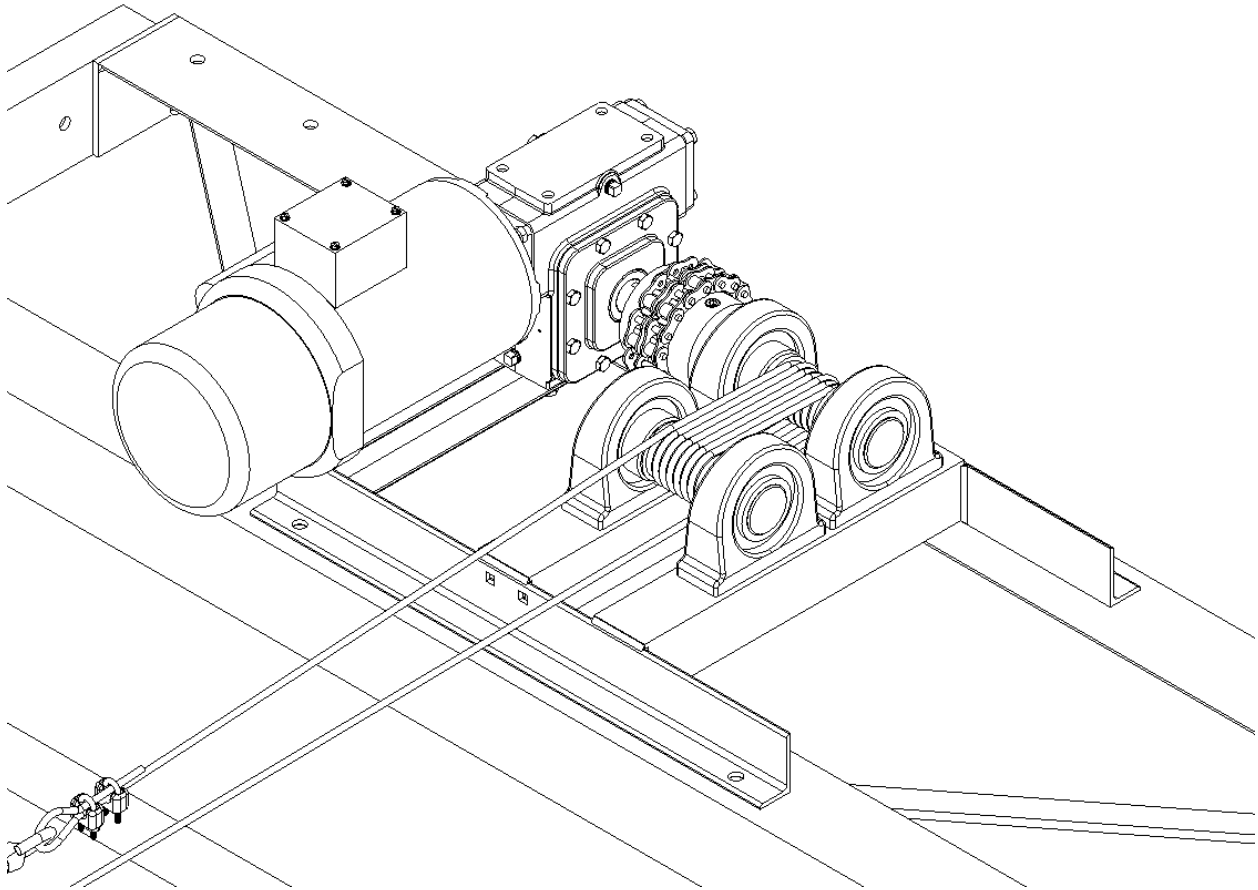




PUSH-PULL RAILWAY DRIVE INSTRUCTIONS

(Applies to P/N 3362000)



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1. SAFETY

1.1. INTRODUCTION

Your Reimann & Georger Corporation Marine Products Railway Lift has been engineered to provide reliable performance, long term economics, and safety advantages that no other type can match. However, even a well-designed and well-built railway 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 railway 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 SERIOUS PERSONAL INJURY AND/OR 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 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 motorized 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 above the water on the carriage.



WARNING:

DO NOT STAND OR WALK ON THE CARRIAGE WHILE IT IS IN ANY 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. Ensure the pulleys spin freely. If any pulley binds, replace it immediately.
3. Do not weld or otherwise modify the lift. Such alterations may weaken the structural integrity of the lift and void the warranty.
4. All lifting accessories such as pontoon brackets, pivoting bunks, and guide-ons, must be commercially manufactured, have a rated load capacity equal to that of the lift, and be properly maintained and installed.
5. Ensure that the carriage frame and track are square.
6. 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.
7. Wear heavy leather gloves when handling wire rope. Insufficient hand protection when handling wire rope can cause personal injury.

1.6. OPERATING SAFETY

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 and/or binding pulleys.
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.
15. When raising the boat, be sure that the track area is clear and the boat is correctly situated on the carriage.
16. When lowering the boat, do not continue lowering the carriage after the boat floats freely. Excessive slack in the 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 carriage, or clamp blocks to track at all four carriage wheels to prevent any movement in either direction 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.

2. SPECIFICATIONS

2.1. TECHNICAL DATA

The RGC Push/Pull Power Drive is designed to be used ONLY for RGC Beacher Railways. It is not to be used for any other applications.

If your application requires the use of RGC Curve Track Sections, ensure cable rollers are installed properly to prevent the wire rope from contacting any structural components of your RGC Railway.

Ensure your RGC Railway track sections, especially suspended sections, are properly supported as specified in the instruction manual. RGC track Supports may be required.

Component	Specifications
Motor	1 HP motor, 1725 RPM, 115/208-230VAC @ 60 Hz, 12.8/6.4 A
Gear Reducer	60:1
Nominal Driveshaft Speed	30 RPM
Carriage Speed	15 ft/min (approx.)
Wire Rope Type	5/16" stainless 7x19 wire rope, 200' included
Remote Control	GEM GR1
Railway Minimum Slope	0
Railway Maximum Slope	21" per 10' track section

2.2. NAMEPLATE AND SERIAL NUMBER TAG

It is important to identify your lift completely and accurately whenever ordering spare parts or requesting assistance in service. There are two product nameplates for each lift; the nameplate on the HL lift is located at the top of the Right-Hand Forward Lift Arm, the nameplate on the HVL lift at the top of 'B' leg and another nameplate inside the control box. Each label shows the model and serial numbers and capacity rating. The lift label should appear as the sample nameplate shown in Figure 2-1. Record your own lift information from both nameplates below for future reference.

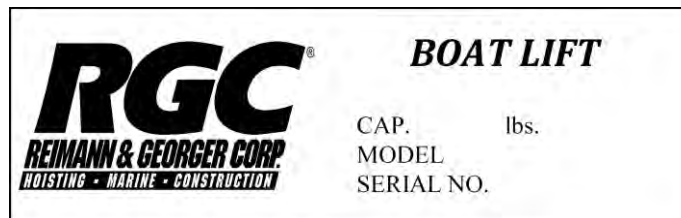


Figure 2-1 Typical Product Nameplate

MODEL _____

SERIAL NUMBER _____

CAPACITY RATING _____

3. INSTALLATION AND SETUP

3.1. PRIOR TO SETUP

3.1 PRE-INSTALLATION CHECKS

1. Ensure you have received all specified parts as listed in supplied parts lists.
2. The Power Drive must be installed with no weight on the Railway carriage.
3. Ensure that the Railway has been properly installed as described in your Railway instruction manual.
4. Do not install or use the Power Drive if it shows any signs of damage.
5. Do not weld or otherwise modify any part of the Power Drive assembly. Such alterations may damage the Power Drive and / or the Railway and void the associated warranties.
6. Ensure the wet boat weight (total boat, fuel, all gear, etc.) does not exceed the rated capacity of railway system.
7. This product has been supplied with stainless steel hardware to protect against a harsh marine environment and provide outstanding performance. Due to the chemistry and surface condition of stainless steel, there is a natural tendency for the hardware to “gall, lock up, or seize) during assembly. To prevent this from occurring, it is strongly recommended that the anti-seize supplied in the hardware be applied to the mating surfaces of all stainless steel fasteners before assembly. Lubricants containing molybdenum disulfide, graphite, mica or talc may be used.



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.

8. Two people will be needed to mount the Power Drive onto the Railway. 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.



WARNING:

THE DRIVE IS TOO HEAVY TO SAFELY MOUNT IT SINGLE-HANDEDLY. ATTEMPTING THIS CAN CAUSE EQUIPMENT DAMAGE AND/OR PERSONAL INJURY.

3.2 MOUNTING THE POWER DRIVE

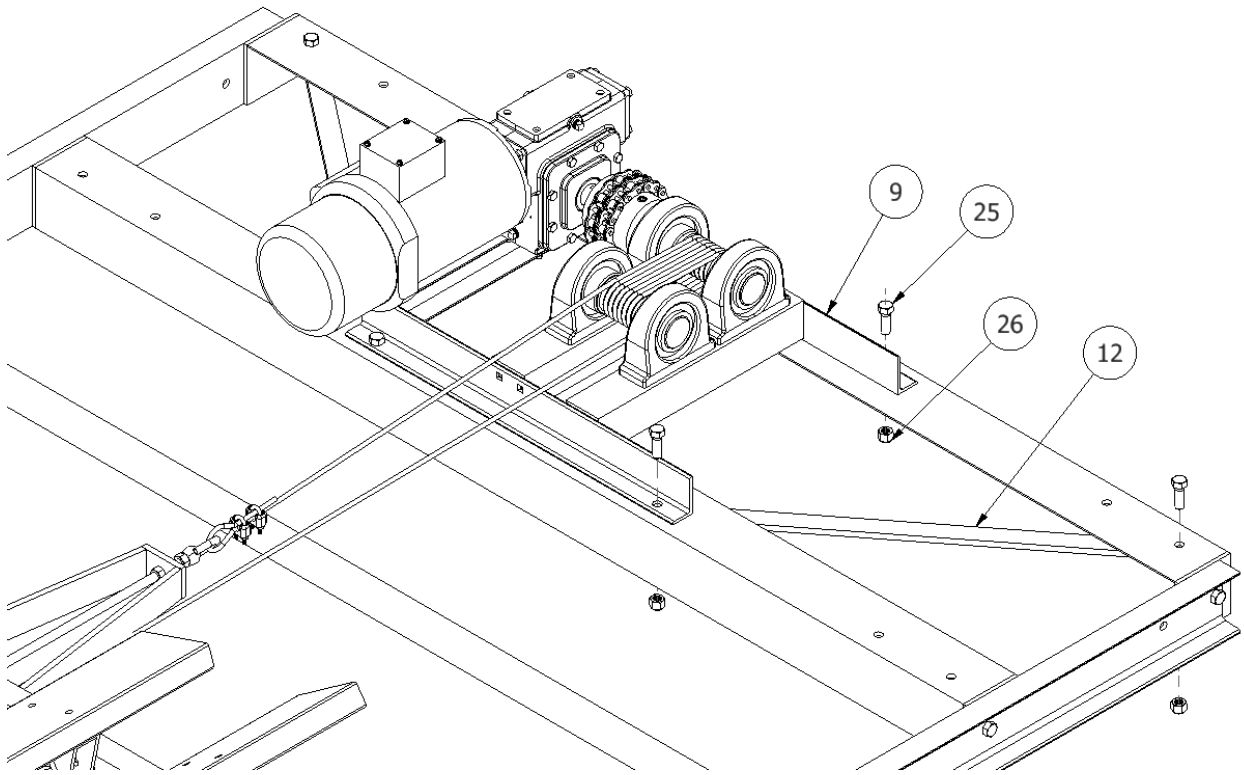


Figure 3-1. Mounting Push / Pull Drive Unit

1. **Refer to Figure 3-1 or 3-2.** Mount the drive unit onto the rear motor cross tie using fasteners (A, & C) supplied. Mount drive front to cross-tie using fasteners securing diagonal braces (railway track hardware bag). Ensure drive unit is installed with the six groove drum (13) furthest away from the water.
2. Remove the red pipe plug from reducer (4). Install the vent plug supplied with unit.



CAUTION:

FAILURE TO INSTALL THE VENT PLUG CAN CAUSE PREMATURE FAILURE OF THE REDUCER SEALS AFTER EXTENDED USE AND VOID YOUR WARRANTY.

3.3 MOUNTING THE REMOTE CONTROL PANEL (OPTIONAL)

1. **Refer to Figure 3-3.** Mount optional remote control panel to motor cross tie using supplied mounting bracket and hardware as shown above if applicable.

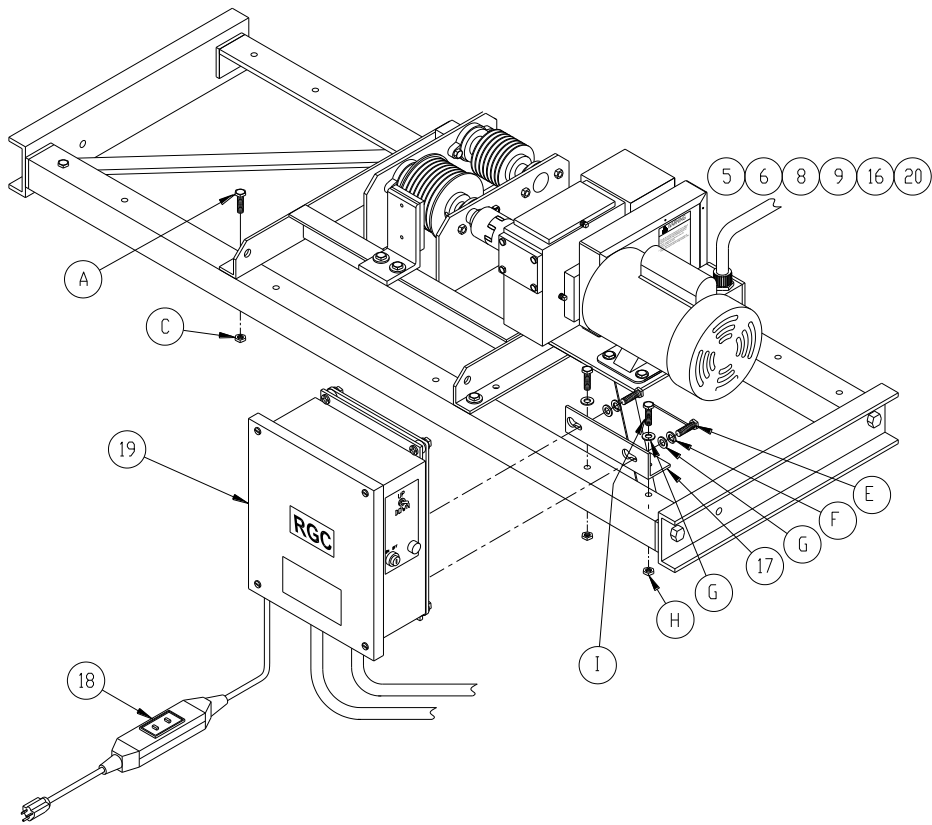


Figure 3-3.

Mounting Push / Pull Remote Control Panel

3.4 LIMIT SWITCH INSTALLATION

1. Refer to Figure 3-4. Fasten the limit switch to the railway track on the motor side of power drive as shown. Ensure switch is installed far enough away from the power drive to prevent contact between power drive and carriage or boat.

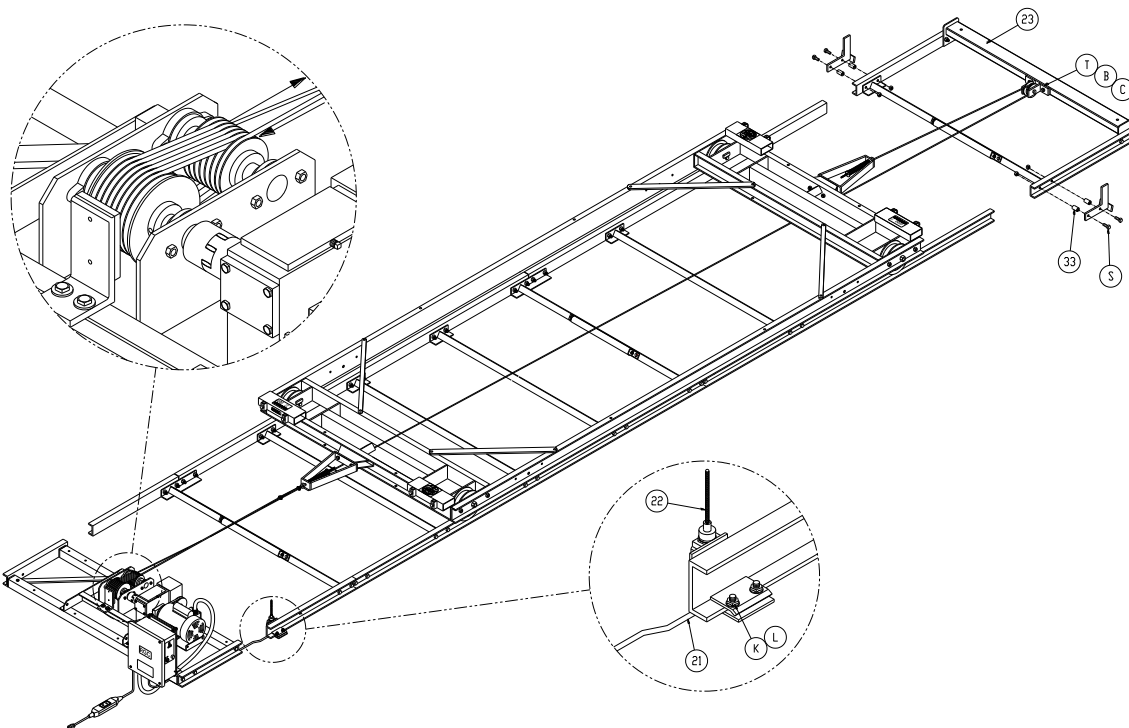


Figure 3-4.

Install Limit Switch

3.5 SPRING FRAME ASSEMBLY

1. Refer to Figure 3-5. Assemble the spring frames as shown below.

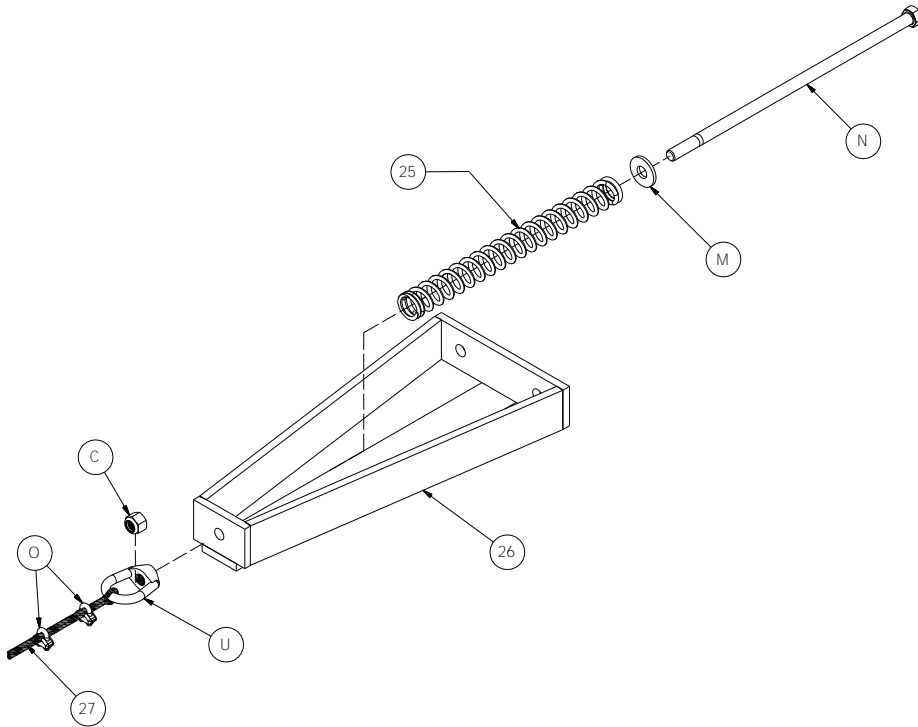


Figure 3-5.

Spring Frame Assembly

3.6 MOUNTING SPRING FRAME TO 6000# CARRIAGE

1. Refer to Figure 3-6. Attach spring frames to railway carriage trucks with hardware supplied.

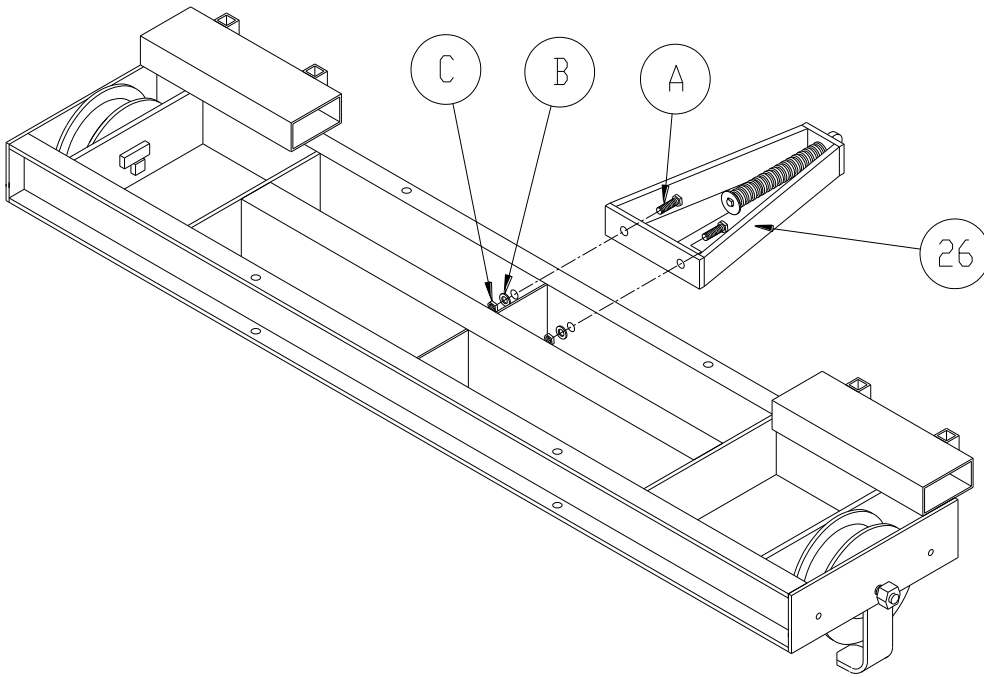


Figure 3-6.

Mounting Spring Frame to AR6K Carriage Truck

3.7 MOUNTING SPRING FRAME TO 4000# CARRIAGE

1. Refer to Figure 3-7. Attach spring frames to railway carriage trucks with hardware supplied.

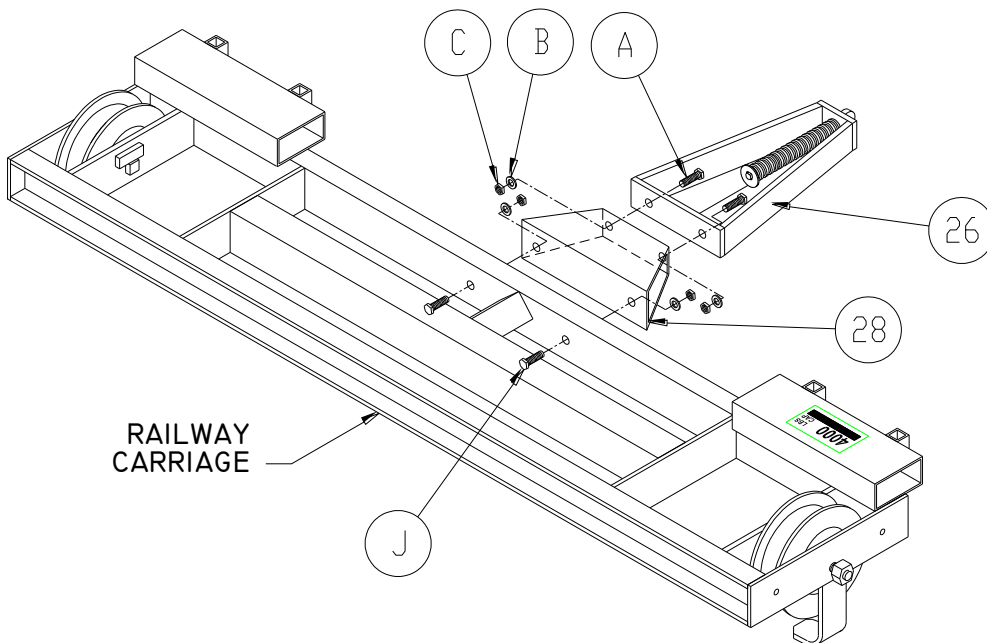


Figure 3-7.

Mounting Spring Frame to AR4K / BR4K Carriage Truck

3.8 WATER END SUPPORT AND SHEAVE ASSEMBLY

3.8.1 AR4K / AR6K Refer to Figure 3-8.

1. Install the water end support with tube offset furthest away from power drive using hardware supplied in railway track hardware bag for carriage stops to end of track. Install the carriage stops to outside of track crosstie closest to water end support using HHCS (S) and spacer (33) facing upward with the cross leg facing the water end of the railway. Reuse hex nuts from crosstie to fasten securely.
2. Attach the pulley assembly to the cross tube using the supplied hardware.

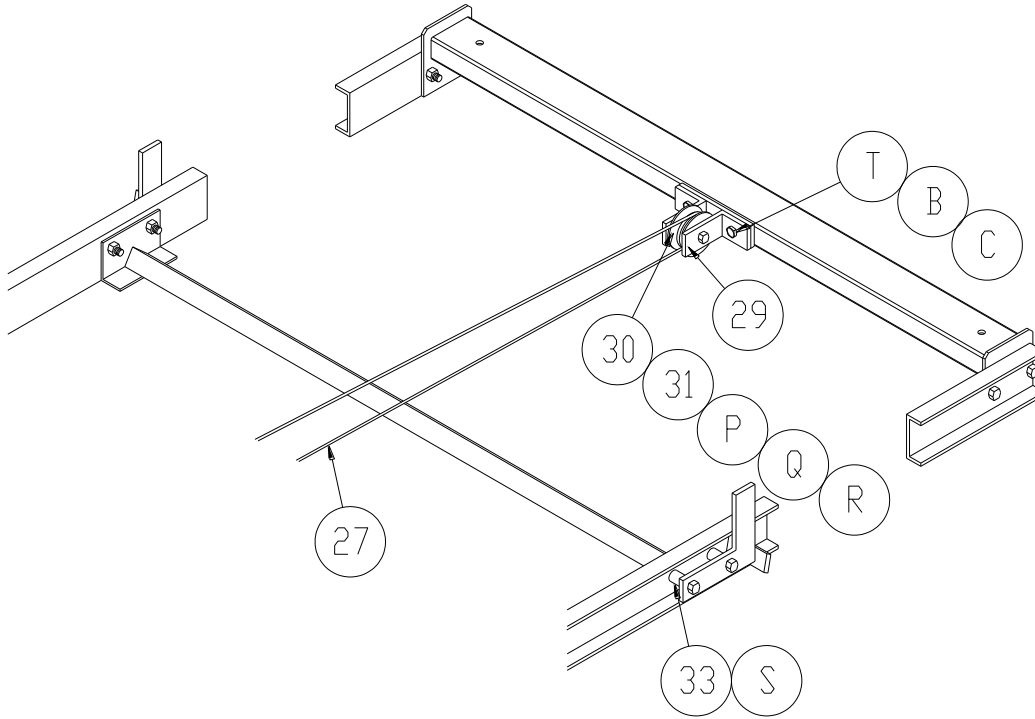


Figure 3-8.

Water End Support and Carriage Stop Assembly

3.8.2 BR4K Refer to Figure 3-8.

1. Install the water end support with channel legs facing the ground using hardware supplied in railway track hardware bag for carriage stops to end of track. Install the carriage stops to outside of track crosstie closest to water end support using HHCS (S) and spacer (33) facing upward with the cross leg facing the water end of the railway. Reuse hex nuts from crosstie to fasten securely.
2. Attach the pulley assembly to the cross channel using the supplied hardware.

3.9 CABLE ROLLER INSTALLATION

1. Refer to Figure 3-9. Attach the cable support rollers to the track splice cross ties as shown. This will stop the cable from rubbing on the cross ties while the unit operates.

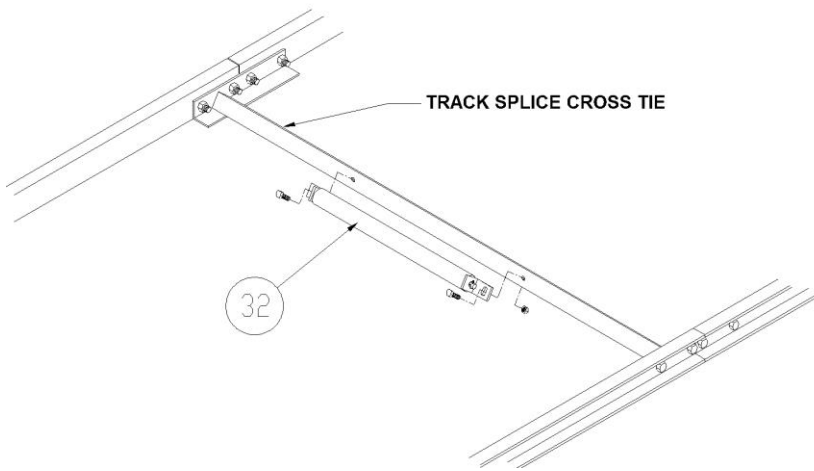


Figure 3-9.

Cable Roller Assembly

3.10 REEVING WIRE ROPE

1. Position carriage approximately 10 feet away from power drive and lock into place, using wooden blocks clamped to top edge of track, at both ends of carriage, to prevent carriage from moving on track.



WARNING:

FAILURE TO SECURE CARRIAGE TO TRACK CAN CAUSE EQUIPMENT DAMAGE AND/OR PERSONAL INJURY.

2. Using leather gloves, unwind wire rope.
3. **Refer to Figure 3-4 & 3-5.** Attach one end of the wire rope to eye nut (U) of the spring frame on front of carriage by looping it through the eye nut and securing with two cable clamps (O).
4. **Refer To Figure 3-10.** Run wire rope over top idler sheave (7-groove sheave), starting with groove closest to motor side and loop it over drive sheave (8-groove sheave) starting with second groove away from motor side. Continue looping around both of them, ending up with the cable coming off the bottom of idler sheave towards the water end of the railway.
5. **Refer To Figure 3-4.** Run wire rope under carriage to water end support and up through the pulley assembly.
6. **Refer To Figure 3-5.** Finally, run wire rope over water end sheave to eye nut (U) of the spring frame on rear of carriage by looping it through the eye nut, do not secure yet.



CAUTION:

DO NOT REMOVE BLOCKS FROM TRACK AT THIS TIME.

7. **Refer to Figure 3-4.** Pull all slack from entire wire rope length and secure with both remaining cable clamps (O).
8. Cut off any excess wire rope.

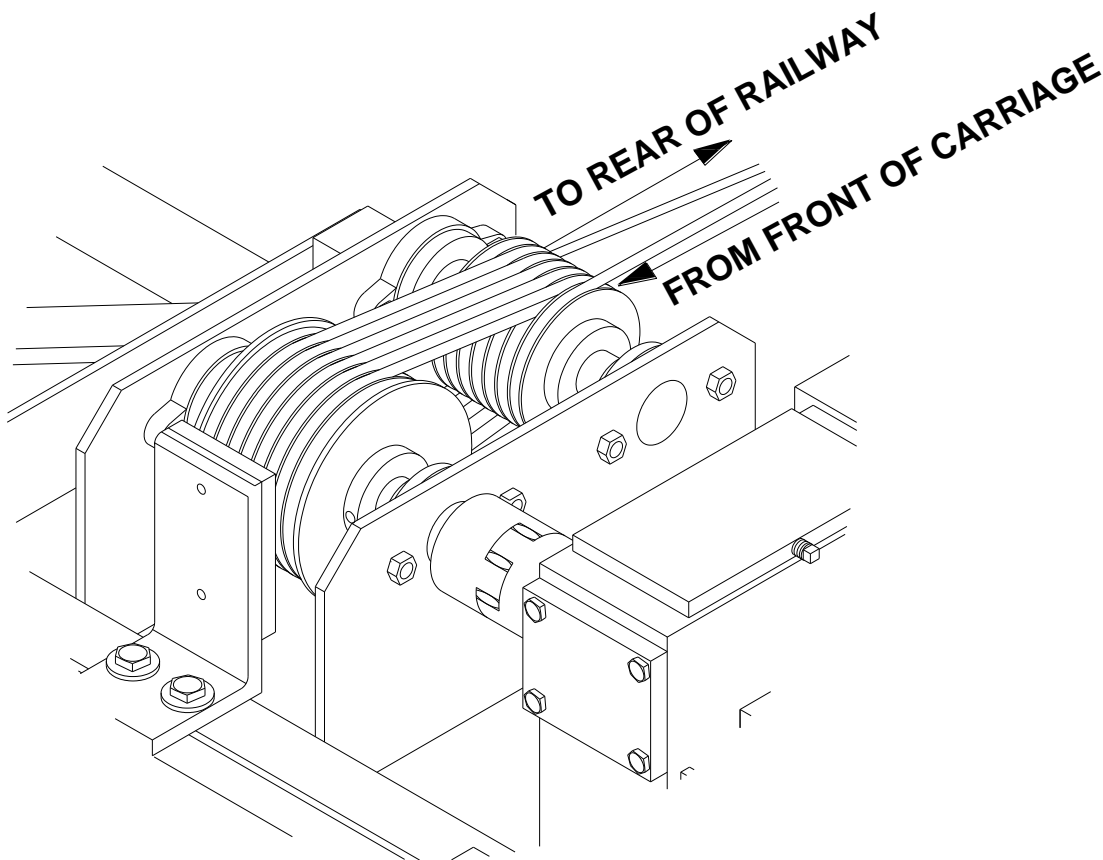


Figure 3-10.

Reeving Wire Rope On Push / Pull Power Drive

9. Tighten the front and rear eye nuts (U) to further tension the wire rope. The system relies on the friction between the wire rope and the drive pulley of the power drive to move the carriage. If the cable tension is not sufficient, the drive will not pull to its full capacity.
10. Install one nut (C) to both front and rear spring bolts to jam or lock eye nut (U) in place.



CAUTION:
DO NOT REMOVE BLOCKS FROM TRACK AT THIS TIME.

3.11 RE-TENSIONING WIRE ROPE (EXISTING INSTALLATIONS)

1. It may be necessary, depending on the application, to re-tension the wire rope as it stretches.
2. Secure carriage to track by clamping blocks to track at all four wheels to prevent any carriage movement. Release excess wire rope tension by lowering carriage until against track blocks.
3. Loosen locking nuts on both eye nuts, and loosen both wire rope clamps at rear of carriage.
4. Pull wire rope tight, and re-clip wire rope. Then, tighten both the front and rear eye nuts as needed to put spring tension on the wire rope.
5. Re-secure locking nuts on both eye nuts.
6. Remove front track blocks, raise carriage slightly and remove rear track blocks.

3.12 POWER SUPPLY CONNECTIONS

1. Ensure the power supply is compatible with motor nameplate ratings. The motor must be connected to a properly rated branch circuit to help minimize voltage drops during operation.



WARNING:

THE POWER DRIVE AND SUPPLY LINE MUST BE INSTALLED AND INSPECTED BY A CERTIFIED ELECTRICIAN IN ACCORDANCE WITH LOCAL ELECTRICAL CODES. BECAUSE WATER AND ELECTRICITY ARE POTENTIAL SAFETY HAZARDS, THIS INSTALLATION MUST INCLUDE A PROPERLY WORKING GROUND FAULT CIRCUIT INTERRUPTER. (G.F.C.I.)

Use the following wire sizing guide as a reference in wiring the power drive.

WIRE SIZING GUIDE

FOR REFERENCE ONLY

Motor Full Load Current	50 feet	100 feet	150 feet	200 feet	250 feet	300 feet	350 feet	400 feet
7.5 Amp (230V)	#12 awg	#12 awg	#10 awg	#10 awg	#8 awg	#8 awg	#6 awg	#6 awg
15 Amp (115V)	#10 awg	#10 awg	#8 awg	#8 awg	#6 awg	#6 awg	#4 awg	#4 awg

AWG = American Wire Gauge

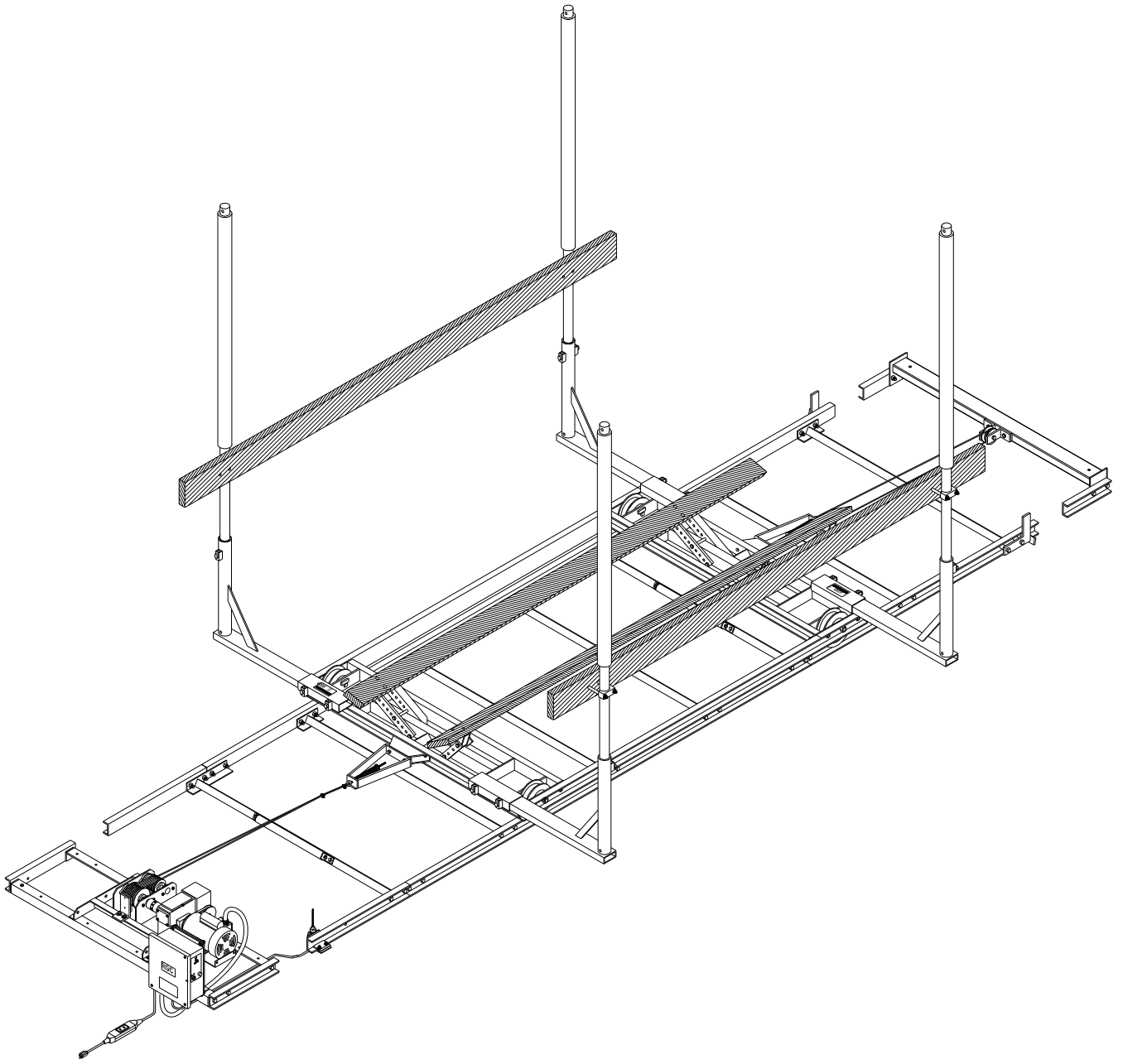
Feet = Distance From MAIN Breaker Box to Control Panel



CAUTION:

THE ABOVE CHART IS ONLY A REFERENCE FOR WIRE SIZING. DO NOT USE THIS INFORMATION TO ACTUALLY SIZE THE WIRE TO YOUR POWER DRIVE. YOU MUST CONSULT A LICENSED ELECTRICAL CONTRACTOR WHO WILL DETERMINE THE ACTUAL WIRE SIZE REQUIRED TO SUIT YOUR PARTICULAR APPLICATION.

2. Use plastic zip ties and any other supplies needed to tie off the electrical cords. This protects the cords from abrasion, sharp objects, water contact and other harm.



BEACHER RAILWAY WITH REMOTE CONTROL PUSH / PULL POWER DRIVE

4. OPERATION & MAINTENANCE

4.1 TESTING POWER DRIVE OPERATION

After the railway and power drive installation is complete, it is important that the power drive functions properly. Test the power drive operation as follows:

1. Turn and hold the switch in the UP position to raise the empty carriage about one-foot to allow for removal of wood blocks installed in section 3. Then release the switch. If the power drive is functioning properly, the power drive will stop and hold the carriage at any position. The wire rope on the power drive must reeve from motor side top of both drums to front of carriage when operating.
2. For remote control power drive, press and hold UP button to raise the carriage or press and hold DOWN button to lower carriage. Release button to stop operation.



WARNING:

THE POWER DRIVE WIRE ROPE MUST REEVE FROM MOTOR SIDE TOP OF BOTH DRUMS TO CARRIAGE FRONT TO OPERATE PROPERLY AND PREVENT PERSONAL INJURY AND OR EQUIPMENT DAMAGE.



WARNING:

ENSURE WIRE ROPE DOES NOT CONTACT ANY OF THE RAILWAY OR POWER DRIVE STRUCTURAL COMPONENTS TO PREVENT PERSONAL INJURY AND OR EQUIPMENT DAMAGE.

3. Repeat Step 1 in the DOWN direction.
4. Operate the power drive and empty carriage in both directions for the full length of the railway ensuring no interference with railway or power drive structural components.
5. Contact your authorized dealer if the power drive fails to perform as described in this section.

4.2 RAISING AND LOWERING THE CARRIAGE

1. Raise the carriage by turning and holding the switch in the UP position until the carriage is at the desired level. The switch can be released any time to stop the carriage movement.
2. For remote control power drive, press and hold UP button to raise the carriage or press and hold DOWN button to lower carriage. Release button to stop operation.



WARNING:

DO NOT STAND OR WALK ON THE RAILWAY CARRIAGE OR SIT IN THE BOAT WHILE THE CARRIAGE IS IN ANY RAISED POSITION.

3. Lower the carriage by turning and holding the switch in the DOWN position. The switch can be released any time to stop the carriage movement. Do not continue lowering the carriage after the boat floats freely from it. Excessive slack in wire rope may cause wire rope and/or equipment damage.
4. Check the railway periodically for frayed wire rope and/or binding pulleys.
5. Never operate the power drive from inside the boat or railway.
6. Keep fingers and clothing clear of all moving parts of the railway and power drive. Keep people clear during operation of the railway.

4.3 SECURING RAILWAY WHEN NOT IN USE

At the end of operation, secure the power drive and railway to prevent unauthorized use. Proceed as follows:

1. Raise the carriage to the desired height.

2. Disconnect and lock out the power source to prevent unauthorized use of the power drive when it is unattended.

4.4 PRE-OPERATIVE CHECKS

Review the following Pre-Operation Checklist. Only those who have read and understood this manual, the railway manual, and related equipment manuals are qualified to do this inspection.

Railway installation will clear all power lines and obstructions.

All structural members of the railway are free of defects and damage that may affect the integrity.

The power drive 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.

Wire rope reeves on and off the top of the power drive drums on motor side.

Any user or dealer installed locking devices have been removed before operating the railway.

Operate the railway first without, and then with, your boat on the carriage to test the operation of both the railway and the power drive.

The boat is properly positioned on the carriage before doing any raising or lowering.

The railway is not being used beyond its rated capacity.

Any drain plug is in place on the boat before launching.

Conduct the wire rope inspection procedure described in your railway manual at least monthly.

Suspended track sections and splice connections are rigidly supported.

The power drive winch drums are parallel to carriage and railway cross ties.

The wire rope ends are securely fastened.

The power drive is securely fastened to motor cross ties and braces.

Vent plug is installed on the gearbox reducer.

Read the railway and power drive manual and ensure that everyone understands the proper operating procedures.

Understand the use of all controls and connections provided with the direct drive.

Do not use the railway or power drive if either shows any signs of damage.

All bolts and nuts are fastened securely prior to operation.

Check that the power drive wire rope is reeved properly.

Never try lifting anything other than a boat with this railway.

Do not operate the railway under the influence of drugs, alcohol, or medication.

Never try to raise or launch your boat in severe rough water conditions. This can damage your boat and/or the railway.

5. INSPECTION AND MAINTENANCE

5.1. GENERAL MAINTENANCE RULES

1. Do not allow persons other than authorized service personnel to repair this equipment.
2. Do not weld or otherwise modify the beacher. Such alterations may weaken the structural integrity of the beacher railway and invalidate your warranty.
3. Completely lower the carriage before performing any type of maintenance or repair.



WARNING:

NEVER ALLOW ANYBODY TO WORK IN OR ON THE BOAT WHEN IT IS POSITIONED ON THE CARRIAGE. IF 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 BEACHER OR BOAT DAMAGE, TRYING TO STOP FREEWHEELING CAN CAUSE SERIOUS PERSONAL INJURY.

5.1 WIRE ROPE INSPECTION PROCEDURE

Refer to Figure 5-1. Inspect the wire rope at least once per month 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 any 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. If a broken wire or wires are localized in the end attachment of an operating rope and making a new attachment can eliminate this condition, this may be done instead of replacing the entire rope. Keeping the rope clean 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 wire rope caused by the individual wires becoming untwisted. This untwisting of individual wires is usually caused by impact loading on the wire rope (such as a sudden stop).

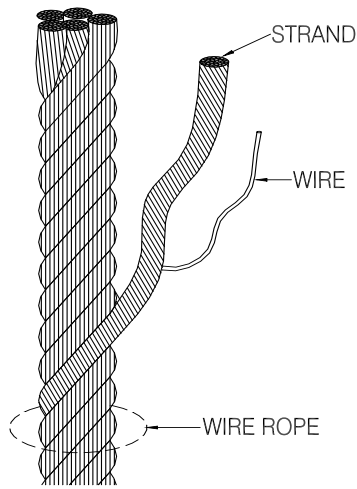


Figure 5-1.

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 3/64 inch from 1/4 inch diameter wire rope, 1/16 inch from 5/16 inch or 3/8 inch diameter wire rope. Marked reduction in diameter indicates core deterioration.

5.2 ANNUAL INSPECTION

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



WARNING:

DO NOT ALLOW ANYBODY TO USE THE BEACHER RAILWAY UNTIL THIS MAINTENANCE IS COMPLETED.

1. Tighten all bolts.
2. Check the sheaves to ensure 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.

5.3 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 carriage is completely lowered. Do not manipulate any of the winch mechanisms when the carriage is raised.
3. Lubricate cables and sheave bearings.
4. Lubricate winch hub bearings.



WARNING:

AFTER EVERY WINCH MAINTENANCE, TEST THE WINCH MECHANISM AS DESCRIBED IN CHAPTER 4 OF THIS INSTRUCTION MANUAL BEFORE LETTING ANYONE USE THE BEACHER RAILWAY.

5.4 STORAGE PROCEDURE

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

6. TROUBLESHOOTING

The following chart is intended to assist with troubleshooting your Push / Pull Beacher Railway lift. While not all inclusive, the chart outlines the most common causes of a problem and the recommended course of action.

SYMPTOM	CAUSE AND CORRECTIVE ACTION
Winch fails to hold the carriage in a given position as described in the test procedure.	Contact your authorized dealer—tampering with the winch mechanism can cause equipment damage that may invalidate your warranty.
Carriage raising is either difficult or impossible.	<p>Carriage is binding because either frame is not square or track is not straight.</p> <p>Drive cable is rubbing against the drive unit frame—repeat reeving as specified in chapter 3.</p> <p>One or more truck wheels is binding—inspect/lubricate/replace.</p> <p>Load exceeds rated capacity of drive unit—reduce load weight as needed.</p> <p>User or dealer installed locking devices are in place—remove these.</p> <p>Auxiliary equipment such as boating hardware is being improperly hung on beacher—remove this equipment permanently.</p>
Boat shifts position when operating the beacher.	Boat is not properly secured on the carriage—failure to properly secure boat can cause equipment damage and/or serious personal injury.
Wire rope is slipping on drive sheave	<p>Wire rope is not sufficiently tensioned. Tension is required on the lines on both sides of the drive sheave.</p> <p>Wire rope elongates when it is first loaded. Re-tensioning may be required after lifting a heavier load than has been previously lifted.</p> <p>See section 3.11.</p>

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.

7.1. Railway Push-Pull Drive Unit

REF #	QTY	DESCRIPTION	P/N
1	1	PPD FRAME SILVER	3362010
2	1	RAILWAY RC PANEL ASSY 110V	3320030
3	1	MOTOR MARATHON 1.5HP W/BRAKE TEFC	6535621
4	1	REDUCER 60:1 SGL E26 MDNS 56C WINSMITH	6733000
5	4	BEARING PILLOW BLOCK TAPPED BASE 1-15/16 SHAFT	5133600
6	1	SHAFT DRIVE PPD	3362005
7	1	SHAFT IDLER PPD	3362004
8	1	COUPLING SPROCKET ID 1-1/4 KEYED OD 5	6733002
9	1	COUPLING SPROCKET ID 1-15/16 KEYED OD 5	6733003
10	1	COUPLING CHAIN 60-2 Ø5	6733001
11	1	KEY MACHINE 1/2x1/2x1-1/2 UNDERSIZED	5806455
12	1	PPD FRAME CABLE KEEPER	3362015
13	1	P/P CABLE KEEPER WEAR PLATE	3362016
14	2	HHCS 3/8-16 X 1 SS	5896247
15	4	HHCS 1/2-13 X 1 SS	5896280
15	4	WASHER SPLIT LOCK 1/2 SS	5806244
16	8	HHCS 5/8-11 X 1 SS	5896298
17	6	WASHER SPLIT LOCK 3/8 SS	5806243
18	2	WASHER FLAT SAE 3/8 SS	5896406
19	2	NUT HEX 3/8-16 SS	5896377
20	2	SCREW FH SOC 1/4-20 X 1 SS	5892801
21	2	NUT HEX NYLOCK 1/4-20 SS	5893101
23	2	BOLT CARR 3/8-16 X 1 CZP	5806481
24	1	DECAL VL "WARNING"	6206971
25	1	INST. MANUAL PUSH-PULL RAILWAY DRIVE	6115005

TWO YEAR LIMITED WARRANTY

Reimann & Georger Corporation

Marine Products

This product is warranted by RGC® Marine Products to the original purchaser to be free from defects in material and workmanship under normal use for a period of two years from the date of purchase.

During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or similar model) at our option, without charge for either parts or labor when serviced at RGC® Marine Products.

Upon completion of repair, the unit will be returned to the customer freight prepaid. The warranty will not apply to this product if it has been misused, abused, or altered.

NEITHER THIS WARRANTY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, SHALL EXTEND BEYOND THE WARRANTY PERIOD. NO RESPONSIBILITY IS ASSUMED FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

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