

OWNER'S GUIDE FREE STANDING PWC/BOAT HOISTS

Thank you for choosing ShoreStation!

Enclosed please find the operating instructions for your new **ShoreStation** PWC/boat 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:					
Purchased From:					

Models and specifications are subject to change. Because of the continual improvements to our hoist products, **Shore-Station** 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 hoist 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.

All PWC and smaller fishing boat hoists have the cantilever style lift design.

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 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 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. 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 Hoist. Children should not be allowed to play under or around the hoist.

Properly Positioning the PWC or Boat on the Hoist. The PWC or boat should be positioned on the hoist so that there is an equal amount of weight on each platform. This position will vary for each PWC or boat because the center of gravity on every machine is different. The equal weight distribution is determined by how far forward or backward the boat is positioned on the hoist. Once identified, adjust the motor stop (optional equipment) so it will stop the boat in this position in future use.

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.

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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.

Check the pulleys 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 or hand wheel are 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 loose 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 PREFORMED ON THE WINCH MECHANISM, FOLLOW THESE INSTRUCTIONS TO CHECK YOUR WINCH.

- 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 up. 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.
- 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.
- 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 of the boating season.

Proper positioning allows you to have the hoist fully raised to a predetermined 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 boat hoist 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

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your hoist. 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 hoist, how they would be installed and how they would be used to enhance your hoist.

Extension Legs

Front Post W/ Adjustable Leg (Required when installing a canopy on a hoist with only two legs as standard equipment)

Canopies
Post Style Load Guides
Motor Stop
Electric Drive

EXTENSION LEGS

Extension legs are required in most installations where the depth is greater than 36-42 inches. This will vary on the hoist model and design. They are sold individually because there may be instances where only one extension leg may be required per hoist installation. Other installations may require extension legs on only the lake end of the hoist when the lake bottom drops off quickly. They may also be required on all four legs when being installed in deeper water. The type and size hoist you have will determine which optional extension leg is required to adapt your hoist to the surroundings.

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



BOAT HOIST WATER DEPTHS

The chart below lists minimum and maximum water depths for installing **ShoreStation** hoists.

To function properly, the hoist must be installed at a depth where the boat is nearly floating free in the lowered position and protected from the waves in the raised position.

Maximum Water Depth measurements are taken on the lake end of the hoist with the legs fully extended. They are based on raising the boat out of the water 24 inches. **NOTE**: In lakes with extremely rough water, the boat may need to be raised more than 24 inches.

Minimum Water Depth is determined by taking the measurement listed on the following charts plus the draft of the boat. These measurements are taken at the end of the hoist closest to shore. The measurement listed is the distance from the platform to the ground when sitting on a level surface.

IMPORTANT: The boat draft must be added to the measurement on this chart to determine the true minimum water depth.

Midwest Industries, Inc. Page 4

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MODEL	LEG	LEG	MINIMUM	MAXIMUM		
	ADJUSTMENT	OPTION	WATER DEPTH	WATER DEPTH		
PWC HOISTS						
SS852	2 – 20"	standard	17"	24"		
SS8521	4 - 20"	standard	17"	44"		
	4 - 40"	SS-KA	17"	64"		
SSD8521	4 – 20"	standard	17"	44"		
	4 – 40"	SS-KA	17"	64"		
SS853	2 – 16"	standard	17"	24"		
SS8531	4 – 16"	standard	17"	40"		
SS1053D	1 – 20"	standard	22"	48"		
	1 – 40"	SS-KA	22"	80"		
SS1053DS	1 – 20"	standard	22"	48"		
	1 – 40"	SS-KA	22"	80"		
SS10531D	1 – 20"	standard	22"	48"		
	1 – 40"	SS-KA	22"	80"		
SS10531DS	1 – 20"	standard	22"	48"		
	1 – 40"	SS-KA	22"	80"		
SS1062	2 – 20"	standard	19"	24"		
SS10621	4 – 20"	standard	19"	44"		
	4 – 40"	SS-KA	19"	64"		
MODEL	LEG	LEG	MINIMUM	MAXIMUM		
	ADJUSTMENT	OPTION	WATER DEPTH	WATER DEPTH		
STANDARD ALUMINUM HOIST						
SS862	2 – 20"	standard	19"	24"		
SS8621	4 – 20"	standard	19"	44"		
	4 – 40"	SS-KA	19"	64"		
SSV1288	4 – 20"	standard	19"	44"		
	4 – 40"	SS-KA	19"	64"		
SSV1288-4	4 – 20"	standard	19"	44"		
	4 – 40"	SS-KA	19"	64"		

Midwest Industries, Inc. Page 5

MOTOR STOP

A motor stop is available for the SS1288-4 fishing series boat hoist. It is used to make positioning the boat front to rear on the hoist easier by stopping the outboard motor as the boat is brought onto the hoist when returning for storage.

ELECTRIC DRIVE UNIT

An electric drive unit is available that replaces the winch mechanism and the need for you to crank the winch when raising or lowering the hoist platform. It is powered by 110 volt AC electrical current. It has a pendant remote control that allows you to move or position your boat while raising the platform.

POST STYLE LOAD GUIDES

Post style load guides are available for the SS1288-4 fishing series boat hoist.

FRONT GUIDE POSTS WITH ADJUSTABLE LEGS

The extra guide posts and adjustable legs are available to be added to a hoist equipped with only two upright legs as standard equipment. The additional legs are required when the hoist is being installed in deep water or else when a canopy is going to be installed on a two legged hoist

CANOPY

ShoreStation manufactures a canopy system to fit the cantilever style hoists that are equipped with four upright legs. Hoists with only two legs on one end of the hoist will require you to purchase the additional upright posts so that the canopy has a support system on both ends of the hoist.

Canopies for the PWC hoists are available in a 13 ft. length only. The canopies for the fishing boats are 20 ft. long. The object of the canopy is to protect your boat from the sun and the elements when not in use.

Contact your local dealer for the size and color of canopies that are available for your particular model hoist.

Canopy Adjustment

IMPORTANT: BE CAREFUL WHEN RAISING THE BOAT ON YOUR HOIST WITH A CANOPY FOR THE FIRST TIME. FAILURE TO DO SO MAY RESULT IN YOUR BOAT BEING FORCED INTO THE CANOPY FRAME AND COVER CAUSING POTENTIAL STRUCTURAL DAMAGE TO THE CANOPY FRAME, PUNCTURING THE COVER. AND/OR DAMAGING THE BOAT.

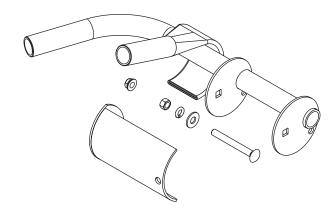
Once the boat is fully raised, position the canopy frame down so it is positioned as low as possible above the boat and yet not contact it. This will give you the ultimate protection.

The canopy frame can be moved forward or backward as well so it can be centered over your boat. This is accomplished by loosening the clamps securing the canopy frame to the upright posts. Reposition if needed, then retighten in the new position.

CANOPY FRAME ADJUSTMENT

(Canopy Frames are Optional Equipment)

The canopy frames are designed with the ability to be lengthened or shortened 1 ½ inches on each end. This is important because over a period of years the canopy cover will have a tendency to shrink. See the following instructions on how to change the length of your canopy frame to fit your canopy cover.



Adjust as follows:

- Loosen the nuts on the adjusting bolts located in the end
 of the side frame tube weldments. Doing so will shorten
 the overall length of the frame. Put the cover over the
 framework. Once the cover is on the framework attach
 the ends of the cover to the end hoods with the bungee
 cords provided.
- 2. Once the bungee cords are installed the frame can now be lengthened to fit the cover by tightening the nuts on the bolts in the side frame tube stop weldments just loosened in Step 1. Turn clockwise. As the nut is threaded onto the bolt it will pull the end hood out of the side frame thus increasing the length of the canopy framework. Continue to lengthen the frame until it is the right length to fit the cover.
- 3. Once the proper length for the frame has been achieved, stop turning the nut. Adjustment is complete.

CANOPY STORAGE AND CLEANING

(Canopies are Optional Equipment)

Proper care and cleaning of the canopy cover are very important in extending the appearance and life of your canopy cover. This care should not only be while the cover is in use on the hoist, but also how it is prepared for storage and stored during the off season.

The vinyl material has a mildew retardant built in when it is produced at the factory. This retardant will stay with the vinyl for a period of years but over time will disappear. There are some chemical cleaners that will expedite the disappearance of the retardant. It is recommended that these not be used to clean the vinyl. The following cleaning process is recommended to extent the life of your vinyl cover.

- Ordinary oil and dirt can be removed with soapy water such as laundry detergent. Apply with a mop, sponge, brush or cloth followed by a clear-water rinse. Stubborn spots can be removed by using rubbing (Isopropyl) alcohol in a well ventilated area, away from open flames. Do **NOT** use gasoline, kerosene, Methyl Ethyl Keytone (MEK) or other solvents or bleaches.
- Remove the vinyl cover when storing the hoist in the off season.
- 3. Always clean the cover before storing.
- 4. Make sure the cover is completely dry before folding for storage.
- 5. Store the cover in a clean, warm, dry place.

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All of the attaching hardware should be stored with the cover as well. This eliminates lost hardware components in the off season.

INSTALLATION AND REMOVAL OF THE HOIST

The cantilever boat hoists are designed to have minimal weight so the units can be moved in and out of the water by manually carrying them. Depending on the strength of the individuals doing the installation or removal will determine how many people are required to do the job.

INSTALLATION

Position the hoist along side the dock at the desired location. Then adjust the extension legs so that the hoist is setting level not only side to side, but also front to rear. A properly leveled hoist will operate and function much easier than one that is not level. It will also reduce the internal stress on the hoist extending its life.

Whenever possible, do not have the platform fully lowered when placing the boat on the hoist. Doing so will cause excessive internal loading of the hoist component parts when raising the load from its fully lowered position. This type of installation should be done only in extreme water conditions where you need as much platform height possible to protect the unit from the wave action when it is on the hoist.

REMOVAL

Upon removal the hoist can be stored on the shoreline for the winter or else transported to a more desirable location. Mark the extension legs before adjusting them inward so you know where to readjust them to at the start of the next season if the hoist is going to be re-installed in the current location. Adjusting the legs inward for the off season is important especially if you have an uneven lake bottom.

The winch mechanism should be protected from the elements if it is being stored outside. Allow the covering to breath from the bottom side to prevent condensation inside the covering.

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

Andy Brosins, CEO

Midwest Industries, Inc. Page 7

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