



Technical Service Bulletin #23

Epic 22, X22 - Heater Option

Revision #1

April 6, 2000

Parts Needed

Heater Kit – MHE0010500	Tie Wraps
-------------------------	-----------

Kit Includes

Heater core	2 Louver vents	Snorkel Vent w/ hose
2 Heater vent hoses	2 Heater hoses	6 Black vent screws
Heater mounting bracket	4 Mounting screws	

Tools Needed

Flat head & Philips screwdriver	Drill	Razor Knife
Pliers	3" hole saw	4" Hole saw
Tape measure	Wire strippers	Wire crimpers

WARNING

Always be sure to wear OSHA approved eye protection when using a drill or saw as these have the potential to throw debris into the air.

Procedure

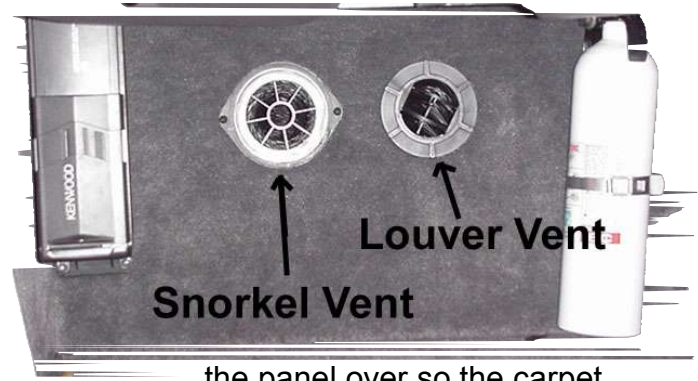
Step 1 – Panel Removal

Remove battery access panel and disconnect battery. Remove battery-retaining bracket from top of battery and remove battery. Next, completely remove motorbox assembly by removing the four thumbscrews holding the box in place. After placing motorbox in a safe location, remove the main battery hatch, the aft seat cushions and base. Finally, remove the two aft hatches between the fuel tank bulkhead and the engine, exposing the shaft log and steering cable bracket.

Step 2 – Driver's Kick Panel

Remove the drivers side kick panel assembly by removing the four screws fastening the kick panel to the support structure. Once the kick panel is removed place it carpet side down on a clean work area.

First, measure and mark a line across the panel 6 ½" from the panel's top edge. Next, measure and mark spots on the previous line at 9" and 15" from the right side of the panel. These marks are the center of the 3" holes you will need to cut out of the panel using a hole saw to accommodate the driver's side louver vent and the telescoping snorkel vent. For best results it is recommended that you drill a center pilot hole from back, flip side is facing up, and use your hole saw as a guide for cutting the carper away from the area to be drilled with a razor knife. Make sure to only remove the 3" area which will be cut away. Using your 3" hole saw cut the two holes. Finally, on the carpet side install the louvered vent in the right-hand hole and the telescoping vent in the left-hand hole. **NOTE: Depending on date of manufacture the driver's kick panel may have factory-predrilled holes.**



the panel over so the carpet side is facing up, and use your hole saw as a guide for cutting the carper away from the area to be drilled with a razor knife. Make sure to only remove the 3" area which will be cut away. Using your 3" hole saw cut the two holes. Finally, on the carpet side install the louvered vent in the right-hand hole and the telescoping vent in the left-hand hole.

Step 3 – Routing the Hoses

First, using a 4" hole saw drill a hole in the outboard side of the air box 3" off of the floor. Next, route the hoses through the 4" rigging hole in the air box that you just drilled to the access hole located on the vertical surface of the liner forward of the engine. In order to grab the hoses it is necessary to feed the hoses through the access holes individually. Finally run the hosing to the back of the engine making sure there is enough slack to reach the heater pipes.

Step 4 – Mounting the Core

The Heater Core must be mounted in the limited space between where the drivers kick panel was mounted and the forward bulkhead. Before mounting the heater core to the liner floor, attach the two heater hoses using the supplied hose clamps. **(NOTE: The orientation of the hose attachments is not critical.)** The Heater Core must be mounted with the three air hose connections facing towards the driver's seat and the hot water hose connections on the port side.



Step 5 – Defroster Location

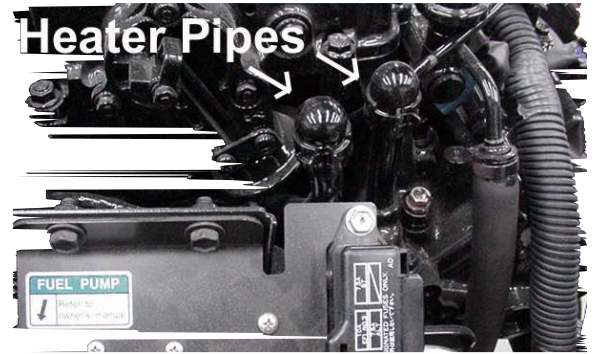
First, remove the radio and unhook all the gauges. Next, carefully remove the dashboard and move it to a clean work area. On the top of the dash panel measure 7 ½" forward from the edge closest to the drive and mark using a grease pen. **NOTE: The side to side location of the defroster vent is done visually. The vent must be centered on the tachometer on 1999 models and centered on the Epic logo on 2000 model boats.**

Using a 3" hole saw drill completely through the dash. Next, fasten the defroster's air hose to the vent assembly and feed the hose through the hole you just created. Screw the louvered defroster vent to the top of the dashboard and reinstall the dash. Next, feed the defroster's air hose down to the heater core. Finally, reinstall the radio and reconnect all the gauges.



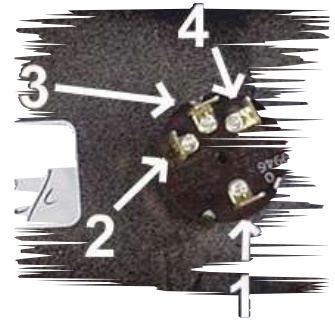
Step 6 – Connect Hoses to Heater Pipes

Locate the heater pipes on the back of the engine. Remove the clamps and rubber caps that seal the pipes. Next, attach the heater hoses to the heater pipes using the clamps removed with the rubber caps. Finally, secure the hoses in a large arc to prevent kinks as they heat and cool.



Step 7 – Wiring Heater

To wire the heater, connect the supplied plug to the heater core. Next, run the black ground wire to the horn and piggyback it to the horn's ground wire. Run the rest of the wires to the Heater switch located on the Accessory box. Connect the Yellow wire to Pin 4, the Red wire to Pin 3, and the Orange wire to Pin 2. The Heater Core's power is supplied by an Orange/Red wire prewired into the boat's electrical system and is located in the wire bundle behind the lanyard kill switch plate. This Orange/red wire should be connected to Pin 1.



Step 8 – Reinstall Driver's Kick Panel

First, connect the telescoping snorkel vent and louver vent to the heater core. Next, reinstall the driver's side kick panel after making sure the snorkel vent's hose is easily extendable.

Step 9 – Clean up

Reinstall all the panels removed in Step 1 in reverse order to how they were removed. After reinstalling all the floor panels return the aft seat base and cushions, followed by reinstalling the motorbox. Finally, vacuum and carefully clean the area around the dashboard where the defroster was installed.