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Addenda



The Publisher's Statements on page i of this Owner's Manual apply to this chapter. Please read before proceeding.

This chapter deals with some optional equipment and presents location drawings for various skin fittings. A brief discussion of safety issues is presented.

Major Topics:

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Stern Lift Davit

Concept

This is a very compact power davit **D** to lift small watercraft aboard onto the swim platform for easy launching and retrieval. Maximum allowable weight is 770 pounds.

The davit is hydraulically deployed as shown here by means of a hand-held remote control **A**. Icons on the face of the control show which button achieves which motion. The davit unfolds clockwise and the fully extended boom **G** will reach over the swim platform to the center of a small tender or ski boat.

When unit is not in use turn off the NEGATIVE ISOLATION switch **H** (opposite page) on the DC panel to prevent accidents.

Usage

Anyone using the davit must be fully briefed – read the owner's manual it comes with. Powerful hydraulics like this are not toys – and are out-of-bounds for children.

Put on the HIGH LOAD ISOLATION **H** and PASSERELLE / CRANE **J** switches (opposite page) before using the crane. Circuit breakers 72 & 90 in the DC cabinet in the lazarette will trip if a problem develops.

The electro-hydraulic power unit **D** (opposite) is beside the steering gear in the aft lazarette (or optional crew cabin).

There is an emergency hand pump **F** (opposite) beside the main pump unit to stow the davit away, if required.

Cautions

When unfolding the stern lift **G** operate the remote from safely behind (ie., fwd of the davit). Keep the back deck clear of people until it is extended.

When retrieving or launching the tender ensure that the lifting cable is properly attached to the davit. The tender must be empty. Do not lift it higher than necessary and watch for it swinging if a wake should move the vessel.

Have crew on the swim platform to assist placing the tender onto the chocks. Cover the tender to keep out water. Lash it down so no movement is possible. When stowing the davit into the compartment crew should be clear of the afterdeck.

The CRANE switch **J** (opposite) should always be OFF unless the davit is in use.

Stern lift davit extended

Maximum capacity is 770 lbs. Make up a set of cables and / or a robust harness to easily and securely lift your tender.



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Opacmare Hydraulic Power Pack

The hydraulic pump and valving for the aft deck davit are in the lazarette at starboard. The hydraulic pump is actually inside the hydraulic fluid tank

An electric motor is mounted on the hydraulic units, and solenoid valves control all the functions of the crane. Maintenance requirements comprise mainly checking fluid level regularly and avoiding overuse – the system is designed and rated for 4 minutes continuous use. Intermittent, discontinuous use, is its proper application

See the Opacmare owner's manual for information on topping up the hydraulic tank. Also refer to the manual for troubleshooting advice and how to use the emergency hand pump **F** to move the crane back into the stored position if normal controls fail.

Oil to be used is Shell Tellus T46 or Esso Invarol 46. The main crane breaker #74 (24V 50A) is in the Aux supply located inside the DC distribution cabinet in the lazarette. Control breaker #25 is on the secondary breaker panel under the clear panel on the Salon helm.



Opacmare hydraulic unit



Hand pump



Enabling the davit

Both **HIGH LOAD ISOLATION H** and **PASSERELLE/CRANE switch J** must be on to use the davit (both pilot lights on). The pump will start when a button is pressed on the remote control **A**.

Windshield Defogger

This optional device **K** (also called a demister) blows hot air onto the inside of the windshield(s) to clear mist or fogging.

The blown air is heated using the vessel's hot water supply, augmented by a 24V pump **L** which increases water flow through the internal heat exchanger, thus increasing heating capacity.

When activated by switch **M**, the unit blows hot air through pipes onto the windshield.

Hot water passing through the unit returns through a one-way valve to the hot water tank.

The unit is installed underneath the top of the console. Two 19 mm heater hoses are connected to it for supply and return. The unit sits in a sealed box, which collects condensate which is then drained down into the grey water box.

A fitting at the highest point of the return hose is for bleeding the system if necessary. The bleed discharge also goes into the grey water box.

Salon Helm switch **M** is the window demist ON switch. It starts a fan that, after a 5 second delay, blows hot air onto the windshields to clear condensation.



Windshield defogger unit (Demister)

This photo shows a typical defogger unit prior to installation.



Pump



Demister switch

Central Vacuum System

Viking Sport Cruisers install central vac in all their vessels (photo right). On the 65FY it is installed under hatch #5.

The Nu-Tech Max-Vac model MV-603 central vacuum system is 120 VAC and draws 11 amps when running. The circuit breaker is on the 120 volt breaker panel.



The vacuum hose incorporates a low voltage contactor switch that automatically starts the motor when the hose is plugged into a wall inlet port.

For troubleshooting see the Max-Vac instructions.

Use only the vacuum tools and hose provided.

If interrupted in your vacuuming, unplug the hose from the wall to switch it off. If left unattended, the powerful suction force could pick up unwanted objects or pose a hazard for children and pets.

Filter bag replacement

The disposable filter bag is replaced by accessing the power unit by lifting the floor panel (hatch #5) it is under. The unit must be OFF (hose removed from the wall inlet). Unscrew the nut on top of the door. Underneath you will see the filter bag **F**. Remove it by sliding the card portion of the bag back and forth off the inlet tube. Pull the bag out of the compartment and dispose of it in the trash.

Before installing a new bag inspect the Secondary Filter for heavy dust accumulation. It should be removed and cleaned periodically for best efficiency as instructed on the label on inside the door.

To install bag: spread out the bag inside the compartment, then slide the card over the inlet tube at least one inch. Replace the door and screw the nut down.

DO NOT operate the vacuum with the door off, or without a filter bag in place. It could overheat and dust could enter the motor and damage it.

Spare bags are available from:

1-800-724-9757

Ask for: Bag #MV0014 for model MV-603.

Type K bags, which are available from department and vacuum supply stores, also fit.



Central vac installation

The unit is installed on a bulkhead under hatch #5.



Central vac installation

The filter bag is clearly visible when the top of the unit is removed. When removing a full bag, be careful not to squeeze it – it will expel a cloud of dust!



Wall inlet port (typical)

These are at strategic points throughout the vessel. As long as the panel breaker is on, the system activates on plug-in.

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Neff Lava Brick BBQ

The Neff grill **A** on the bridge is powered by a 240 VAC supply from the vessel electrical system. The circuit breaker **B**, marked BARBECUE GRILL, is on the main breaker panel at the Salon helm. For safety, the breaker MUST be switched off here at all times, unless the grill is in use.

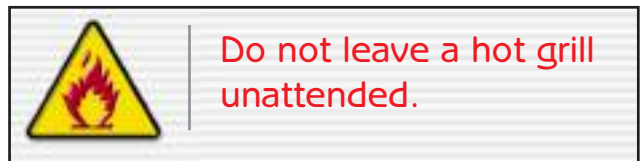
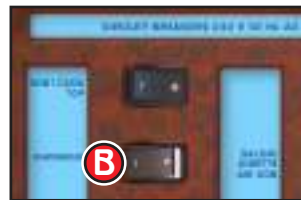
Photo **C** is a close-up of the grill surface.

It has a front and rear heating element with a signal display that illuminates when the grill is switched on. Underneath, special "Lava Bricks" simulate traditional BBQ charcoal. No other stones or briquets can be used.

An unusual feature is the water bath under the grill. This allows you to use the grill without the stones, after a pre-heat time of 5 minutes. Steam then plays a part in the cooking of the food.

When cooking over the Lava Bricks the water bath still has to have water in it, but the water level is reduced. In all cases the water bath must be drained after every use using the installed drain valve **E**.

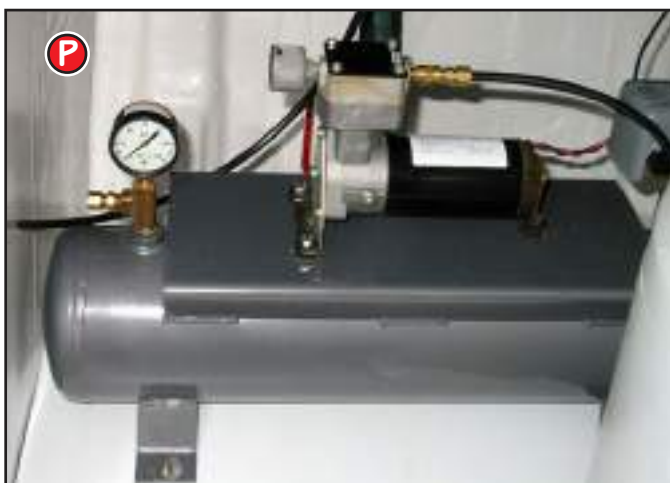
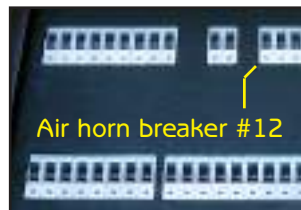
Read the Neff instructions carefully before using the unit. It contains a list of cooking times and full maintenance details.



Air Horn (custom installation)

The compressor **P** for the air horn is installed in the lazarette, stb. It supplies the horn attached to the vessel's roof forward of the bridge. The large air tank ensures that there is adequate volume of air available at all times.

Breaker #12 on the secondary breaker panel must be on to energize the system. There are air horn switches **H** on both bridge and salon helms.



Safety Issues

The owner or his/her Captain is responsible for the safety of the vessel and all aboard. It is a violation of regulations to operate a vessel that does not have all required safety equipment on the vessel, and in good working order. It is an offence to be travelling in a way that can adversely effect the safety of people or property, boat traffic, or operating the vessel in a careless manner. You are in fact totally responsible for everything on the vessel.

Being on the water, particularly the ocean, you are in a hostile environment. If you have properly prepared yourself, and the vessel is properly maintained and operated, it's a small world of your own and a great way to unwind with those you choose to be with. You do, however, have to anticipate the worst case scenario, and try to avoid it happening. Rescue police and Coast Guard will tell you: Often, it's little things that make the difference. For instance, do you have waterproof flashlights and new batteries on board?



Quality equipment

Buy only QUALITY life-saving equipment – and make sure your guests know how to use it. Everyone must know where the PFDs (personal floatation devices) are stored. There should be a whistle attached to each one – buy these yourself. (Fox make a good one <<http://www.fox40whistle.com/outdoor.htm>>)

Carry an adequate – and currently dated – supply of approved flares. Many people don't realize flares have a "best before" date, because old flares are unreliable.



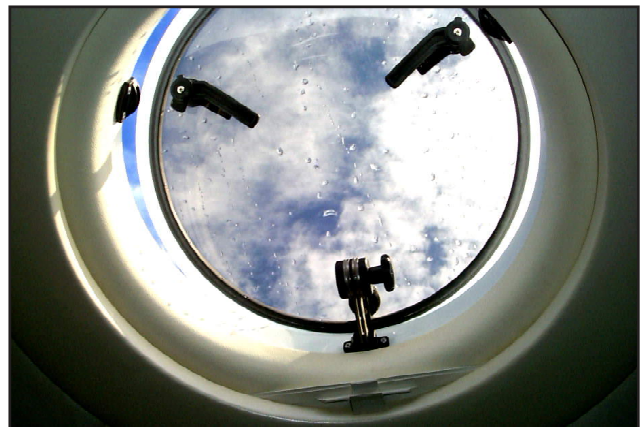
Children

Children should wear a personal floatation device (PFD) whenever they are on deck. And be sure they understand that equipment controls are "out-of-bounds" for them. Do not allow mischievous youngsters to run about on deck unsupervised. If one of them fell overboard, who would know?

If a baby under 20 pounds is aboard, be aware that no life jackets are made for such a small child. The only way the baby can be safe in the water is for someone to hold it. For older babies remember that diapers, when soaked, affect the performance of PFDs.

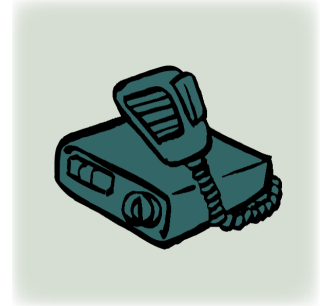
Escape hatch

In dire circumstances the forward skylight, shown here with the two latches undone, can serve as an emergency escape hatch. This should be explained to the guests in case they are ever trapped at the front of the cabin area. Remember, the deck may be wet and slippery.



Back-up

How many movies have you seen where the pilot of an aircraft is incapacitated and some untrained person has to make a safe landing? Yes – it happens! And it could happen at sea, as well, so be prepared. Designate a responsible crew member or guest to be your back-up. Remind them they can use a cell phone to call for assistance using 911 (if in a serviced area). If offshore, teach your back-up basic use of the VHF. Emphasize that the talk button **MUST NOT** be held in after they have finished speaking. Show your designate how to switch off the engines, raise or lower the anchor and (if sufficiently skilled) how to get the vessel under way.



Man overboard*

Instruct guests that if someone falls overboard when underway, *one or more people should assume the role of "watchers" – they must never take their eyes off the victim in the water.* They must shout loudly **MAN OVERBOARD!** – **ALL THE TIME** – **AND POINT** to where the victim is. The shouting and pointing must be kept up until the rescue.

The vessel must slow down immediately (but watch your wake). Turn about, and make way to where the watchers are pointing - hopefully, you will see the victim. Circle round slowly and come up INTO the wind.

When near enough, throw a lifering within near reach of the victim. Hold the line so it uncoils in your hand. The vessel should be stopped and if possible use the attached line to pull the victim to the swim platform. Depending on conditions, you may have to slowly circle the victim. Once the victim has hold of the lifering, idle the engines out of gear, then use the lifering line to pull the victim to the swim platform.

There are many variables in a situation like this, and the captain must decide. Perhaps the dinghy could be quickly launched and the victim brought aboard it.

Hypothermia: Hypothermia can set in quickly, especially if the victim is in shock. If it does the victim has very little arm strength, making it difficult or impossible for them to get into the dinghy or onto the swim platform. Hypothermia is a threat even in warm waters up to 86°F; and hypothermia happens very quickly in water below 60°F. The victim's body trunk temperature may have dropped significantly – if so, they will have little strength and will need help to climb out of the water.

Once safely aboard, cover the victim with a blanket from the thighs to the neck **ONLY**. Leave the legs and arms out of the blanket – this is the quickest way to warm up the body core. Only sweet warm drink can be given.



Alcohol

Excessive use of alcohol is a prime cause of accidents causing injury and deaths on the water. Enforcement authorities take the view that a vessel when underway is the same as a car being driven, and **NO ALCOHOL** is allowed to be consumed by the Captain and crew. In some areas, such as the Great Lakes, drinking and open bottles are not allowed *anywhere* by *anyone* on a vessel underway. The Captain has grave responsibilities for vessel and passenger safety and should be sober even when anchored or docked. Your responsibilities remain at all times you are in charge of the vessel.

Safe sun

There are few places where you are more subject to ultraviolet rays than on a boat at sea. Even on overcast days sunburn is a possibility. Ozone depletion has made this a serious safety issue. Use sunscreen and a good hat and watch your exposure to sunburn and windburn. Be sure to warn guests, and remind them when it's time to get inside or cover up. Don't forget sunglasses for everyone.



* The cry "Man overboard" is universal, regardless of gender.

Notes on Winterizing

Winterizing a modern boat is a job that is best left to the dealer or the marina where the vessel will be stored for the winter. They have special equipment, such as fittings and vacuum pumps that attach to the thru-hulls to suck out water and replace it with antifreeze if required. For information only, this section gives an overview of how some engines are winterized. The task should NEVER be attempted by an owner or helpful friends.

Environmental regulations and concerns dictate the type of antifreeze that must be used. Non Toxic is now required for all winterizing where it will end up in the sea or lake water.

It is not practical to fill up both of the water tanks with enough antifreeze to operate the vessel's water pump. So, usually, marina technicians use a small pump and tank. Systems are drained and water is vacuumed out of the piping. The vessel's water pump is disconnected and the water heater drained. A temporary bypass may be installed to join the hot and cold water systems together as one system. The antifreeze is pumped into the system, and taps are run to fill all the lines. Toilets are flushed until the antifreeze reaches the holding tank, then the overboard discharge pump runs until antifreeze comes out the hull fittings.

There are many systems and components needing winterizing and it is easy to overlook items such as demisters, ice makers, anchor wash pump, sumps, bilges, engine and generator intercooler, etc.

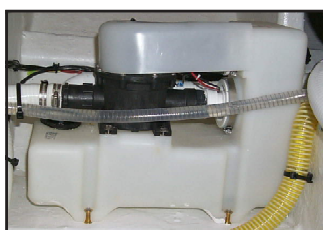
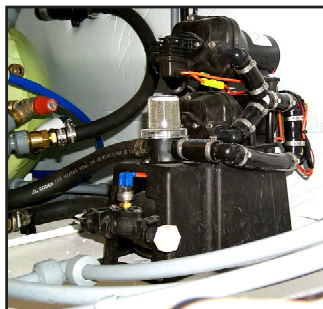
Batteries must be left fully charged, and the positive cables on the batteries disconnected (though the high amperage isolators do this, there would still be some current in the system).

Leave all this to the professionals. It is much safer and your vessel will be ready for you in the spring when the new season starts.



Hepworth piping system

This photo shows the Hepworth fittings used in the Viking semi rigid pipe systems. Take care when reassembling to push the pipe and fitting firmly together through the O-ring and turn the nut as far as it will go.

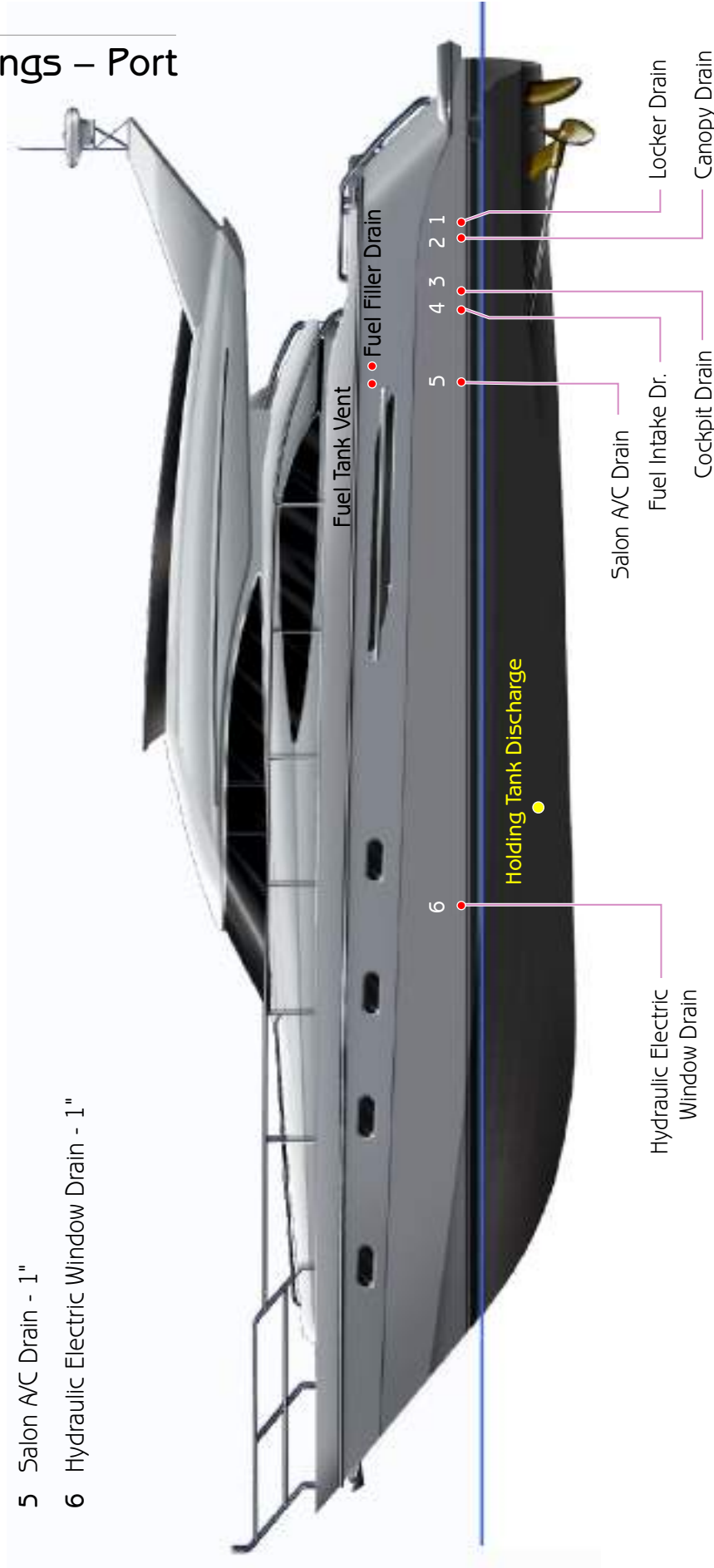


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Discharge Fittings – Port

Discharge Fittings – Port Side

- 1 Locker Drain - 1"
- 2 Canopy Drain - 1.5"
- 3 Cockpit Drain - 1.5"
- 4 Fuel Intake Drain - 1"
- 5 Salon A/C Drain - 1"
- 6 Hydraulic Electric Window Drain - 1"



Discharge Fittings – Starboard Side



Discharge Fittings – Stb



- 1. Locker Drain
- 2. BP.7 Lazarette Aft Bilge
- 3. Cockpit Drain
- 4. Fuel Intake Drain
- 5. BP.6 Lazarette Fwd Bilge
- 6. Manual Bilge
- 7. BP.5 Engine Room Aft Bilge
- 8. Wet Bar Drain
- 9. Salon Aircon Drain
- 10. Galley Sink Drain
- 11. BP.4 Engine Room Fwd Bilge
- 12. Aircon Grey Water Drain
- 13. BP.3 Utility Bilge
- 14. Washing Machine Drain
- 15. Dishwasher Drain
- 16. Grey Water Box
- 17. BP.2 Mid Bilge
- 18. BP.1 Fwd Bowthruster Bilge

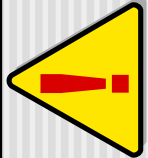
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Slings the Vessel



Drain Water Mufflers

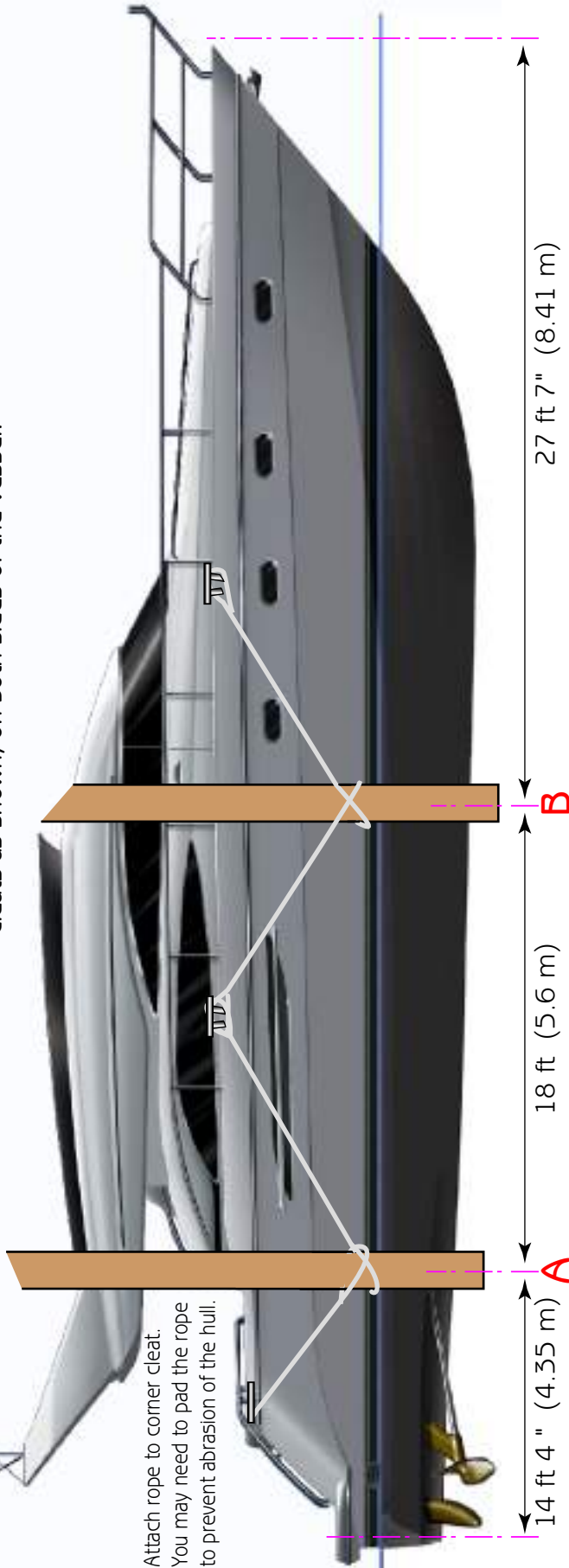
A valve at the base of each water muffler will drain water into the bilges from where it can be pumped overboard.



Water lift mufflers **MUST** be drained before lifting the boat. Otherwise, water in the mufflers could run into the engines causing much damage.

Cautions:

- All equipment used must be rated to lift this craft
- Must be lifted only by trained personnel using appropriate equipment such as a travel lift or a crane with the correct spreader bar.
- Secure slings at points A & B, fore & aft. Attach ropes to cleats as shown, on both sides of the vessel.



Dry Weight (approx.):	58240 lbs (26,417 kg)	Height above waterline, top of glass fiber arch: 13 ft 9 in (4.2 m)
Weight Fueled & Watered): (approx.):	65,646 lbs (29,783 kg)	(excluding electronics, lights, hardware)
		Draft (approx.): 4 ft 4 in (1.35 m)