## 33 Electrical Stage Diesel Heater Unit Installation (3-26-07)



Install the heater fuel pick up fitting on this location.



Fuel pump enclosure assembly locates under the aft cabin bunk port side forward face.



Heater exhaust tubing runs from the heater unit to outboard end. The fitting locates on port side sheer



Copper fuel line runs along with engine fuel line under aft bunk.



Heater unit is secured on L bracket, the unit locates inside aft cabin port euro shelf.



Exhaust thru hull fitting locates 7" aft bulkhead and 4-1/2" down hull flange.

## 33 Electrical Stage Diesel Heater Aft Cabin Ducting Installation (3-26-07)



Heater inlet air duct facing upward. Inlet air vent locates on aft galley bulkhead



Air outlet locates underneath the heater unit. T junction under the heater distributes air to aft cabin and to main cabin.



Air inlet nozzle & 2.36" air duct mounted on aft galley bulkhead, and thermostat unit locates next to the inlet air nozzle.



Aft cabin air nozzle locates on euro shelf 15" above the bunk top and 4-1/2" aft the aft galley bulkhead.

## 33 Electrical Stage Diesel Heater Main Cabin Ducting Installation (3-26-07)





Air duct comes from heater unit, under galley then to port bunk. Install T junction at this location.







Runs outlet air duct from T junction inboard inside the bunk then install outlet nozzle on bunk lower corner.



Drill hole on lower corner of port main salon bunk for main cabin outlet air nozzle. The hole locates 2" aft teak corner and 2" above floor ring.

## 33 Electrical Stage Diesel Heater Fwd Cabin Ducting Installation (3-26-07)







# Webasto Diesel Heater Information (3-26-07)

### **Control Element (Rheostat) Installation**

1. Install control element in a suitable location allowing enough slack in the harness so that it is not stretched taut. The shaft will require a 12.5 mm (1/2 in.) hole for mounting. See the figures below for mounting. Plug harness connector into receptacle on rear of control element.



### **Fuel System**

### **General Information**

This heater installation must follow the American Boat & Yacht Council, Inc. (ABYC) guidelines. The Fuel system conforms to Inland Waterways specifications.

Several specific regulations may apply including the use of flame resistant fuel pipe such as copper pipe, and fire resistant fixings.

The fuel must be extracted from the fuel tank of the vessel by means of a separate fuel pick-up (standpipe). Do not "Tee" into engine fuel delivery or return lines.

Suitable fuel extraction devices or tank pick-up devices are contained in the accessory lists for the heaters, or are included in the heater kit.

If an additional fuel tank needs to be installed for the fuel supply of the heater, we recommend this be carried out by a marine installation center familiar with applicable marine industry directives, codes and standards. Any safety hazards can thus be avoided.

### **Fuel Standpipe Installation**

The fuel standpipe should be kept 25mm (1 in.) off the bottom of the fuel tank to prevent drawing sediment and water into the heater's fuel system.

#### Figure 6. Fuel Standpipe



### Legend for Figure 6:

- 1 Nut
- 2 Washer
- 3 Rubber gasket
- 4 Bushing (tank-boss)
- 5 Tank with 25mm (1 in.) hole
- 6 Tank with available N.P.T. threaded port

- 1. Cut fuel standpipe to length, approx. 25 mm (1
- in.) off bottom of fuel tank. Angle the cut to prevent clogging.
- 2. Remove burrs from cut end. Apply thread sealant to threaded fittings to prevent fuel leaks.
- 3. Install fuel standpipe using one of the following methods:
  - use 1/4 or 1/2 spare port on top of fuel tank (if available) and install standpipe OR
  - drill or punch a 25 mm (1 in.) hole in a clear area on top of the fuel tank or fuel sender plate. (Before drilling hole, apply grease to drill bit to catch metal chips)
  - assemble tank-boss and fuel standpipe to form single unit.
  - install standpipe by angling unit in so that one ear of the bushing hooks under the edge of the hole. - repeat with the other ear in the same fashion.
- 4. Center in hole and clamp in place by tightening nut down until gasket begins to squeeze out slightly.