

MINI MAG

1500

MODEL

INSTALLATION

INSTRUCTIONS

1500 E, 1500 M, 1500 E DUAL SKI

Boat Lifts Unlimited
Odenton, Maryland
410-674-3100

Prior to installation:

- a). To insure that the lift will operate properly, adequate electricity should be available. Electricity will also be needed to install the lift.
- b). Insure that the pilings are at least 12" high above the deck of the pier.
- c). The lift pilings should be driven in the ground to the dock or seawall . Otherwise the weight of the boat will pull the piles over.
- d). If existing piles are to be used, insure they are not cracked or show any signs of decay.
- e). obtain any locally required permits.

DO NOT USE ANY POWER TOOLS WHILE STANDING IN THE WATER. IF ELECTRICITY MUST BE USED NEAR THE WATER, INSURE THAT THE CIRCUIT IS PROTECTED BY A GROUND FAULT INTERRUPTER.

INSTALLATION INSTRUCTIONS MINI MAG 1500 LB. LIFT

- 1) Determine which piling is to be used to mount the Mini Mag Lift. Timber piles should be 8" in diameter or greater. Square piles should be 6" x 6" or greater. Both pilings must be tied back to the dock or sea wall.
- 2) Mount the track as per figure #09. The top of the track should be 2 feet above the deck or seawall cap. It is not necessary for the track to reach the bottom. It should reach to 3' below low water. Be sure to install the 3" dock washer behind the head of the 5/8" carriage mounting bolt and the 5/8" x 1 1/2" stop bolt at the bottom of the track. The track should have a slight backward pitch. It may be necessary to install a wooden shim between the channel spacer and the track to compensate for a out of plumb piling.
- 3) Lubricate the stainless steel axles with a marine grease and install the poly rollers (item #8) onto the carriage. Apply some grease to the inside walls of the track to lube the poly rollers. Clamp a set of vice grips on the lip of the track 3' down from the top of the track. Install the arms in the track and lower the arm until it rests on the vice grips.
- 4) Install the AMS 1500 with the electric motor mounts or the manual winch to the top of the track. Install the cable in accordance with figure #7 & #08 and the blue nylon sheave. Plug in the power cord. Firmly grasp the cable using leather gloves and turn the switch to the up position. Neatly wind the cable onto the drum.
- 5) Install the PVC guide pole bases onto the arms and close to the dock. Determine the width of the vessel being lifted. If the vessel is 6' wide, measure out 3' on each arm. This will be your center marks for installing the vertical bunks. Install the vertical bunks in accordance with figure #11. Initially set the bunks at about 30" apart for a VEE bottom boat. That would be a 15" on either side of the center mark.

IMPORTANT

Apply a good heavy grease to the winch gears. Use the two zirk fittings located on either side of the worm gear. If the gears are not lubricated the lift will bind and wear the gears producing a fine powder and a scraping noise. This is only for electric models.

**INSTALLATION INSTRUCTIONS
MINI MAG 1500 LB. LIFT CON'T.**

- 6) Check all nuts and bolts to be sure they are tight before fitting the boat onto the lift. Lower the lift to a depth deep enough to move the boat over the lift. Place the boat more forward so the transom extends 1' - 2' past the end on the bunks. Ideally the Boat's center of gravity will be centered fore and aft on the forks. If the carriage *sticks*, the center of gravity is off center. Reposition the boat to center the weight on the lift and raise the boat. Adjust the bunks and guides if required to securely hold the boat.

*******IMPORTANT*******

DO NOT HARDWIRE THIS LIFT OR LEAVE IT PLUGGED IN WHILE NOT IN USE, TO AN ELECTRICAL CIRCUIT. IF THE GROUND WIRE IS ALLOWED TO REMAIN CONNECTED TO THE CIRCUIT WHILE THE LIFT IS NOT IN USE, ELECTROLYSIS WILL OCCUR. THIS WILL CORRODE THE TRACK AT A GREATLY ACCELERATED RATE.

**1500E MINI MAG LOAD SHEET
PARTS LIST**

NO.	ITEMS	QTY
1	3' x 5' FORK ARM	1
2	TRACK 8'/10'/12'	1
4	AMS 1500 WINCH WITH COVER (8" PULLEY & 4L280 BELT)	1
5	ELECTRIC MOTOR MOUNTS	2
6	3" NYLON SHEAVE	1
7	1/4" S.S. CABLE WITH LOOP 13'-6"-8'/17'-6"-10'/21'-6"-12'	1
8	POLY ROLLERS	4
9	NOT USED	0
10	4' PVC GUIDE POLE SECTIONS	2
11	PVC GUIDE POLE CAPS	2
12	GUIDE POLE STANCHIONS (BASE)	2
13	2" x 6" x 6' TIMBER RUNNERS-CARPETED (RETAIL ONLY)	2
14	BUNK BRACKETS-4 EA L AND R 8"	8
15	5" WIDE CARPETS x 6' LONG (WHOLESALE ONLY)	2
16	5/8" x 1 1/2" GAL HEX BOLT (STOP BOLT)	1
16a	5/8" GAL NUTS	1
18	3/8" x 1" CARRIAGE BOLTS	4
18a	3/8" GAL NUTS	4
19	1/2" x 2 1/2" STAINLESS HEX BOLT	1
19a	1/2" STAINLESS LOCK NUT	1
20	3/8" x 1" GAL HEX BOLTS	4
20a	3/8" GAL NUTS	4
21	3/8" x 2 1/2" GAL CARRIAGE BOLTS	8
21a	3/8" GAL NUTS	8
22	3/8" x 3" GAL HEX BOLTS	8
22a	3/8" GAL NUTS	8
23	3/8" x 5" GAL HEX BOLTS	2
23a	3/8" GAL NUTS	2
24	1 1/2" x 1/2" STAINLESS STEEL CARRIAGE BOLT	1
24a	1/2" GAL WASHER	3
24b	1/2" GAL LOCK WASHERS	1
24c	1/2" GAL NUTS	1
25	3/16" CABLE CLAMP	1
26	AMS POLY COVER	1
27	BACKING PLATE	1

**1500E MINI MAG LOAD SHEET
PARTS LIST**

NO.	ITEMS (CONTINUED)	QTY
PILE MOUNTED		
3	BACKING CHANNELS (SPACER)	2
17	5/8" x 14" BUTTON HEAD BOLTS	2
17a	5/8" DOCK WASHERS WITH SQUARE ID 3" OD	2
17b	5/8" WASHERS	2
17c	5/8" GAL NUTS	2
OPTIONAL		
28	SEAWALL MOUNT	1
FOR DUAL MOUNTS ADD:		
22	3/8" x 3" GAL HEX BOLTS	8
22a	3/8" GAL NUTS	8
29	BUNK BRACKETS (HORIZONTAL TYPE)	8
30	STAINLESS 'U' BOLTS	8
30a	3/8" STAINLESS NUTS	16
30b	3/8" STAINLESS WASHERS	16
31	2" x 4" x 5' FLAT BUNKS (RETAIL KIT ONLY)	4
32	2" x 4" x 5' CARPETS (WHOLESALE ONLY)	4

**1500M MINI MAG LOAD SHEET
PARTS LIST**

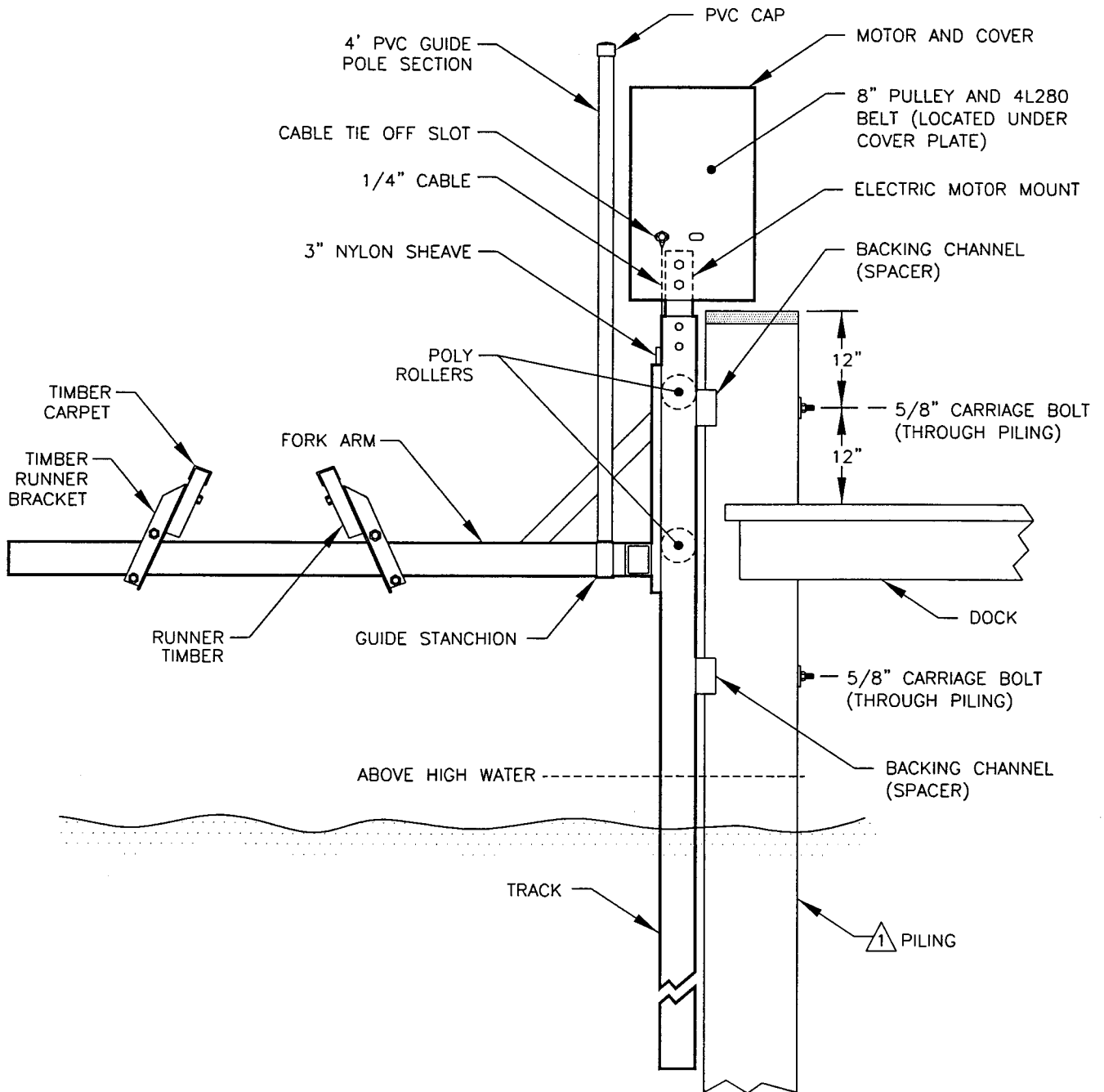
NO.	ITEMS	QTY
1	3' x 5' FORK ARM	1
2	TRACK 8'/10'/12'	1
4	DL 1500 WINCH	1
5	MANUAL MOTOR MOUNT	1
6	3" NYLON SHEAVE	1
7	1/4" S.S. CABLE WITH STOP 16'-8'/20'-10'/24'-12'	1
8	POLY ROLLERS	4
9	NOT USED	0
10	4' PVC GUIDE POLE SECTIONS	2
11	PVC GUIDE POLE CAPS	2
12	GUIDE POLE STANCHIONS (BASE)	2
13	2" x 6" x 6' TIMBER RUNNERS-CARPETED (RETAIL ONLY)	2
14	BUNK BRACKETS-4 EA L AND R 8"	8
15	5" WIDE CARPETS x 6' LONG (WHOLESALE ONLY)	2
16	5/8" x 1 1/2" GAL HEX BOLT (STOP BOLT)	1
16a	5/8" GAL NUTS	1
18	3/8" x 1" CARRIAGE BOLTS	4
18a	3/8" GAL NUTS	4
19	1/2" x 2 1/2" STAINLESS HEX BOLT	1
19a	1/2" STAINLESS LOCK NUT	1
20	3/8" x 1" GAL HEX BOLTS	4
20a	3/8" GAL NUTS	4
21	3/8" x 2 1/2" GAL CARRIAGE BOLTS	8
21a	3/8" GAL NUTS	8
22	3/8" x 3" GAL HEX BOLTS	8
22a	3/8" GAL NUTS	8
23	3/8" x 5" GAL HEX BOLTS	2
23a	3/8" GAL NUTS	2
24	NOT USED	0
24a	NOT USED	0
24b	NOT USED	0
24c	NOT USED	0
25	NOT USED	0
26	NOT USED	0
27	NOT USED	0

**1500M MINI MAG LOAD SHEET
PARTS LIST**

NO.	ITEMS (CONTINUED)	QTY
PILE MOUNTED		
3	BACKING CHANNELS (SPACER)	2
17	5/8" x 14" BUTTON HEAD BOLTS	2
17a	5/8" DOCK WASHERS WITH SQUARE ID 3" OD	2
17b	5/8" WASHERS	2
17c	5/8" GAL NUTS	2
OPTIONAL		
28	SEAWALL MOUNT	1

GENERAL NOTE:

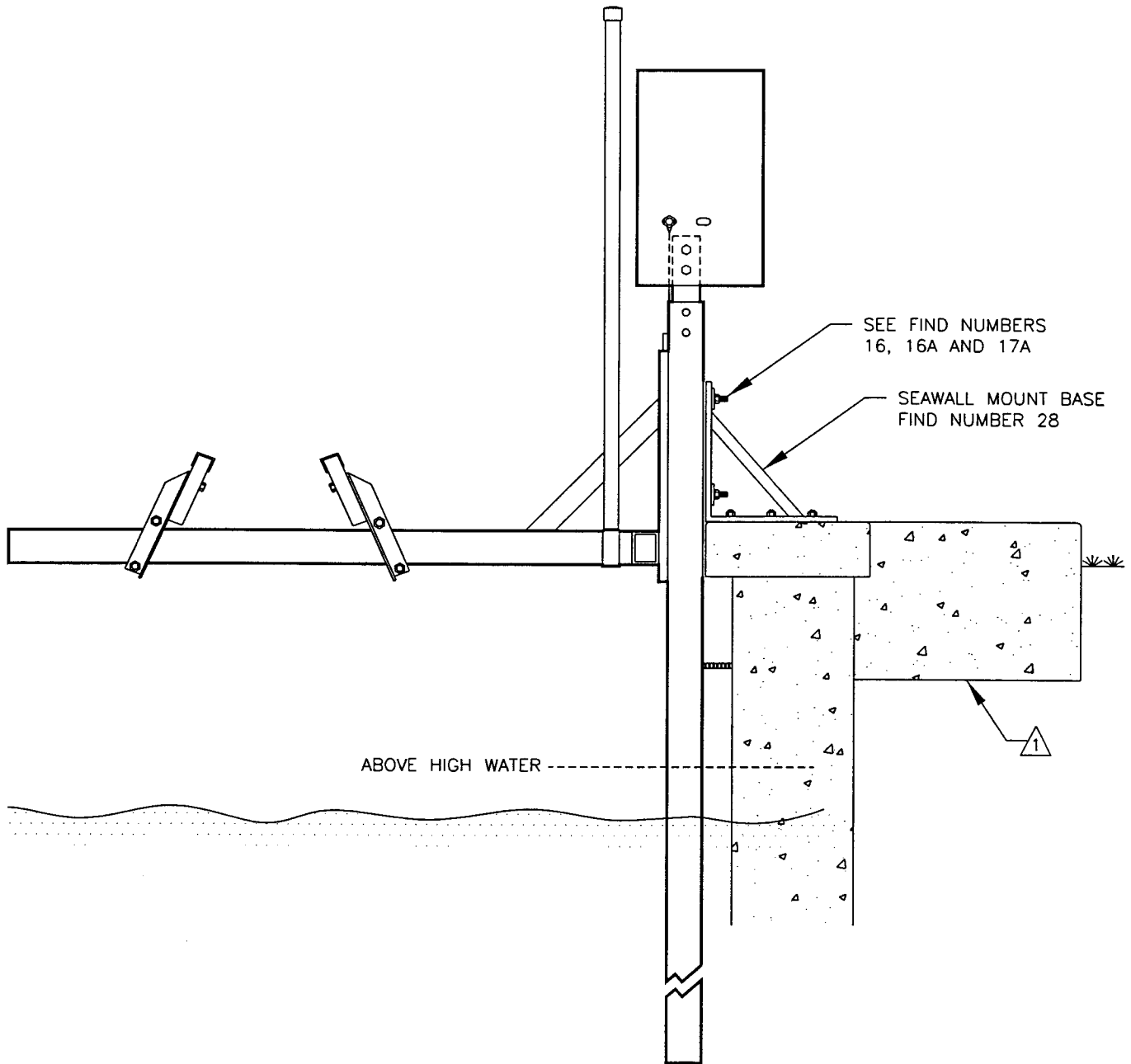
⚠ IMPORTANT—PILINGS MUST BE SECURELY ANCHORED TO A SEAWALL OR INTEGRATED INTO A DOCK.



Project: 1500 Assembly Drawing Part Names (Piling Mount)		
No.: 001	Revision Date:	
Scale: None	Date: 08-28-00	Sheet: 1 of 1

GENERAL NOTE:

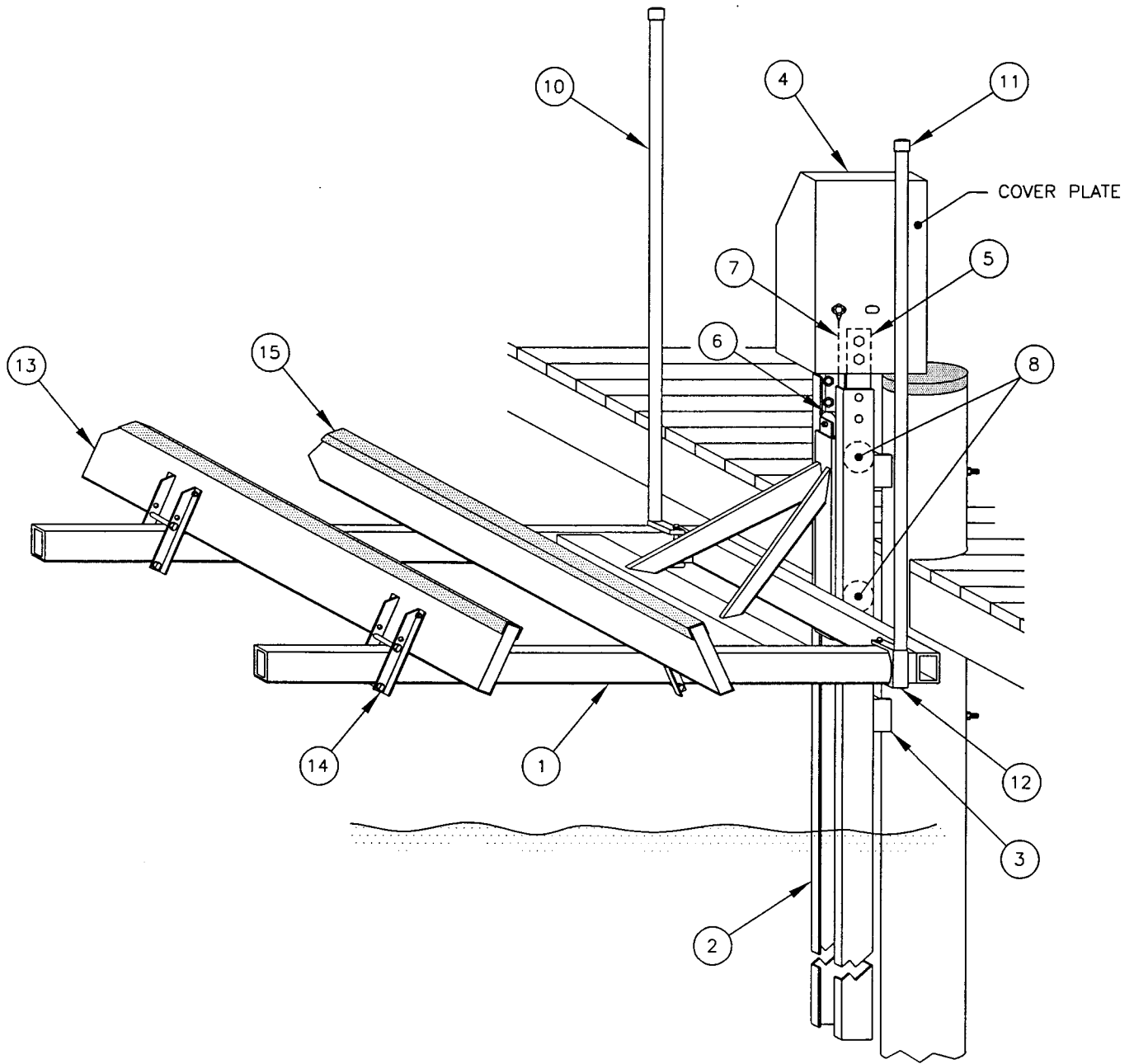
- 1. IMPORTANT—PILINGS MUST BE SECURELY ANCHORED TO A SEAWALL OR INTEGRATED INTO A DOCK.
- 2. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500E OR 1500M.



Project: 1500 Assembly Drawing (Seawall Mount-Optional)		
No.: 002	Revision Date:	
Scale: None	Date: 08-28-00	Sheet: 1 of 1

GENERAL NOTE:

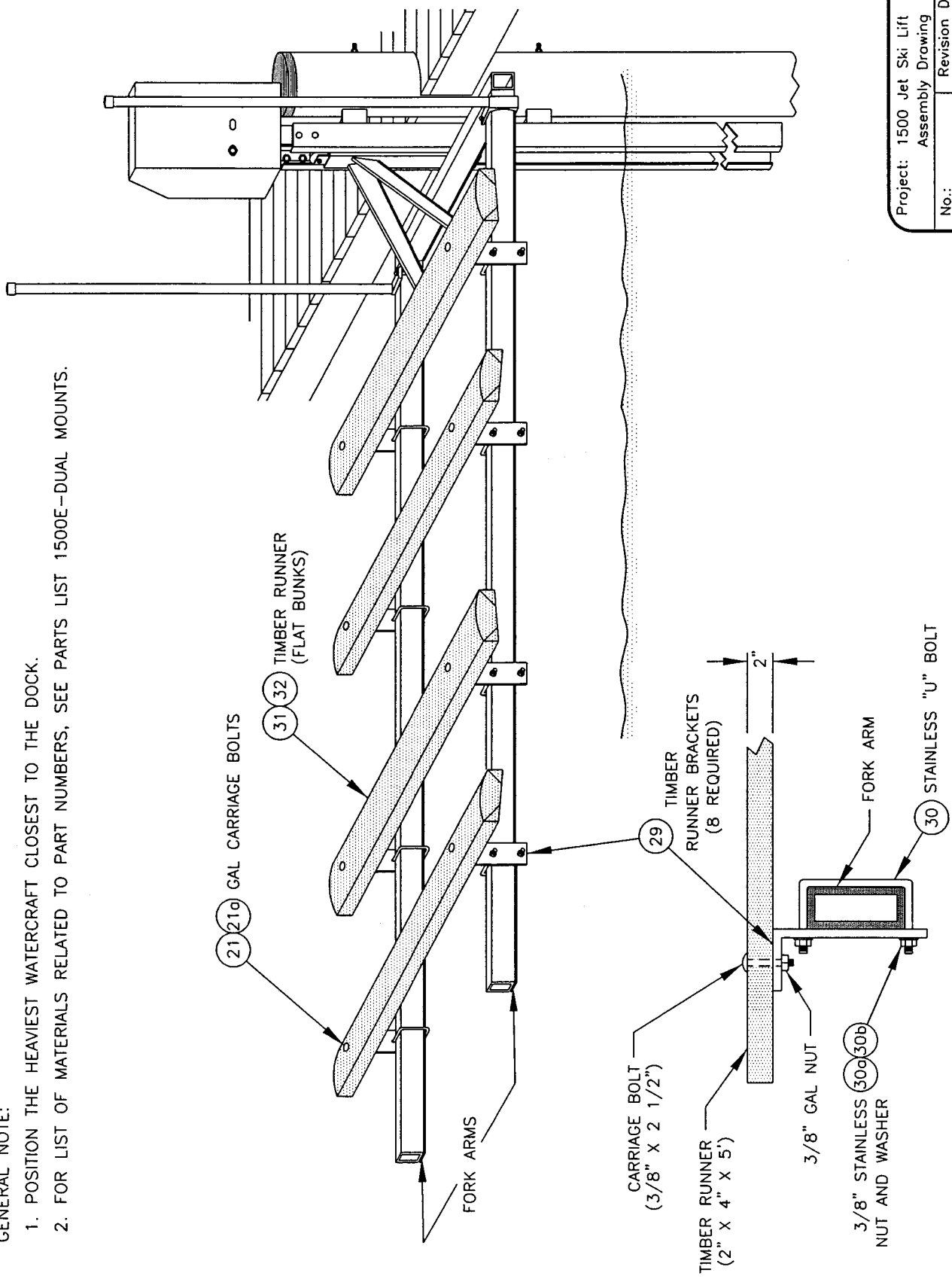
- FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500E OR 1500M. FIND NUMBERS 4, 5, AND 7, AS SHOWN ON THIS ILLUSTRATION, ARE SPECIFIC TO 1500E; HOWEVER, FOR MANUAL OPERATION, REFER TO 1500M, FIND NUMBERS 4, 5, AND 7.



Project: 1500 Installation Part Numbers		
No.: 003	Revision Date:	
Scale: None	Date: 08-28-00	Sheet: 1 of 1

GENERAL NOTE:

1. POSITION THE HEAVIEST WATERCRAFT CLOSEST TO THE DOCK.
2. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500E--DUAL MOUNTS.

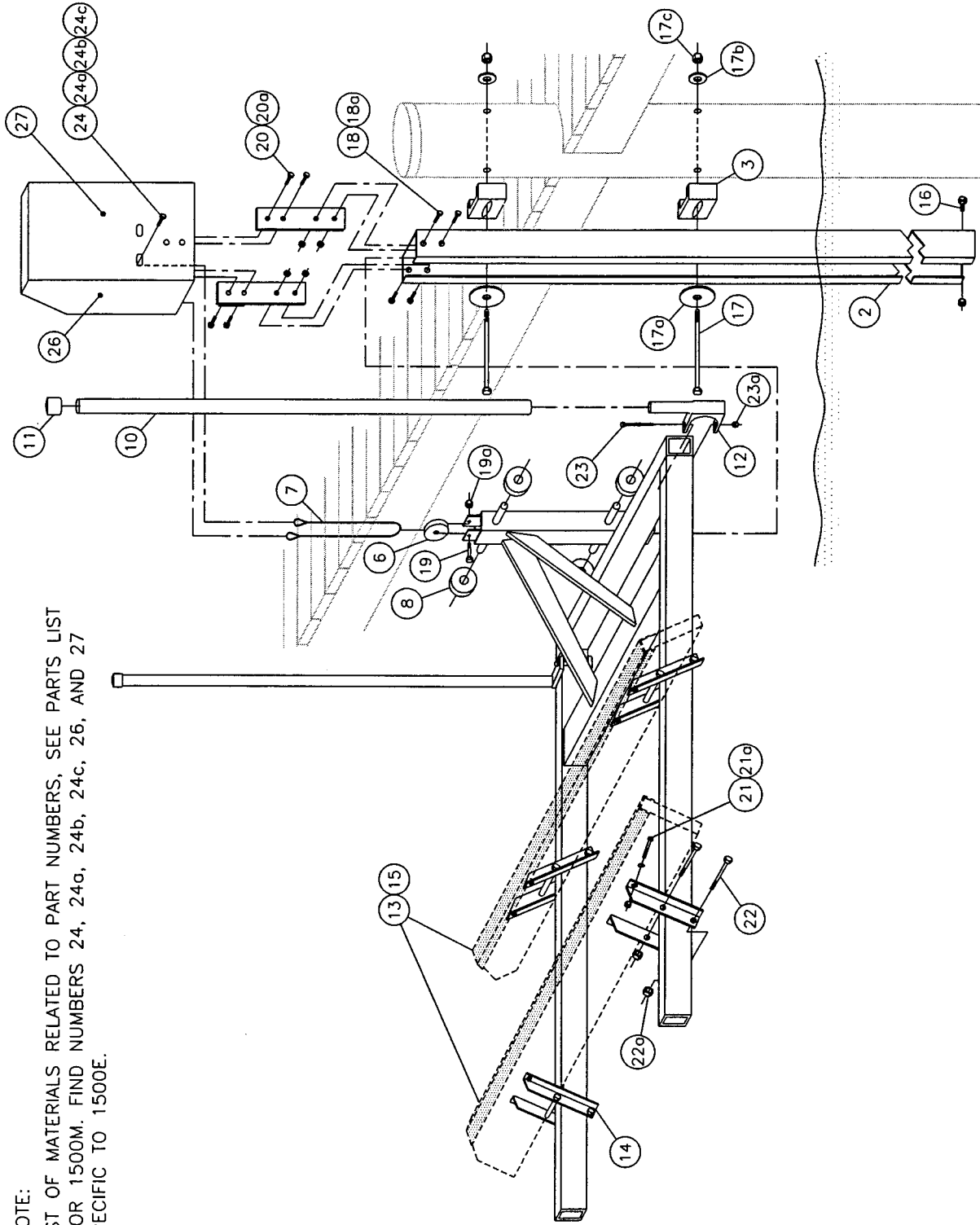


Project: 1500 Jet Ski Lift	
Assembly Drawing	
No.: 004	Revision Date:
Scale: None	Date: 08-29-00
	Sheet: 1 of 1

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GENERAL NOTE:

- FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500E OR 1500M. FIND NUMBERS 24, 24a, 24b, 24c, 24d, 26, AND 27 ARE SPECIFIC TO 1500E.

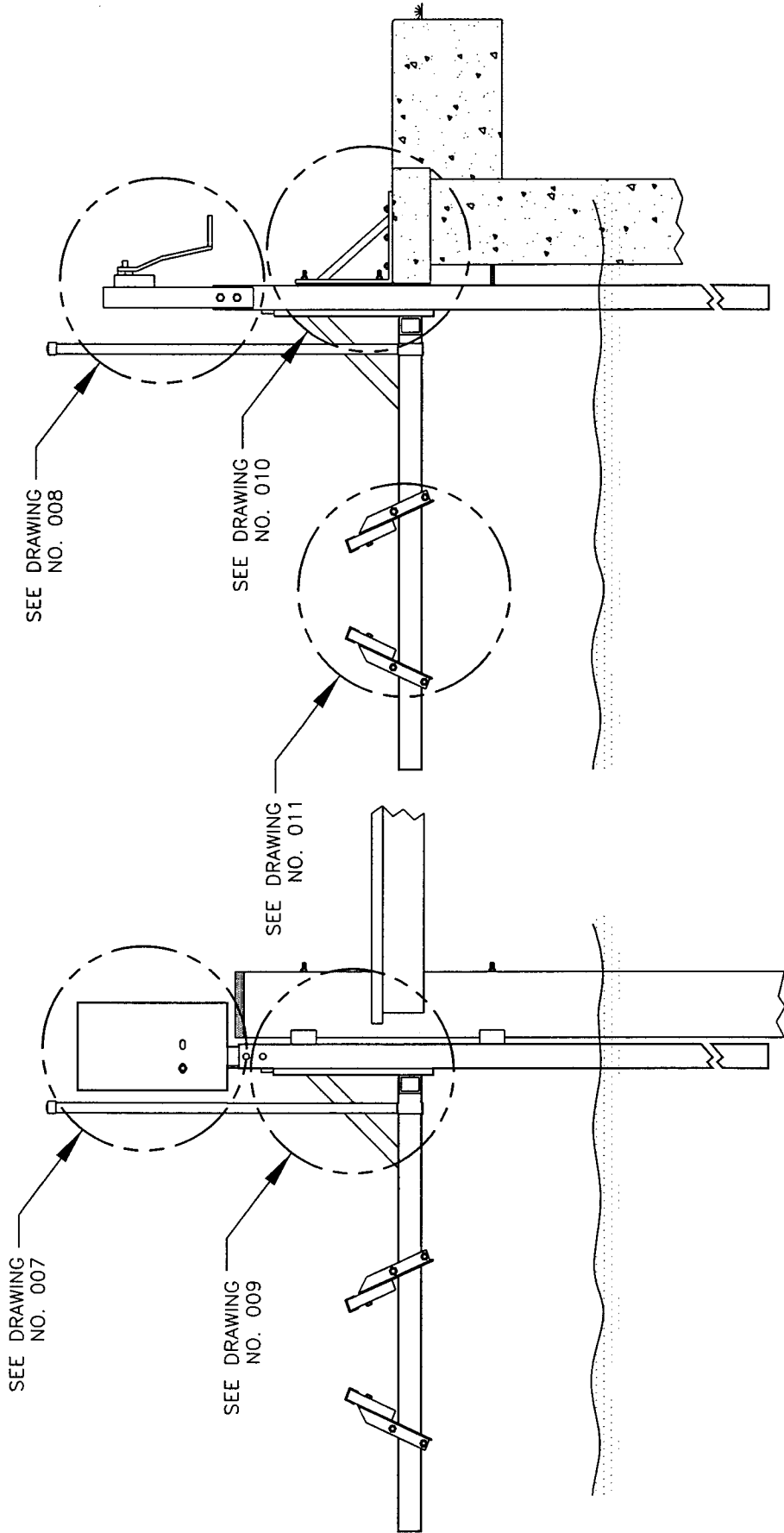


Project: Exploded View	
No.: 005	Revision Date: _____
Scale: None	Date: 08-30-00
	Sheet: 1 of 1

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GENERAL NOTE:

- 1. FOR A DETAIL DRAWING OF VIEW CALLED OUT, GO TO SPECIFIED DRAWING.

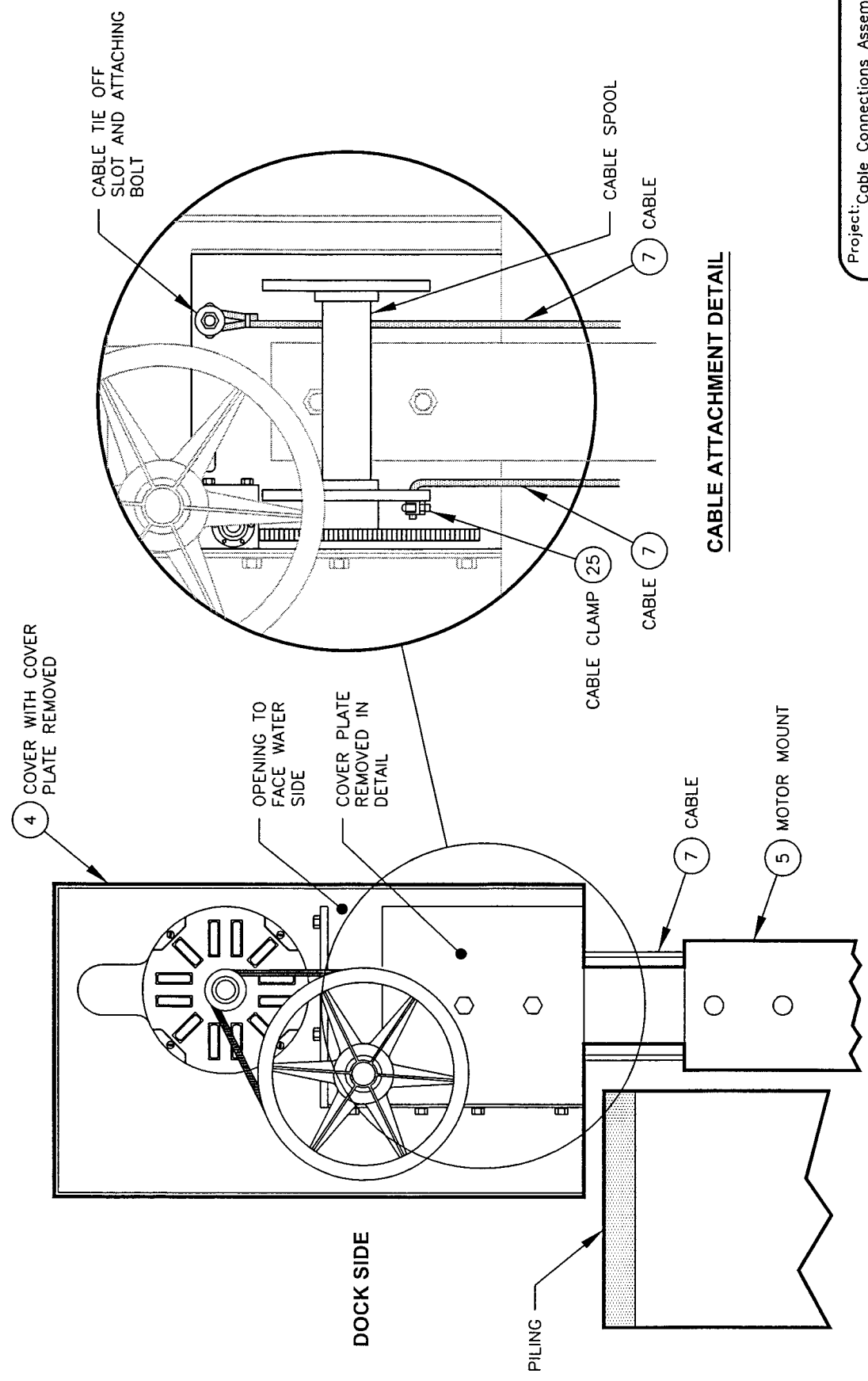


Project: Key To Detail Drawings	
No.: 006	Revision Date:
Scale: None	Date: 08-29-00
	Sheet: 1 of 1

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GENERAL NOTES:

1. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500E.



CABLE ATTACHMENT DETAIL

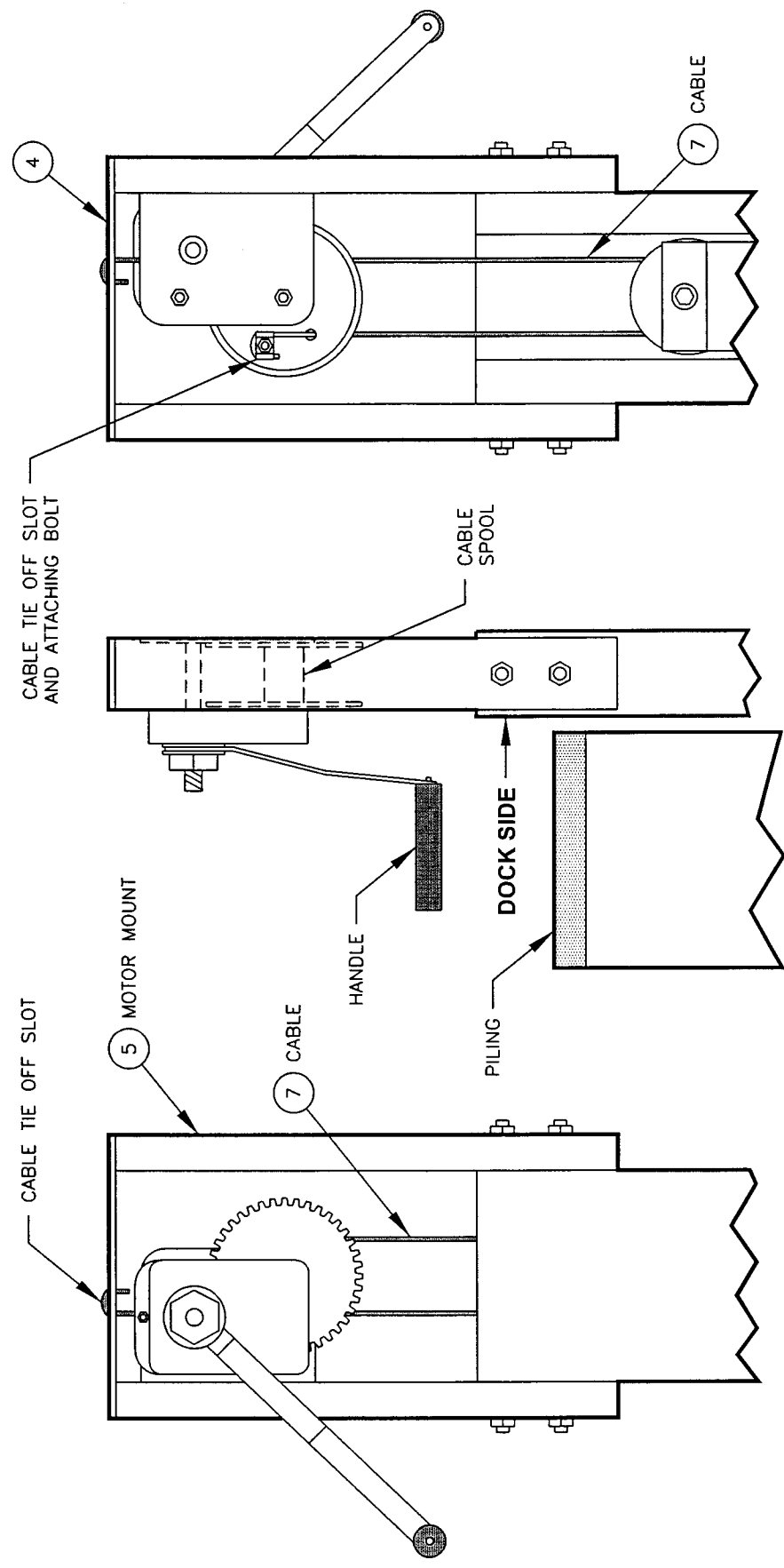
ELECTRIC MODEL (1500E)

Project: Cable Connections Assembly Detail and Cable Attachment			
No: 007	Revision Date:	Date: 07-25-00	Sheet: 1 of 1
Scale: None			

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GENERAL NOTES:

1. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500M.



DOCK SIDE

SIDE VIEW

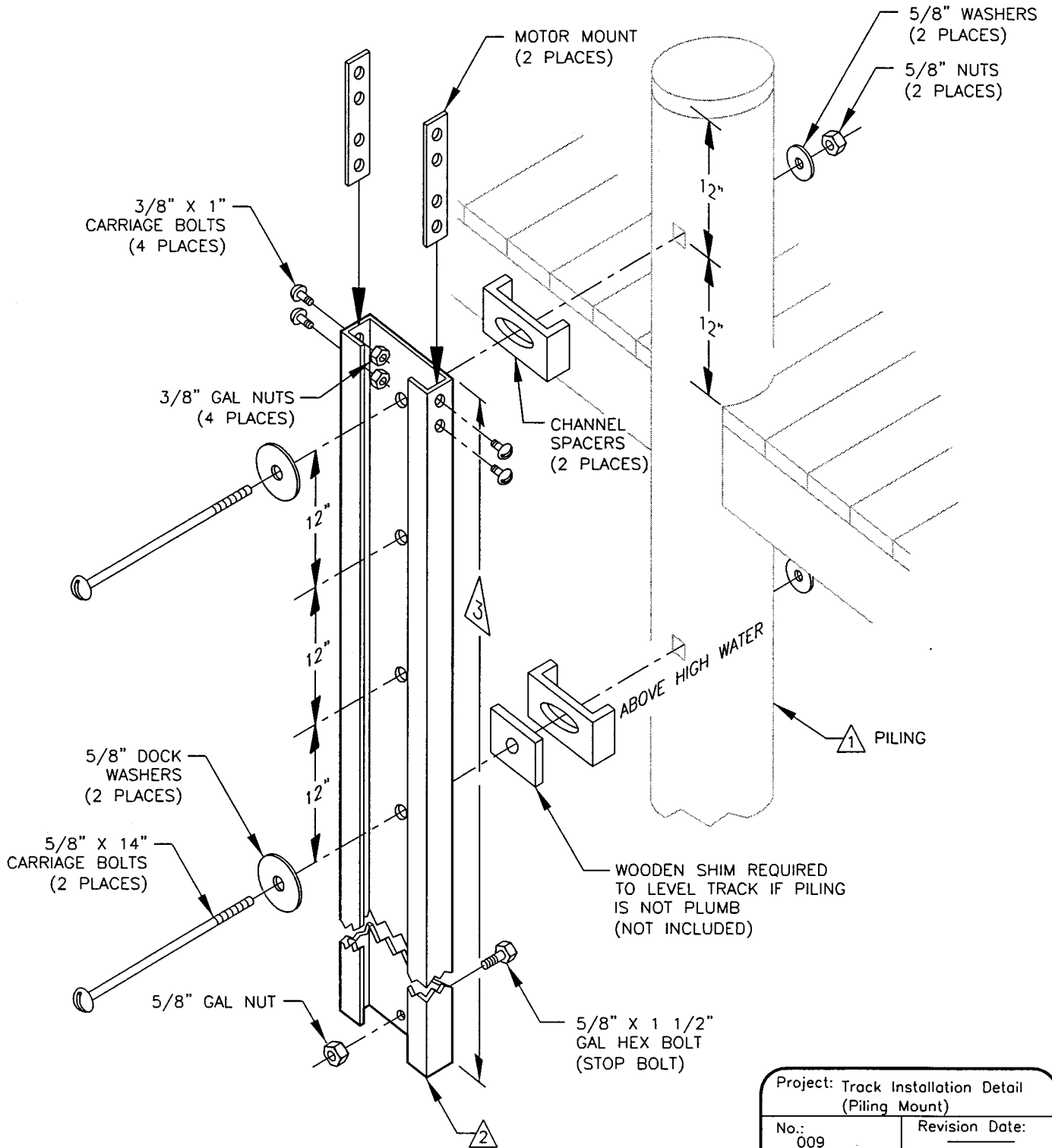
WATER SIDE

MANUAL MODEL (1500M)

Project: Cable Connections Assembly and Cable Attachment (Manual)			
No.:	008	Revision Date:	
Scale:	None	Date:	08-30-00
		Sheet:	1 of 1

GENERAL NOTES:

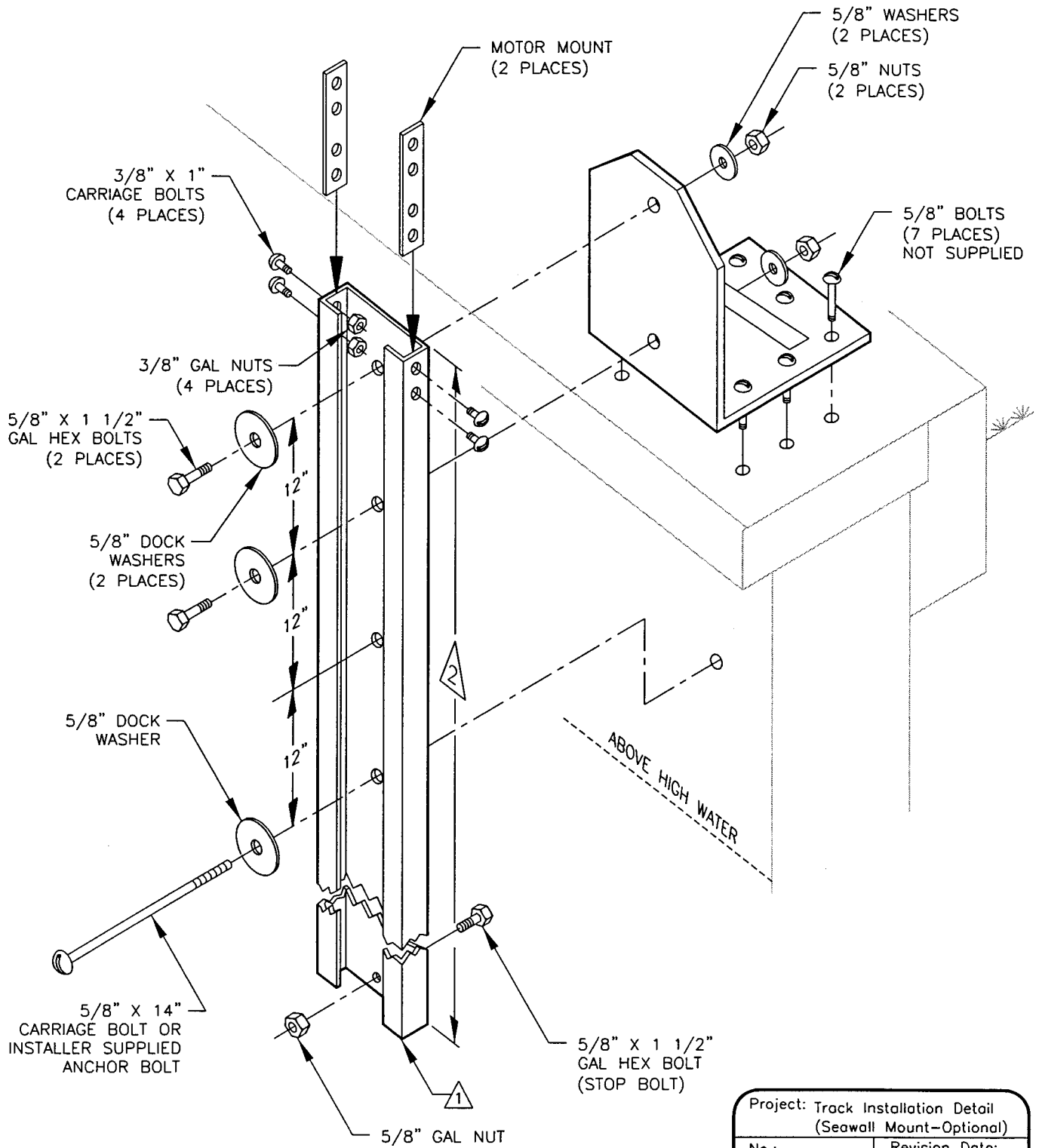
- ⚠ 1 IMPORTANT—PILINGS MUST BE SECURELY ANCHORED TO A SEAWALL OR INTEGRATED INTO A DOCK.
- ⚠ 2 IMPORTANT—IT IS NOT NECESSARY FOR THE TRACK TO EXTEND TO THE WATER BOTTOM IN DEEP WATER.
- ⚠ 3 8'/10'/12' TRACK LENGTH



Project: Track Installation Detail (Piling Mount)		
No.: 009	Revision Date:	
Scale: None	Date: 08-29-00	Sheet: 1 of 1

GENERAL NOTES:

- ⚠ IMPORTANT—IT IS NOT NECESSARY FOR THE TRACK TO EXTEND TO THE WATER BOTTOM IN DEEP WATER.
- ⚠ 8'/10'/12' TRACK LENGTH

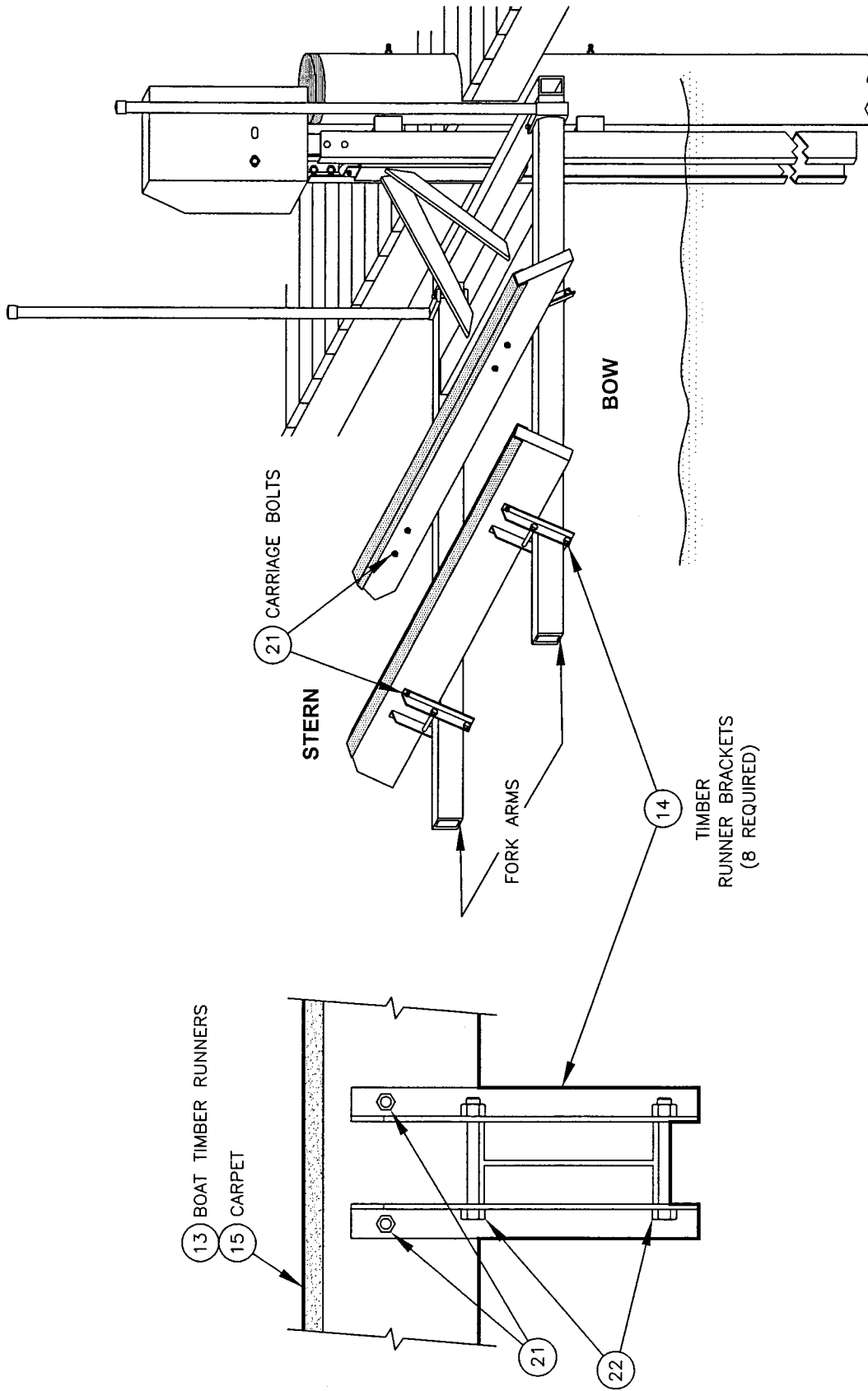


Project: Track Installation Detail (Seawall Mount-Optional)		
No.: 010	Revision Date:	
Scale: None	Date: 08-29-00	Sheet: 1 of 1

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GENERAL NOTE:

1. FOR LIST OF MATERIALS RELATED TO PART NUMBERS, SEE PARTS LIST 1500E OR 1500M.

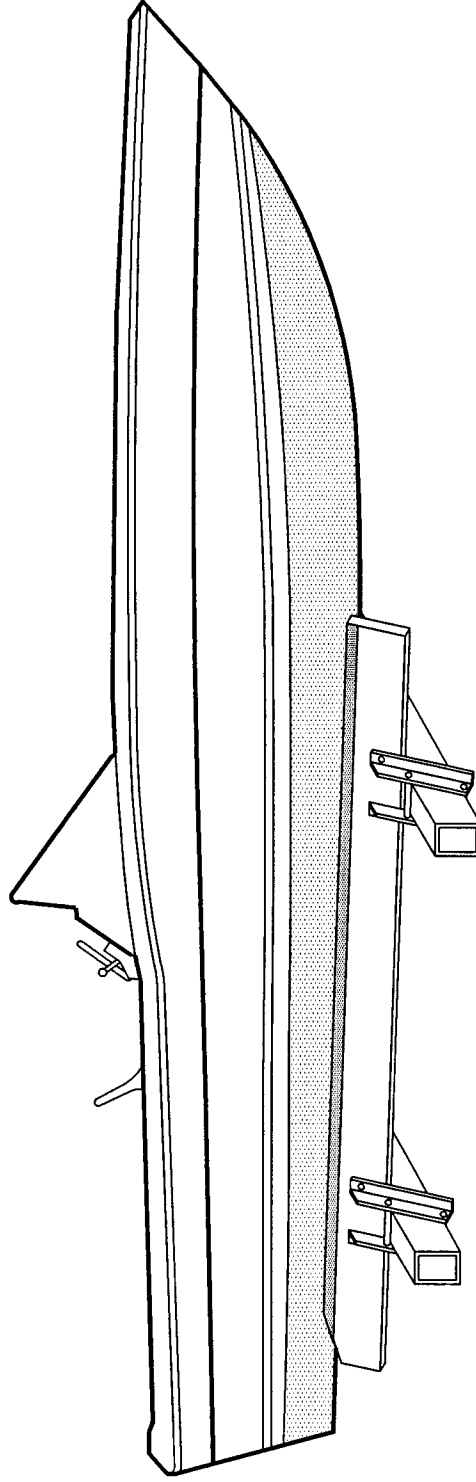


Project: Chock Rails Assembly Detail	
No.: 011	Revision Date:
Scale: None	Date: 08-29-00
	Sheet: 1 of 1

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GENERAL NOTES:

1. FOR OPTIMUM PERFORMANCE, EQUAL WEIGHT DISTRIBUTION IS REQUIRED OVER BOTH CRADLE ARMS.
2. TO OBTAIN EQUAL WEIGHT DISTRIBUTION:
 - A. USE BALANCE POINT OF BOAT.
 - B. DO NOT USE CENTER OF BOAT LENGTH.
3. POSITION THE BOAT IN THE LIFT AS CLOSE TO THE TRACK AS POSSIBLE.



Project: Instructions For	
Weight Distribution	
No.: 012	Revision Date:
Scale: None	Date: 08-29-00
	Sheet: 1 of 1