11E	3202702	1	IB ELECTRIC WINCH DRUM
1	3202703	4	IB UPPER LEG
2R	3202704	2	IB LOWER LEG RIGHT HAND
2L	3202705	2	IB LOWER LEG LEFT HAND

### 5.2 #3203090 IB4500 CARTON OF PARTS

REF #	PART #	QTY	DESCRIPTION
10	3202317	4	IB/OH FOOT PLATE
13	3202715	1	IB DRUM BEARING
14	3202716	1	IB BEARING STRAP
22	3202722	1	IB HOISTING CABLE- PAIR
23	7303113	2	SINGLE BLOCK W/EYE
24E	7303117	4	DOUBLE BLOCK W/EYE
24H	7303115	4	DOUBLE BLOCK W/HOOK

**5.3 #3206507 IBE BAG OF BOLTS**

REF #	PART #	QTY	DESCRIPTION
	<b>3206507</b>	<b>1</b>	<b>IBE BAG OF BOLTS consisting of:</b>
17	3205425	2	IB DRUM WASHER
A	5806280	103	1/2 X 1 HEX HEAD CAP SCREW
B	5806282	4	1/2 X 1-1/2 HEX HEAD CAP SCREW
C	5806279	113	1/2 HEX NUT CZP
D	5806400	6	1/2 SAE WASHER
E	7306460	8	3/16 WIRE ROPE CLAMP
F	5806432	2	3/8 X 4 COTTER PIN

**5.4 #3213110 IBE ELECTRIC DRIVE (POWER HEAD) See Figure 7-2**

REF #	PART #	QTY	DESCRIPTION
25	3202700	1	IB ELECTRIC DRIVE FRAME
26	3202726	1	IB DRUM COUPLING
27	6703128	1	GEAR REDUCER 50:1
28	6500684	1	MOTOR 3/4 HP 115/230V
29	3203106	1	IB REVERSING SWITCH 15A
32	7303153	1	SHEAVE AS49 X 1
33	7300614	1	SHEAVE AK30 X 5/8
34	6703111	1	V-BELT A36
	6206990	1	DECAL POWER DR "OPER INSTRUCTIONS"
	6206211	1	TAG MODEL MARINE "BOAT LIFT"
G	5806280	4	1/2 X 1 HEX HEAD CAP SCREW
H	5806288	1	1/2 X 3 HEX HEAD CAP SCREW
J	5806142	1	1/2 HEX LOCKNUT
K	5806222	4	5/16 X 3/4 HEX HEAD CAP SCREW
L	5806412	4	1/2 EXT TOOTH WASHER
M	5806375	4	5/16 HEX NUT
N	5806402	4	5/16 EXTERNAL TOOTH WASHER
	5806184	1	ALLEN WRENCH 5/32 X 4-1/8
	5806187	1	ALLEN WRENCH 3/16 X 4-1/2
	<b>3213109</b>	<b>1</b>	<b>IBE ELECTRIC DRIVE COVER consists of:</b>
	3205411	1	IB/OB GUARD
	6206974	1	DECAL "RGC LOGO"
	3203183	2	IB/OB GUARD CLIP
	3203185	2	IB GUARD CLIP
	5806222	8	5/16 X 3/4 HEX HEAD CAP SCREW
	5806392	4	1/4 USS FLAT WASHER
	5806375	8	5/16 HEX NUT
	5806402	8	5/16 EXTERNAL TOOTH WASHER

## **LIMITED WARRANTY**

### **REIMANN & GEORGER CORPORATION MARINE PRODUCTS**

RGC Marine products, hereafter referred to as the "Manufacturer", extends this limited warranty to the original purchaser of this product. The original purchaser, hereinafter referred to as the "Buyer", is defined as the first legal owner of this product other than an authorized distributor or dealer who has bought the product from the Manufacturer for resale to the public. **The Buyer must complete and return the Warranty Registration section of the provided Warranty Card to make this limited warranty effective.**

#### **CONSUMER PRODUCT PROVISIONS**

**I. ARTICLE I—CONSUMER PRODUCT PROVISIONS: THE FOLLOWING PROVISIONS SHALL BE APPLICABLE IF THIS PRODUCT IS BEING PURCHASED FOR PERSONAL, FAMILY OR HOUSEHOLD PURPOSES.**

**THE CONSUMER PRODUCT PROVISIONS CONTAINED IN THIS ARTICLE I SHALL APPLY UNLESS THIS PRODUCT IS BEING PURCHASED SOLELY FOR COMMERCIAL OR INDUSTRIAL USE, IN WHICH EVENT THE PROVISIONS CONTAINED IN ARTICLE II BELOW SHALL APPLY AND THE PROVISIONS CONTAINED IN THIS ARTICLE I SHALL BE INAPPLICABLE.**

#### **A. 2-YEAR LIMITED WARRANTY**

The Manufacturer warrants to the Buyer that all supplied parts shall be free of defects in material and workmanship for a period of two (2) years from date of original purchase. This limited warranty covers the cost of all parts and labor needed to repair any item that is found to be defective in material and workmanship. Items covered include cables, sheaves, chains, motors, reducers, switches, control panels and ground fault circuit interrupters.

#### **B. 15-YEAR LIMITED WARRANTY ON VL/PL SERIES ALUMINUM FRAME EXTRUSION**

The Manufacturer warrants to the Buyer that the frame and extrusions shall be free of defects in material and workmanship for a period of fifteen (15) years from date of original purchase. This limited warranty covers the cost of all parts and labor needed to repair any item that is found to be defective in material and workmanship.

#### **C. MANUFACTURER'S OBLIGATIONS**

The Manufacturer's sole obligation under either of these limited warranties is the replacement or repair, at the Manufacturer's discretion, of parts found to be defective.

#### **D. NO SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES**

**IN NO EVENT SHALL THE MANUFACTURER BE LIABLE TO THE BUYER OR ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL LOSSES OR DAMAGES CONNECTED WITH THE USE OF THE PRODUCT UNDER WARRANTY. SUCH DAMAGES FOR WHICH THE MANUFACTURER SHALL NOT BE RESPONSIBLE INCLUDE, BUT ARE NOT LIMITED TO, LOST TIME AND CONVENIENCE, LOSS OF USE OF THE PRODUCT, THE COST OF A PRODUCT RENTAL, COSTS OF GASOLINE, TELEPHONE, TRAVEL, OR LODGING, THE LOSS OF PERSONAL OR COMMERCIAL PROPERTY, AND THE LOSS OF REVENUE.**

Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**E. NO LIABILITY IN EXCESS OF PURCHASE PRICE**

**IN NO EVENT SHALL THE MANUFACTURER'S OBLIGATIONS UNDER THIS LIMITED WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT.**

**F. NO EXTENSION OF STATUTE OF LIMITATIONS**

**ANY REPAIRS PERFORMED UNDER EITHER OF THESE WARRANTIES SHALL NOT IN ANY WAY EXTEND THE TWO-YEAR AND FIFTEEN-YEAR STATUTES OF LIMITATIONS CONTAINED IN THIS LIMITED WARRANTY.**

**G. PROCEDURE FOR WARRANTY PERFORMANCE**

If the product fails to perform to the Manufacturer's specifications, the Buyer must contact the dealer from whom the product was purchased. The Buyer must provide the dealer with the applicable model and serial numbers, the date of purchase, and the nature of the problem.

**H. PREAPPROVAL OF LABOR COSTS**

All labor costs related to a dealer's performance of the warranty obligations under this limited warranty must be pre-approved by Reimann & Georger Corporation Marine Products.

**I. NO OTHER EXPRESS WARRANTIES**

**THE MANUFACTURER IS NOT SUBJECT TO ANY EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH ABOVE.**

**J. LIMIT ON DURATION OF IMPLIED WARRANTIES**

**THE DURATION OF ANY IMPLIED WARRANTIES UNDER APPLICABLE STATE LAW RELATING TO THE PURCHASE OF THIS PRODUCT SHALL BE LIMITED TO A PERIOD OF TWO (2) YEARS FROM THE DATE OF PURCHASE.**

Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

**K. QUESTIONS REGARDING LIMITED WARRANTY**

Any questions regarding this limited warranty or the procedure which the consumer should follow in order to obtain performance of any warranty obligation may be addressed to either the dealer from whom this product is purchased or to Reimann & Georger Corporation Marine Products, P.O. Box 681, Buffalo, NY 14240.

**L. EXCLUSIONS FROM LIMITED WARRANTY. THIS LIMITED WARRANTY DOES NOT COVER ANY OF THE FOLLOWING:**

1. Equipment which has been abused, damaged, used beyond rated capacity, or which is damaged or has defects caused by repairs or service completed by persons other than authorized service personnel.
2. Costs of repairing damage caused by environmental factors which include, but are not limited to, airborne fallout, chemicals, tree sap, salt, ocean spray, and water hazards.
3. Damage caused by acts of God which include, but are not limited to, hailstorms, windstorms, tornadoes, sandstorms, lightning, floods, and earthquakes.

4. Damage under conditions caused by fire or accident, by abuse or negligence, by improper installation, by misuse, by incorrect operation, by “normal wear and tear”, by improper adjustment or alteration, by alterations not done by the Manufacturer, or by failure of product parts from such alterations.
5. Costs of repairing damage caused by poor or improper maintenance, costs of normally scheduled maintenance, or the cost of replacing any parts unless done as the result of a repair covered by your two-year limited warranty.
6. Costs of modifying the product in any way once delivered to the Buyer, even if such modifications were added as a production change on other products made after the Buyer’s product was built.

**M. RIGHT TO MODIFY PRODUCT**

The Manufacturer has the right to modify this product at any time without incurring any obligation to make the same or similar modifications on products previously purchased.

**N. NO AUTHORITY TO ALTER WARRANTY**

No agent, representative, distributor or dealer has any authority to alter the terms of this warranty in any way.

**O. SPECIFIC LEGAL RIGHTS**

This warranty gives you specific legal rights and you may also have other rights which vary from State to State.

**COMMERCIAL PRODUCT PROVISIONS**

**II. ARTICLE II—COMMERCIAL PRODUCT PROVISIONS: THE FOLLOWING PROVISIONS SHALL BE APPLICABLE ONLY IF THIS PRODUCT IS BEING PURCHASED SOLELY FOR COMMERCIAL OR INDUSTRIAL USE. IF THIS PRODUCT IS BEING PURCHASED FOR PERSONAL, FAMILY OR HOUSEHOLD PURPOSES, THE PROVISIONS CONTAINED IN THIS ARTICLE II SHALL NOT BE APPLICABLE AND THE PROVISIONS CONTAINED IN ARTICLE I ABOVE SHALL APPLY.**

**A. 1-YEAR LIMITED WARRANTY**

The Manufacturer warrants to the Buyer that all supplied parts shall be free of defects in material and workmanship for a period of one (1) year from date of original purchase. This limited warranty covers the cost of all parts and labor needed to repair any item that is found to be defective in material and workmanship. Items covered include cables, sheaves, chains, motors, reducers, switches, control panels and ground fault circuit interrupters.

**B. 5-YEAR LIMITED WARRANTY ON VL/PL SERIES ALUMINUM FRAME EXTRUSION**

The Manufacturer warrants to the Buyer that the frame and extrusions shall be free of defects in material and workmanship for a period of five (5) years from date of original purchase. This limited warranty covers the cost of all parts and labor needed to repair any item that is found to be defective in material and workmanship.

**C. MANUFACTURER'S OBLIGATIONS**

The Manufacturer's sole obligation under either of these limited warranties is the replacement or repair, at the Manufacturer's discretion, of parts found to be defective.

**D. NO SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES**

**IN NO EVENT SHALL THE MANUFACTURER BE LIABLE TO THE BUYER OR ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL LOSSES OR DAMAGES CONNECTED WITH THE USE OF THE PRODUCT UNDER WARRANTY. SUCH DAMAGES FOR WHICH THE MANUFACTURER SHALL NOT BE RESPONSIBLE INCLUDE, BUT ARE NOT LIMITED TO, LOST TIME AND CONVENIENCE, LOSS OF USE OF THE PRODUCT, THE COST OF A PRODUCT RENTAL, COSTS OF GASOLINE, TELEPHONE, TRAVEL, OR LODGING, THE LOSS OF PERSONAL OR COMMERCIAL PROPERTY, AND THE LOSS OF REVENUE.**

**E. NO LIABILITY IN EXCESS OF PURCHASE PRICE**

**IN NO EVENT SHALL THE MANUFACTURER'S OBLIGATIONS UNDER THIS LIMITED WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT.**

**F. NO EXTENSION OF STATUTE OF LIMITATIONS**

**ANY REPAIRS PERFORMED UNDER EITHER OF THESE WARRANTIES SHALL NOT IN ANY WAY EXTEND THE RESPECTIVE STATUTES OF LIMITATIONS CONTAINED IN THIS LIMITED WARRANTY.**

**G. WAIVER OF OTHER WARRANTIES**

**THESE EXPRESS WARRANTIES ARE IN LIEU OF AND EXCLUDE ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

## **H. PROCEDURE FOR WARRANTY PERFORMANCE**

If the product fails to perform to the Manufacturer's specifications, the Buyer must contact the dealer from whom the product was purchased. The Buyer must provide the dealer with the applicable model and serial numbers, the date of purchase, and the nature of the problem.

## **I. PREAPPROVAL OF LABOR COSTS**

All labor costs related to a dealer's performance of the warranty obligations under this limited warranty must be pre-approved by Reimann & Georger Corporation Marine Products.

## **J. EXCLUSIONS FROM WARRANTY. THIS LIMITED WARRANTY DOES NOT COVER ANY OF THE FOLLOWING:**

1. Equipment which has been abused, damaged, used beyond rated capacity, or which is damaged or has defects caused by repairs or service completed by persons other than authorized service personnel.
2. Costs of repairing damage caused by environmental factors which include, but are not limited to, airborne fallout, chemicals, tree sap, salt, ocean spray, and water hazards.
3. Damage caused by acts of God which include, but are not limited to, hailstorms, windstorms, tornadoes, sandstorms, lightning, floods, and earthquakes.
4. Damage under conditions caused by fire or accident, by abuse or negligence, by improper installation, by misuse, by incorrect operation, by "normal wear and tear", by improper adjustment or alteration, by alterations not done by the Manufacturer, or by failure of product parts from such alterations.
5. Costs of repairing damage caused by poor or improper maintenance, costs of normally scheduled maintenance, or the cost of replacing any parts unless done as the result of a repair covered by your one-year limited warranty.
6. Costs of modifying the product in any way once delivered to the Buyer, even if such modifications were added as a production change on other products made after the Buyer's product was built.

## **K. RIGHT TO MODIFY PRODUCT**

The Manufacturer has the right to modify this product at any time without incurring any obligation to make the same or similar modifications on products previously purchased.

## **L. NO AUTHORITY TO ALTER WARRANTY**

No agent, representative, distributor, or dealer has any authority to alter the terms of this warranty in any way.

## **M. SPECIFIC LEGAL RIGHTS**

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.