

## MOUNTING CONSIDERATIONS

### Anchor Mounting Considerations

Minn Kota recommends mounting the Raptor directly to the transom of the boat with the built-in Mounting Bracket. Your Raptor comes complete with all the necessary hardware to mount directly to the transom. The Raptor may also be mounted using an optional adapter bracket when direct transom mounting is not possible or desired due to obstructions or irregularly shaped transoms. For more information on universal adapter brackets and other Minn Kota® Raptor accessories, please visit [minnkotamotors.com](http://minnkotamotors.com). When using an adapter bracket to mount the Raptor, please use the instructions included with the accessory.

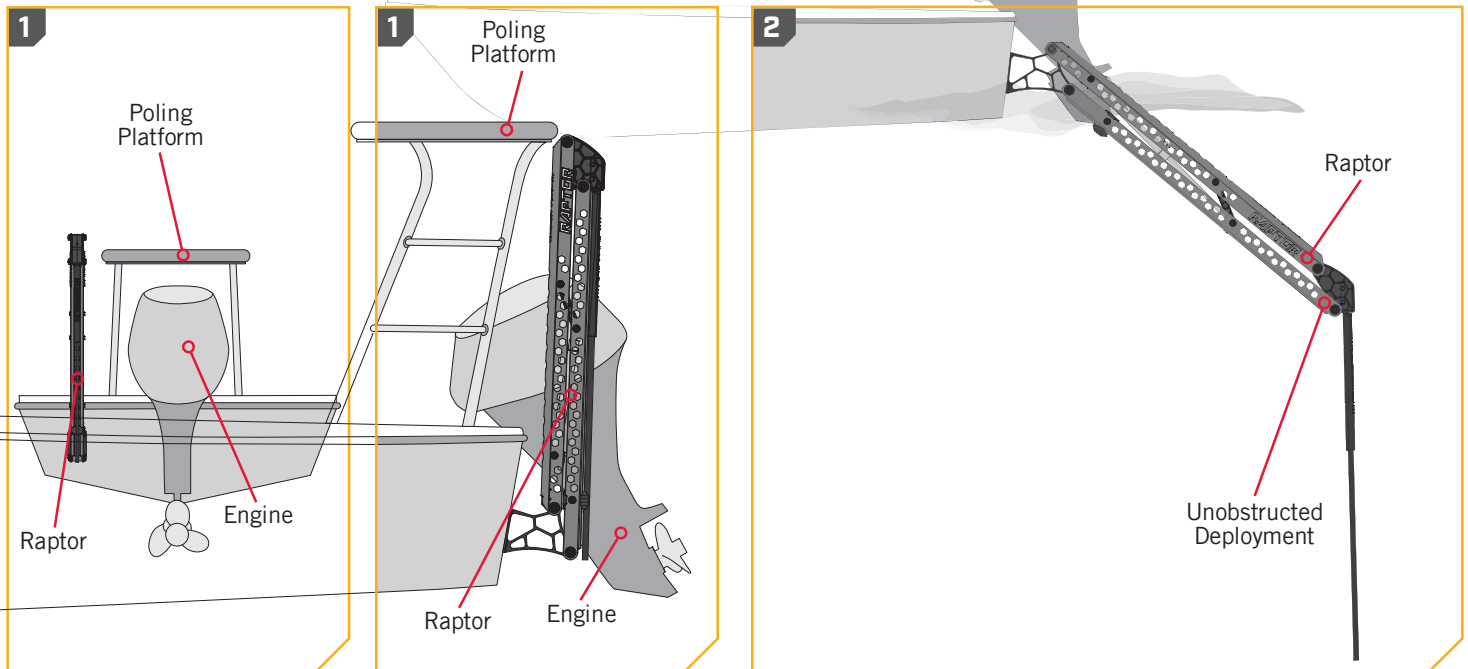
In order to use the direct mount installation, the following conditions need to be met:

**1. Unobstructed Mounting** - When selecting the Raptor Mounting Bracket mounting location, examine your boat to ensure that you will not drill into any obstructions and that the hardware will be accessible for assembly. Make sure that the Transom is strong enough to accept the Raptor mounted at the intended location.

**2. Unobstructed Deployment and Retraction** - The Raptor is designed to mount on either the port or starboard side of the transom. The Raptor must have a clear, unobstructed path to deploy. Check to make sure that your proposed location will allow the anchor to deploy and retract without hitting trim tabs, poling platform, the engine or other obstructions. You should also consider your fishing methods when selecting the mounting location.



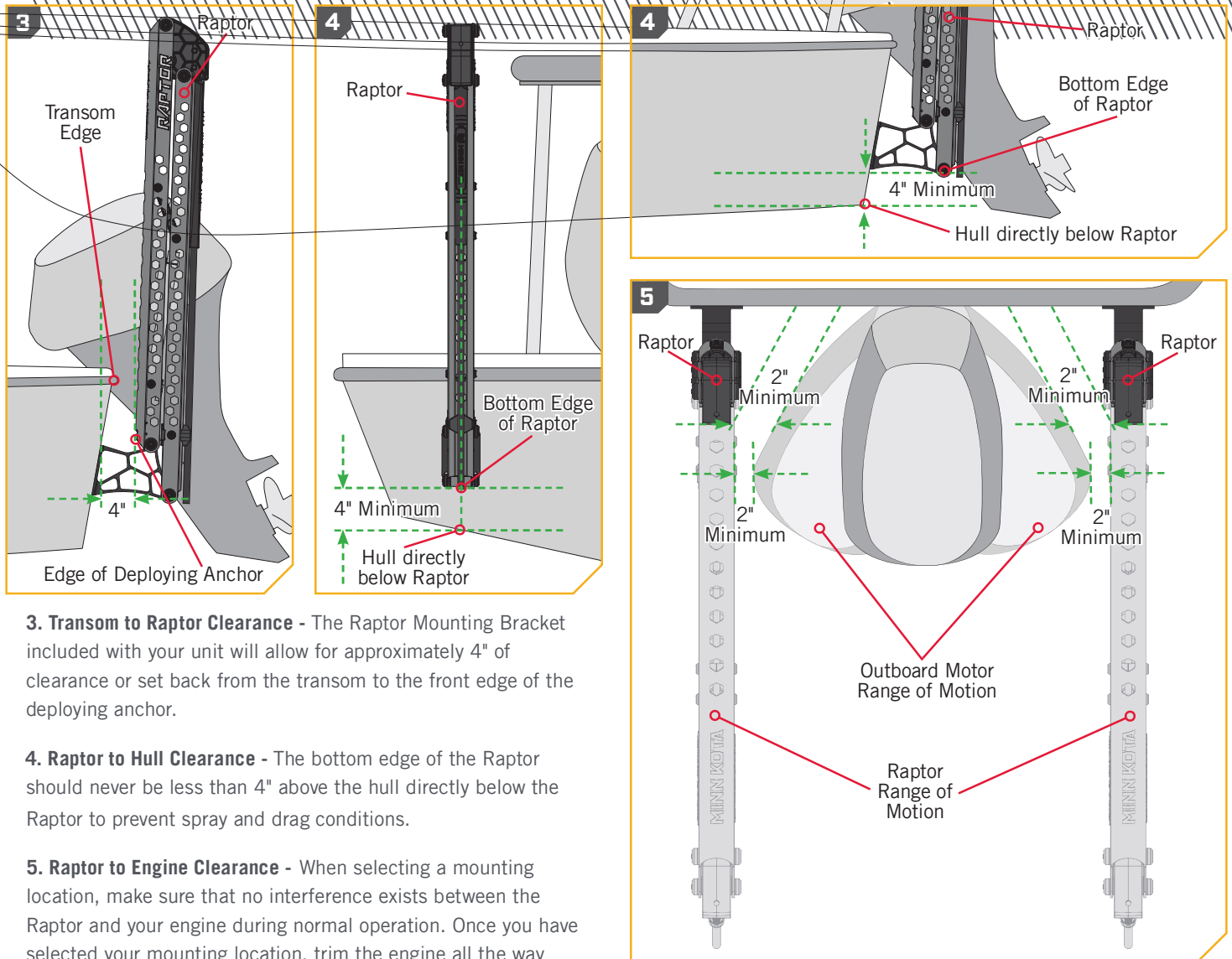
View accessories  
available for  
your Raptor at  
[minnkotamotors.com](http://minnkotamotors.com).



## ⚠ CAUTION

Follow all instructions and heed all safety considerations. Minn Kota recommends having a second person help with installation. Not following proper installation and rigging instructions may result in injury. Mounting the Raptor too low can cause undue drag from the Raptor or Mounting Bracket when operating the boat. It is important to mount the Raptor as recommended to avoid unsafe driving conditions.

## INSTALLING THE RAPTOR



**3. Transom to Raptor Clearance** - The Raptor Mounting Bracket included with your unit will allow for approximately 4" of clearance or set back from the transom to the front edge of the deploying anchor.

**4. Raptor to Hull Clearance** - The bottom edge of the Raptor should never be less than 4" above the hull directly below the Raptor to prevent spray and drag conditions.

**5. Raptor to Engine Clearance** - When selecting a mounting location, make sure that no interference exists between the Raptor and your engine during normal operation. Once you have selected your mounting location, trim the engine all the way up and all the way down, and steer the engine fully to the left and right to confirm proper engine clearance. Ensure there is a minimum of two to three inches of clearance from any point on the Raptor in all states of stow and deploy.

If these conditions are not met, please consider using an optional Minn Kota adapter bracket accessory. There are many adapter brackets designed for the Raptor that allow for greater adjustability of the mount and allow for greater clearances to operate the Raptor. Please visit [minnkotamotors.com](http://minnkotamotors.com) to learn more about selecting and installing an adapter bracket.

**Review the mounting considerations for the hydraulic pump and hose routing before installing the anchor to the boat.**

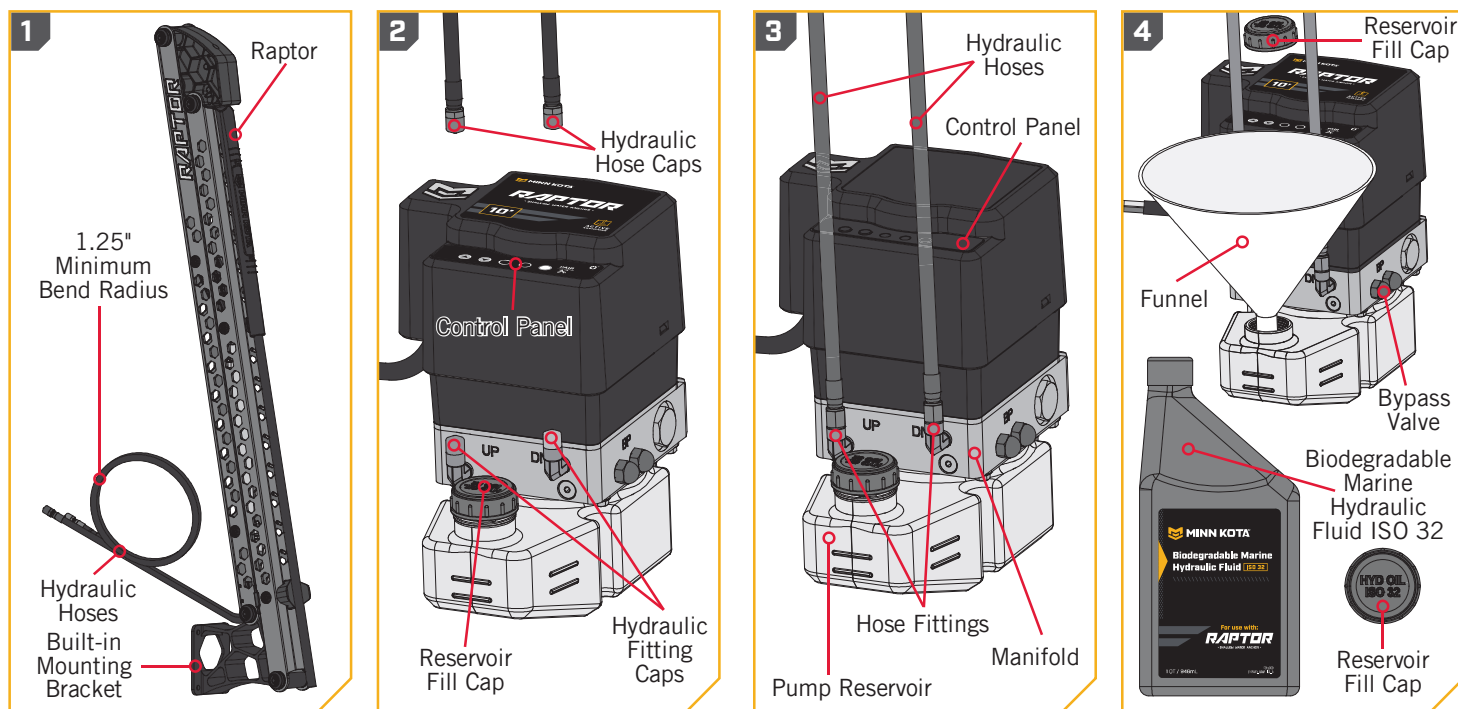
**NOTICE:** In some instances, boat manufactures have begun to make hollow boat Transoms. We recommend speaking to your local boat dealer or OEM Manufacturer for mounting recommendations.

## ► Hydraulic Pump Mounting Considerations

Minn Kota recommends reviewing all mounting considerations for the hydraulic pump and hose routing for the Raptor to ensure that all circumstances are taken into account before installation.

In order to successfully route the hydraulic hoses and mount the hydraulic pump, please consider the following:

**1. Hydraulic Hose Routing** - The hydraulic hoses exit the anchor near the top of the built-in mounting bracket and will be routed to the hydraulic pump. When selecting the mounting location for the hydraulic pump, examine your boat to ensure that you can route hydraulic hoses to the intended hydraulic pump mounting location, and the hoses can be connected once the pump is mounted. Hoses may be routed over or through the hull of the boat. It is recommended to route hoses through an established routing on the boat, such as where the main engine lines are routed. If routing through an established routing on the boat such as the manufacturer's boot, ect, make sure they are re-rigged and tightened to their original state when installation is complete. If drilling holes in the hull of the boat is necessary, make sure that the drilled location is free from obstructions that could damage existing gas or electrical lines. Make sure that the hoses have enough slack so that the anchor can be deployed and stowed without creating pinch points or excessive tightness along the path for the intended mounting locations. Make sure that the hoses do not pass over any sharp surfaces or edges that could cause abrasions over time. Make sure that the hydraulic hoses are not kinked or bent when routing through the boat compartment. The minimum bend radius for hose routings is 1.25 inches. Hydraulic lines shall be routed away from heat sources. There shall be no joints or connections in hydraulic lines directly over exhaust lines or high temperature manifolds. Make sure that the routed hoses do not create a tripping hazard.



**2. Keep Hydraulic Lines Clean** - During installation, precautions must be taken to prevent the entrance of foreign material into components or hydraulic lines. Take note of the black and green caps on the hose fittings on the hydraulic pump and hydraulic hoses. Do not prematurely remove the protective caps from the ends of the hydraulic hoses that exit the anchor or the hose fittings on the pump assembly. Keep the fill cap on the pump reservoir in place unless filling the reservoir, to keep dirt and debris from entering.

**3. Hose Attachment** - Install the pump in a way so that there is space between the compartment or mounting locations and the pump to attach hoses. The hose fittings are located on the manifold of the hydraulic pump between the pump reservoir and control panel. Also be sure that the location will have room to allow the hoses to pass through and maintain proper hose placement that will prevent it from bending or kinking.

## INSTALLING THE RAPTOR

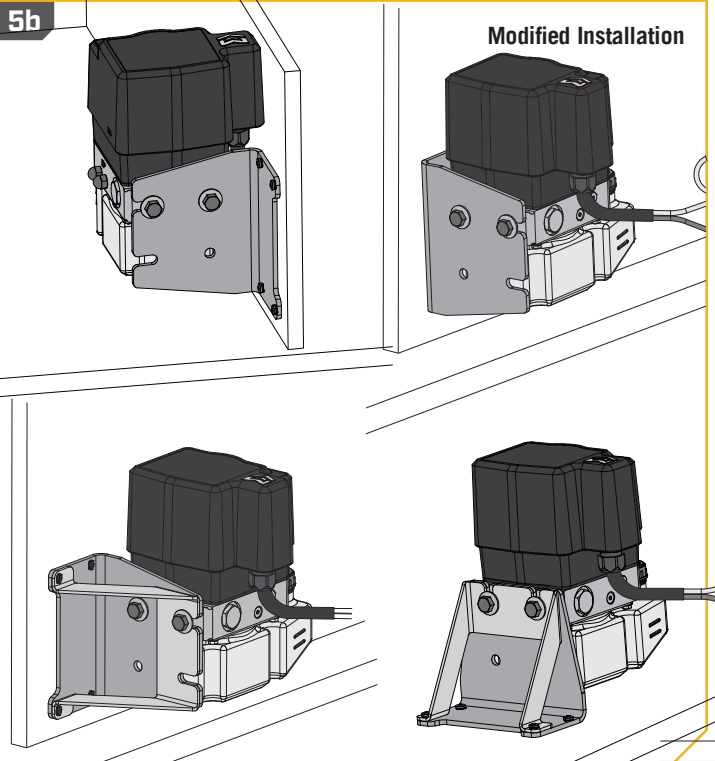
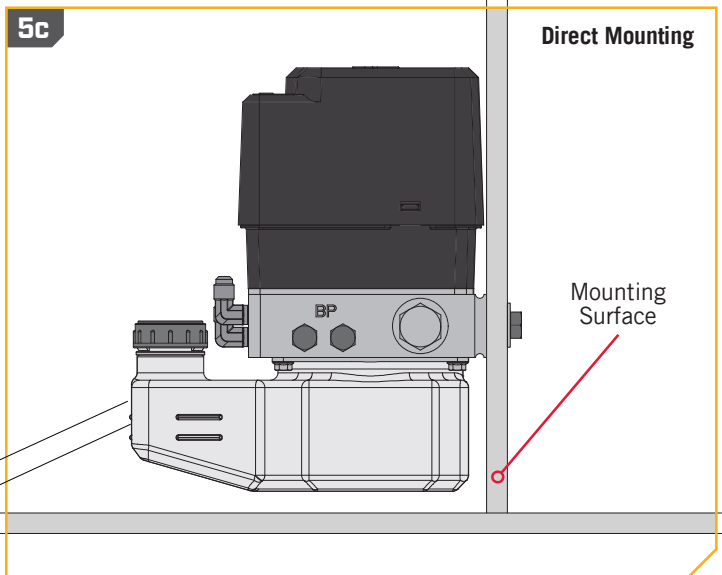
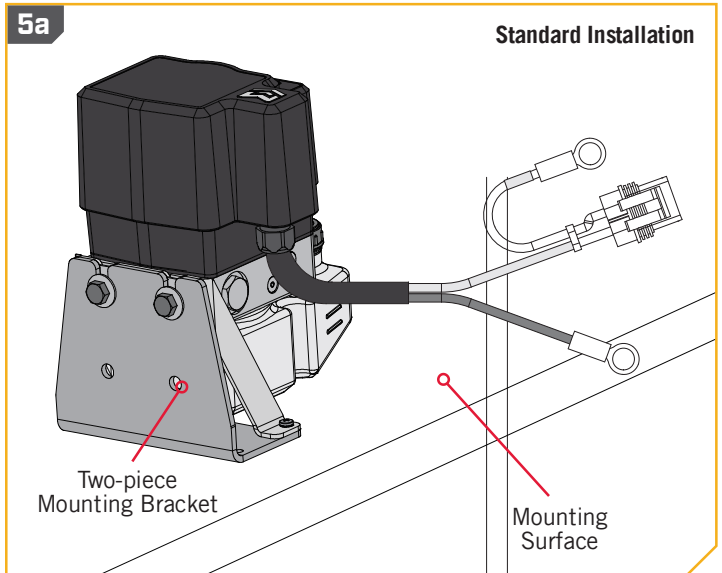
**4. Hydraulic Fluid and Filling Access** - Make sure that the mounting location allows for the pump to be filled with hydraulic fluid. The cap to the pump assembly must be accessible to fill the hydraulic pump reservoir with hydraulic fluid. Be sure that the installation location allows access with a funnel or similar tool to aide in filling the reservoir. The pump is filled with fluid as noted on the red cap marked "Hyd Oil ISO 32". Biodegradable Marine Hydraulic Fluid ISO 32 (Item# 2357700) is provided for the installation.

**5. Secured Mounting** - Mount the pump in a secure location where it will remain affixed to a rigid surface. Hydraulic components shall be secured to the boat's structure in consideration of the potential forces transmitted. It is recommended to mount the hydraulic pump with the Two-piece Mounting Bracket provided. The Pump Assembly must be mounted vertically. If adjustments to the mounting need to be made, adjust the position of the Two-piece Bracket that will accommodate keeping the Pump Assembly vertical. Make sure that there is enough room to successfully use the tools needed to secure the installation hardware to the intended mounting location. Make sure that the hydraulic hoses will not be kinked or bent when attached to the pump. Options for mounting the pump include:

a. **Standard Installation** - Mounting the pump with the Two-piece Mounting Bracket.

b. **Modified Installation** - Mounting the pump using either both of the pieces from the Two-piece Mounting Bracket rotated to fit your specific mounting needs or just the Pump Mounting Bracket (Item #20) on its own rotated to fit your specific mounting needs.

c. **Direct Mounting** - Mounting the Hydraulic Pump directly to a secure structure on the boat without the use of the bracket.



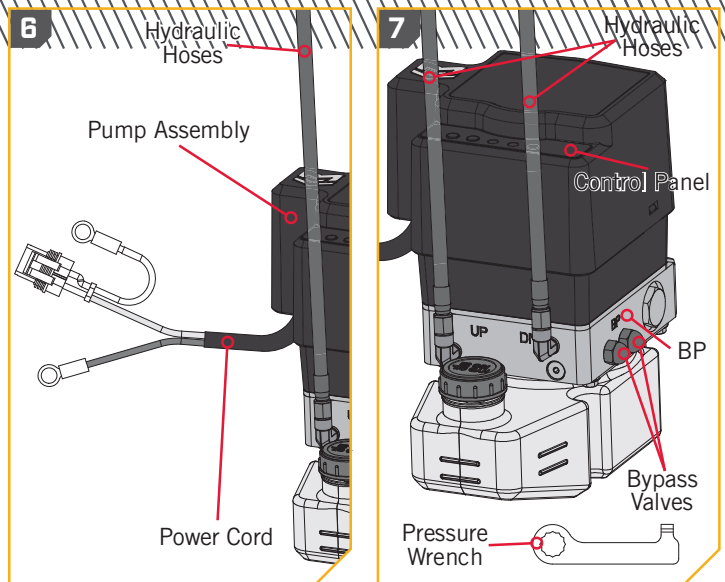


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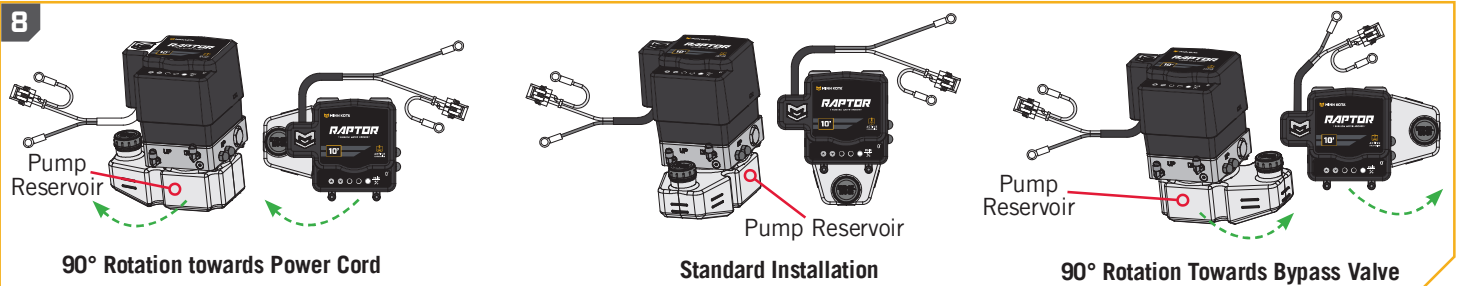
**6. Power Source** - Make sure that the power cord can reach its intended power source and will not pose as a tripping hazard. It is recommended to mount the pump as close to the power source as possible to create the least obtrusive routing for cables between the pump and power source.

**7. Bypass Access** - On the side of the hydraulic pump manifold, there are two acorn nuts that cover manual Bypass Valves in the event of the need to Emergency Stow. The installation kit comes with a Pressure Wrench (Item #2358800). Be sure that the installation location allows a minimum of 1-1/2 inch clearance around the "BP" on the pump manifold to access these acorn nuts and the Bypass Valves below them and enough space to utilize the Pressure Wrench. Store the pressure wrench in the boat.

**8. Reservoir Clearance** - When selecting the mounting location, it may be necessary to rotate the position of the reservoir on the hydraulic pump to accommodate for tight mounting locations. The hydraulic pump comes out of the box with the reservoir fill cap directly below the hydraulic hose fittings on the pump manifold. The reservoir can be rotated 90 degrees to either the right or the left so that the fill cap is either directly below the power cord, or directly below the bypass valves on the manifold to accommodate a variety of installation variability. If you need to rotate your Pump Reservoir, please see the "Rotating the Pump Reservoir" section of these instructions.



**NOTICE:** The orientation of the Reservoir on the pump may affect how the Two-piece Mounting Bracket is used.



## ⚠ WARNING

Do not run the Hydraulic Pump until after hydraulic fluid has been added. Running the Hydraulic Pump without hydraulic fluid can damage the pump.

### TOOLS AND RESOURCES REQUIRED

- Drill
- 5/16" Drill Bit
- 9/16" Box End or Socket Wrench
- Marine Grade Sealant
- Cable Ties
- 30ft/lb capacity Torque Wrench
- Awl or similar marking tool
- A second person to help with installation
- Funnel
- Masking Tape
- 7/16" Drill Bit
- 5/16" Deep Well Socket or 5/16" Ratchet Wrench
- 1/8" Drill Bit
- 3/4" Drill Bit
- Anti-seize
- 5/32" Drill Bit
- File, sand paper, or emery board
- #2 Phillips Bit

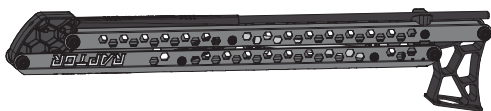
# INSTALLING THE RAPTOR

## INSTALLATION

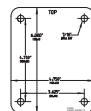
### Installing the Raptor

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#### ITEM(S) NEEDED



#A x 1



#34 x 1

- a. Review the Mounting Considerations to determine if it is acceptable to complete a direct mount of the Raptor Mounting Bracket. Move the Hydraulic Hoses away from the bracket and out of the way for installation. If acceptable, position the Mounting Bracket (Item #A) at the selected location and mark the edge of the Mounting Bracket with a pen or similar marking tool. Mark at least 2 of the 4 edges and then set the Mounting Bracket aside.

**NOTICE:** The Raptor weighs approximately 27lbs. It is recommended to have a second person help with installation.

- b. With the Raptor set aside, take the Mounting Template (Item #34) and place it along the marked edges. Using a level along the edge of the Mounting Template, rotate the position of the template so that it sits level. Use an awl or similar marking tool and mark all four Mounting Holes. All 4 Mounting Holes are used for the installation of the Raptor.

