

# OWNER'S GUIDE

## VERTICAL LIFT BOAT LIFTS

Thank you for choosing ShoreStation!

Enclosed please find the operating instructions for your new ShoreStation vertical lift boat lift. Please read this document carefully before using your lift.

Keep it in a safe place for future reference.

If you have any questions about your lift or need service, contact your local ShoreStation dealer. If you have difficulty contacting a dealer, e-mail: shorestation@midwestindustries.com, so we can assist you in contacting a dealer.

You should have received a packet of warranty documents with your lift. Be sure to fill out and mail your Warranty Registration Card to activate your lift's warranty. If you did not receive this information, ask your dealer for a copy or visit [www.shorestation.com](http://www.shorestation.com) to register online.

PLEASE FILL IN THE FOLLOWING INFORMATION FOR YOUR RECORDS.

Model Year: \_\_\_\_\_

Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Lifting Capacity:  
\_\_\_\_\_

Date Purchased: \_\_\_\_\_

Purchased From: \_\_\_\_\_

Salesperson:  
\_\_\_\_\_

Phone Number: \_\_\_\_\_

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*Models and specifications are subject to change. Because of the continual improvements to our lift products, ShoreStation reserves the right to add or discontinue models at any time or to change design and specifications without notice and incurring obligations.*

## YOU AND YOUR SHORESTATION

Our goal is your complete satisfaction. That is why we recommend reading this manual in its entirety. A better understanding of your lift's features and adjustments will make your boating experience more pleasurable.

It is important that you maintain and store your boat lift and accessories properly to ensure that it continues to provide the dependable performance year after year.

**IMPORTANT:** Read this manual carefully with special attention directed toward all **WARNING, CAUTION,** and **IMPORTANT** information.

**ShoreStation** has been manufacturing boat lifts since 1959. Our current product offering of lifts ranges from 1000 lb. PWC lifts through 15,000 lb. hydraulic lifts.

Certain models (not available in all weight capacities) are an all steel construction while others are an all-aluminum construction. Still others are a combination of the two metals to offer the strongest and best built product in the marketplace today.

Some lifts are of the cantilever style lift system while others are the vertical style lift. It is your decision to choose the style lift that will best fit your needs in your location.

This manual includes information for the aluminum vertical lift boat lifts with the mechanical winch system. It also lists what lift accessories are currently available, what they are used for and how they operate.

## USING YOUR LIFT

**DO NOT OPERATE THIS LIFT WITHOUT FIRST STUDYING AND UNDERSTANDING THIS OWNER'S MANUAL FOR PROPER OPERATING PROCEDURES.**

### Basic Lift Operating Tips and Guidelines

**IMPORTANT:** Before using your ShoreStation lift, read this Owner's Manual for detailed operating instructions and safety information.

Here are some basic guidelines to follow:

**Know the maximum capacity of your lift.** It is important not to exceed the maximum load capacity of your lift. Overloading could cause mechanical failure and serious personal injury.

**Watch for any areas in your craft that may trap water.** Remove the drain plug if available. Make sure that water will drain from the area on a PWC where your feet are placed on the machine. Trapped water could greatly increase the machines total weight during a rainstorm exceeding the lift's load capacity.

**Never board your craft while it is raised on the lift.** Always lower the lift platform before boarding your craft so it is almost floating free from the platform, but is still stabilized by the platform. This will aid in the user's ability to load while not placing excess weight on the lift.

**Use Caution during Maintenance and Repairs.** Always remove your craft from the lift and fully lower the platform before any maintenance and repairs are performed. Only remove the safety shields after the platform is fully lowered. Never reach into the winch mechanism and manipulate any of the winch parts when the platform is raised.

**DO NOT let Children Play on or around the Lift.**

## Properly Positioning the Boat on the Lift

The boat should be positioned on the lift so that there is an equal amount of weight on each platform. This position will vary from boat to boat because the center of gravity on every boat is different. The equal weight distribution is determined by how far forward or backward the boat is positioned on the lift. Once identified, adjust the motor stop (adjustable on 1500 – 9,000 lb. aluminum lifts) or front end boat stop (USED ON INBOARDS) so it will stop the boat in this position in future use.

## Positioning an Inboard Boat on the Lift

When placing an inboard boat on the lift, it is necessary to install a front-end boat stop on your lift. This option will protect your drive shaft and prop from being bent when the platform is raised to support the boat. The boat must be positioned rearward far enough so the bunks are supporting the boat before the drive shaft contacts the cross member as the platform is raised. A new lift installation for an inboard should NOT have the motor stop installed. If an existing lift is going to be used for an inboard, the motor stop should be removed before placing the boat on the lift.

**Platform Height Positioning.** The height that the platform should be positioned when the boat is removed for use is best determined by lowering the lift platform until the boat is about to float above the platform. Once at this point, start the engine and put the unit in reverse. With the engine idling, continue to lower the platform. As the boat breaks free from the platform, the power of the engine in reverse will pull the boat out of the lift. Discontinue lowering the platform at this point. Positioning the platform at this location will allow the platform bunk system to also serve as a centering system guiding your boat into the lift when you return.

Upon returning to the lift, slowly drive your boat into the lift. Doing so will allow the bunk system to center your boat on the lift platform. Continue to power into the lift until the boat is stopped by either the motor stop or front end boat stop installed on your lift.

**Level Installation.** The lift must be installed so it is setting level. Doing so will allow the lift to operate without binding as the platform is raised and lowered.

**For Added Safety and Security.** Always lock your lift when it is unattended for any period of time. Set the wheel lock in the “locked” position on lifts equipped with mechanical winches. A padlock can be placed around the spoke on the big wheel and then through the wheel lock for added security. This protects both you and your boating equipment.

## SAFETY

The following are safety and maintenance tips that should be adhered to for your safety and the longevity of your lift.

### HAND WHEEL OPERATION

**WARNING:** Turn the operator’s hand wheel clockwise when raising the platform. Failure to do so will cause the brake mechanism to not engage creating a free-wheel spinning situation. This may cause potential bodily injury and/or possible damage to the boat and lift.

### TURNING THE WINCH HANDLE COUNTERCLOCKWISE

Turning the winch handle counterclockwise after the platform is fully lowered will cause the winch handle to unwind from the drive shaft and will not raise the platform when it is continued to be turned counterclockwise. No damage will occur because the handle will only turn on the drive shaft. A spring will force the winch handle to thread back onto the drive shaft when it is turned clockwise.

## OVER-CRANKING THE WINCH MECHANISM

**WARNING:** Continuing to crank the winch mechanism once the platform is in its fully raised position will create tremendous internal loading of the cables, pulleys, the winch assembly and its components. This overloading may cause some components to fail. Once the platform has reached its fully raised position, discontinue cranking.

New versions of the aluminum lift models with the mechanical winch system have an automatic stop mechanism built into the lift so that the wheel cannot be turned once the platform has reached its fully raised position. Make sure your automatic stop mechanism is properly installed and maintained to eliminate over cranking.

Do not exceed the maximum lifting capacity of this unit. Overloading may cause mechanical failure and serious personal injury.

Do not board the watercraft on the lift while the lift is being raised or lowered.

Completely lower the lift's platform before removing the winch cover to work on or inspect the winch. Never reach through the hand wheel and manipulate any of the winch mechanism when the platform is raised.

## MAINTENANCE

**REFER TO OUR ONLINE PARTS RESOURCING SYSTEM FOR YOUR PARTICULAR LIFT WHEN ORDERING REPAIR PARTS FROM YOUR DEALER.**

It is recommended that your ShoreStation lift be thoroughly inspected at the start of each season.

Check all fasteners for tightness.

Check the frame thoroughly for bent members and signs of fatigue.

Check the pulleys periodically to make sure they are turning at all times and are not damaged.

Inspect all cables for fraying, wearing and deterioration. Check the stress on the cable attaching ends. If any of the above signs appear, replace the cables immediately.

Check the winch mechanism to make sure it is functioning properly. A winch servicing schedule must be followed annually to prevent possible failure.

Grease the winch drive chain at the start of each season.

## MANUAL WINCH MECHANISM

Remove the large hand wheel and apply a light coating of grease on the acme threads to prevent the wheel hub from seizing to the drive shaft. To remove the hand wheel, use the following instructions:

With the lift in the lowered position, remove the acorn nut and flat washer from the winch drive shaft. Turn the lift wheel counterclockwise on the drive shaft. This will thread the wheel off of the drive shaft.

Remove the oilite washer, ratchet sprocket and clutch plate.

Inspect the brake disc pad for glazing on the braking surfaces. The braking surfaces can be reconditioned by using Emory cloth to clean the surfaces from rust and glazing. While cleaning, inspect the surfaces of the clutch plate for stress cracks. If stress cracks appear on the clutch plate, replace before reassembling.

Replace the reconditioned clutch plate or new clutch plate and ratchet sprocket. (Be sure the ratchet is properly positioned and aligned so it will engage the notches or teeth on the outer diameter of the sprocket.)

Place on the oilite washer. Place a small amount of grease on the threads inside the hub of the hand wheel and the acme threads on the drive shaft. A small tube of grease is supplied with your lift for your convenience. Remove the winch cover. The tube of grease is attached with Velcro to the inside of the winch case. Use this brand grease or an equivalent for the wheel hub only.

**CAUTION: After maintenance has been performed on the winch mechanism, follow “checking the winch mechanism” before using the lift.**

## ALUMINUM LIFT MODELS WITH WINCH STYLE LIFT MECHANISMS

**ShoreStation** incorporates the vertical lift design in all aluminum winch style boat lifts it manufactures with a lifting capacity range of 1,500- 6,000 lb. The vertical lift design will raise the boat straight up without moving it through an arc as the platform is raised.

This style lift has a V-platform so it can be used in shallow water applications. The lift platform is lowered and raised through the use of cables to transfer the load equally to all corners.

The main lifting mechanism is in the winch tube assembly that is located on the dock side of the lift. This winch tube assembly is adjustable up and down for height so it is easier to access your boat if it is an issue. See the following instructions for adjusting.

### WINCH TUBE HEIGHT ADJUSTMENT

#### For all Aluminum Vertical Lift Boat Lifts with a Mechanical Winch System

The winch tube height can be adjusted to various heights to better accommodate your installation, making it easier for you to enter and exit your boat when it is in the lift.

Currently all assembly instructions are written to position the winch tube assembly in its highest position. This maximizes the lift height for your lift. However, there are applications where you may not be in deep, rough water. Another application may be where your dock is positioned closer than 24” to the water level. If one of the above is your situation, the winch tube can be lowered to better match your dock height. It can be lowered as follows:

1. Install the lift in position alongside the dock. Level the lift and adjust so you can enter and exit the lift with your boat as desired.
2. Remove the boat from the lift and lower the platform to its lowest position. This will remove all load and tension on the winch and lift cables.

**NOTE:** Decals are located on the upright posts of the lift that the winch tube is attached to. These decals are positioned on the posts at the factory so that when the winch tube assembly is positioned on the upright posts at identical locations on the decals, the winch tube should be located level with respect to the other post.

**NOTE:** For every inch that you lower the winch tube assembly, you will lose one inch of lift. The cable mechanism is designed that any excess cable that is created by you moving the winch tube downward will be taken up by the winch cable attached in the winch.

#### Adjusting Instructions

3. Loosen the bolts in the clamps that attach the winch tube to the upright posts. Note that the bolts should **NOT** have to be re- moved to lower the winch tube if loosened sufficiently.
4. Using a hammer, tap the clamps slightly on the top side causing them to slide down the post. They will have a tendency to bind around the post as the winch tube is lowered so they will have to be moved together. Both ends of the winch tube need to be adjusted together. It works best to have a person on each end of the winch tube assembly so both ends can be lowered at the same time. If you are alone, lower one side about an inch,

then lower the other end the same distance. Re-repeat these processes until you have lowered it to the desired height.

5. Once the winch tube has been lowered to its desired position, tighten the clamps on one end of the winch tube assembly. When they are tightened, adjust the remaining end to a matching height using the decals on the post.

6. Once all of the clamps are tightened, turn the hand wheel clockwise to wind up the excess cable created by lowering the winch tube assembly. Carefully guide the cable on the drum with one hand while you turn the hand wheel with the other. The cable should be guided on the drum so the wraps of cable will lie beside each other as it winds on the drum. Done properly, the cable will form one complete wrap on the winch drum without wrapping over itself when the platform is in the full up position.

7. Raise the platform completely to check the height that it can now be raised with the new winch tube height adjustment. If the desired height is reached, the adjustment is complete. If not, repeat the above process. If the platform will not raise high enough, the winch tube assembly will have to be raised using the same process only raising the winch tube assembly instead of lowering.

8. Once all adjustments are complete and the platform is at the desired height, place the boat back on the lift platform for storage and future use.

## LEVELING THE LIFT PLATFORM

The level cables are the cables that run from the corner cable brackets on the lower frame of the lift, up through the lift platforms, and then upward and connect to the top side rail on the side opposite of the winch tube side of the lift. These cables are designed and built to a standard length that is compatible for a specific lift width and size. When installed according to the assembly instructions, they will keep the platform level in the lift. However, should the situation arise where the platform is not level in the lift, it can be adjusted as follows:

1. Determine which side of the platform is high.
2. If the side of the platform under the winch tube is high, there are two procedures for correcting the problem.

Remove the boat from the lift to perform this procedure.

A. If the difference is minimal (one to two inches) the platform can be leveled by threading the nuts farther onto the threaded portion of the cable ends located on each end of the level cables. The amount of additional adjustment available to you is dependent on how far the nuts were threaded onto the cable ends during the assembly of the lift. This will determine how much additional adjustment can be achieved.

B. If the adjustment is two inches or more, it is more than what you can gain by threading the nuts further onto the cable ends. The top side rail can be adjusted up as a unit to gain the additional height that you may need to level the platform.

3. If the side of the platform opposite the winch tube assembly is high, the cables need to be lengthened. There are two procedures for correcting the problem. Remove the boat from the lift to perform this procedure.

A. If the difference is minimal (one to two inches) the platform can be leveled by unthreading the nuts onto the threaded portion of the cable ends located on each end of the level cables. The amount of additional adjustment available to you is dependent on how far the nuts were threaded onto the cable ends during the assembly of the lift. This will determine how much additional adjustment can be achieved. The nuts should never be loosened beyond less than two threads protruding through the nuts.

B. If the adjustment has to be 2 inches or more, it is more than you can gain by threading the nuts off of the cable ends. The top side rail can be adjusted down as a unit to gain the additional adjustment that you may need to level the platform.

## WINCH TUBE SERVICE INSTRUCTIONS

The winch tube assembly was pre-assembled at the factory. It is important that the internal parts and cable routings are assembled properly in order for the winch tube assembly to function properly. It also requires special tools during the assembly process. It is therefore recommended that you contact your local dealer should you ever have issues with the winch tube assembly.

In the event that you are experiencing a problem and do not have a **ShoreStation** dealer available to assist you. To locate a servicing dealer, go to [www.shorestation.com](http://www.shorestation.com) and click on 'Find a Dealer'. To buy parts exclusively, click on 'Parts' on the home page. Should you have any trouble locating a helpful dealer, please

click on 'Contact Us' on our homepage and include a brief description of the issue, your location, and the name of the selling dealer.

## How the Winch Brake Mechanism Operates

This unique brake mechanism includes a feature that holds your platform in the raised position when the grip on the hand wheel is released. It is designed to hold the load applied to the lift at any position the hand wheel is released. It is up to you to maintain the brake system to make sure that it is always operating properly.

## Brake System Assembly Instructions

The brake mechanism consists of several component parts that must be assembled in the following manner for the brake system to operate properly.

1. The drive shaft has a flat disc that is welded to the shaft in a permanent location.
2. The disc brake pad is placed on the drive shaft and slid against the welded flat disc.
3. The clutch sprocket is placed on the drive shaft next. Note that there are notches on the outer diameter of the clutch sprocket. The clutch dog must be raised so that the outer diameter of the clutch sprocket can be slid under the end of the clutch dog so that the notches on the outer diameter and the end of the clutch dog will engage each other during operation.
4. Slide a flat oilite washer onto the drive shaft until it contacts the clutch sprocket installed in step 3.
5. Note that there should be a small amount of grease applied to the threads on the inside of the wheel hub before you attempt to assemble it on the drive shaft. A small amount is necessary to allow the threads to move freely against each other but care must be taken not to over grease.

**WARNING:** Excess grease will have a tendency to work itself onto the brake disc assembled in step 2. Once grease is applied to the disc brake surfaces, normal use of the winch will cause a glazing to form on the disc surface, thus reducing the amount of friction that can be generated with the braking system leading to premature failure.

6. Place the large hand wheel onto the end of the drive shaft so the center hub of the wheel is aligned and positioned on the end of the drive shaft. Apply light pressure inward on the center of the hand wheel as you rotate the hand wheel clockwise. The large acme threads inside the hub of the hand wheel will thread onto the acme threads of the drive shaft. Rotate the hand wheel until it is fully threaded onto the acme threads and the center hub is against the flat washer installed in step 4.

7. Place on a 5/8" flat washer until it contacts the step in the shaft between the standard threads on the end of the shaft and the acme threads.

8. Thread on the 5/8" cap nut and tighten it against the flat washer just installed. This will prevent the hand wheel from threading off of the acme threads when the hand wheel is turned counterclockwise to lower the lift platform.

9. Assembly is complete.

## Winch and Brake Mechanism Operation

### How the Brake Mechanism Operates

#### RAISING THE PLATFORM

1. To raise the lift platform, rotate the large hand wheel clockwise. As the hand wheel is rotated the hub in the hand wheel will thread itself onto the acme threads of the drive shaft. Once it has threaded itself onto the threads far enough so that the clutch sprocket and disc brake pad are fully compressed against each other, the complete brake system will rotate with the drive shaft.

2. As the hand wheel is continued to be turned clockwise, you will hear a definite clicking sound. This click is created by the clutch dog engaging the notches on the outer diameter of the clutch sprocket. This will continue to happen until you stop rotating the hand wheel.

3. When the lift platform is at the desired height, stop turning and release the grip on the hand wheel. The brake system is now engaged if operating properly and will hold the platform in its raised position.

## **LOWERING THE PLATFORM**

1. To lower the platform, rotate the hand wheel counterclockwise. When you do, the first thing that happens is the hub inside the hand wheel will thread itself off of the acme threads on the drive shaft. When it does, the pressure it has created against the clutch plate and the disc brake pad will be reduced allowing the drive shaft to rotate counterclockwise from the load that is applied to it.
2. It will rotate quickly and catch up to the hand wheel releasing and controlling the brake system. This all happens simultaneously to give the appearance of the hand wheel turning the winch system to lower it when in actuality the turning of the hand wheel is only releasing the brake system so the load can lower itself.
3. If the hand wheel rotation is stopped as the platform is being lowered, the brake system will automatically engage holding the lift platform in its location.

## **WARNING: Never raise the lift platform by rotating the hand wheel counterclockwise.**

The winch brake mechanism will operate and function properly when it is used properly as described above. In the event that you turn the hand wheel counterclockwise to raise the lift platform, you totally eliminate the brake system from operating and create a very hazardous situation. Turning the hand wheel counterclockwise eliminates the breaking system because it will not engage itself when turning the hand wheel counterclockwise. When the grip on the hand wheel is released, the hand wheel will spin uncontrollably, allowing the load on the platform to propel it. This can create a potentially dangerous situation and you should **NEVER** try to put your hand on or into the hand wheel or try to prevent it from spinning downward in any way.

## **Servicing the Brake System**

The brake system is basically maintenance free as long as grease is not allowed to get on the disc brake pad surfaces. It is therefore recommended that the following maintenance be done at the start of each season.

1. Disassemble the brake system by removing the 5/8" cap nut and flat washer containing the hand wheel on the drive shaft.
2. Unthread the hand wheel and remove the component parts. Clean any grease or rust that may have built up on the disc brake pad, the clutch plate and the flat surface of the drive shaft. Clean the surfaces using emery cloth.
3. Check the disc brake pad to see if a glazing has formed on the surfaces. If it has, the pad can be reconditioned by roughing the surfaces with emery cloth. If it cannot be reconditioned, it must be replaced.
4. Reinstall the component parts using the instruction as described above.
5. Place a small amount of grease on the threads of the drive shaft and wheel hub taking care that any excess grease is wiped away so it does not get on the brake mechanism. This is very important for the brake mechanism to function properly.
6. Rethread the hand wheel back onto the drive shaft as described above. Secure in place using the flat washer and 5/8" cap nut. Tighten.

## **Fitting a Boat on an Aluminum ShoreStation Lift**

Your boat will spend most of its time setting on the lift when not in use. Therefore it is important that the boat is properly supported while on the lift. It is also important that the boat is properly positioned on the lift so that the weight of the boat is equally distributed on both lift platforms opposed to it being supported mostly by one. This is more important as the size of the boat is increased. That is why the motor stops on the **ShoreStation** lift are adjustable forward and backward on the 3,000 lb. lifts and larger.

Position using the following steps:

## **STANDARD OUTBOARD BOATS OR BOATS WITH AN OUTDRIVE**

1. Position the motor stop so it is adjusted as close to the rear platform as possible.
2. Adjust the bunks in or out from the centerline of the lift to the position you think will best fit your boat. Also make sure that the bunks are adjusted high enough to keep your boat from contacting the cross members of the platform when the platform is raised. **NOTE:** The bunks can be adjusted higher in the front than the back



if you so choose to do so. This will assist you in centering the boat when you drive in on the lift once the adjustments are complete.

3. Identify the approximate center of gravity of your boat. Carefully place the boat on the lift so the center of gravity is as close to the center of the platform cross members as possible. This does not apply to inboard boats.
4. Slowly raise the platform on the lift to see how well the bunks fit the boat hull. The bunks may need to be moved in or out from the centerline of the platform depending on how well you positioned them beforehand. Note that the bunks can be adjusted closer together at the front platform of the lift opposed to the rear as long as you are not crossing a strake on the boat bottom. Otherwise, it is recommended that you place the bunks just to the outside of a strake. This not only gives you good support but will also help you in centering your boat on entry if the platform is properly positioned when the boat is removed for use.
5. Once the bunks are positioned to your boat, the motor stop must be positioned to fit the drive unit of your boat. Slide the telescoping arms until the motor stop contacts the drive unit. Tighten in position.

## CABLE ROUTING FOR 1500-15,000 LB. LEVEL LIFT PLATFORMS

The level cables installed in the aluminum level lift are made of stainless steel.

The platform is assembled as shown in the Diagram above. The component parts will vary depending on the size lift but the concept is basically the same on all models.

Starting on the end of the cable that is attached to the Top Side Rail, the cable comes down, then under the pulley as shown. The cable must be in the pulley groove and contained there by the cable retainer. It is important that the cable does not come out of the pulley groove. Cable damage will occur if it does not have the pulley diameter to route the cable around the bend. Manually raising the platform assembly on the top side rail side of the lift only will cause slack in the level cables creating the possibility of the cables slipping out of the pulley grooves.

The cable is then routed through the platform tube under the bushing located inside the platform tube to keep the cable from rubbing on the top inside of the platform tube.

The cable is then routed in the pulley groove on the top side of the pulley on the winch tube side of the lift. Again the cable retainer channel is used to keep the cable in the pulley groove. Note that this cable retainer is located on the top side of the pulley while the one installed on the other end of the platform is positioned on the bottom side of the pulley.

The cable is then routed down and attached to the bottom corner cable bracket. The nuts used to attach the cables on either end are made from brass so they can be easily removed in the event the cable has to be replaced in the field.

**NOTE:** Check the pulleys periodically to make sure they are turning. The pulleys **MUST TURN** at all times when the platform is being raised or lowered to prevent damage to the pulleys and/or cables.

Should you have any questions regarding the cables and pulleys, contact your local **ShoreStation** dealer.

## OPTIONAL EQUIPMENT FOR YOUR SHORESTATION BOAT LIFT

**ShoreStation** supplies the standard boat lift with the basic equipment that is required to raise and support your boat to protect it from the algae growth and damage that can occur from sitting in the water when not in use.

**ShoreStation** also manufactures numerous pieces of optional equipment that will enhance the use of your lift. Some are designed for a specific purpose and may be more valuable for a particular style boat opposed to another.

The following is a list of the optional equipment for your lift, please see your ShoreStation dealer for additional information:

- Transport Unit for transporting the lift on land and water.
- Lift roll-in kit.
- Extension legs
- Canopies
- Front end boat stops
- Post style load guides

- Spring loaded load guides
- Bunk style load guides
- Electric drive units

## ShoreStation Lifts – Frequently Asked Questions

Q. What corner of the lift can the winch are mounted?

A. Left front or right rear on aluminum and right front or left rear on steel.

Q. What is the minimum water depth the lift will work in?

A. Approximately 12"-14" plus the draft of the boat.

Q. What is the maximum water depth the lift can be installed in?

A. The standard lift leg can be used in up to 4 ½ ft. The extension leg can be used in up to 6 ft. of water. The deep-water lift models can be used in up to 9 ft. of water.

Q. What parts of the lift need lubrication?

A. The threads of the winch drive shaft, winch cable, and drive chain.

Q. Can I change my 3000lb. lift to a 4000lb. lift?

A. It can be done by changing the winch on 2000 MY and newer models.

Q. How do I know when to replace the cables?

A. When cables start to fray, they should be replaced.

Q. How hard does the wheel turn?

A. With the lift at capacity, it takes 40 lbs. of rim pull to raise the lift.

Q. Is the winch tube adjustable?

A. Yes, it can be adjusted up or down to the corresponding numbers on both ends of the tube. This will limit the lifting height.

See the **ShoreStation Aluminum Lift Warranty** for further information regarding **Owner's Warranty Information**.

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### DECLARATION OF CONFORMITY

Midwest Industries, Inc., Ida Grove, IA 51445 U.S.A. manufactures and declares that this **ShoreStation** Boat Lift is in conformity with the essential health and safety requirements specified in The Machinery Directive 98/37/EC.