

Thank you for choosing ShoreStation!

Enclosed please find the operating instructions for your new **ShoreStation** PWC hoist. Please read this document carefully before using your hoist.

Keep it in a safe place for future reference.

If you have any questions about your hoist or need service, contact your local **ShoreStation** dealer. If you have difficulty contacting a dealer, please call our Customer Service Department at (800) 859-3028 or 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 hoist. Be sure to fill out and mail your Warranty Registration Card to activate your hoist's warranty. If you did not receive this information, ask your dealer for a copy or visit www.shorestation.com and 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: _____

*Models and specifications are subject to change. Because of the continual improvements to our hoist 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 hoist's features and adjustments will make your boating experience more pleasurable.

It is important that you maintain and store your boat hoist 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 hoists since 1959. Our current product offering of hoists ranges from 1000 lb. PWC hoists through 15,000 lb. hydraulic hoists.

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.

USING YOUR HOIST

Basic Hoist Operating Tips and Guidelines

IMPORTANT: Before using your **ShoreStation** hoist, 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 hoist. It is important not to exceed the maximum load capacity of your hoist. Overloading could cause mechanical failure and serious personal injury.

Watch for any areas that may trap water. Remove the your PWC's 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 machine's total weight during a rainstorm, exceeding the hoist's load capacity. Make sure that the drain plug is removed if a small boat is going to be placed on the hoist.

Never board a PWC while it is raised on the hoist. Always lower the hoist platform before boarding the PWC 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 hoist.

Use Caution during Maintenance and Repairs. Always remove the PWC from the hoist and fully lower the platform before any maintenance and repairs are performed. 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 Hoist. Children should not be allowed to play under or around the hoist.

Properly Positioning the PWC on the Hoist. The PWC should be positioned on the hoist so that the center of gravity of the load being raised is centered directly above the main cross member of

the hoist platform. The center of gravity will be different for each application. Balancing the load being raised on the hoist platform will greatly affect the operation of the hoist by reducing the internal friction created by unbalanced loading. Place a mark or reference point on the PWC for future reference to assist in the proper positioning for weight distribution on the hoist.

Platform Height Positioning. The height that the platform should be positioned when the PWC is removed for use is best determined by lowering the hoist platform until the PWC is about to float above the platform. Once at this point, mount the PWC, 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 PWC out of the hoist. Discontinue lowering the platform at this point. Positioning the platform at this point will allow the platform bunk system to also serve as a centering system, guiding your PWC into the hoist when you return.

Upon returning to the hoist, slowly drive your PWC into the hoist. Doing so will allow the bunk system to center your PWC on the hoist platform. Continue to power into the hoist until the PWC is positioned at the predetermined position established earlier.

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

For Added Safety and Security. Always lock your hoist when it is unattended for any period of time. It is recommended that you securely lock the winch handle so it can not be rotated while you are away. This protects both you and your boating equipment.

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

SAFETY

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

WINCH OPERATION

WARNING: Always turn the operator's winch handle clockwise when raising the platform. The winch handle **MUST** be turned clockwise while raising the platform to properly engage the braking mechanism of the winch.

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.

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 hoist while the hoist is being raised or lowered.

Completely lower the hoist's platform before inspecting or performing maintenance on the winch.

MAINTENANCE

REFER TO THE PARTS MANUAL FOR YOUR PARTICULAR HOIST WHEN ORDERING REPAIR PARTS FROM YOUR DEALER.

It is recommended that your *ShoreStation* hoist 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.

The maintenance required on the hoist is also minimal. It is manufactured mostly from aluminum materials that will not deteriorate in the elements.

The pulleys need to be checked periodically to make sure they are turning at all times and are not damaged.

The cable must be checked for fraying and any damage that it may have received from use. If fraying or damage to the end mountings occurs, replace immediately.

WINCH MAINTENANCE

The winch mechanism on this style hoist is a complete mechanism purchased from a leading vendor. This system is almost maintenance free. It uses a self-braking mechanism design so when the handle is released, the platform will stay in position.

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

SERVICING THE WINCH

Remove the winch handle and apply a light coating of grease on the threads to prevent the winch handle from seizing to the drive shaft. To remove the handle, use the following instructions:

With the hoist in the lowered position, remove the nut on the drive shaft. Note that there is a small wire spring that fits on the drive shaft that applies pressure on the handle. Care should be taken not to lose this spring because it is needed to restart the handle on the acme threads in the event that either of them is turned counterclockwise far enough to unthread them completely off of the acme threads on the shaft.

Turn the winch handle counterclockwise on the drive shaft. This will thread the handle off the drive shaft.

Inspect the brake disc pad for glazing on the braking surfaces and possible signs of stress cracks. If they appear, replace the disc brake pad before reassembling.

Place a small amount of grease on the acme threads of the drive shaft. **MAKE SURE THAT THERE IS NO GREASE THAT COMES IN CONTACT WITH THE BRAKE CLUTCH MECHANISM.**

To reassemble, turn the winch handle clockwise onto the acme threaded drive shaft until it is completely threaded on the shaft. Re-install the small spring so the larger diameter end of the spring is against the winch handle. Thread the retainer nut onto the drive shaft. Tighten.

CAUTION: AFTER MAINTENANCE HAS BEEN PERFORMED ON THE WINCH MECHANISM, FOLLOW THESE INSTRUCTIONS TO CHECK YOUR WINCH.

1. Raise the platform approximately half way up. Release the lever to make sure the platform will stay in the half-raised position.
2. Raise the platform completely. Release the lever to make sure the platform will stay in the fully-raised position.
3. If the platform remains in the raised positions of step 1 and 2, lower the platform and place the PWC on the hoist.
4. Raise the platform with the PWC approximately half way up. Release the lever to make sure the platform will stay in the half-raised position.
5. Raise the platform with the PWC completely up. Release the lever to make sure the platform will stay in the fully-raised position.
6. If the winch holds the platform in the designated positions and operates as normal, the hoist is now ready for use. If it does not operate as it should, recheck to make sure it was re-assembled properly. If it does not operate properly, contact your local *ShoreStation* dealer.

Placing the PWC on the Hoist

Always center the weight of the PWC on the hoist platform to reduce any extra friction that is created by the load being placed off center.

The hoist should be placed only deep enough in the water so that when the hoist is fully raised the PWC is at the proper level beside the dock to protect it from the wave action.

Place the hoist in deep enough water to compensate for the water fluctuation during the boating season. Doing so will eliminate the need for you to reposition the hoist during the lower water levels during the boating season.

Proper positioning allows you to have the hoist fully raised to a pre-determined level with respect to the dock surface when the PWC is not in use.

Bunk Adjustment

Bunk adjustment is a matter of moving bunks either in or out with respect to the centerline of the hoist to best fit the PWC being placed on it. There is no vertical adjustment on the bunks system.

OPTIONAL EQUIPMENT FOR YOUR SHORESTATION BOAT HOIST

ShoreStation supplies the standard PWC dock mounted hoist with the necessary equipment that is required to raise and support your PWC to protect it from the algae growth and damage that can occur from setting in the water when not in use. The only additional item needed is an extension leg that will allow you to place the unit in deeper water should it be necessary to do so.

EXTENSION LEGS

Your hoist is shipped with a 20" adjustable leg as standard equipment. This should accommodate up to 48" of water when the maximum out of water height is 24" when the hoist is fully raised. Longer extension legs are required where the depth is greater than 48 inches. They are sold individually.

Determine what the water depths are in your location, then check the following **Water Depth Chart** to determine the correct extension leg you will need for your hoist. The chart lists a minimum and maximum water depth that can be obtained with each style hoist model with each length extension leg installed. Your goal should be to pick an extension leg that will give you some adjustment in the event that your water level rises or falls during the season or from year to year.

PWC Dock Mount Hoist Installation Specifications

- 1.) Determine the water depth and distance from dock to water.
- 2.) The hoist should be installed high enough to allow the PWC to be lifted out of the water a minimum of 24". Use the table to determine if the SSKA 40" leg extension is needed.
- 3.) Determine the desired height of the winch above the dock. 3'-4' is a comfortable height for most people.
- 4.) Using your water depth and dock-to-water measurements, refer to the table to select the model that will permit setting the winch at your desired height.

					<u>Winch Height above Dock</u>			
					SS1053D/DS 90" Winch Post		SS10531D/DS 120" Winch Post	
18" Dock to Water					Minimum	Maximum	Minimum	Maximum
Water Depth	Boat out of Water	Required Leg Extension Height *	Extension Leg Required	Dock to Water	* with leg extended to required height	* with leg extended to maximum height	* with leg extended to required height	* with leg extended to maximum height
24	24	0	20" Standard	18	48	68		
30	24	0	20" Standard	18	42	62		
36	24	0	20" Standard	18	36	56		
42	24	2	20" Standard	18	32	50	62	80
48	24	8	20" Standard	18	32	44	62	74
54	24	14	40" SSKA	18	32	58	62	68
60	24	20	40" SSKA	18	32	52	62	62
66	24	26	40" SSKA	18	32	46	62	76
72	24	32	40" SSKA	18	32	40	62	70
80	24	40	40" SSKA	18	32	32	62	62

24" Dock to Water								
24	24	0	20" Standard	24	42	62		
30	24	0	20" Standard	24	36	56	66	86
36	24	0	20" Standard	24	30	50	60	80
42	24	2	20" Standard	24	26	44	56	74
48	24	8	20" Standard	24	26	38	56	68
54	24	14	40" SSKA	24	26	52	56	62
60	24	20	40" SSKA	24	26	46	56	56
66	24	26	40" SSKA	24	26	40	56	70
72	24	32	40" SSKA	24			56	64
80	24	40	40" SSKA	24			56	56

* Greater Dock to Water distance will decrease the winch height by the same distance.

* Lesser Dock to Water distance will increase the winch height by the same distance.

* Lift Height (travel) = 42"

* Maximum water depth = 48" with standard 20" legs; 80" with SSKA 40" legs.

* Minimum water depth = 22" plus the draft of the boat.

INSTALLATION AND REMOVAL OF THE HOIST

The PWC dock mounted hoists are designed to be of minimal weight so they can be removed and carried down the dock or through the water for installation and removal. This is usually a two person task but is dependent on the strength and stamina of the people doing the installation and removal. If necessary, consult a physician prior to taking part in moving this hoist.

INSTALLATION INSTRUCTIONS

IMPORTANT

The dock mounted hoists have two different styles of mounting brackets used to attach it to the dock. One is designed to attach to the **ShoreStation** Dock systems; the second is a generic bracket that will attach to all competitors dock systems. Make sure you have the proper mounting bracket before installing.

Carry the hoist down the dock or in the water to the desired location. Position the hoist along side and attach it to the dock side using the mounting brackets provided. See the installation and parts manual. Once positioned, adjust the extension leg so that the hoist is setting level side to side. It is also recommended that the hoist platform be positioned so the PWC will be 24" above the water line when the hoist is fully raised.

The main upright member of the hoist must be setting level both directions. A properly leveled hoist will operate and function much easier because it does not have the internal stresses applied to it that are created by a non level situation. This results in easier operation and thereby extends its life.

The hoist should be positioned so that the platform can be lowered enough to allow the PWC to float over the platform during the lower water levels of the season. This will reduce the need to reposition the hoist when the water level drops to its lowest point of the season.

REMOVAL

Detach the hoist from the dock by loosening and removing the hardware that connects it to the side of the dock. The hoist can then be carried either down the dock or else through the water to shore.

Once removed, the hoist can be stored for the winter, preferably inside so it is out of the elements. If it is left outside, the winch system should be protected by placing a cover over it. Marking the extension leg before adjusting it inward will give you a reference for readjusting it out again at the start of the next season if the hoist is going to be re-installed in the current location. Adjusting the legs inward will make it easier to remove and store.

Check the maintenance section of this manual for the service that should be done to the hoist at the start of the next boating season.

See the **ShoreStation Aluminum Hoist 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** Hoist is in conformity with the essential health and safety requirements specified in **The Machinery Directive 98/37/EC**.

Andy Brosim, CEO