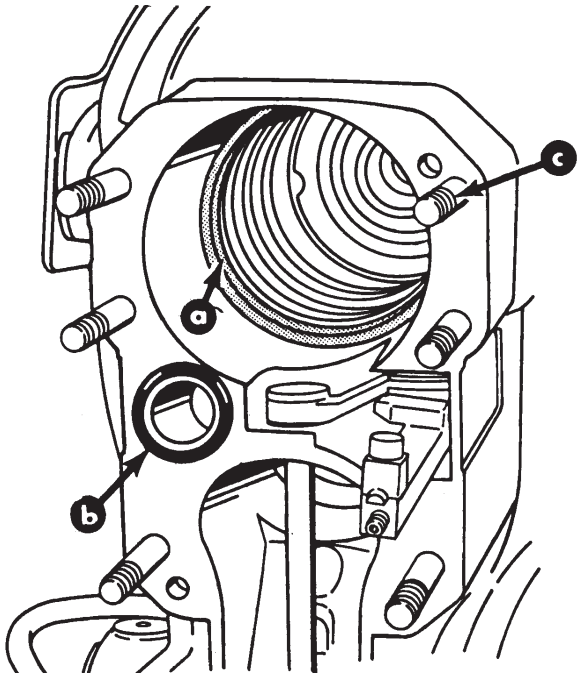
Sterndrive Unit Installation

1. Install and align engine. (Refer to appropriate Engine Service Manual).

IMPORTANT: Rubber gasket must be properly positioned in bell housing bore before installing drive unit, or water may leak into boat.

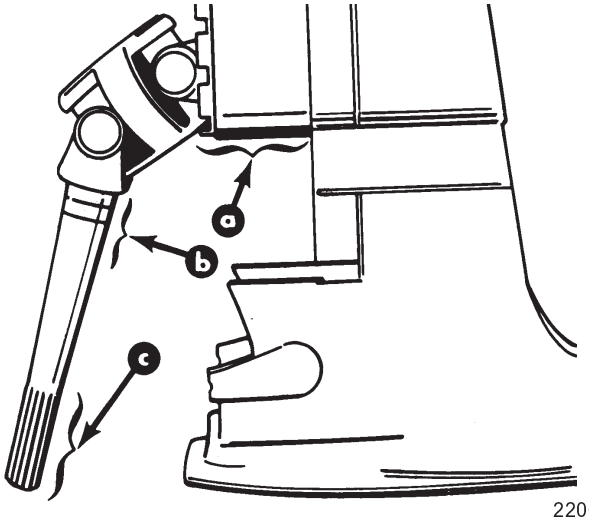
2. Ensure that rubber gasket and water passage O-ring are properly positioned in bell housing.
3. Coat entire stud and threads with 2-4-C Marine Lubricant.



50636

a - Rubber Gasket
b - Water Passage O-ring
c - Studs

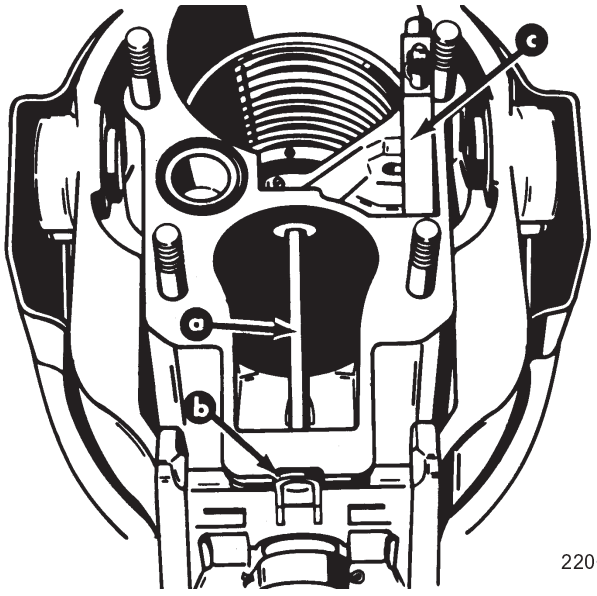
4. Coat drive unit pilot and drive shaft O-rings with 2-4-C Marine Lubricant. Coat the driveshaft splines with Engine Coupler Spline Grease.



22061

a - Drive Shaft Pilot
b - Drive Shaft O-rings
c - Drive Shaft Splines

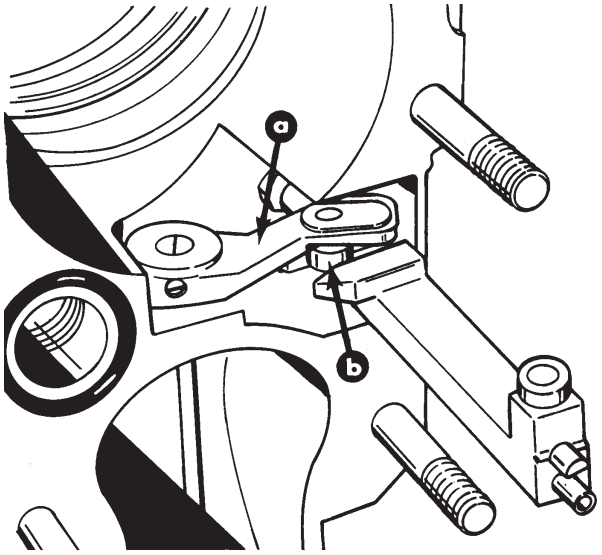
5. Position bell housing shift shaft coupler so that slot in coupler is positioned straight fore and aft. Do this by placing remote control shift lever in: **Forward gear position for RH drive or Reverse gear position for LH drive unit.**



22061

a - Shift Shaft
b - Shift Shaft Coupler
c - Shift Slide

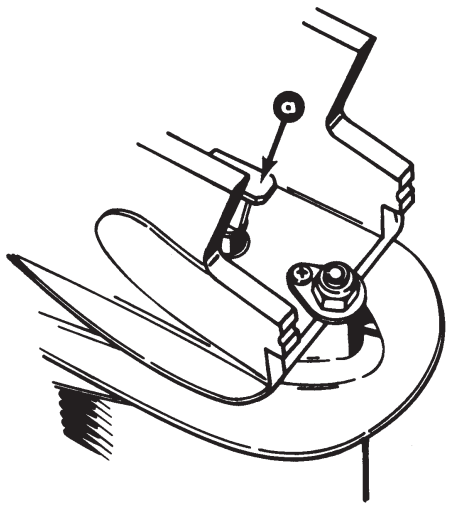
IMPORTANT: Shift slide assembly is free to rotate on core wire, therefore, be careful that shift slide remains in upright position and is properly engaged with shift shaft lever while installing drive unit.



50629

a - Shift Shaft Lever
b - Roller

6. Position drive unit shift shaft coupler so that is straight forward by turning coupler clockwise while simultaneously turning propeller shaft counterclockwise.



22061

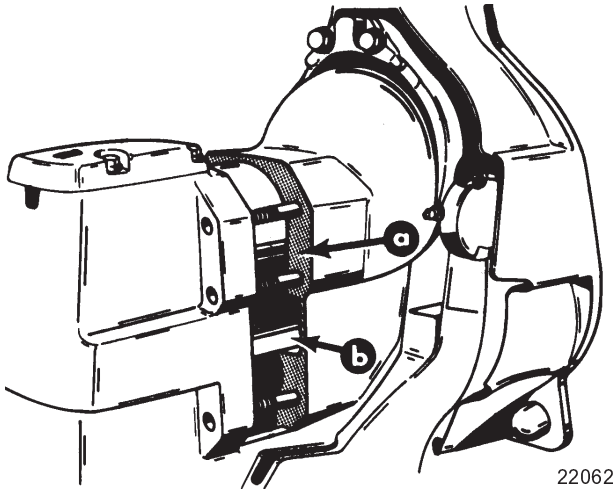
a - Drive Unit Shift Shaft Coupler

IMPORTANT: Be sure to install RH or LH drive unit on the appropriate transom assembly when making dual engine installations. The LH rotation drive unit can be identified by the decal on the back side of the upper drive shaft housing, which states:
"Alpha One-Counter Rotation"

7. Place gasket on bell housing.
8. Install sterndrive unit as follows:
   a. Position trim cylinder straight back (over top of acceleration plate). Be careful not to scratch acceleration plate or trim cylinders.
   b. Guide U-joint shaft through gimbal bearing and into engine coupler while simultaneously guiding shift slide into drive shaft housing. Make sure shift slide remains upright and engaged with bell housing shift shaft lever.

IMPORTANT: If drive unit will not slide all the way into bell housing, check shift shaft coupler to ensure they are positioned properly. Do not force drive unit into position.

   c. If necessary, rotate propeller shaft **counterclockwise** slightly to help align U-joint shaft splines with engine coupler splines, then, slide drive unit all-the-way into bell housing.

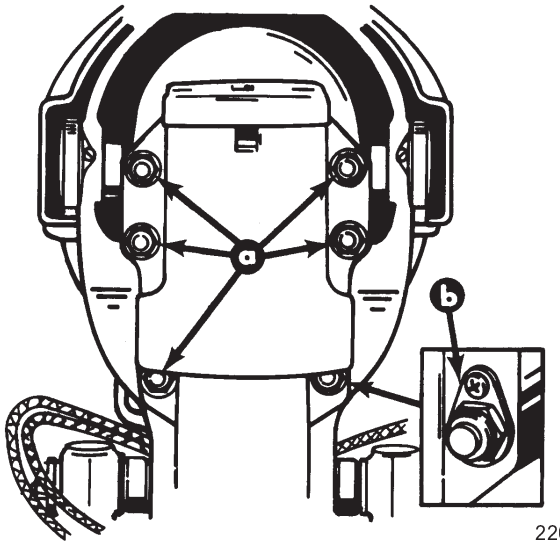


22062

a - Gasket
b - Shift Slide

   d. Return remote control shift lever to the neutral position.

9. Fasten drive unit to bell housing with hardware shown. Torque evenly, starting from center, to 50 lb. ft. (68 N·m).

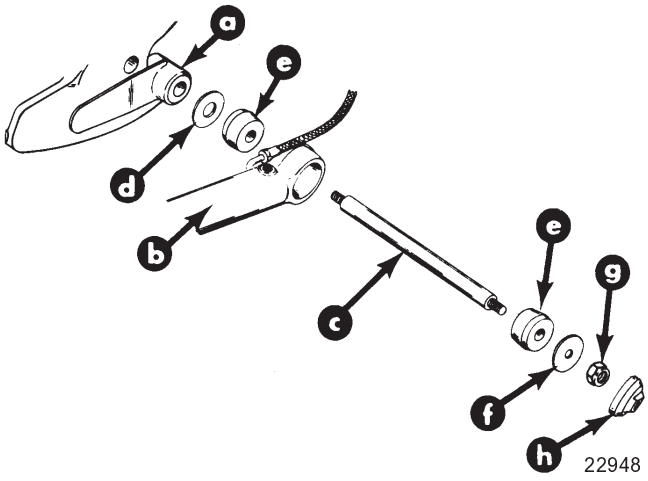


22062

a - Locknuts And Flat Washers
b - Locknut And Ground Plate (Do NOT Use Flat Washer)

IMPORTANT: To aid in installing rubber bushings, use a water and soap solution.

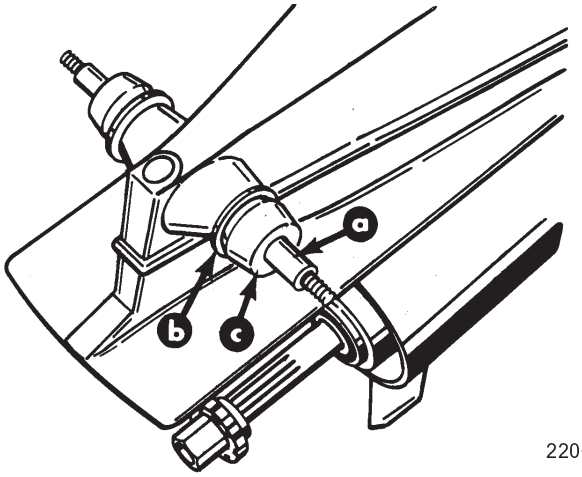
10. If removed, install trim cylinders on gimbal ring. Tighten until locknuts bottom on anchor pin shoulder.



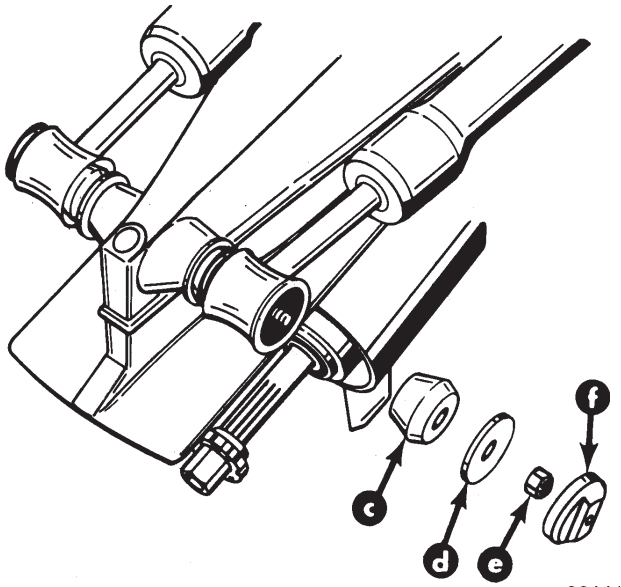
22948

a - Gimbal Ring
b - Trim Cylinders (Port And Starboard)
c - Anchor Pin
d - Flat Washers (2)-Large I.D.
e - Rubber Bushings (4)
f - Flat Washers (2)-Small I.D.
g - Locknuts (2)
h - Plastic Caps (2)

11. Install trim cylinders (Aft End) on drive shaft housing. Tighten locknuts until they bottom on anchor pin shoulder.



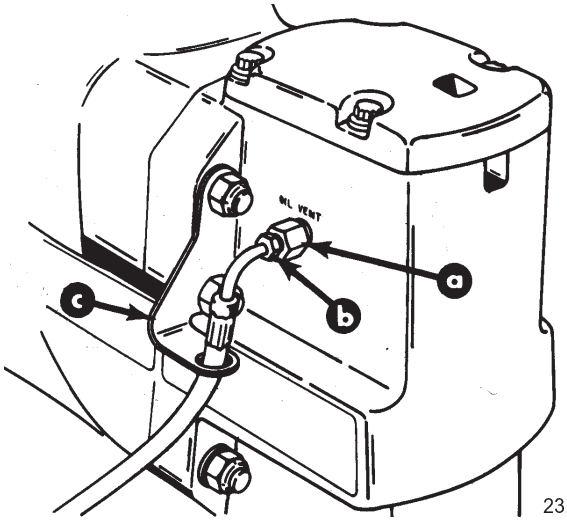
22060



22441

a - Anchor Pin
b - Washers (2)-Large I.D.
c - Rubber Bushings (4)
d - Washers (2)-Small I.D.
e - Locknuts (2)
f - Plastic Caps (2)

12. If equipped, reinstall remote oil reservoir hose. (Refer to Section 1B for filling instructions).

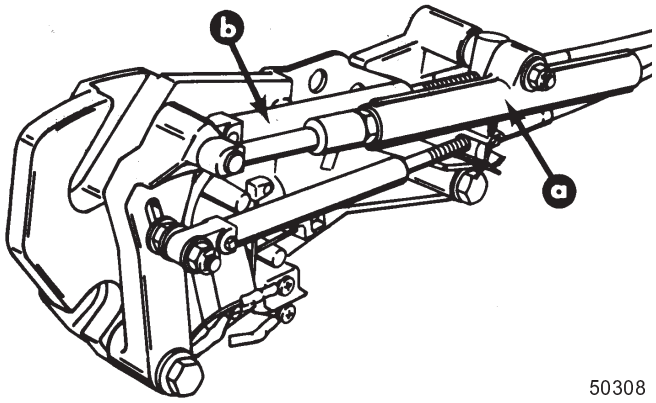


23253

a - Adaptor Fitting
b - Hose Fitting
c - Bracket

Shift Cable Adjustment

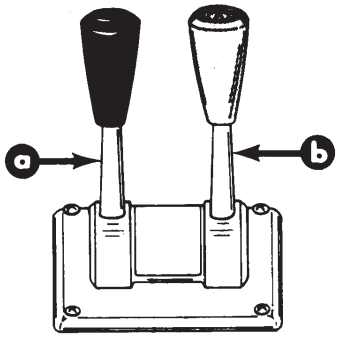
NOTE: *Some models may be equipped with a shift assist assembly. The only difference with these models is that the remote control shift cable attaching hardware is slightly longer. Shift cable adjustment is the same as all other versions.*



50308

a - Shift Assist Assembly
b - Remote Control Shift Cable

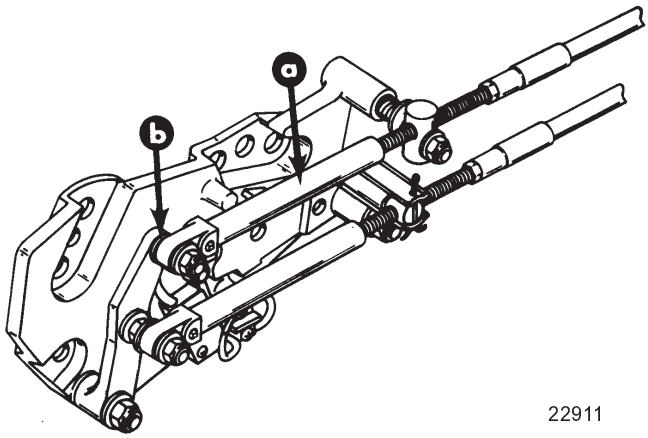
IMPORTANT: If boat is equipped with A REMOTE CONTROL THAT HAS SEPARATE SHIFT AND THROTTLE LEVERS, this shift assist assembly should NOT be used. The use of the shift assist assembly with this type of remote control can cause the shift lever to move out of gear unexpectedly.



71339

a - Shift Lever
b - Throttle Lever

NOTE: *A difference exists between earlier and later model shift plates, in that the later models have a pin and cotter pin to secure the remote control shift cable to the shift lever, whereas the earlier models used a stud with washers and locknut. However, adjustment procedures are the same.*



22911

Earlier Models (With Metal Shift Lever)

a - Remote Control Shift Cable
b - Stud, Washers and Locknut