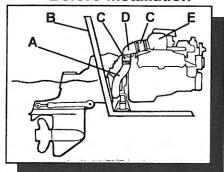
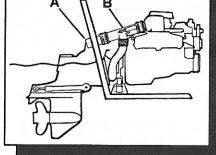
Before we begin lets go over some of the existing components on your boat and how it appears before and after the installation of your new Captain's Call Diverters.

#### Before Installation



- **D.** Exhaust Elbow
- B. Transom
- E. Exhaust Riser
- C. Upper and Lower Joint Hoses and Clamps

After Installation

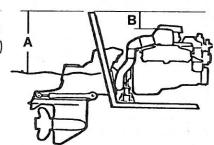


- A. Exhaust Tip
- B. Captain's Call Diverter

Please become familiar with the names and locations of the above listed components as they will be mentioned throughout the remainder of the installation manual.

#### If you Do Not Have Exhaust Spacers Under Your Risers Read Below Otherwise Move on to Next Section

To determine if exhaust spacers are required see diagram. Take measurements (A) and (B) with boat at rest in the water and max. load aboard. Subtract (B) from (A). If (A) minus (B) is less than 13 in. (330mm) select an appropriate size exhaust spacer kit that will correctly position the exhaust riser.



- A. Water line to top of transom
- B. Highest point on exhaust riser to top of transom

### REMOVE EXHAUST ELBOW

First, loosen ALL the clamps around the lower joint hose for the elbow and y-pipe connection and then loosen ONLY the 2 clamps holding the upper joint hose around the elbow. (Do not loosen clamps around riser.) Let the clamps from the lower joint hose slide down onto the y-pipe for later use and also move the clamps from the upper joint hose up against the riser.

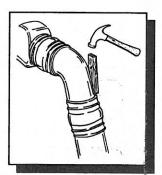
NOTE: At this time, all hoses and clamps should be inspected for deterioration and replaced if needed.

The next step is to move the lower joint hose down onto the y-pipe and then remove the elbow from the riser/elbow joint hose.

To help in breaking the seal between the joint hoses and tubing, wedge a screwdriver under the joint hose and spray in WD-40 or equivalent. You may have to do this in different locations around the joint hose until it will start to break loose. Also, a block of wood and a hammer can be used to help slide the hose down onto the y-pipe. (See illustrations)



Pry apart tubing and hose with a screwdriver and spray in WD-40 to help break seal.



A hammer and block of wood can help to slide the hose down onto the y-pipe

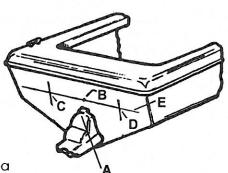
### **IMPORTANT** - LOCATING POSITIONS FOR EXHAUST HOLES

• The following measurements are for a standard straight back system. If you have a non-standard application, the hole locations would have been determined when the system was ordered.

Referring to the illustration at right, find the center point on top of the gimbal (drive) housing (A) and measure up 3 1/4" for a 454 or 2 1/2" for a 350 and mark a point (B).

From this point, measure the distance up to a bumper rail or any other horizontal line on the transom.

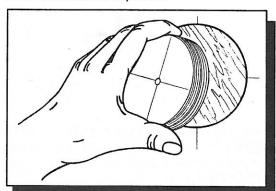
Then, taking that distance, measure down from your chosen horizontal line on the transom (bumper rail, etc.) and mark points about 10" to the right and left of point (B). Using a straight edge, draw a line (E) across the transom through all three points.



Next, from point (B) measure 13 11/16" right and left for a 454 or 12 1/8" for a 350 and mark points (C) and (D) on line (E). (These points are the centers of the exhaust holes.)

### **DRILLING TRANSOM**

After locating the positions for the exhaust holes on the transom, MEASURE AGAIN! When ABSOLUTELY sure of the proper location, check that nothing in the engine compartment will be in the way of the hole saw as it comes through. Also check if any other components will need to be relocated to safely clear the exhaust system.



Use a center punch to mark the center of each hole to be drilled. Drill a pilot hole using a 3/16" dill bit and again check for clearance and correct hole placement.

Before cutting the exhaust hole, cover the area with masking tape to help reduce chipping or scratches.

The hole saw depth may be less than the thickness of the transom. Drill first section until saw bottoms out. Carefully pry out first section which should eventually separate from layers of plywood. Carefully drill last section, especially near the end of the hole.

NOTE: When removing masking tape, slowly pull towards the exhaust hole. Some chipping is normal.

IMPORTANT: Cover all exposed wood in exhaust holes with polyester resin and let dry. Failure to do this could result in deterioration of the transom.

## **INSTALLING DIVERTERS**

After completing the previous steps, it is now time to install your Captain's Call Exhaust Diverters.

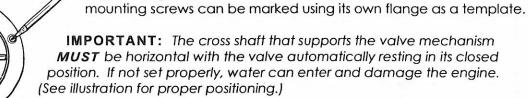
Slide one of the joint hoses and four clamps provided over the outlet of the diverter. (WD-40 will also ease installation.) Push the inlet of the diverter into the joint hose that was left on the riser (making sure there are four clamps around the hose). Next, pull the joint hose and four clamps from the y-pipe, up onto the diverter down tube. Do not tighten any of the clamps yet.

**NOTE:** If installing equalizer diverters, place four clamps around the cross-over hose and push it onto the cross-over tube on the diverter. When installing the other diverter, push on the other end of the hose before the diverter is in position.

**NOTE:** Please find the enclosed wiring packet for all necessary hardware and wiring instructions.

### INSTALLING THRU-HULL EXHAUST TIPS

• If Silencer Tips were ordered, please see enclosed insert for Silencer Tip Installation.



By inserting a tip into an exhaust hole, the locations for the

Cross shaft must be horizontal. View from outlet of tip.

the transom.

After correctly marking the locations for the screw holes, center punch and drill using a 3/16" drill bit. Be carefull not to damage the joint hose on the outlet of the diverter if the bit comes through the transom.

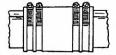
Next, using silicon sealant, place 2 beads around the back side of the tip flange and around all screw holes to ensure a water tight seal.

Failure to do this could result in deterioration of

Secure the exhaust tips to the transom with screws provided. (Excess silicon should be wiped off or removed when dry.)

If your tips have Salisbury flapper gards, position the hinge at the top of the tip and tighten clamp.

Lastly, position the joint hoses and tighten all the clamps. IT IS IMPORTANT THAT TWO CLAMPS ARE AT EACH END OF THE JOINT HOSES. ALSO, WHEN THE CLAMPS ARE TIGHTENED, THEY SHOULD CLAMP THE HOSE FIRMLY AROUND THE TUBING AND NOT ON THE EDGE OR IN A GAP IN BETWEEN THE TUBING. (SEE ILLUSTRATIONS)



CORRECT

The state of the s

INCORRECT

IMPORTANT: All connections should be double checked. Dangerous carbon monoxide and/or water can build up in the engine compartment if the exhaust system leaks. Run the system in water or with a fresh water hook-up before taking the boat out.

Your installation is now complete. If you have any questions or problems with the installation or performance of your diverters, please call! **1-800-486-0999** 

A Division of JB Design, Inc. 80 Helwig St. Berea, OH 44017 1-800-486-0999 - Fax 440-891-1868



# **CAPTAIN'S CALL EXHAUST DIVERTERS**

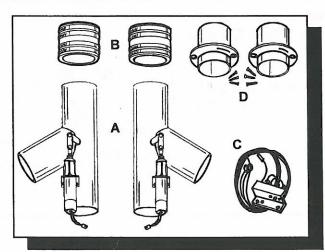


### **Installation Instructions**

Thank you for selecting the Captain's Call Exhaust Diverter. Please take a few minutes to carefully read through the instructions before installing your diverters. If at any point you have a problem or need clarification of these instructions, please call; 1-800-486-0999, Monday - Friday 9 AM to 5 PM EST.

NOTE: It is the responsibility of the installing dealer or owner to properly install the system. Improper installation could result in dangerous carbon monoxide and/or water build up in the engine compartment.

Please inspect the parts you have received with those listed below. Report any damaged or missing parts immediately.



- A. 2 Captain's Call Diverters (style may vary for different applications)
- B. 2 Joint hoses with 4 clamps each
- C. 1 Wiring harness with instructions
- **D.** 2 Exhaust tips optional (style may vary or optional Silencer Tips with separate installation manual)
- E. 2 Salisbury Flapper Gards (not shown; included with 90° exit tips only)
- F. 1 Cross-Over Hose and 4 clamps (not shown; included with Equalizer Diverters Only 19" long for a 350, 22" long for a 454

### **NECESSARY TOOLS**

- standard screwdriver
- #3 phillips screwdriver
- 1/2" electric drill
- polyester resin
- center punch
- masking tape
- Optional To aid in the removal of old system
  - WD-40
  - hammer
  - block of wood

- ruler at least 14" long
- new or sharp 4 1/8" hole saw
- silicon sealant
- 3/16" drill bit
- pencil

If silencer tips were ordered, see Silencer Tip installation insert for additional items.