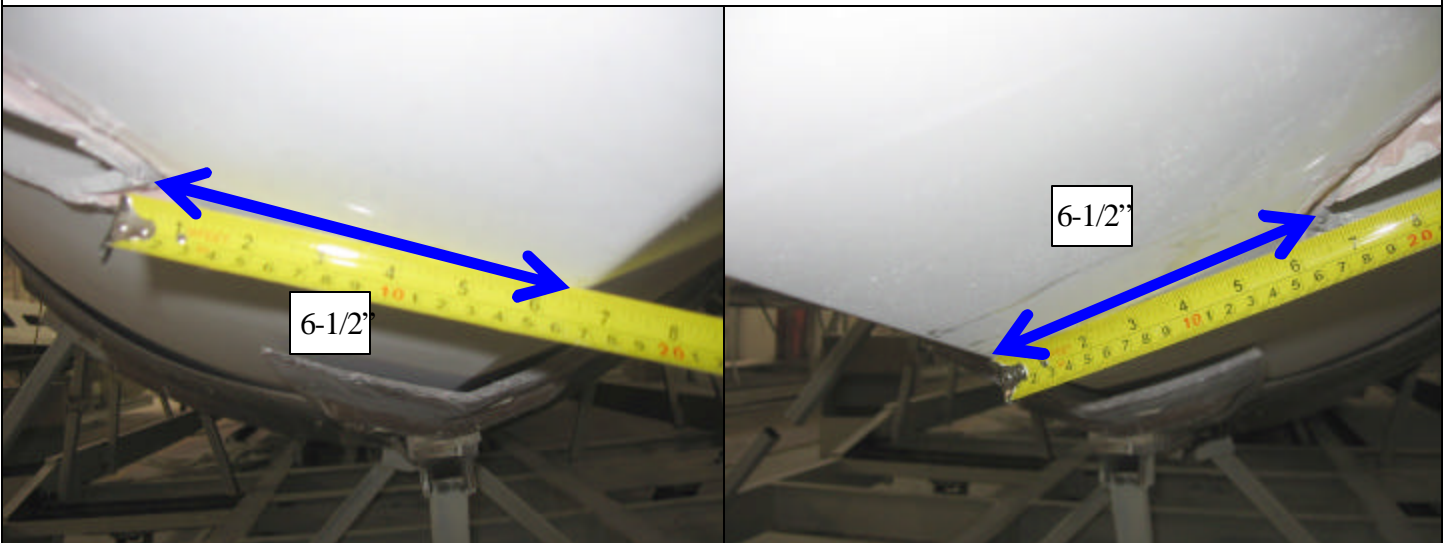


49 Glass Room Breezeway Optional Bow Thruster Cutouts 9-5-06

1. The bow thruster tube is 7-1/4' in diameter and 60" in length. The size of cutout for bow thruster tunnel need to be at least 7-1/2" in diameter by using free hand saw.
2. Locate the bow thruster tunnel, measure 70" from lower radius of bow rake afterward, then mark on this location (upper quad point of tunnel cutout) . Measure from the marked location downward 19-1/2" , the location should be at bottom of bilge then mark a straight line along the measured line. From the lower end of this line, measure 6-1/2" upward then mark this location (lower quad point of cutout) .
3. Do the same measure procedure to the other side of hull for bow thruster tunnel cutout.
4. Use both upper and lower quad point to locate the center of cutout, then use hole saw to cut through the hull then use free hand saw to complete the cutout for bow thrust tunnel installation.
5. Insert the bow thruster tunnel in the cutout then use tape to hold the tube in place temporary.

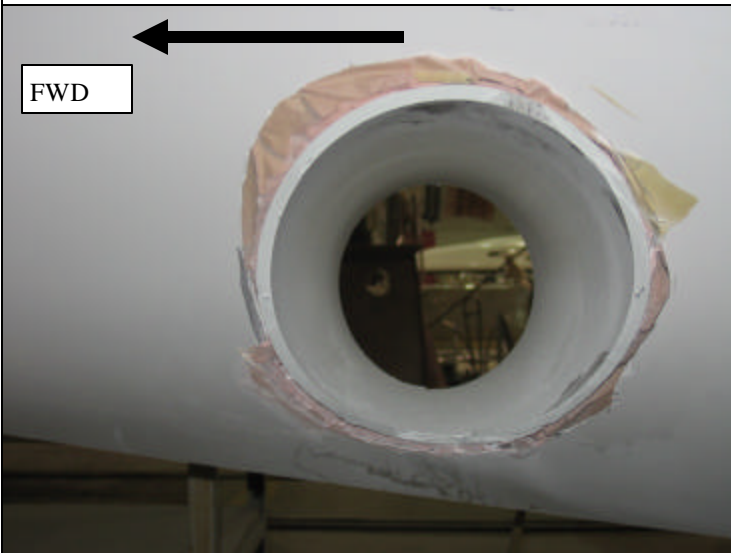


From this location 70" afterward . The above illustration shows the reference point at bottom of bow rake.

49 Glass Room Breezeway Optional Bow Thruster Cutouts 7-5-06



The arrows indicate the upper quad location of the cut-out.



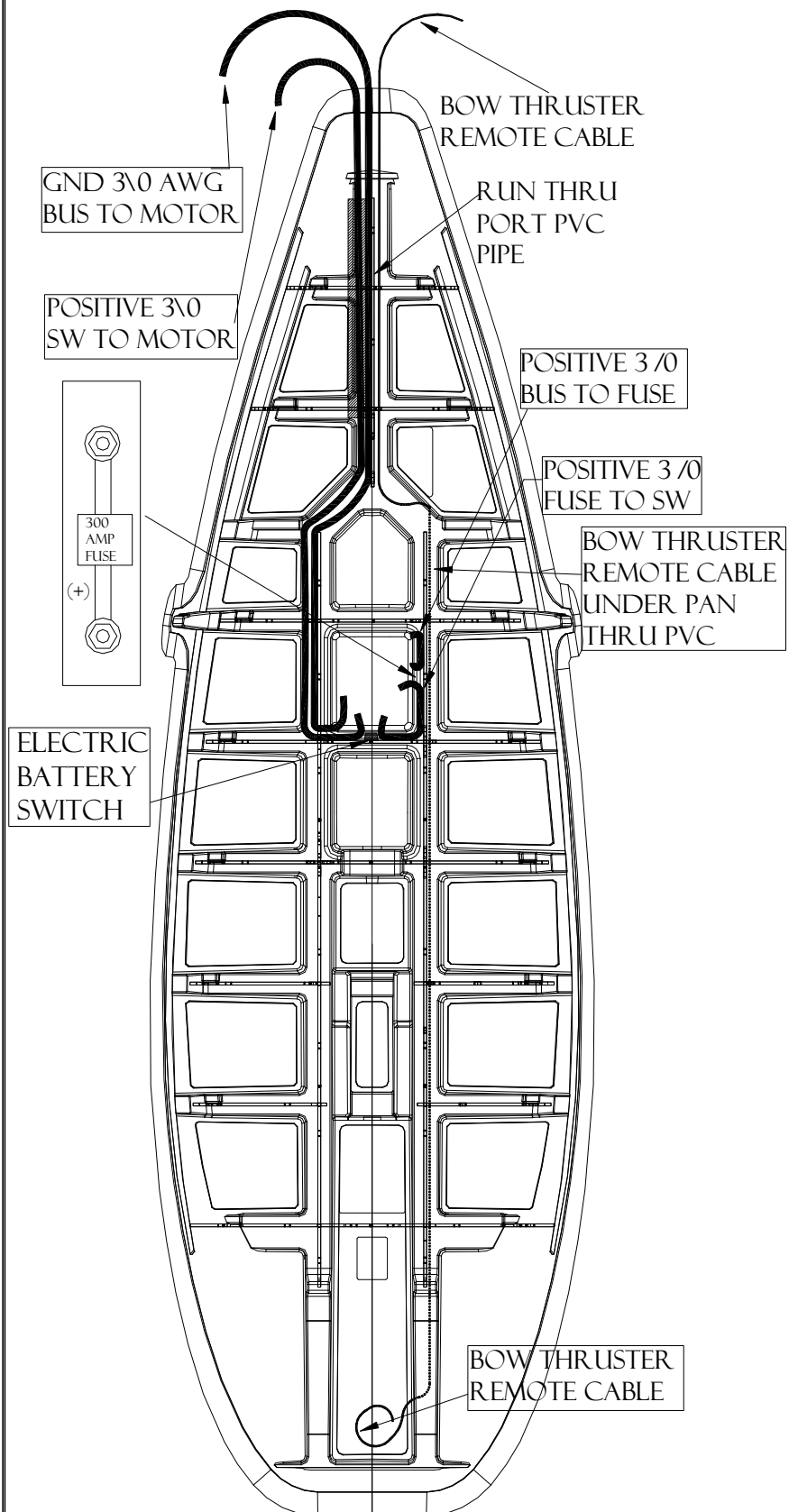
Complete installation of the bow thruster tunnel installation.

48 Module Pan Sub Assembly

DC Cables Installation (02-08-2006) Rev-A

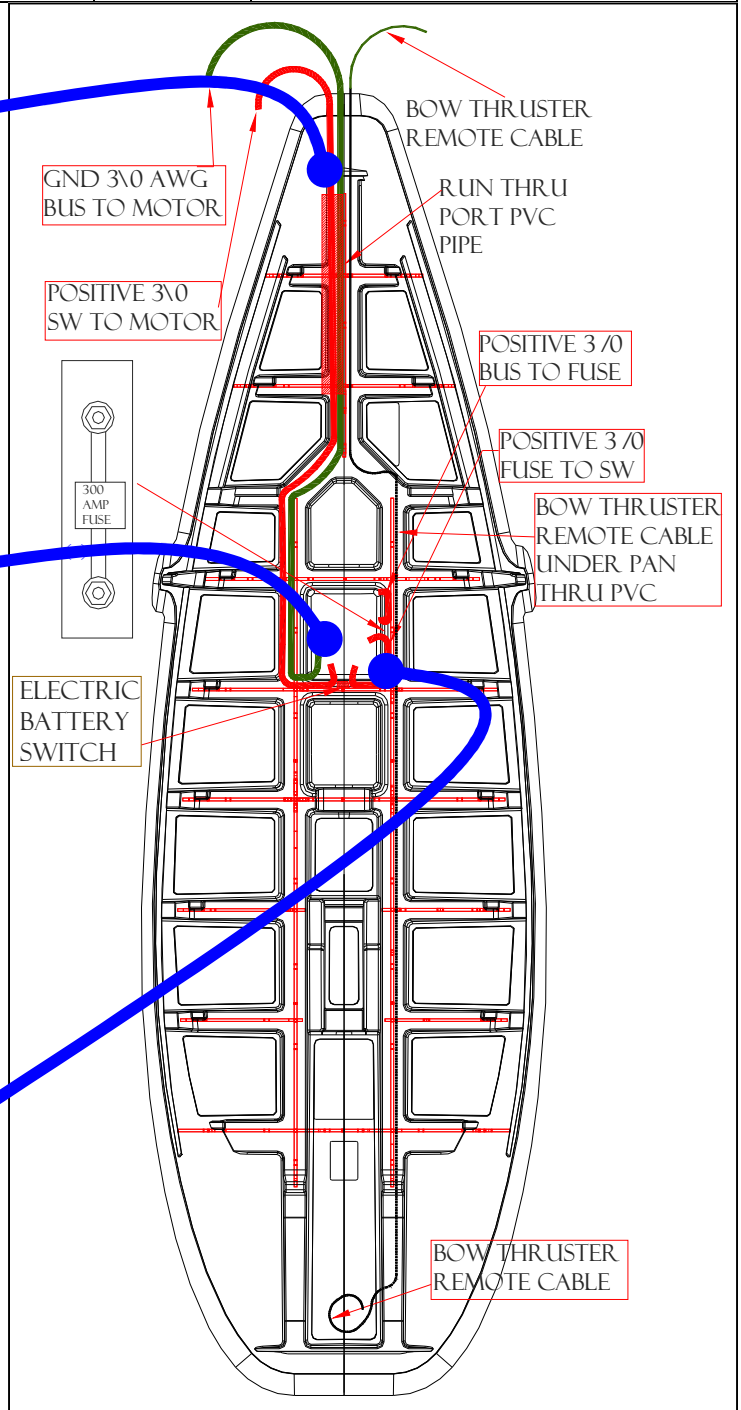
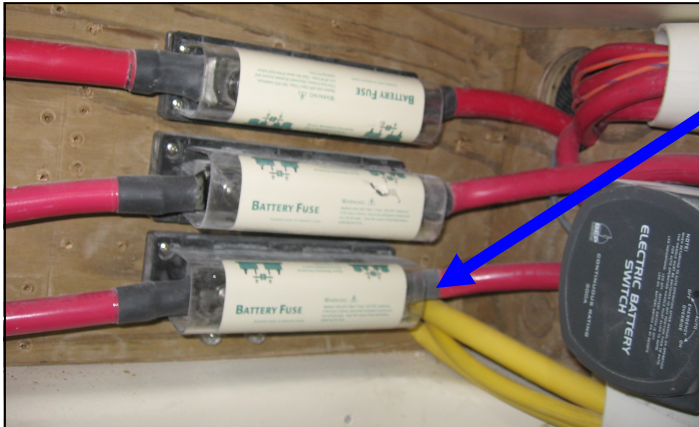
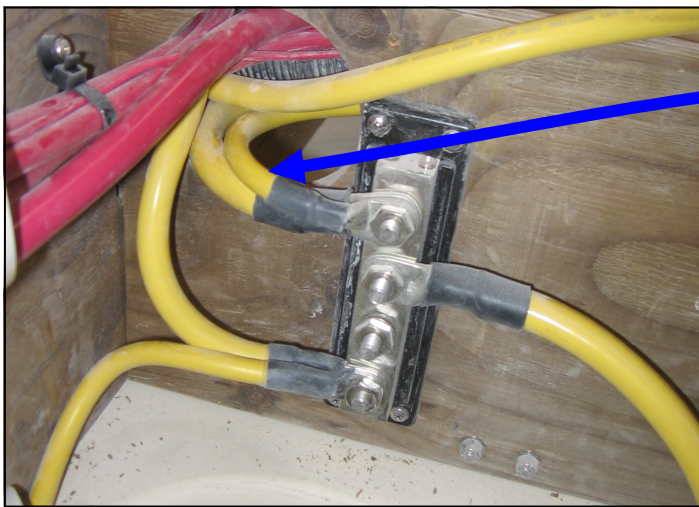
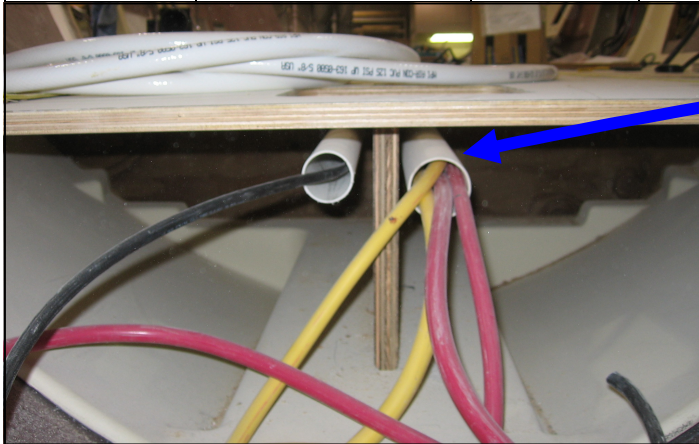
Bow Thruster Cables

1. Run bow thruster cables, start from house battery compartment, run both positive and ground cables from the compartment port side stringer cutout outboard then turn fwd thru $\varnothing 2''$ PVC pipe, run both cables thru V berth PVC pipe (port side), all the way forward.
2. Secure 3/0 AWG ground cable to ground bus bar (the bar is mounted on the house battery compartment port side aft corner).
3. The red cable is 19' and yellow cable is 17', secure the red cable at house battery compartment end to automatic switch box., and secure 3/0 AWG 19" long red cable to automatic switch and the other end of this cable to 300 AMP fuse block.
4. Mount and secure bow thruster switch to house battery compartment aft stringer fwd face. And install 300 AMP fuse block to starboard side stringer inboard face lower end.
5. Install red cable 3/0 AWG with 22" long to 300 AMP fuse block and the other end to positive bus bar. Install clear insulation cover to fuse block
6. Install insulation boot too all energized terminal studs.
7. Run bow thruster remote cable thru under pan starboard side PVC pipe from fwd vanity compartment pan cutout thru PVC pipe going afterward then pull it out from QB starboard oval cutout. And run fwd end of this cable thru V berth PVC pipe to bow location.
8. See following figures and drawings for more detail about bow thruster cables of this boat.

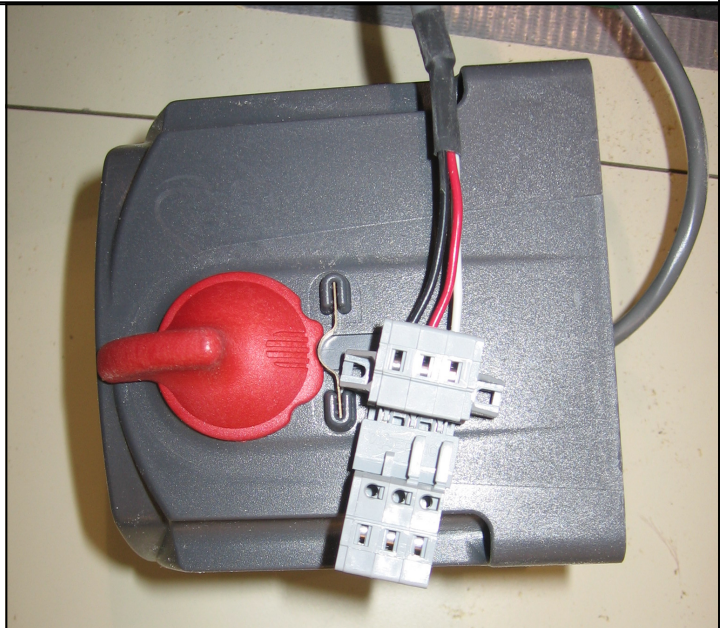
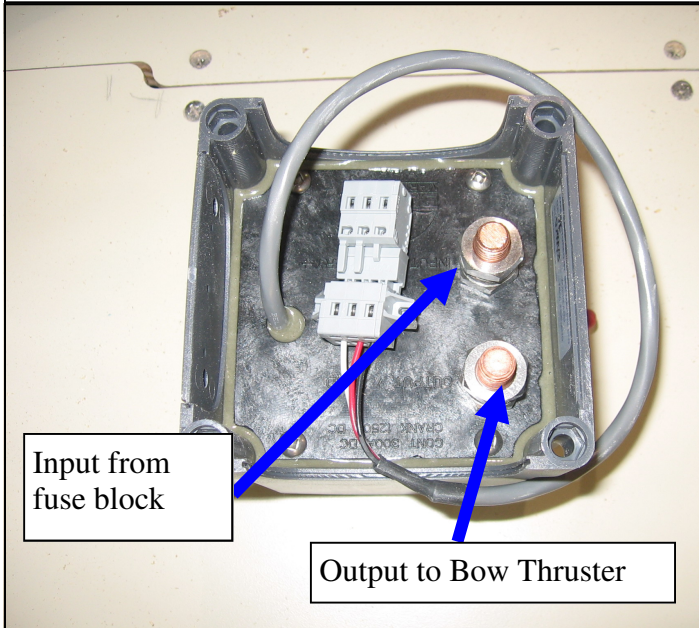


48 Module Pan Sub Assembly DC Cables Installation (02-08-2006) Rev-A Bow Thruster Cables

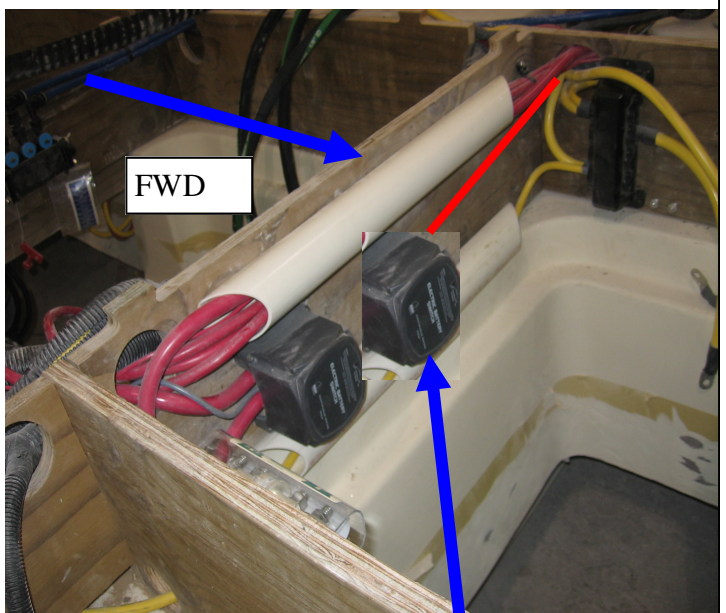
WIRE SIZE	COLOR	LENGTH	EYE	EYE	DESCRIPTION
3/O	RED	22"	3/8"	3/8"	BUS TO FUSE-BOW
3/O	RED	18"	3/8"	3/8"	FUSE TO SW-BOW
3/O	RED	19'	3/8"	3/8"	SW TO MOTOR-BOW
3/O	YELLOW	17'	3/8"	3/8"	BUS TO MOTOR-BOW
12ga	RED	23'			TO CONTROL BOX-BOW



48 Module Pan Sub Assembly DC Cables Installation, Bow Thruster Cables

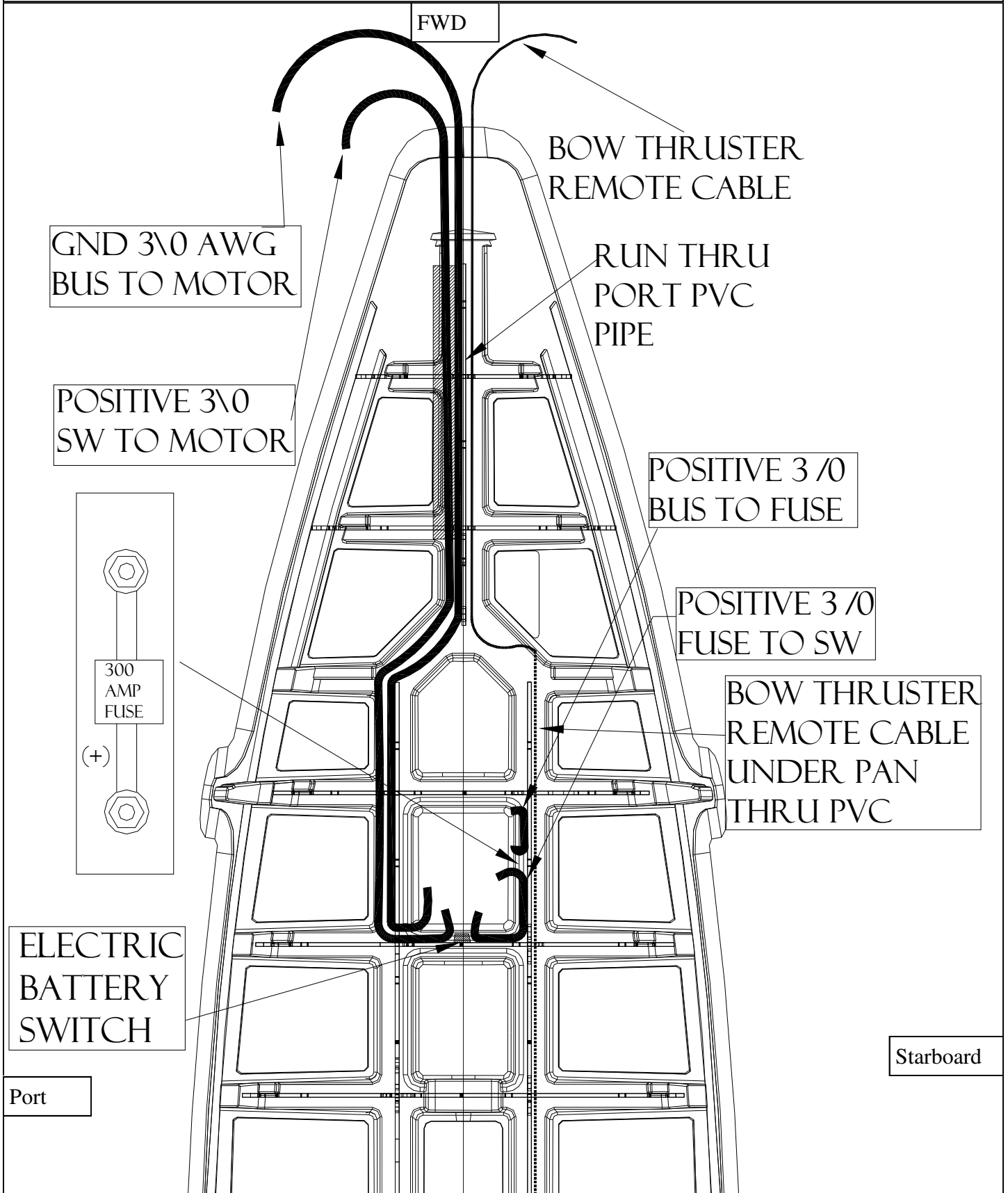


Secure (+) 3/0 AWG cable that is from fuse block to this stud and secure positive 3/0 AWG 22' cable to the other stud

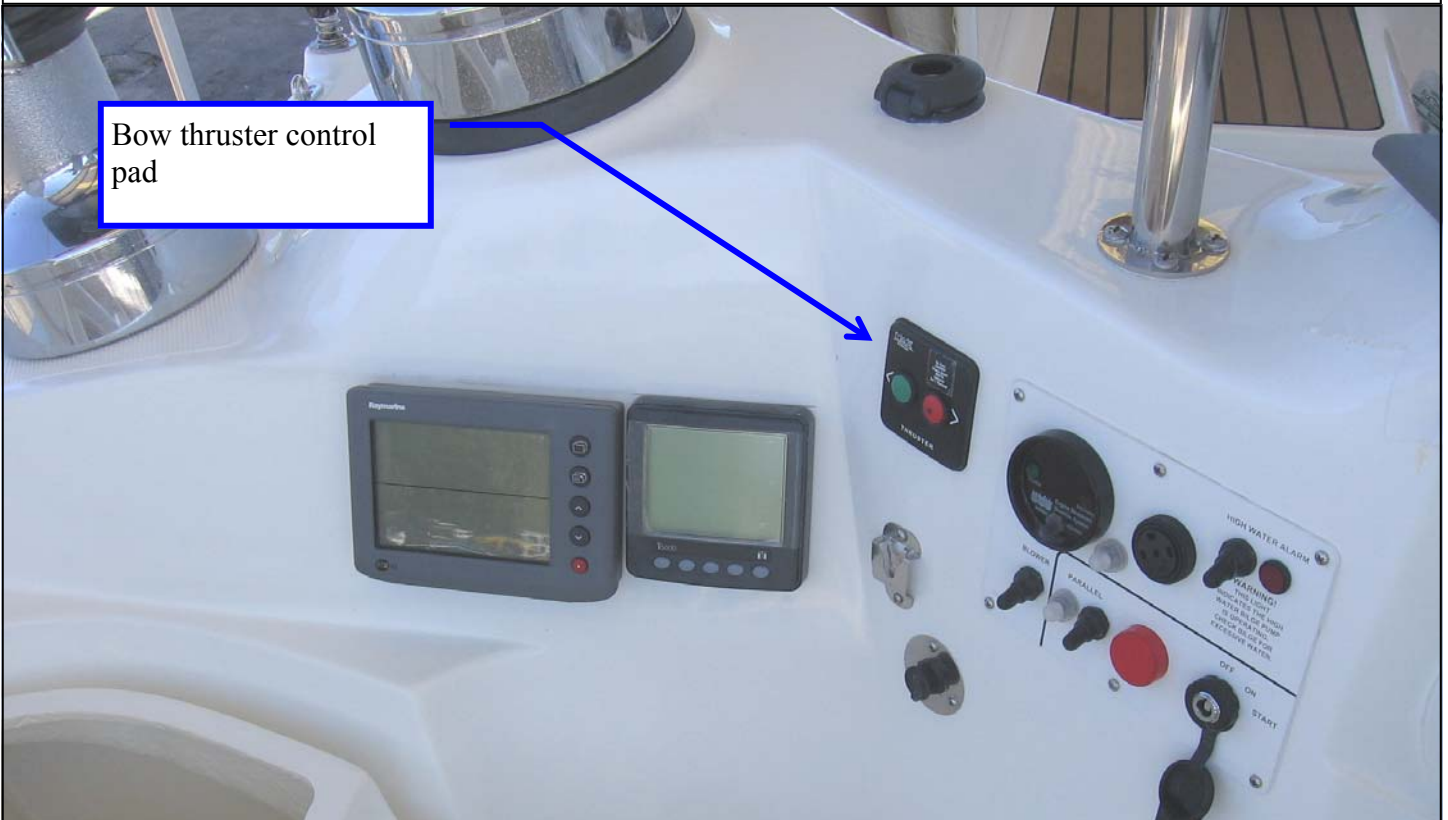


Secure electric bow thruster switch at this location

48 Module Pan Sub Assembly DC Cables Installation, Bow Thruster Cables



49 Bow Thruster Control Panel Location



Bow thruster control panel locates on port helm station instrument face next to key switch panel.

