

## service bulletin

TO: SERVICE MANAGER ☐ PARTS MANAGER ☐

TECHNICIANS

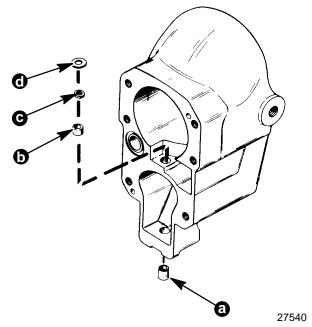
No. 90-3

## Alpha One Bell Housing Shift Shaft Bushing Kit 23-79373A1

When installing bushing kit 23-79373A1 in a M/C I thru an Alpha One the following steps must be followed:

- 1. Remove bell housing shift lever apply heat to the stainless steel screw before loosening.
- 2. Remove both old bushings and oil seal.
- 3. Check housing for excessive corrosion and or pitting (replace bell housing assembly if necessary).
- 4. Apply Loctite Type "A" to O.D. of lower bushing and install in housing with tapered side up until flush with bottom of bore in housing.
- 5. Apply Loctite Type "A" to O.D. of upper bushing and install from top side of housing until flush with bottom of bore in housing.
- Install oil seal above top bushing with lips facing down towards bushing. Use Loctite type "A" on O.D. of oil seal.

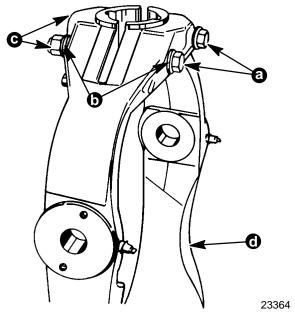
 Apply Quicksilver 2-4-C Marine Lubricant on lips of oil seal and install the shift shaft and nylon washer then install the lever and screw (use Loctite type "A" on screw threads) tighten the screw securely.



- a Lower Bushing
- b Upper Bushing
- c Seal
- d Plastic Washer

## Bravo "U" Bolt and Alpha One Gimbal Ring Screw Torque Checking Process

It is recommended to recheck the torque on the gimbal ring screws on the Alpha or "U" bolt nuts on the Bravo after the first 20 hours of operation and again at about 100 hours of operation. The torque valve must be done by first loosening the screw and nut on the Alpha one or the "U" bolt nuts on the Bravo then retorquing to 40 lb. ft. (54 N.m), to eliminate the possibility of any wear.



- a Gimbal Ring Screws (2)
- b Washers (4)
- c Nuts (2)
- d Gimbal Ring

## MCM 5.0LX Gear Ratio Used on 1990 Sea Ray Boats

Some 1990 Sea Ray boats equipped with the MCM 5.0LX Alpha One will use 1.65:1 as a standard gear ratio instead of the 1.50:1 ratio.