H41 Electrical Stage Aft Air Conditioner Unit Installation

- 1. Place Air-Cond unit in A/C shelf with air return facing fwd direction of the boat.
- 2. Do not secure Air-Cond Unit on shelf, install both side of air condition ABS box on inboard shelf divider, then install 3" air duct & 2 piece of 7 " air ducts to ABS box. (ensure there is no obstacle in air duct before you close up)
- 3. Run & install A/C water pick up hose to flow in fitting, A/C discharge hose to flow out fitting and pan drain hose to pan drain hose fitting of Air conditioner unit, secure all these hose use designated hose clamps. *Use marine sealant #795 to seal almond face hole cutouts to avoid air leaks*.
- 4. Use phil pan head #10 x 5/8" long wood screws to secure air conditioning unit on shelf (the shelf is 1/2" thick & mounting bracket is 1/8" thick).
- 5. Install temperature sensor that is close to air return, and install 110V wires (A/C power supply & Relay) to A/C control box, then run A/c remote cable to remote control panel. Conduit all wires and tie wrapping.
- 6. Tie wrapping all hoses and wires. Secure the shelf top cover using 4 x #10 x 1-1/4" long flat head wood screws, and 2 #10 x 1-1/4" flat head wood screws for air return panel.



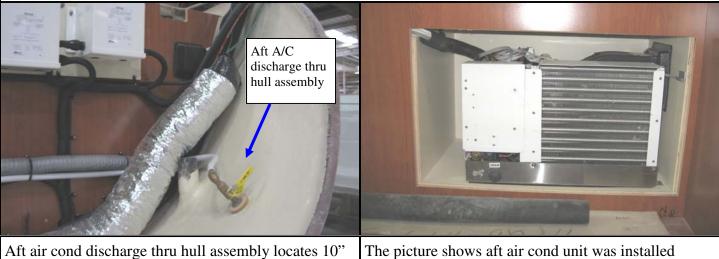
H41 Electrical Stage Aft Air Conditioner Unit Installation



H41 Electrical Stage Aft Air Conditioner Unit Installation



The pictures show complete installation of aft air conditioning unit. Make sure all plumbing hoses and duct work are secured insulated properly.



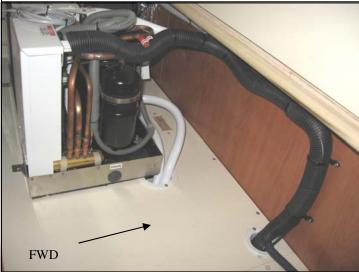
Aft air cond discharge thru hull assembly locates 10" The p behind engine exhaust port.

The picture shows aft air cond unit was installed complete and secured inside the cabinet. The view is from aft cabin site.

Aft Air Cond Discharge thru hull Instruction:

- 1. Measure 10" aft of aft engine exhaust port then drill diameter 1/2" hole for aft air cond discharge thru hull installation.
- 2. Clean up around the mounting hole then use white 795 to caulk around the bad side of fitting and wood doughnut.
- 3. Insert the thru hull fitting into the mounting hole then mount wood doughnut from inside then fasten the fitting.
- 4. Install 1/2" ball valve with nipple facing aft then. Install 1/2" street elbow 90° with it female thread pointing forward. Install brass adapter (1/2" MPT x 5/8"BARB) on street elbow. (make sure apply all pipe thread sealant on all pipe & thread connections.)

H41 Electrical Stage Fwd Air Conditioner Unit Installation



Forward Air cond Unit Installation:

- 1. The forward A/C unit locates in port forward bunk with blower unit facing outboard.
- 2. The raw water pick up hoses were pre-run during manufacturing and the hose should be found in the bilge next to wood stringer.
- 3. Before the air cond unit is secured, run air cond raw water pick up hose from bilge thru sub floor cutout upward as shown in the picture above.
- 4. Air cond 110V/220V wire has been pre-run during manufacturing, the wires is temporary secured in inside the bunk.
- 5. Main cabin duct work was pre-installed in headliner, also the flexible air duct can be found from inside main bulkhead cabinet on port side.



- 6. Connect fwd air cond plumbing hoses to the unit and secure the hoses using designated hose clamps. Install plastic elbow and short piece drain hose to the elbow for air cond unit pan drain. The drain hoes should be ran to the bilge sub floor.
- 7. Wiring all 110V/220V wires to air cond unit. Make sure conduit all wires and secure the wires and conduit on main bulkhead inside the bunk .
- 8. Install hard air duct to the blower unit and tape off the duct work, make sure there will not be any air leak during air cond operating.
- 9. Recheck wiring, plumbing and ducting of the forward air cond unit. Then secure the air cond unit on the sub floor inside the bunk using designated L brackets and Pan head fasteners.
- 10. Install and secure temperature probe on bunk face.
- 11. Install forward air cond control panel on forward of electrical panel access panel. Then run and connect control cable to the panel.

H41 Electrical Stage Fwd Air Conditioner Unit Installation

Forward Air Cond Discharge Thru Hull Assembly:

- 1. Forward air cond discharge thru hull locates on hull sheer that inside port side back rest as shown in the picture.
- 2. Drill 1/2" diameter hole for forward air cond discharge thru hull installation.
- Clean up around the mounting hole then use white 795 to caulk around the bad side of fitting and wood

doughnut.

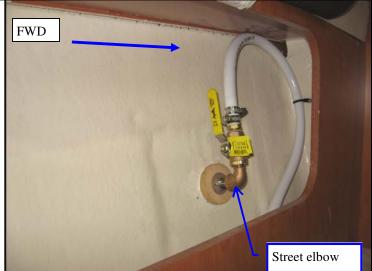
- 3. Insert the thru hull fitting into the mounting hole then mount wood doughnut from inside then fasten the fitting.
- Install 1/2" street elbow with male thread pointing upward, then install 1/2" ball valve with nipple facing afterward and handle pointing upward when open. Install brass adapter (1/2" MPT x 5/8"BARB) on the other end of ball valve. (make sure apply all pipe thread sealant on all pipe & thread connections.)
- 2. Connect the forward air cond discharge hose to the brass barb fitting and secure the hose using designated hose clamps.

Electrical relay Box Installation:

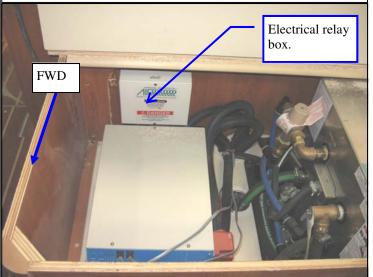
- 1. The 110V/220V wires has been pre-run during manufacturing, and the wires locates inside the port side aft bunk behind inverter and next to water heater.
- Following the wiring diagrams from OEM manufacturer's wiring diagrams in the following pages for connecting the 110V/220V wire to relay box and to air cond units.

Wiring 110V/220V Control Panel:

- 1. Remove AC circuit box mounting screws.
- 2. Refer to AC circuit box wiring schematic then connect 10/3 wires to circuit breakers.

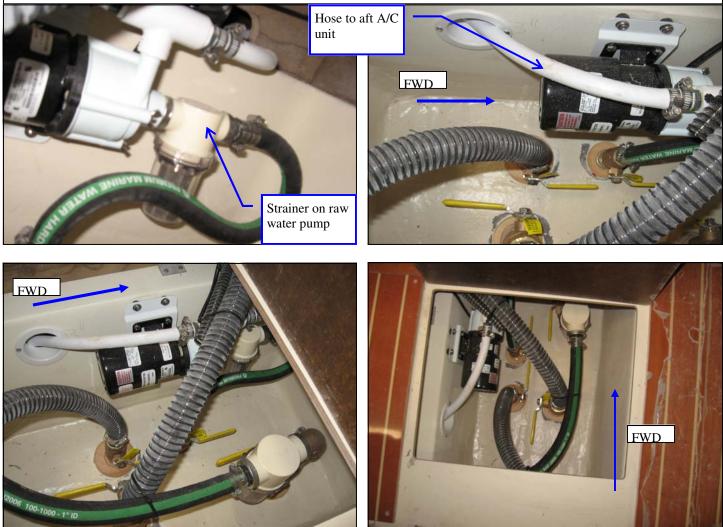


Fwd air cond unit discharge thru hull assembly





H41 Electrical Stage Air Conditioner Raw Water Pick-up Assembly Installation



Air Cond Raw Water Pick-up Assembly:

- 1. Air cond pick up thru hull drill center locates 5-1/2" fwd of aft vanity discharge thru hull which is on port side of the main bilge discharge compartment.
- 2. Drill a 1-1/8" diameter hole in this location for air cond raw water pick up thru hull fitting installation.
- 3. Caulk around the back side of the 3/4" thru hull fitting using marine sealant 5200 then secure the fitting using designated wood doughnut and lock nut.
- 4. Install 3/4" ball valve with its nipple facing inboard and handle pointing forward when close. Install brass adapter (3/4" barb x 3/4" MPT) then install ø3/4" x 3' long hard-wall hose to this barb fitting. Secure the fitting using designated hose clamps.
- 5. Install raw water pick-up pump on the location as shown in the picture. Install 3/4" strainer on suction port of the pump, install brass adapter (3/4" barb x 3/4" MPT) on strainer assembly, then connect the other end of the 3/4" x 3' hose to the brass barb fitting on water strainer. Secure the hose using designated hose clamps.
- 6. Install plastic tee fitting on discharge port of the raw water pick up pump, then attach and connect both water hoses (5/8") that goes to forward air cond unit and aft air cond unit. Make sure pipe thread sealant is applied on all hose connections.

