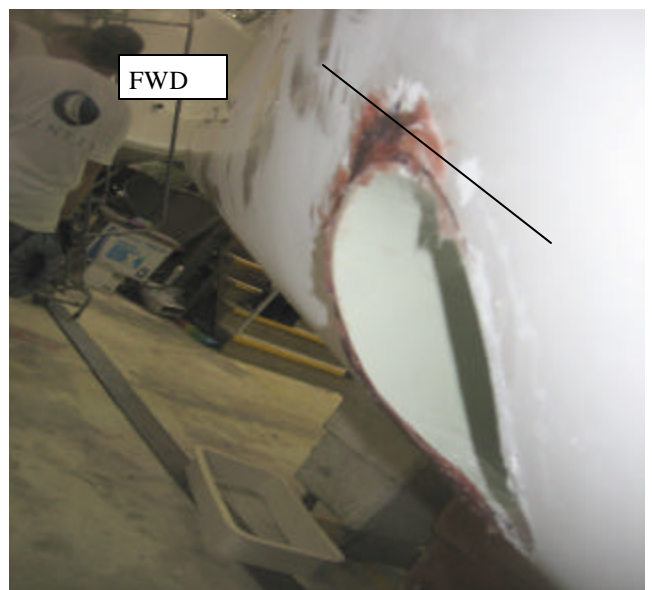
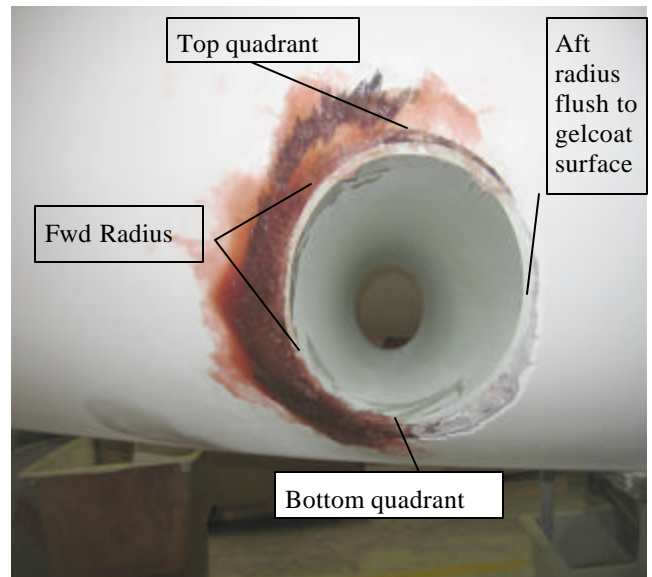
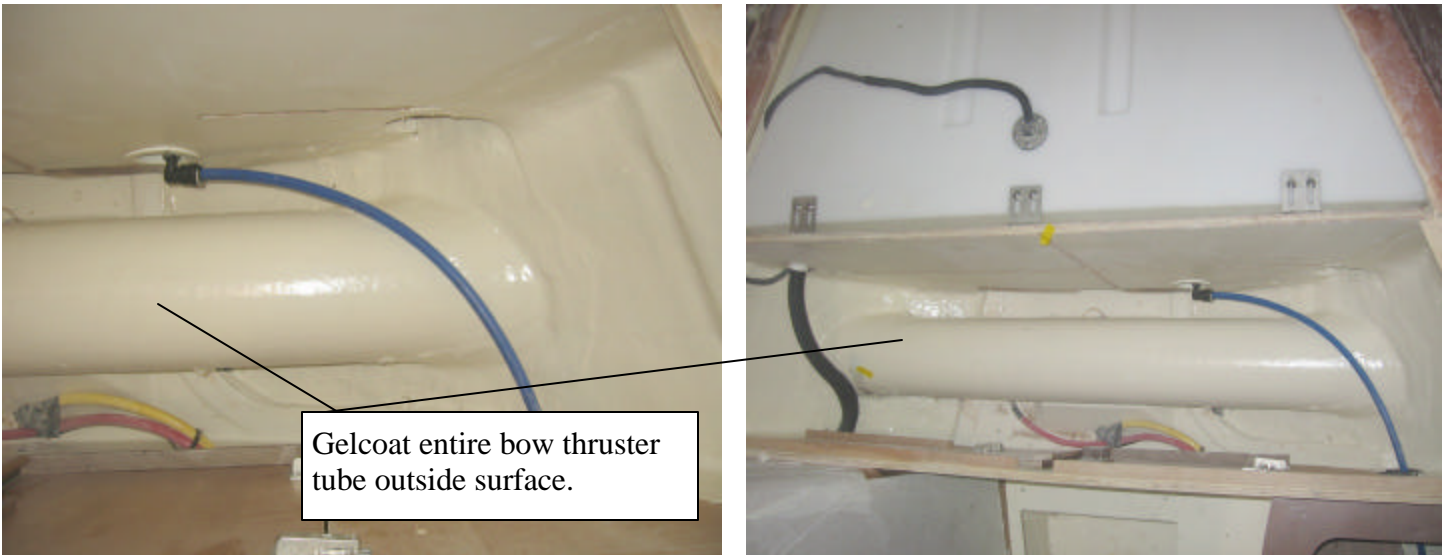


## H45cc Engine Stage Bow Thruster Installation (Option)

1. Cut bow thruster tunnel end with its fwd radius with 3/4" hanging port & starboard side gelcoat surface.
2. Cut bow thruster tunnel end with its aft radius flush to gelcoat surface (both sides).
3. Scuffing gelcoat surface around bow thruster tunnel.
4. Apply bi-ply bond inboard glass surface (between glass tube and hull sheer glass surface).
5. Use amount of fiberglass chop to bond fwd radius. (see picture).
6. Gelcoat entire bow thruster tube outside surface, allow to be cured.
7. Sanding bonding surface, epoxy, patching at tunnel ends to seal up gaps.
8. Reinstall V berth center aft divider bulkhead.
9. Use gasket to locate thrust arm and cut mounting hole location.
10. Apply marine sealant 5200 to caulk around gasket and motor bracket then secure thruster arm to motor bracket together using designated fasteners, then secure the electro-motor on motor bracket.
11. Secure DC power cable to bow thruster terminal and attach remote control harness that has been pre run in previous stage then install oil tank ( 200mm above waterline)



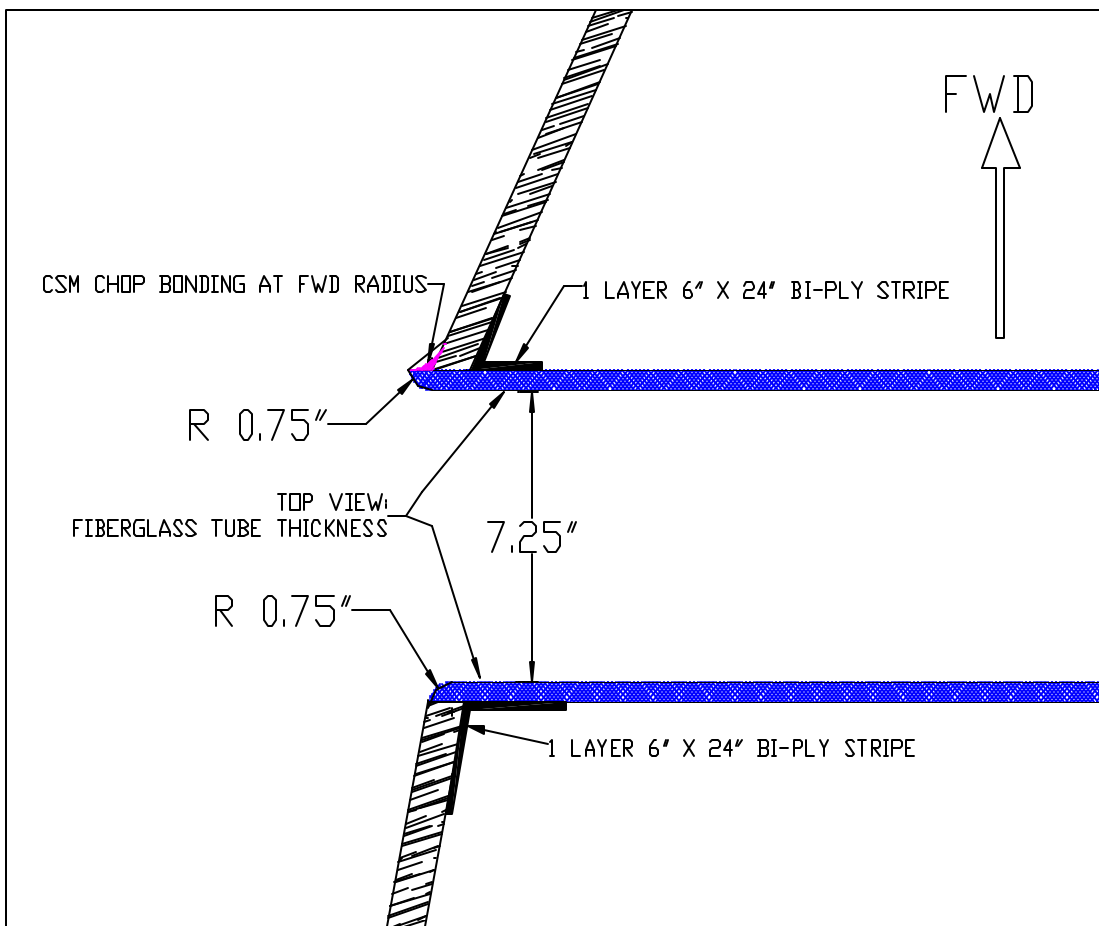
## H45cc Engine Stage Bow Thruster Installation (Option)



Gelcoat entire bow thruster tube outside surface.

### Bonding Related at Bow Thruster Tunnel:

1. The rounded tunnel end from patching is necessary at both port and starboard sides.
2. Bow thrust tube of  $\phi 7\text{-}1/4''$  is used in this boat, and at tunnel ends the radius of the edge suppose to be 10% of tunnel diameter shall gets the most advantages of bow thruster performance & noise reduction.
3. The following drawing shows tunnel end radius on H45cc bow thruster tube.

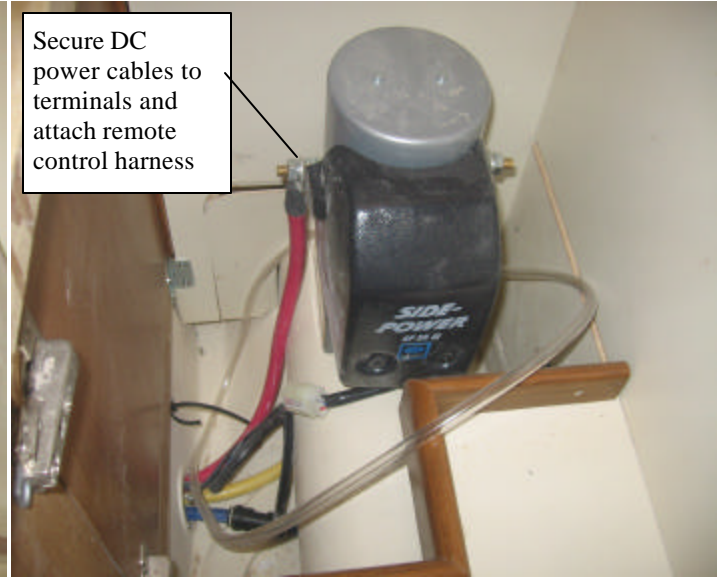


## H45cc Engine Stage Bow Thruster Installation (Option)

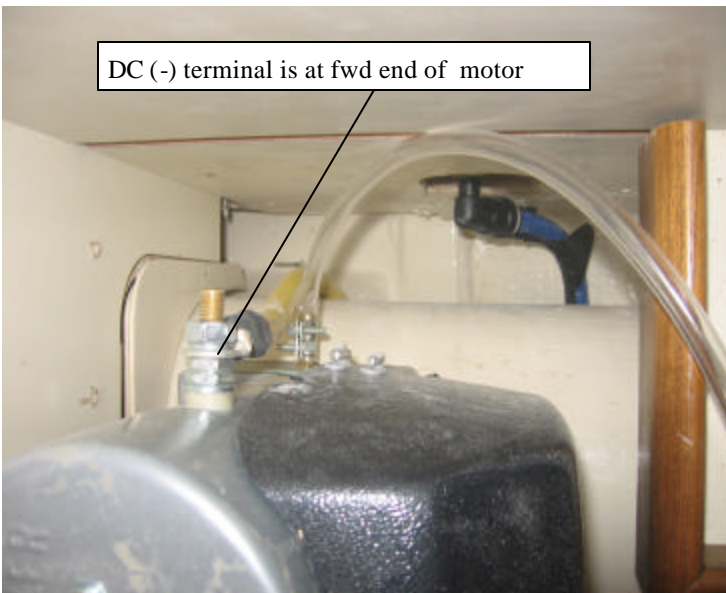
Oil Tank need to be  
200mm above waterline



Secure DC  
power cables to  
terminals and  
attach remote  
control harness



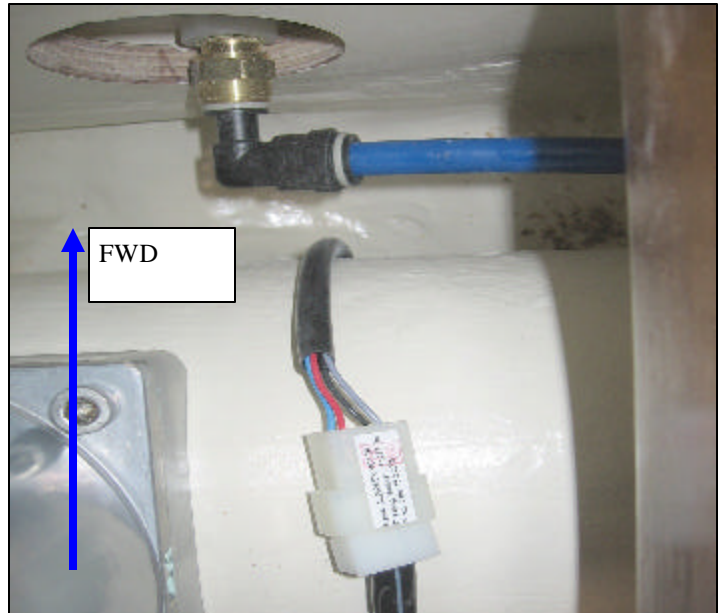
DC (-) terminal is at fwd end of motor



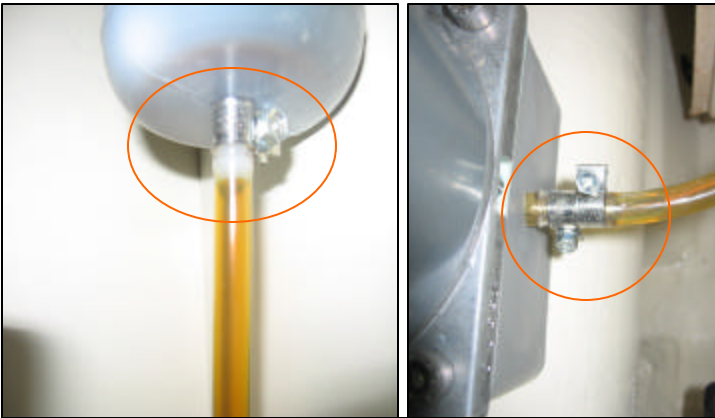
# H45cc Engine Stage Bow Thruster Installation (Option) (Update 10-03-05)



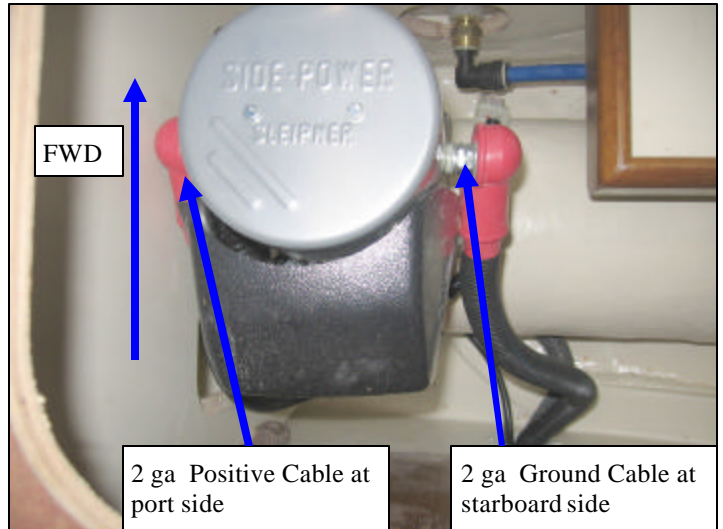
Secure this bottle holder on bunk divider aft face, use #8 x 1/2" long pan head wood screws.



Attach bow thruster remote control harness



Install clear hose for oil reservoir bottle, use designated hose clamps to secure the hose to bottle and to



2 ga Positive Cable at port side

2 ga Ground Cable at starboard side



# H45cc Engine Stage Bow Thruster Installation (Option) (Update 10-03-05)



Overview of bow thruster drive unit installation, oil reservoir bottle is mounted fwd upper of drive unit