INSTALLATION 12JC AND 12JG PACKAGE "H"

1. Locate the centerline on the outside of transom and boat bottom (Figure 1).
2. With a level square and protractor, measure the transom angle. This will decide which transom housing (0° - 9°, 0203-B-06492 or 9° to 18°, 0203-B-06491 or 0203-B-07517) is to be used.

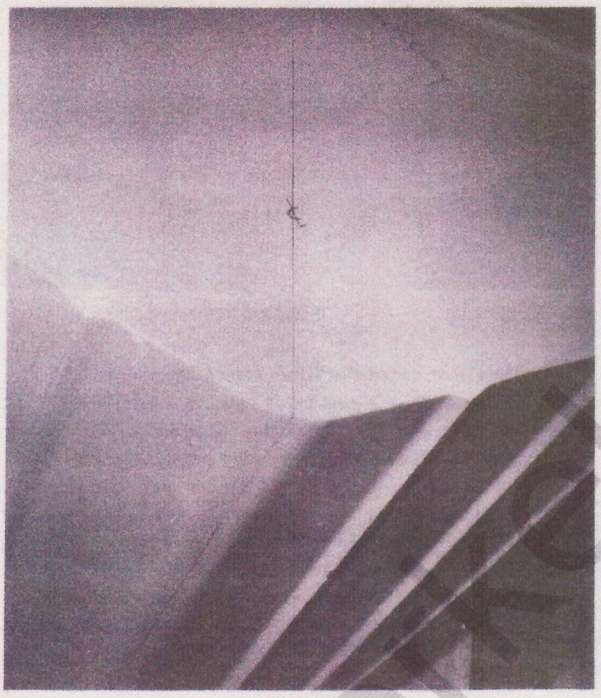

Figure 1

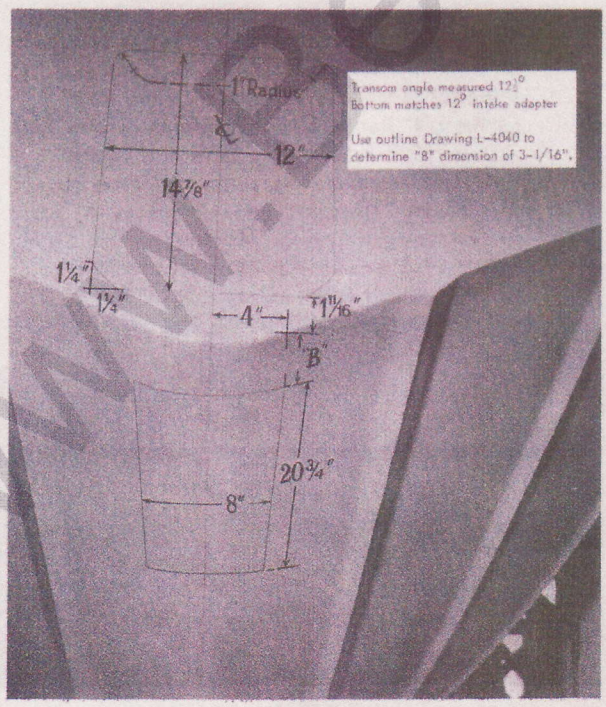

Figure 2

3 Also determine which intake adapter, 12° "V" deadrise or 20° "V" deadrise is to be used.

4 From (2) and (3) above select the proper outline dimension drawing (L-4137, L-4040, L-4155 or L-4157) and mark all the cut-outs on the transom and boat bottom (Figure 2).

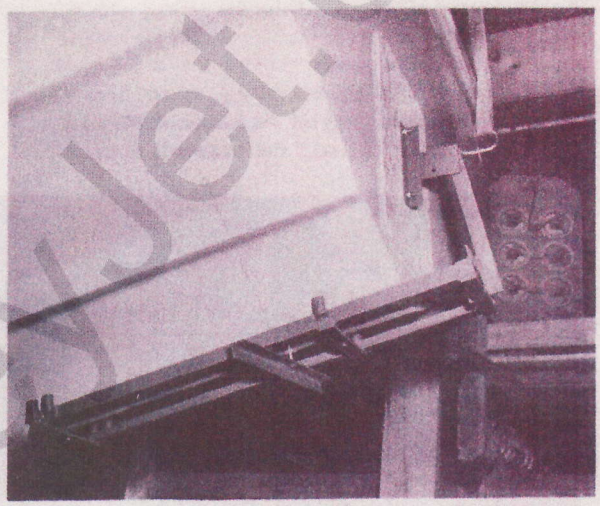

Figure 3

5 Step number 4 may be omitted by using marking template #0203-H-02520 (Figure 3).

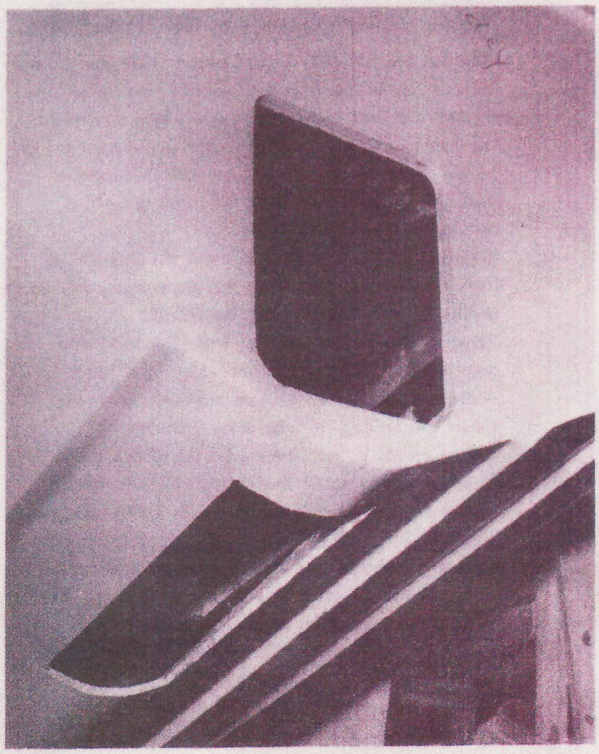

Figure 4

6 Cut the openings with a saber saw. The opening thru the boat bottom may be cut from the inside by first drilling four small holes at the corners of the marked cut-out and re-marking it on the inside of the boat (Figure 4).

7 Loosely insert the intake adapter into the boat with the 4-3/8" leveling bolts threaded into the corners (Figure 5). Raise the casting with the leveling screws so that it matches the outside boat bottom as near as possible with the least amount of filling and fairing. Note: It may be necessary to bevel the bottom inside edge of transom opening if the transom is thick.

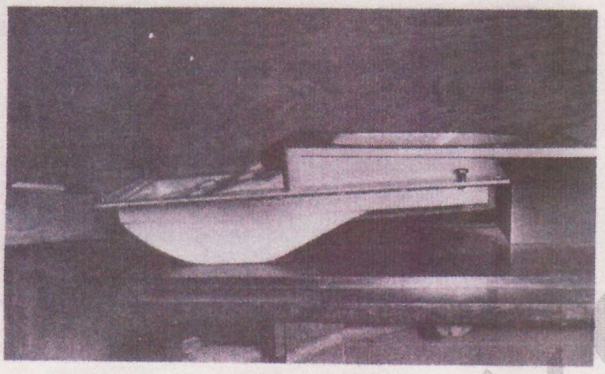

Figure 5

8 Insert the Jet-Drive, less the transom housing thru the transom cut-out onto the suction flange.

9 Without the bowl O-ring in place slide the transom housing up to the transom. Check that when installed the O-ring will be completely covered by the transom housing. If the Jet-Drive appears to be off to one side, raise the suction flange on that side, again checking the fairing on the outside of boat bottom.

10 Remove the transom housing and the Jet-Drive from the boat and observe the area under the suction intake adapter which is to be filled.

11 Remove the intake adapter from the boat and thoroughly sand the bottom flange and boat bottom where filler will be applied. In many cases the filling will be done with resin, either epoxy or polyester, filled with a glass fiber or asbestos. If the epoxy filler is used a one shot method may be used. But when the polyester filler is used it is recommended to wax the bottom flange of the intake adapter and pull it out again right after the filler has jelled. This is necessary because of the polyester's high shrink characteristic. Then a marine bedding sealant, such as Scotch-Seal #5200, is used between the filled surface and the intake adapter when the unit is bolted in place.

Figure 6

In either event the filler should be mixed very thick so that it may be stacked in a pile with no resin run out. Stack the filler on both sides and rear of opening high enough so that some will be squeezed out all around. The front may be packed in after the thru-hull is in place. If the boat bottom is thin and has sagged it will be necessary to install several of the 1/4" fasteners at this time to true up the outside boat bottom. After the resin filler has jelled drill all of the 1/4" holes for the fasteners from the inside of the boat thru the pilot holes in the top flange of the intake adapter (Figure 6). The four leveling screws may be used to jackout the intake adapter so that the sealant may be applied for final installation. Counter-sink the outside boat bottom with a 1/2 inch counter-sink for the 1/4" flat head machine screws. Note: Fixture #0203-B-06506 may be used as a mold instead of the actual intake adapter (Figure 7).

12 Bolt the Jet-Drive, with gasket in place, to suction thru-hull casting. Make certain all bolts are tightened now because the rear bolts will be difficult to get at later (Figure 8).

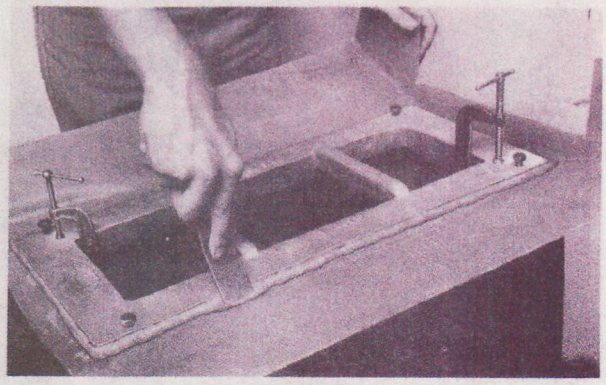

Figure 7

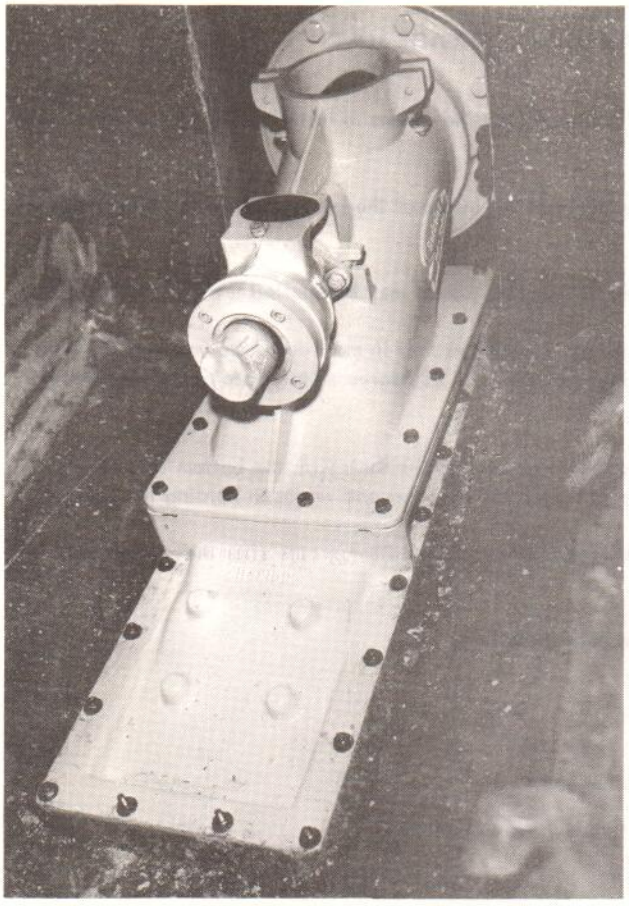

Figure 8

13. Remove, by scraping, any excessive build-up of paint from the bowl O-ring groove. Place the large O-ring into groove. Sand the bore of the transom housing with fine sandpaper, paying particular attention to the chamfer where the O-ring starts into the bore. Glue the neoprene gasket to the transom housing with an adhesive, such as Permatex "Hi-tac 99MA." Note that the corner radius of the gasket at the bottom is larger than the top. Grease the O-ring and the bore of the transom housing with a light grease or silicone. Apply sealer, such as General Electric "RTV Silicone Sealer," to the transom housing gasket surface that contacts boat transom. Place the transom housing over the Jet-Drive bowl, and start over the O-ring. Push the housing evenly onto the O-ring until housing contacts boat transom, making certain O-ring has not been forced out of groove. Only if necessary, using a soft wood block and hammer, tap the transom housing at area around bowl (Figure 9). Do not tap flange itself. This will cause cracking or breaking of housing. Center the transom housing on boat, drill the eight 1/4" holes at the top and sides. The transom housings, cast of aluminum (0203-B-06491 and 0203-B-06492), are secured to the boat transom with flat head machine screws, flatwashers and nuts. The transom housing, molded of Lexan (0203-B-07517), is secured to the boat transom with round head machine screws, nuts and two flatwashers per machine screw, one on the inside and one outside. Drill two 3/16" holes in the bottom of the transom housing. The bottom of the transom housings, cast of aluminum, are secured with flathead No. 12, self-tapping, screws. The transom housing, molded of Lexan, is secured with Pan Head, No. 12, self-tapping, screws and flatwashers. Do not over tighten the fasteners, which will cause warping or bending and eventually breaking of transom housing. Wipe off excessive sealer.

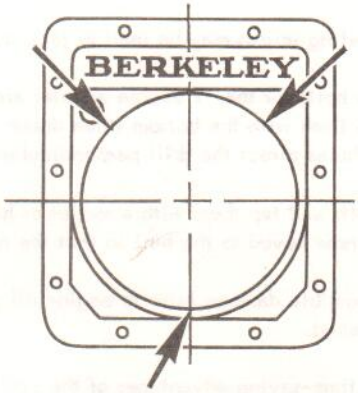

Figure 9

14. Screw the steering tube onto the steerer cable and tighten (Note: For most steering systems, an adapter is furnished to fit). Remove the first large hex nut from the steering tube and insert tube with push-pull cable thru the hole in the transom housing. Replace the large hex nut outside on the transom housing. Center the short piece of rubber bushing in the hole and tighten the hex nut until the rubber has expanded on both sides of the hole. Tightening with a pair of pliers is sufficient. Install ball joint or eye end on tiller arm and attach steering push-pull cable to tiller. If the steering wheel is not centered with the jet nozzle, the two large hex nuts and rubber bushing may be moved one way or the other on the long running threads of the steering tube (Figure 10).

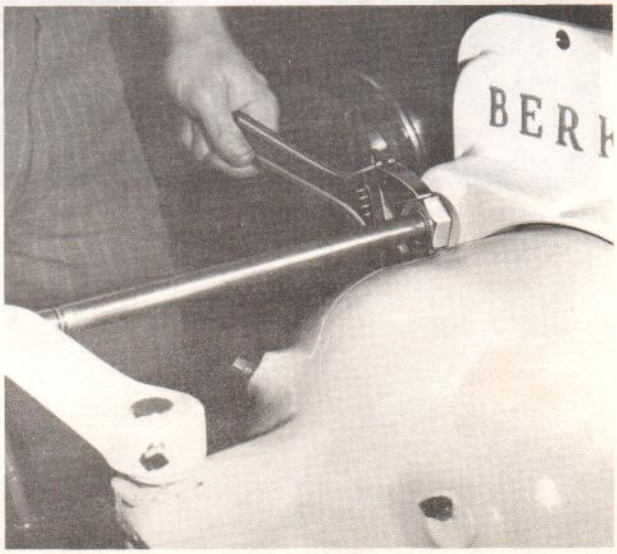

Figure 10