



# HL EXTENSION LEG BRACING INSTRUCTIONS

**OBSOLETE**

REIMANN & GEORGER CORPORATION  
MARINE PRODUCTS  
P/N 6114105

BUFFALO, NY  
5/08/01

# 1 SAFETY

## 1.1 INTRODUCTION

Your Reimann & Georger Corporation Marine Products Hydraulic Lift Extension Leg Bracing has been engineered to provide lifting performance, long term economics and safety advantages that no other type can match. However, even well-designed and well-built bracing can malfunction or become hazardous in the hands of an inexperienced and/or untrained installer. 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 INSTALL BRACING WITHOUT STUDYING THIS ENTIRE MANUAL AND RELATED MANUALS. FAILURE TO DO THIS CAN RESULT IN SERIOUS PERSONAL INJURY AND/OR EQUIPMENT DAMAGE. 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 that, 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 allow persons other than authorized service personnel to repair any part of this equipment.
2. Do not exceed the rated maximum lifting capacity of this equipment.
3. Never try lifting anything other than a boat with this equipment.
4. Never allow people in the boat any time it is suspended above the water on the platform or when the lift is in use.
5. Do not stand or walk on the loading platform while it is in any raised position.
6. Do not allow anyone to swim or play under, near or on the lift at any time. Raise the bunks out of the water when leaving the lift unattended to allow swimmers to see its location.
7. Never use the lift to hang or store any auxiliary equipment such as boating hardware.
8. Never operate the lift during an electrical storm.

## **1.5 INSTALLATION SAFETY**

1. Do not weld or otherwise modify the bracing lift. Such alterations may weaken the structural integrity of the lift and void the warranty.
2. All lifting accessories such as pontoon brackets, pivoting bunks, and guide-ons, must be commercially manufactured, and be properly maintained and installed.
3. Insure 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.
  - d. Use material handling equipment for heavy assemblies

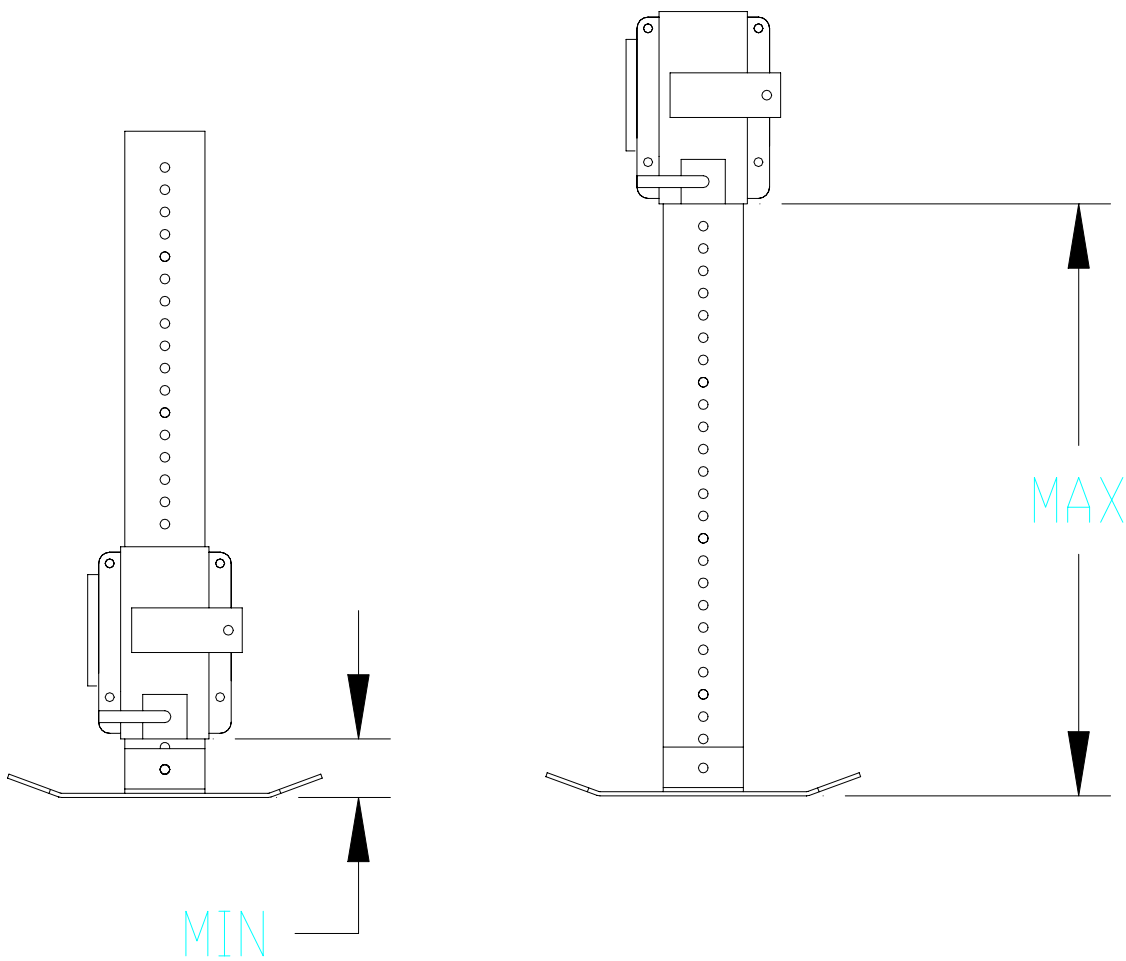
## **1.6 OPERATING SAFETY**

1. Before allowing anyone to operate the lift, be certain they fully understand the proper operating procedure.
2. Completely remove any user or dealer installed locking devices before operating the lift.
3. Ensure the center of gravity of the boat is between forward load tube and rear foot plates.
4. Do not try lifting or launching your boat in rough water conditions. This can damage your boat and/or the lift.
5. The boat must be stored with the lift in the over center position.
6. Keep people and pets clear during operation of the lift.
7. Keep all clothing and all body parts clear of moving parts.
8. Never adjust or service the lift during operation or while connected to the control box.
9. Completely lower the platform before performing any type of maintenance or repair.
10. Never allow anybody to work in or on the boat when it is suspended above the water on the lift.
11. Do not operate the lift when under the influence of drugs, alcohol, or medication.

## 2 SPECIFICATIONS

All extension legs require bracing except the 29-1/2 in. size and are adjustable at 1 in. increments. Adjustment range is measured from base of leg pocket assembly to bottom of foot plate.

EXTENSION LEG SIZE	ADJUSTMENT RANGE ( IN.)	BRACING PACKAGE
29-1/2 IN.	2-9/16 to 26-9/16	NO BRACING
4 FT.	19-1/16 to 43-1/16	SHALLOW WATER
6 FT.	43-1/16 to 67-1/16	DEEP DEPTH
8 FT.	67-1/16 to 91-1/16	DEEP DEPTH
10 FT.	91-1/16 to 115-1/16	DEEPDEPTH



**Figure 2-1**  
**HL Extension Legs**

### 3 INSTALLATION AND SETUP

#### 3.1 PRE-INSTALLATION CHECKS

1. Do not install extension legs or bracing on the lift without reading both this manual and your hydraulic lift manual. Failure to do so could result in personal injury and/or equipment damage.
2. Do not install extension legs or bracing without first inspecting and replacing any damaged or defective parts.
3. Do not weld or otherwise modify any part of the extension legs or bracing. Such alterations may weaken the structural integrity of the lift and void the warranty.
4. Do not install the extension legs or extension leg bracing with the weight of the boat on the lift. This can cause personal injury and/or equipment damage.

#### 3.2 MOUNTING THE EXTENSION LEGS AND BRACINGS

When properly installed the Shallow Water and Deep Depth Brackets are at the lowest possible position with the Extension Leg Brace being at no less than a 15 degree angle to the extension leg. The Shallow Water and Deep Depth Brackets are allowed to slide on the extension leg with the Extension Leg Brace holding the bracket in place. The Horizontal Brace the brackets at a fixed distance apart preventing the extension leg from bowing or swaying.

1. **Refer to Figure 4-1 for Shallow Water Bracing and Figure 4-2 for Deep Depth Bracing.** Assemble the foot plate to the bottom end of the extension leg using a 1/2-13 x 5" HHCS and a 1/2-13 Nylock hex nut. Foot plate and related hardware is supplied with your boat lift.
2. Slide a Shallow Water or Deep Depth Bracket #1 onto each extension leg so the horizontal brace mounting plate is facing outward.
3. Insert the extension leg into the bottom of the leg pocket assembly and set to your desired height. Insert leg pin through holes in leg pocket assembly and extension leg, fastening with leg pin spring clip. HL Leg Pin Set is supplied with boat lift.
4. Install Horizontal Braces #2 to the Shallow Water or Deep Depth Bracket #1 using hardware A and F.

##### **For Shallow Water Bracing:**

5. Loosely install Extension Leg Brace #3 to the Shallow Water Bracket #1 using hardware A and F.
6. Mount the Extension Leg Brace #3 to the HL Frame Cross Tie using HL 3-Hole Plate #4 and hardware C, E, E and F for a 2" wide Frame Cross Tie and hardware D, E, E and F for a 3" wide Frame Cross Tie. Tighten all hardware.

##### **For Deep Depth Bracing:**

7. Loosely install Cross Braces #5 to the lower mounting angle of the Deep Depth Bracket #1 using hardware A, E, E and F.
8. Loosely install both an Extension Leg Brace #3 and a Cross Brace #5 to the upper mounting angle of the Deep Depth Bracket #1 using hardware B, E, E and F.
9. Connect Cross Braces #5 together at the midpoint using hardware A and F.
10. Mount the Extension Leg Brace #3 to the HL Frame Cross Tie using HL 3-Hole Plate #4 and hardware C, E, E and F for a 2" wide Frame Cross Tie and hardware D, E, E and F for a 3" wide Frame Cross Tie. Tighten all hardware.

### 3.3 MOVING LIFT TO OPERATING POSITION

1. Before moving lift to operating position, insure the completed extension leg assembly appears as shown in **Figure 4-1** or **Figure 4-2** and all hardware is securely fastened.
2. Use a material-handling device to move the assembled lift into position.
3. After moving your lift to the operating position, insure that the frame is square and that the lift sets level.



**CAUTION:**

**INSURE LIFT IS SQUARE AND LEVEL TO PREVENT PLATFORM BINDING AND/OR EQUIPMENT DAMAGE.**

## 4 PARTS LISTS

Each reference number in the following parts lists can be matched with the reference number shown on the illustrations in Chapter 3, Installation and Setup.

### 4.1 HL EXTENSION LEGS

#### 4.1.1 #4100512 HL Extension Legs 4 Ft. ( 1 Pr. )

REF #	PART #	QTY	DESCRIPTION
	4100513	2	HL EXT LEG 4 Ft.

#### 4.1.2 #4100514 HL Extension Legs 6 Ft. ( 1 Pr. )

REF #	PART #	QTY	DESCRIPTION
	4100515	2	HL EXT LEG 6 Ft.

#### 4.1.3 #4100516 HL Extension Legs 8 Ft. ( 1 Pr. )

REF #	PART #	QTY	DESCRIPTION
	4100517	2	HL EXT LEG 8 Ft.

#### 4.1.4 #4100518 HL Extension Legs 10 Ft. ( 1 Pr. )

REF #	PART #	QTY	DESCRIPTION
	4100519	2	HL EXT LEG 10 Ft.

### 4.2 HL EXTENSION LEG BRACING

#### 4.2.1 #4100565 HL Shallow Leg Bracing

REF #	PART #	QTY	DESCRIPTION
1	4100535	4	HL EXT LEG SHALLOW BRACE BRACKET
2	4100537	2	HL EXT LEG HORIZONTAL BRACE
3	4100540	4	HL EXT LEG BRACE 48"
4	4100545	4	HL 3-HOLE PLATE
	<b>4100930</b>	<b>1</b>	<b>HL EXT LEG 4' BRACE BAG OF BOLTS consisting of:</b>
A	5896248	20	HHCS 3/8-16 X 1-1/4 SS
C	5896257	8	HHCS 3/8-16 X 3-1/2 SS
D	5896262	4	HHCS 3/8-16 X 4-1/2 SS
E	5896406	12	WASHER FLAT SAE 3/8" SS
F	5897016	28	NUT HEX NYLOCK 3/8-16 SS

#### 4.2.2 #4100570 HL116 Beam Deep Depth Bracing

REF #	PART #	QTY	DESCRIPTION
1	4100536	4	HL EXT LEG DEEP DEPTH BRACKET
2	4100537	4	HL EXT LEG HORIZONTAL BRACE
3	4100541	4	HL EXT LEG BRACE 72"
4	4100545	4	HL 3-HOLE PLATE
5	4100550	4	HL EXT LEG CROSS BRACE 115-1/16
	<b>4100935</b>	<b>1</b>	<b>HL EXT LEG DEEP DEPTH BAG OF BOLTS (SEE SEC. 4.2.4)</b>

**4.2.3 #4100575 HL124 Beam Deep Depth Bracing**

REF #	PART #	QTY	DESCRIPTION
1	4100536	4	HL EXT LEG DEEP DEPTH BRACKET
2	4100537	4	HL EXT LEG HORIZONTAL BRACE
3	4100541	4	HL EXT LEG BRACE 72"
4	4100545	4	HL 3-HOLE PLATE
5	4100551	4	HL EXT LEG CROSS BRACE 122-3/4
	<b>4100935</b>	<b>1</b>	<b>HL EXT LEG DEEP DEPTH BAG OF BOLTS (SEE SEC. 4.2.4)</b>

**4.2.4 #4100935 HL Extension Leg Deep Depth Bag of Bolts**

REF #	PART #	QTY	DESCRIPTION
A	5896248	38	HHCS 3/8-16 X 1-1/4 SS
B	5896250	4	HHCS 3/8-16 X 1-3/4 SS
C	5896257	8	HHCS 3/8-16 X 3-1/2 SS
D	5896262	4	HHCS 3/8-16 X 4-1/2 SS
E	5896406	12	WASHER FLAT SAE 3/8" SS
F	5897016	50	NUT HEX NYLOCK 3/8-16 SS

**4.3 HL EXTENDED LIFT EXTENSION LEG BRACING**

**4.3.1 #4101565 HL XL Shallow Leg Bracing**

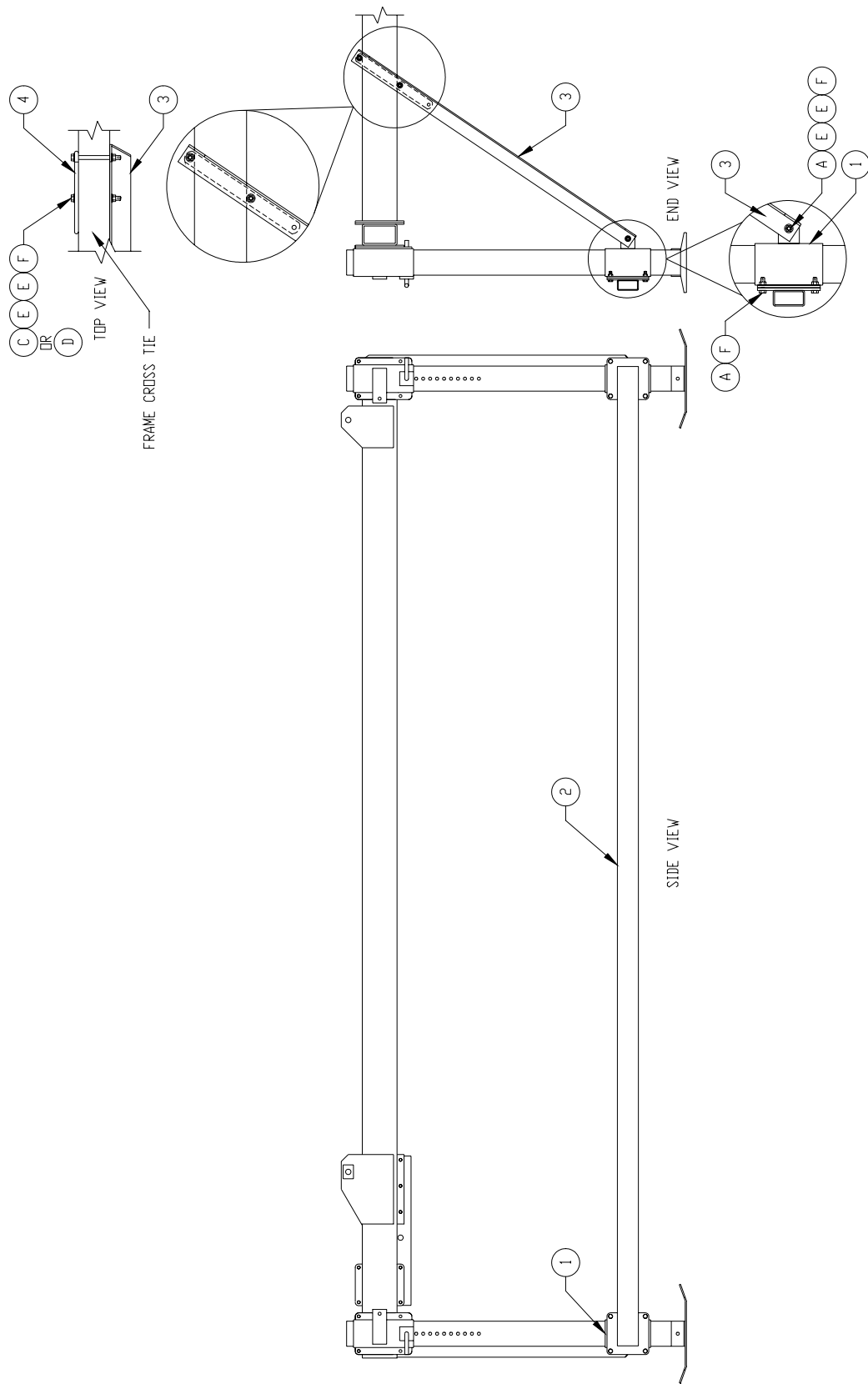
REF #	PART #	QTY	DESCRIPTION
1	4100535	4	HL EXT LEG SHALLOW BRACE BRACKET
2	4101537	2	HL EXT LEG HORIZONTAL BRACE
3	4100540	4	HL EXT LEG BRACE 48"
4	4100545	4	HL 3-HOLE PLATE
	<b>4100930</b>	<b>1</b>	<b>HL EXT LEG 4' BRACE BAG OF BOLTS consisting of:</b>
A	5896248	20	HHCS 3/8-16 X 1-1/4 SS
C	5896257	8	HHCS 3/8-16 X 3-1/2 SS
D	5896262	4	HHCS 3/8-16 X 4-1/2 SS
E	5896406	12	WASHER FLAT SAE 3/8" SS
F	5897016	28	NUT HEX NYLOCK 3/8-16 SS

**4.3.2 #4101570 HL XL116 Beam Deep Depth Bracing**

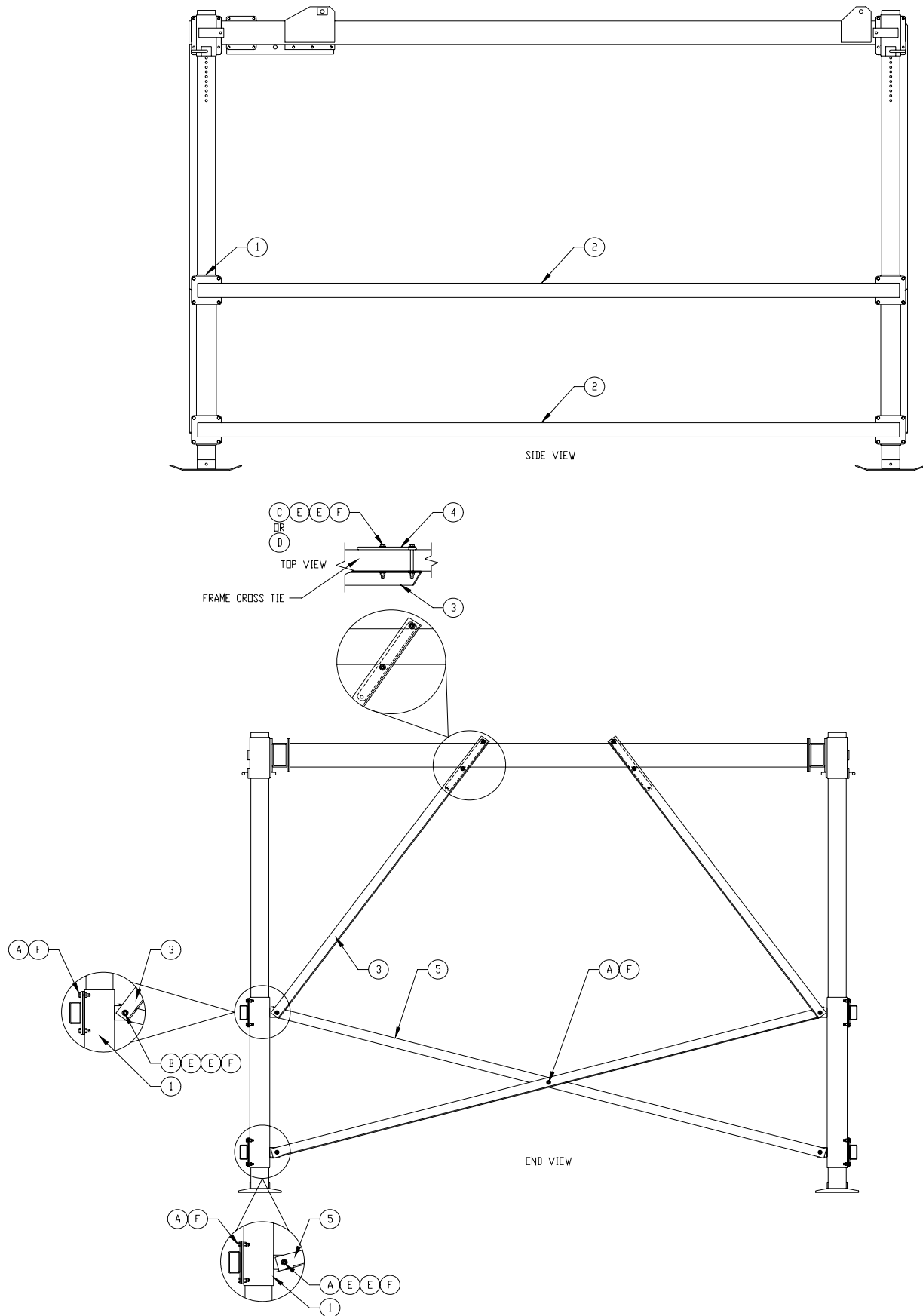
REF #	PART #	QTY	DESCRIPTION
1	4100536	4	HL EXT LEG DEEP DEPTH BRACKET
2	4101537	4	HL EXT LEG HORIZONTAL BRACE
3	4100541	4	HL EXT LEG BRACE 72"
4	4100545	4	HL 3-HOLE PLATE
5	4100550	4	HL EXT LEG CROSS BRACE 115-1/16
	<b>4100935</b>	<b>1</b>	<b>HL EXT LEG DEEP DEPTH BAG OF BOLTS (SEE SEC. 4.2.4)</b>

**4.3.3 #4101575 HL XL124 Beam Deep Depth Bracing**

REF #	PART #	QTY	DESCRIPTION
1	4100536	4	HL EXT LEG DEEP DEPTH BRACKET
2	4101537	4	HL EXT LEG HORIZONTAL BRACE
3	4100541	4	HL EXT LEG BRACE 72"
4	4100545	4	HL 3-HOLE PLATE
5	4100551	4	HL EXT LEG CROSS BRACE 122-3/4
	<b>4100935</b>	<b>1</b>	<b>HL EXT LEG DEEP DEPTH BAG OF BOLTS (SEE SEC. 4.2.4)</b>



**Figure 4-1.**  
**HL Shallow Water Extension Leg Bracing**



**Figure 4-2.**  
**HL Deep Water Extension Leg Bracing**