

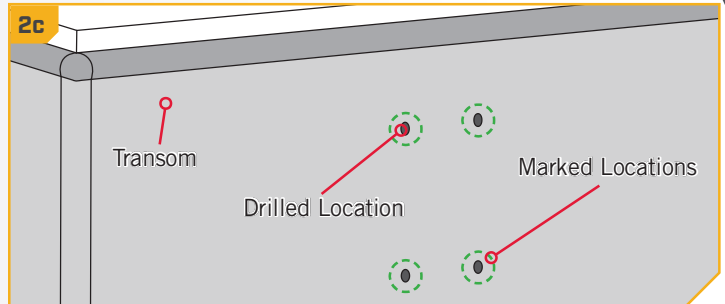
INSTALLING THE RAPTOR

2

- c. Double check that the mounting location is clear to drill holes and then use a Drill with a 7/16" Drill Bit to drill through the Transom/Stern of the boat on the marked locations.

NOTICE: When drilling holes into fiberglass, it is helpful to first cover the surface with masking tape. This will help keep the boat surface unmarked and help with cleanup. Cover the surface and then mark the location to drill. Once the holes are drilled, remove the masking tape before continuing installation.

2c



NOTICE: When drilling the marked holes, make sure that the drill bit is perpendicular to the Transom/Stern of the boat and that the holes are being drilled straight. Not drilling the holes straight will give the mounting hardware a poor fit.

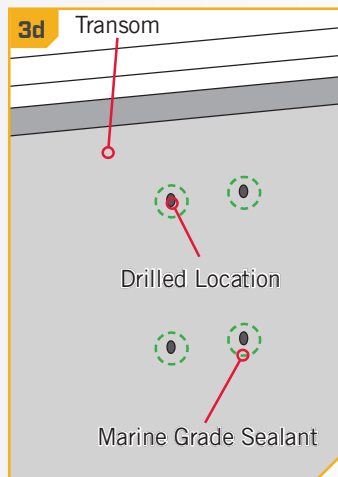
3

- d. Place a 1/8" bead of Marine Grade Sealant on the Transom of the boat around the drilled holes.
- e. Place the Marine Grade Sealant around the Mounting Holes on the face of the Mounting Bracket that will contact the boat Transom/Stern when mounted. Keep the sealant approximately centered between the outside edge of the Mounting Bracket and the Mounting Holes. Once the sealant is in place, align the Mounting Bracket in the desired orientation with the holes that were drilled in the Transom/Stern. Make sure that the Hydraulic Hoses are out of the way to install hardware.

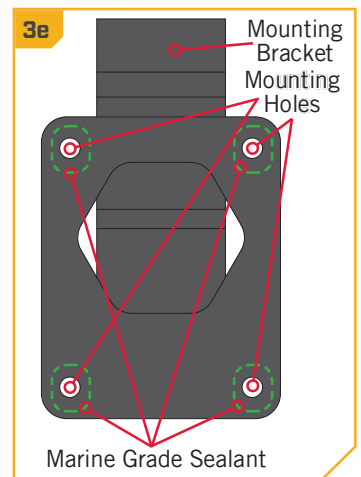
CAUTION

Do not use the Mounting Bracket or Raptor as a step to enter the boat. The bracket will be slippery when wet and is not designed to support people. Using this product as a step may result in injury.

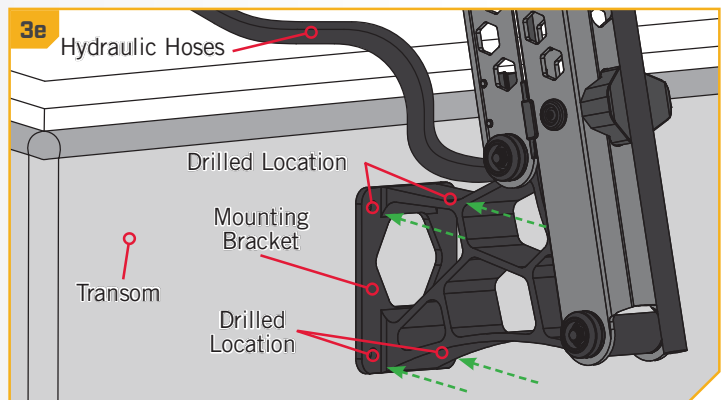
3d



3e



3e



INSTALLING THE RAPTOR

4


ITEM(S) NEEDED

⊙ #2 x 4

⊙ #4 x 4

#6 x 4

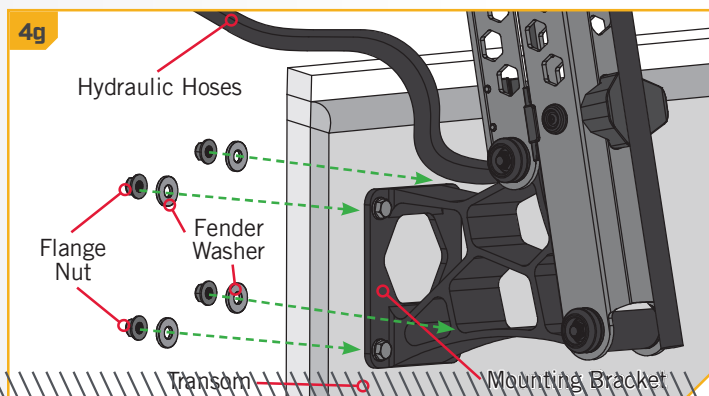
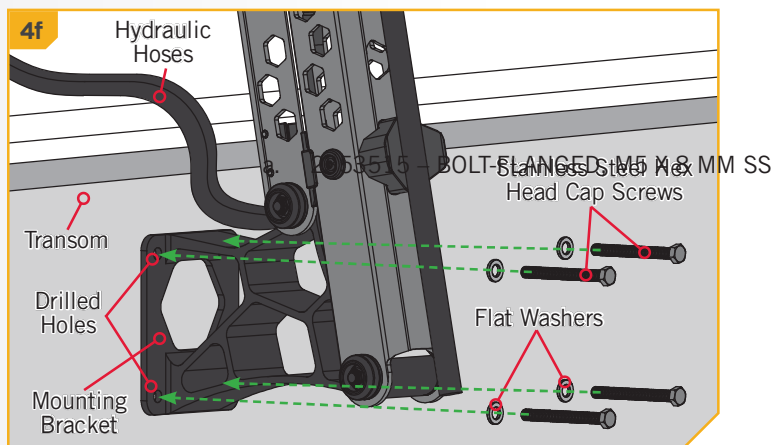
⊙ #8 x 4

 #10 x 1

- f. Take each of the four 3-1/2" Stainless Steel Hex Head Cap Screws (Item #6) and place one Flat Washer (Item #2) on them. Apply anti-seize (Item #10) to the hardware. Place one screw in each of the Mounting Holes so that it passes through the Mounting Bracket and the drilled holes on the transom of the boat.
- g. Place a Fender Washer (Item #4) on the end of each Screw on the inside of the Transom and then secure each with a Flange Nut (Item #8). Apply anti-seize to the threads before tightening. Tighten the screws with a 9/16" Box End or Socket Wrench. Do not over-tighten. Tighten to 20 ft-lbs. Recheck mounting hardware periodically to make sure it remains tight.

NOTICE: To prevent seizing of the stainless steel hardware, do not use high speed installation tools. Applying an anti-seize may help prevent seizing.

NOTICE: If you are replacing a Talon with the Raptor, **DO NOT REUSE** the 5/16" Talon mounting hardware for mounting purposes



Rotating the Pump Reservoir

After reviewing the mounting considerations for your installation, you may have identified that the reservoir on your pump assembly needs to be rotated. If your installation requires rotating the pump reservoir, please follow the instructions below. If your installation does not require the Pump Reservoir to be rotated, please see "Installing the Hydraulic Pump" section of these instructions.

1

ITEM(S) NEEDED

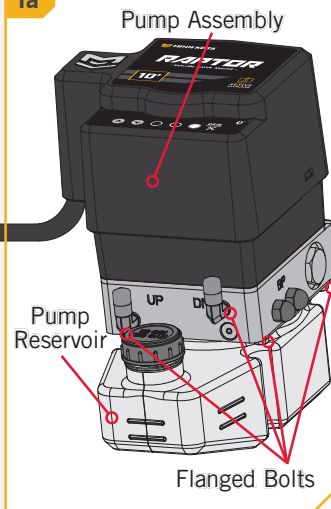


#D, E, or F x 1

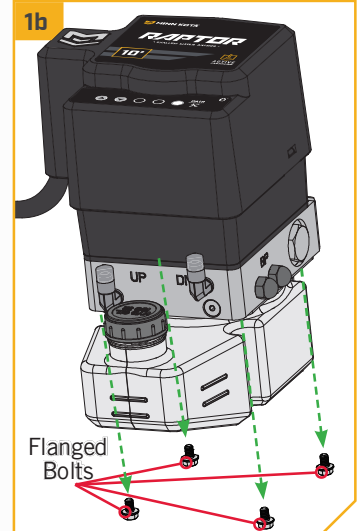
- Take the Pump Assembly (Assembly D, E, or F) and identify the four Flanged Bolts that hold the Pump Reservoir in place on the Pump Assembly.
- Using a 5/16" Deep Well Socket or 5/16" Ratchet Style Wrench, remove all four Flanged Bolts and set them aside.

NOTICE: Do not pull the Pump Reservoir off of the Pump Assembly. It is recommended to rotate the Pump Reservoir in place to maintain a proper seal between pump components.

1a



1b

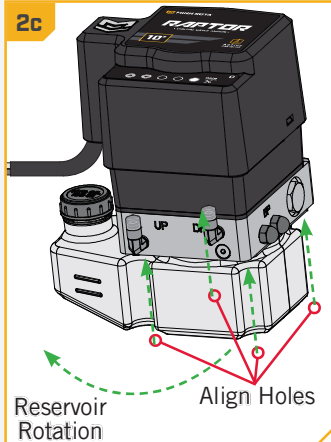


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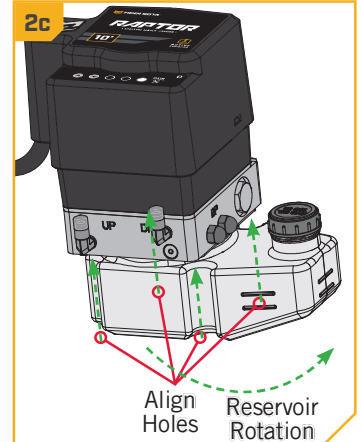
- Determine which direction the Pump Reservoir will be rotated. While firmly holding the top of the Pump Assembly, rotate the Pump Reservoir to its new position. Complete the rotation by making sure that the holes in the Pump Reservoir are aligned with the holes for the Flanged Bolt.

NOTICE: If the Pump Reservoir becomes detached from the Pump Assembly, make sure that the O-ring that sits on the bottom of the Pump Manifold is fully seated in the groove along the assembly. In the event that the reservoir needs to be pushed back in place on the Pump Assembly, make sure that the O-ring does not get pinched between the pieces. An improperly seated seal between components will affect pump operation.

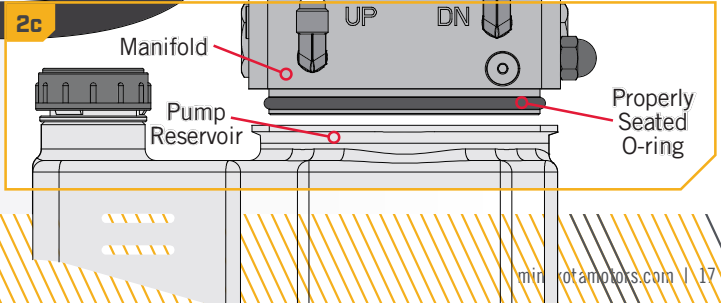
2c



2c



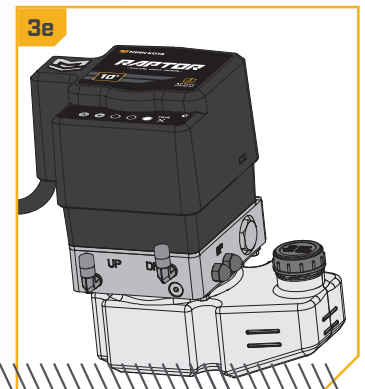
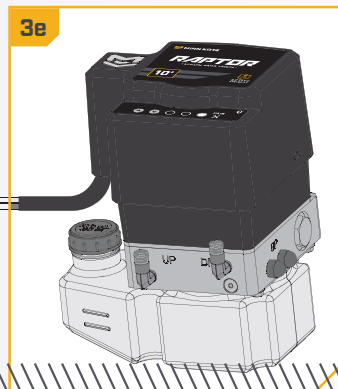
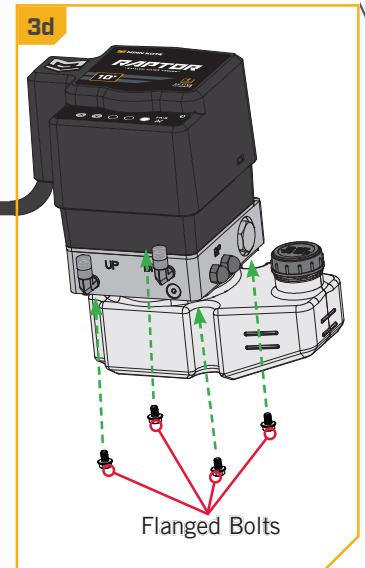
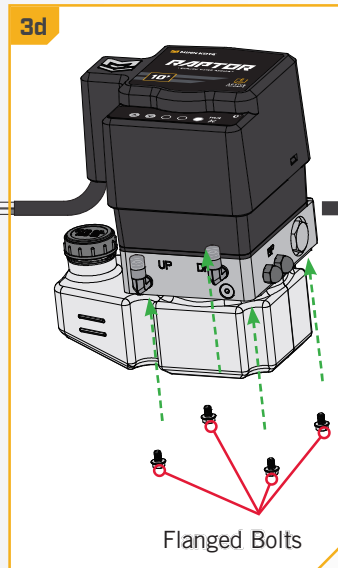
2c



INSTALLING THE RAPTOR

3

- d. With the Pump Reservoir rotated and seated in place, use the 5/16" Deep Well Socket or 5/16" Ratchet-Style Wrench to replace the four Flanged Bolts. Tighten to 12 in-lbs.
- e. With the Flanged Bolts back in place, continue with the Hydraulic Pump installation.



► Installing the Hydraulic Pump

Review the mounting considerations at the beginning of the installation. If it is necessary to rotate the Pump Assembly, refer to the "Rotate the Pump Assembly" section of these instructions. When ready to install the pump, follow the directions below.

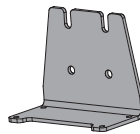
NOTICE: Installation for your Pump Assembly may vary from the standard installation. Review the mounting considerations for variations in mounting.

1

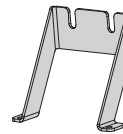
ITEM(S) NEEDED



#D, E, or F x 1



#20 x 1



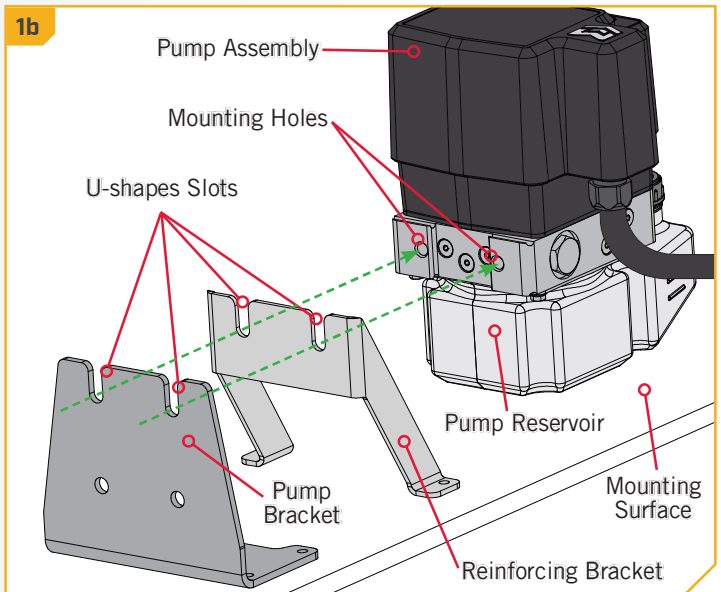
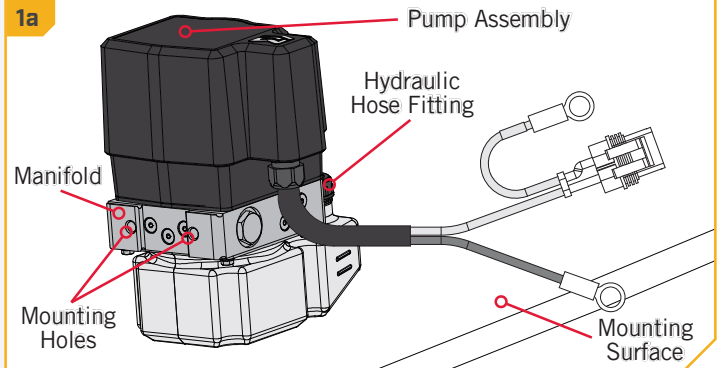
#22 x 1

⚠ CAUTION

Avoid the risk of electric shock. Do not connect the Pump Assembly to a power source before installation.

- Take the Pump Assembly (Assembly D, E, or F) and identify the two mounting holes on the Manifold. The mounting holes are on the opposite side of the pump from the brass colored Hydraulic Hose Fittings. Position the Pump Assembly at the intended mounting location. Review the mounting considerations and make sure the selected location is acceptable.
- The Two-piece Mounting Bracket consists of the Pump Bracket (Item #20) and the Reinforcing Bracket (Items #22). For a standard installation, the Reinforcing Bracket sits nested on top of the Pump Bracket with the U-shaped slots aligned. Take the Two-piece Mounting Bracket and align the U-shaped slots.
- Slide the Pump Bracket and Reinforcing Bracket together and then slide the Pump Assembly into the bracket. The angled sides of the Reinforcing Bracket fit along each side of the Pump Reservoir in a standard installation. Review the mounting considerations and position the Pump Assembly with the Two-piece Bracket in the intended mounting location.

NOTICE: If the Pump Reservoir is rotated for installation, it will not be possible to install the Reinforcing Bracket. The position of the Pump Bracket may vary for your installation based on conditions outlined in the mounting considerations.



NOTICE: The Pump Assembly must be mounted vertically. If adjustments to the mounting need to be made, rotate the position of the Two-piece bracket to accommodate the necessity to keep the pump vertical.

INSTALLING THE RAPTOR

2

ITEM(S) NEEDED

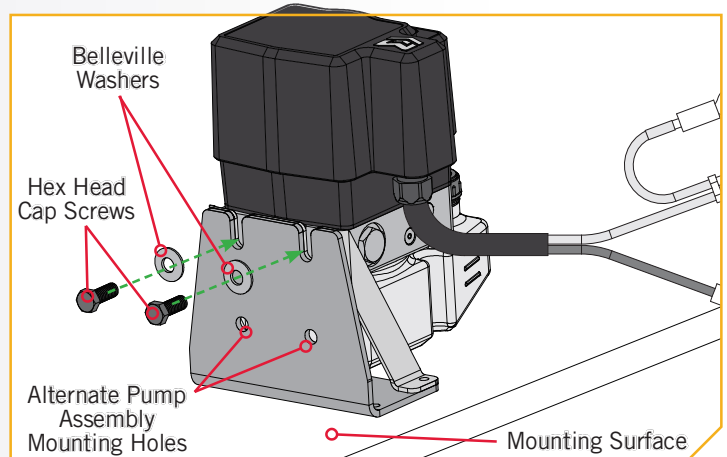


#16 X 2



#12 X 2

- d. The U-shaped Slots on the Mounting Bracket allow for adjustability between the Pump and the mounting bracket. Take both Hex Head Cap Screws (Item #16) and place one 3/8" Belleville Washer (Item #12) on each. The Hex Head Cap Screws will hold the Pump in place along the U-shaped slots. Insert the bolts with the washers in place so that they are partially installed into the Mounting Holes on the Pump. The washers should sit on the outside of the Mounting Bracket, farthest from the Pump Assembly on the screws. Hand tighten or use a 9/16" Wrench just until the bolts are placed. It may be easier to first install the screws and washers partially and then lower the Pump Assembly to fit in the U-shaped slot on the brackets, making sure the washer is closest to the screw head.
- e. Once partially installed, check the mounting location and determine the final position of the Pump Assembly and mounting bracket at the intended mounting location.

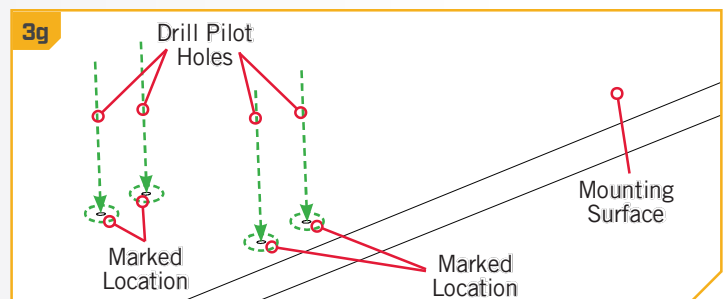
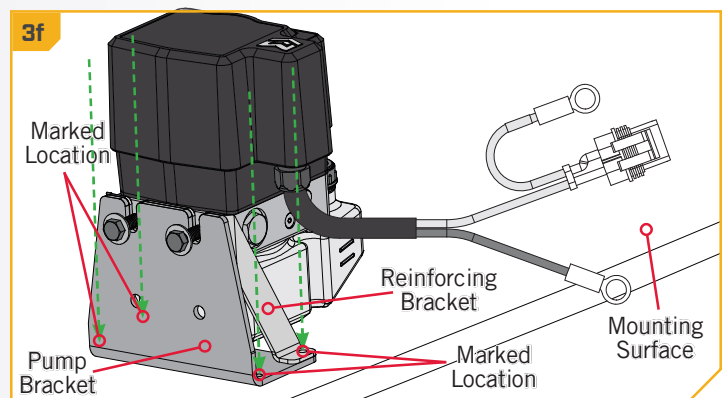


NOTICE: The U-shaped slots and the larger holes on the Pump Bracket may be used to mount the Pump Assembly to the bracket. The holes used will depend on individual mounting circumstances.

3

- f. Once positioned, take a pen or similar marking tool and mark the Mounting Surface where the Reinforcing Bracket and Pump Bracket overlap at the Mounting Hole on each side of the Pump Reservoir. Also mark the bottom holes on the Pump Bracket. It is recommended to mark all four Mounting Holes in the Mounting Bracket.
- g. Set the Pump Assembly aside and use a Drill with a 1/8" Drill Bit to drill Mounting Holes in the Mounting Surface at the marked locations.

NOTICE: When drilling holes, especially into fiberglass, it is helpful to first cover the surface with masking tape. Use a 5/32" Drill Bit when drilling into Fiberglass for the Pilot Holes. Masking Tape will help keep the boat surface unmarked and help with cleanup. Cover the surface and then mark the location to drill. Once the pilot holes are drilled, remove the masking tape before continuing installation.



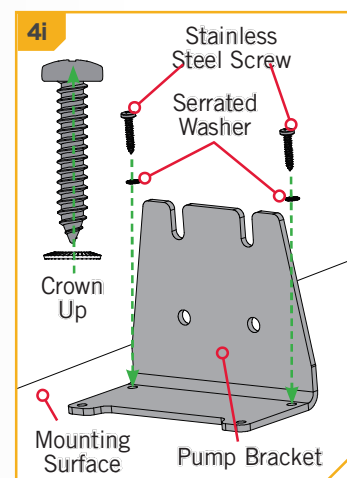
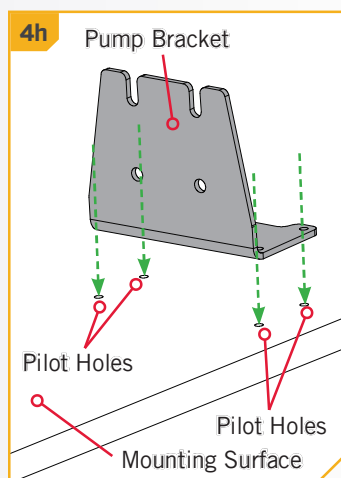
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ITEM(S) NEEDED

○ #14 X 2

⌘ #18 X 2

- h. Replace the Pump Bracket only and align the Mounting Holes with the Pilot Holes.
- i. Take two 1" Stainless Steel Screws (Item #18) and two Serrated Washers (Item #14). Place one washer on the end of each screw so that the crown of the washer is facing up towards the head of the screw. Install the Screws with drill and a #2 Phillips Bit. The screws should pass through the Serrated Washer and Pump Bracket and then into the Mounting Surface.



5

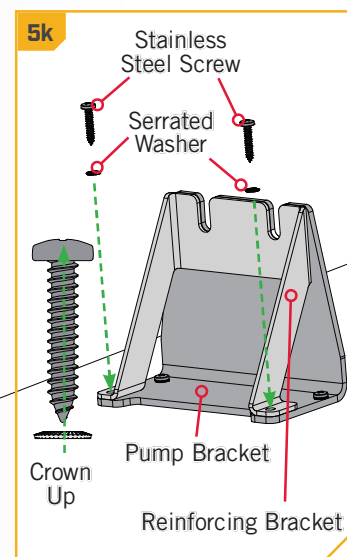
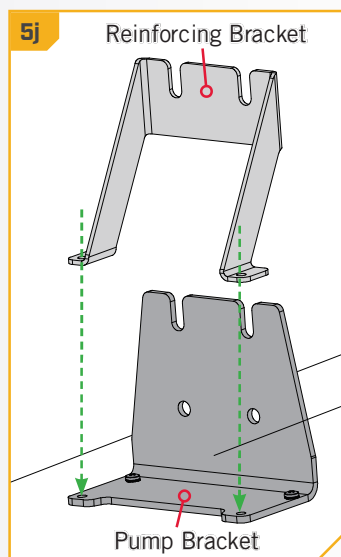
ITEM(S) NEEDED

○ #14 X 2

⌘ #18 X 2

- j. With the two Screws installed, replace the Reinforcing Bracket onto the Pump Bracket so that the mounting holes are again aligned.
- k. Take the two remaining 1" Stainless Steel Screws (Item #18) and two Serrated Washers (Item #14). Place one washer on the end of each screw so that the crown of the washer is facing up towards the head of the screw. Install the Screws with a Drill and a #2 Phillips Bit in the overlapping holes of the Two-Piece Mounting Bracket. The Screws should pass through the Serrated Washer, Reinforcing Bracket and Pump Bracket and into the Mounting Surface.

NOTICE: If the Pump Reservoir is rotated for installation, it will not be possible to install the Reinforcing Bracket. To complete installation, it is recommended to use all four Stainless Steel Screws and Serrated Washers to secure the Pump Bracket to the Mounting Surface.



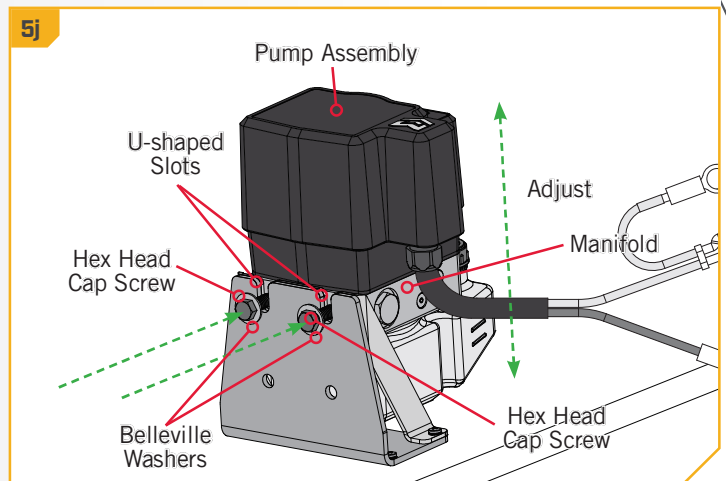
INSTALLING THE RAPTOR

6

- I. With the Two-Piece Mounting Bracket fully installed, replace the Pump Assembly on the Mounting Bracket. Make sure that the Belleville Washers sit between the head of the screw and the Mounting Bracket. The Pump Assembly is secured to the mounting bracket by tightening the Hex Head Cap Screws that were previously put in place on the Manifold.
- m. Slide the Pump Assembly either up or down in the U-shaped slots to find the position that works best for your installation. When satisfied with the position, tighten the hardware with a 9/16" Wrench to 12 ft-lbs.

NOTICE: When direct-mounting the Pump Assembly, only the two Hex Head Cap Screws are used for installation. If direct mounting the Pump Assembly, use a Drill with a 7/16" Drill Bit to drill Pilot Holes in the Mounting Location. Secure the Pump Assembly in place by placing a Belleville Washer on each screw. Then place the screw through the mounting surface and into the mounting holes on the Manifold of the Pump Assembly.

5j



7

ITEM(S) NEEDED



#26 X 1

- n. Take the Pressure Wrench (Item #26) and store it in a secure location on the boat. The Pressure Wrench is only needed if pressure in the hydraulic system needs to be manually relieved. To learn more, please refer to the Owner's Manual.