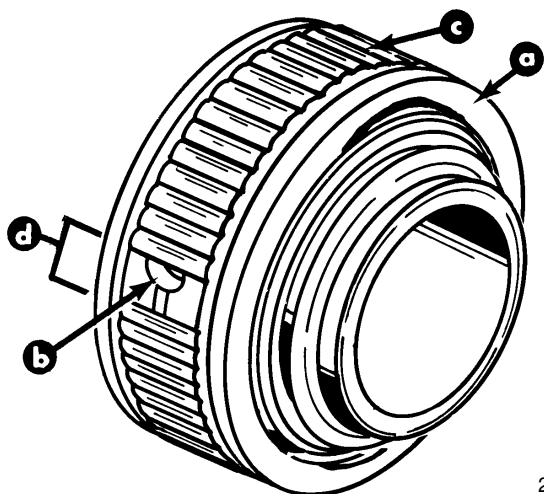


2. Install and position new tolerance ring as shown. Align opening in tolerance ring with grease hole in carrier.

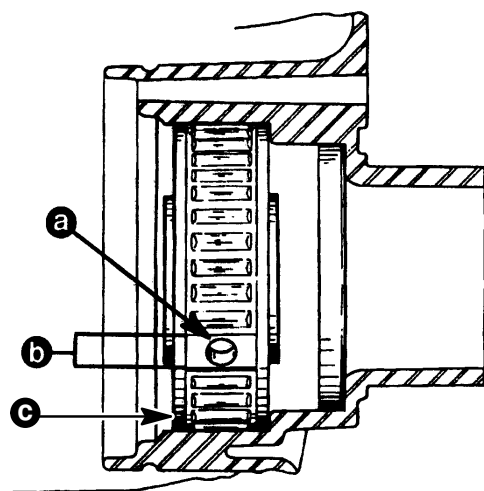


22159

- a - Carrier
- b - Carrier Grease Hole
- c - Tolerance Ring
- d - Opening In Tolerance Ring

**IMPORTANT:** Ensure that notched edge of bearing carrier faces inward in bore when installing gimbal bearing.

3. Align gimbal bearing carrier grease hole and tolerance ring opening with grease cavity hole in gimbal housing.



73668

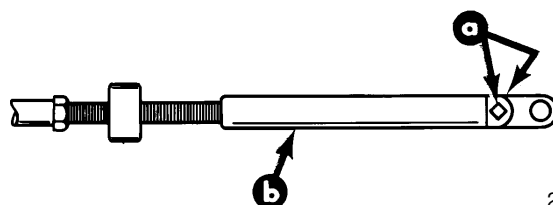
- a - Gimbal Bearing Carrier Grease Hole
- b - Tolerance Ring Opening
- c - Bearing Bore

**NOTE:** When fully installed, there must be at least 1/8 in. (3 mm) of bearing bore exposed behind bearing retainer.

## Shift Cable

### REMOVAL

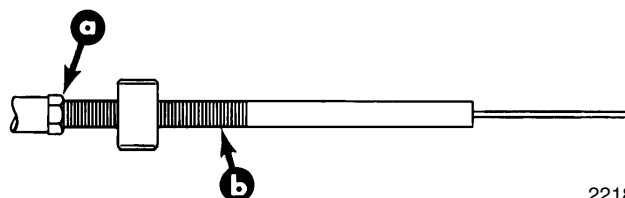
1. Remove sterndrive unit (Refer to Section 2A).
2. Disconnect shift cable from shift plate and remove end guide.



22183

- a - Anchor Screws (2)
- b - End Guide

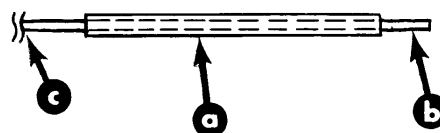
3. Remove threaded tube.



22183

- a - Jam Nut
- b - Threaded Tube

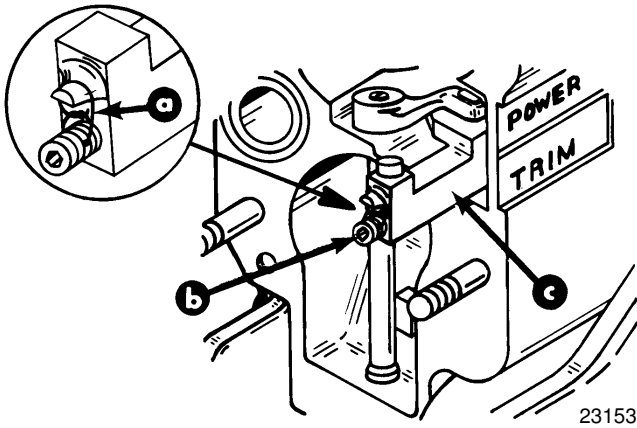
4. Cut support tube from core wire (If core wire is equipped with support tube).



22183

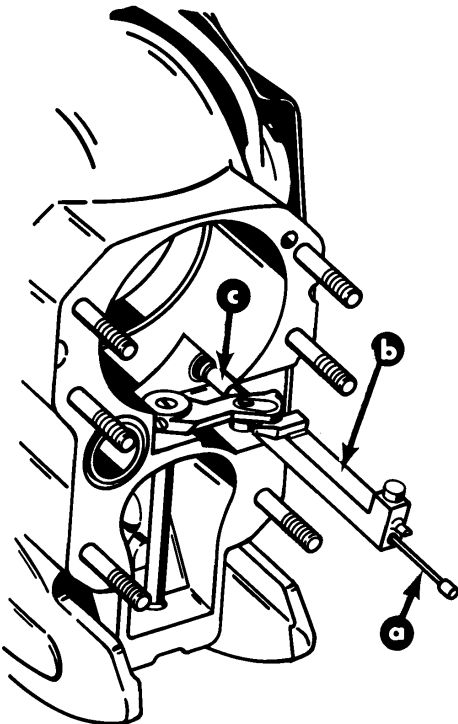
- a - Support Tube
- b - Core Wire
- c - Cut Here

5. Remove set screw from shift slide.



- a - Safety Wire - Cut  
b - Set Screw  
c - Shift Slide

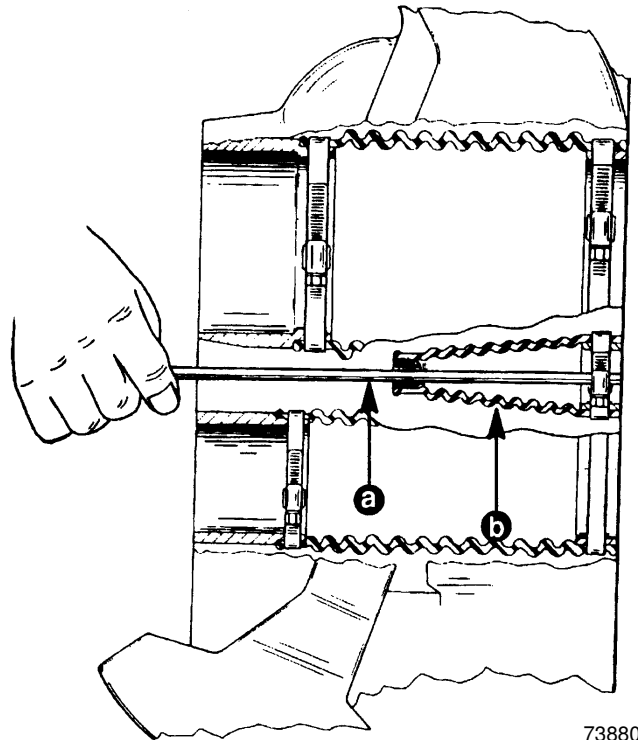
6. Remove inner core wire and shift slide.



- a - Inner Core Wire  
b - Shift Slide  
c - Shift Cable

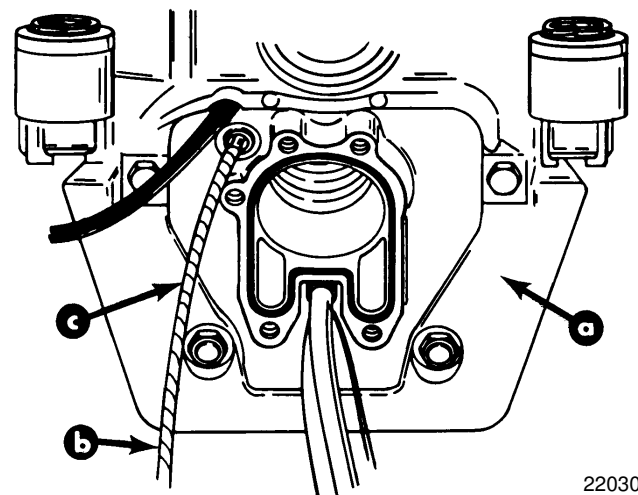
7. Remove and discard shift cable bellows crimp clamp.

**NOTE:** On units with old style shift cable, pull bellows away from bell housing after crimp clamp is removed.



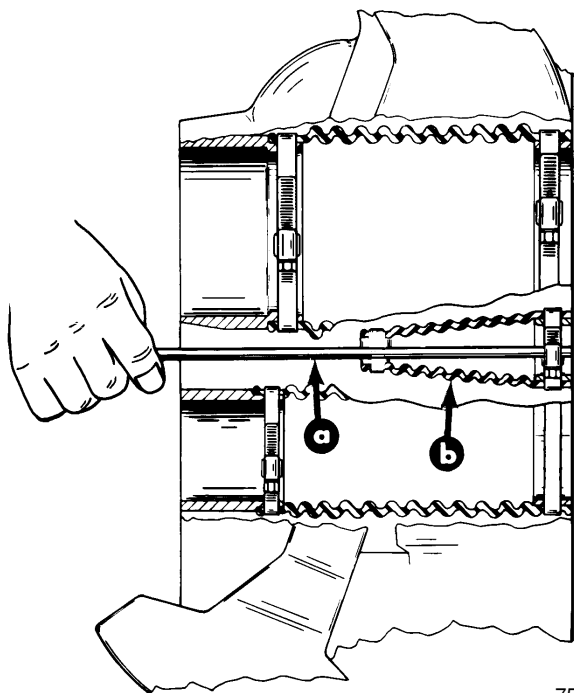
- a - Shift Cable  
b - Shift Cable Bellows

8. Remove shift cable wrapping from shift cable on inner transom.



- a - Inner Transom  
b - Shift Cable  
c - Wrapping

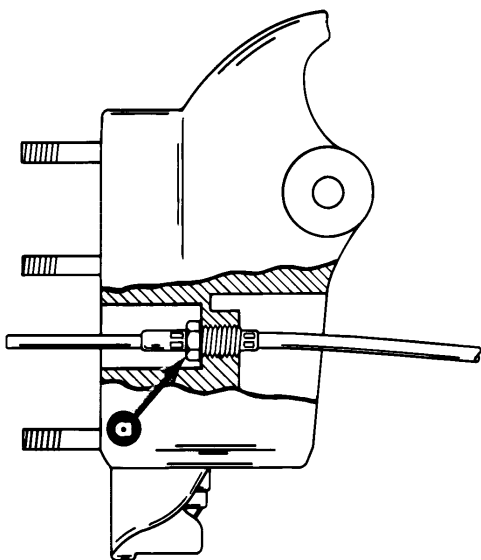
9. Pull shift cable through shift cable bellows.



75793

- a - Shift Cable  
b - Shift Cable Bellows

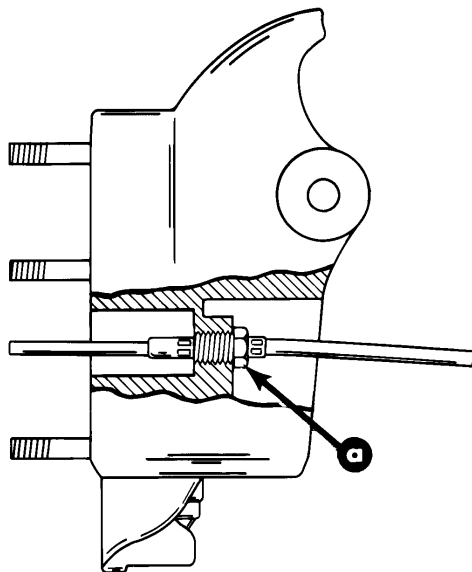
10. Using shift cable removal and installation tool (91-12037), completely loosen shift cable retaining nut.



23156

### New Style Shift Cable

- a - Shift Cable Retaining Nut



23169

### Old Style Shift Cable

- a - Shift Cable Retaining Nut

11. Pull shift cable from bell housing.

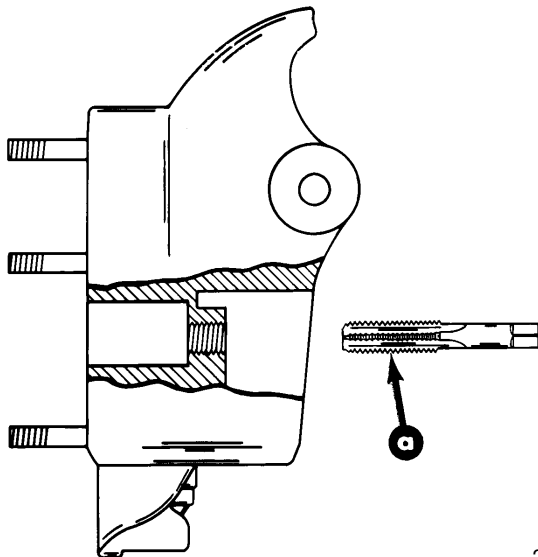
### INSPECTION

1. Inspect shift cable for cuts, kinks and chafing.
2. Inspect core wire for kinks and unraveling.
3. Inspect shift cable retainer nut threads for damage.
4. Inspect for signs of retainer nut separating from outer casing.

## INSTALLATION

**IMPORTANT:** This shift cable (which attaches to bell housing from aft end) can be used on models with old style shift cable (attached on front side of bell housing). To do this, the threaded hole in bell housing must be tapped all the way through, using a 1/4-18 NPSF tap. This special **STRAIGHT THREAD TAP** may be obtained through Quicksilver by ordering 91-95639. The following important information must be observed when performing tapping operation.

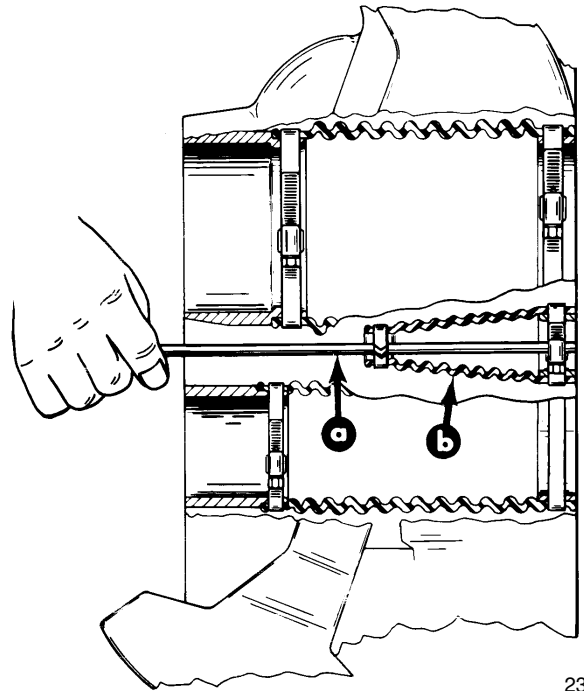
- Tapping must be done from the front (bellows side) end of bell housing to prevent cross-threading.
- Never use a **TAPERED THREAD TAP** as improper positioning of shift cable may result, or water may leak into bell housing.



a - 1/4-18 NPSF Tap

23156

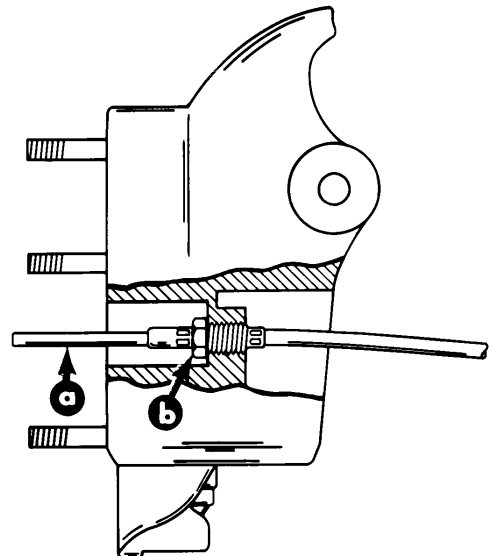
1. Insert shift cable through bell housing and shift cable bellows.



23155

- a - Shift Cable  
b - Shift Cable Bellows

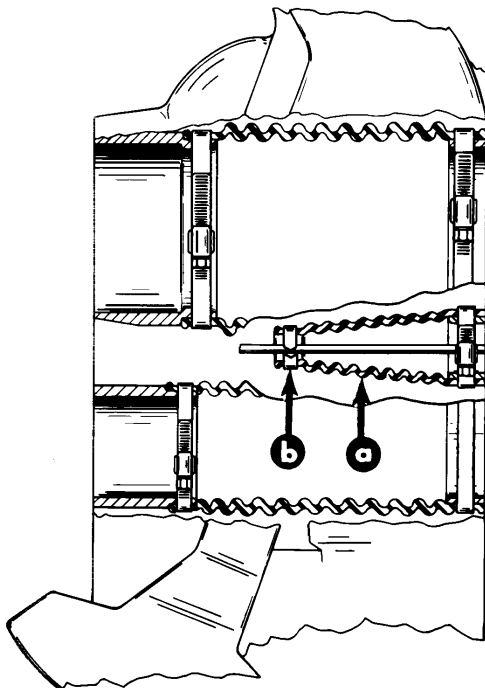
2. Apply Perfect Seal to shift cable retainer nut threads and secure shift cable to bell housing, using shift cable removal and installation tool (91-12037). No more than 2 threads on retainer nut should be exposed.



23156

- a - Shift Cable  
b - Retainer Nut

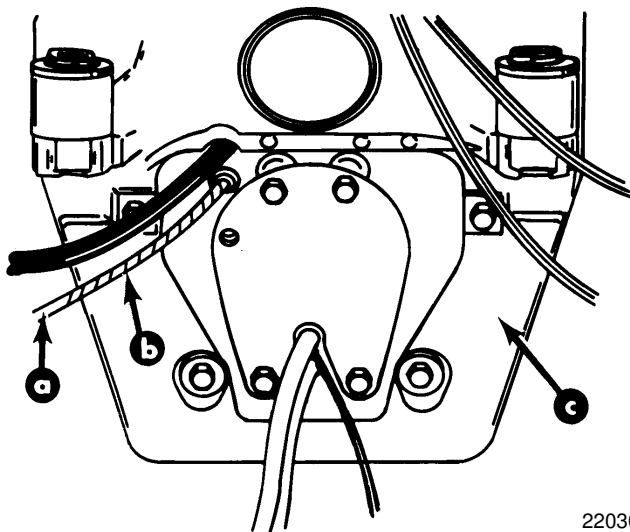
3. Install and compress shift cable bellows crimp clamp. Be sure that clamp is crimped evenly so that a good seal is maintained between bellows and shift cable. DO NOT allow bellows to flatten.



23154

- a - Shift Cable Bellows
- b - Crimp Clamp

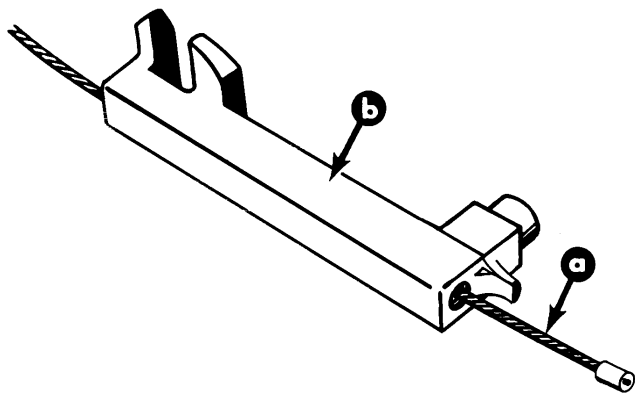
4. Install shift cable wrapping.



22030

- a - Shift Cable
- b - Shift Cable Wrapping
- c - Inner Transom Plate

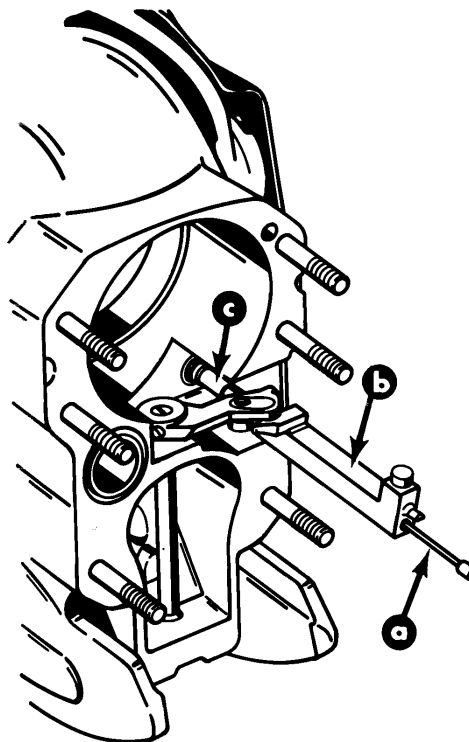
5. Install core wire through shift slide.



23262

- a - Core Wire
- b - Shift Slide

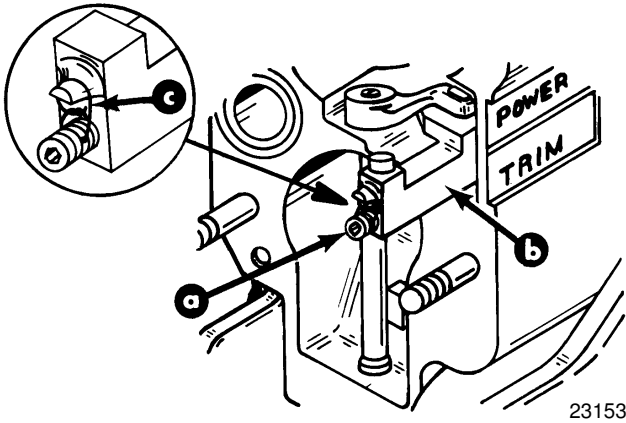
6. Install core wire through shift cable.



23262

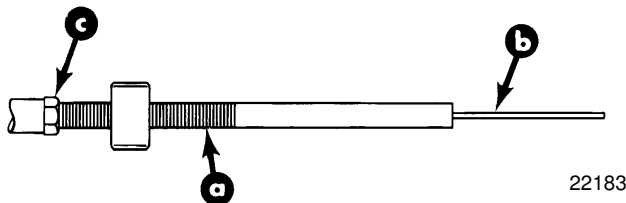
- a - Core Wire
- b - Shift Slide
- c - Shift Cable

7. Install set screw into shift slide. Tighten until contact with core wire. Then back off 1/8 turn max. Safety wire set screw to shift slide using a "figure 8" pattern. Twist until tight and cut off excess length of safety wire.



- a - Set Screw  
b - Shift Slide  
c - Safety Wire

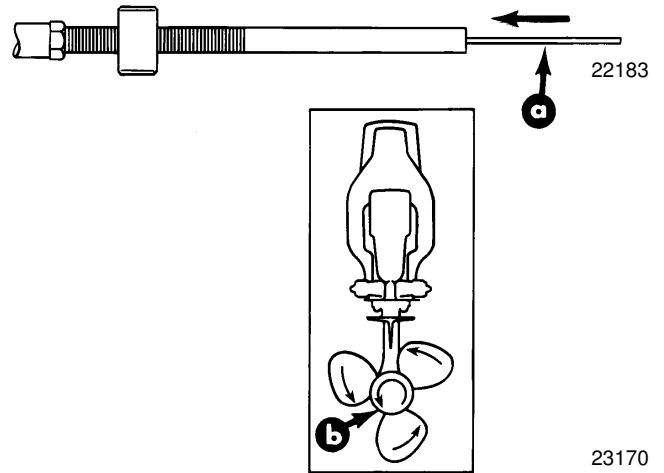
8. Install thread tube on shift cable and tighten until it just bottoms. Secure jam nut against shift cable end.



- a - Threaded Tube  
b - Core Wire  
c - Jam Nut

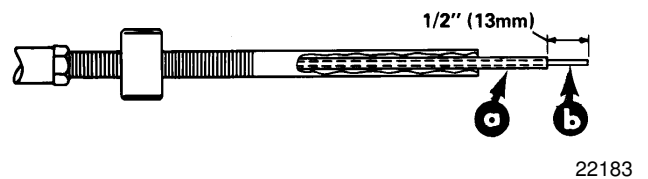
9. Install sterndrive unit (Refer to Section 2A).

10. Shift drive unit into forward gear by pushing in on core wire with a pair of pliers, while rotating propeller shaft counterclockwise. Ensure clutch is fully engaged.



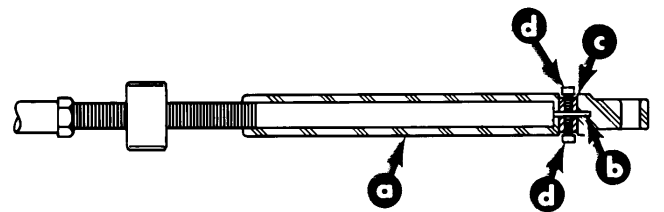
- a - Core Wire  
b - Propeller Shaft

11. (If using older style core wire equipped with support tube) Position support tube so that 1/2 in. (13 mm) of core wire extends from edge of support tube. Crimp end of support tube.



- a - Support Tube  
b - Core Wire

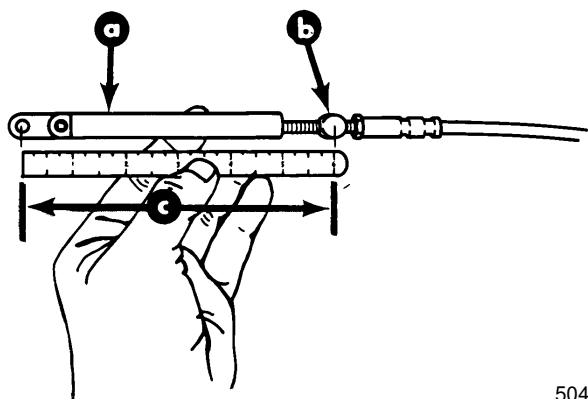
12. Install shift cable end guide over core wire and insert core wire through cable anchor. Tighten screws securely.



- a - Shift Cable End Guide  
b - Core Wire  
c - Cable Anchor  
d - Screws (2)

13. Push in on drive unit shift cable while simultaneously turning propeller shaft counterclockwise until shaft stops, to ensure drive unit is completely in forward gear. Maintain pressure on propeller shaft with a suitable device (elastic strap).

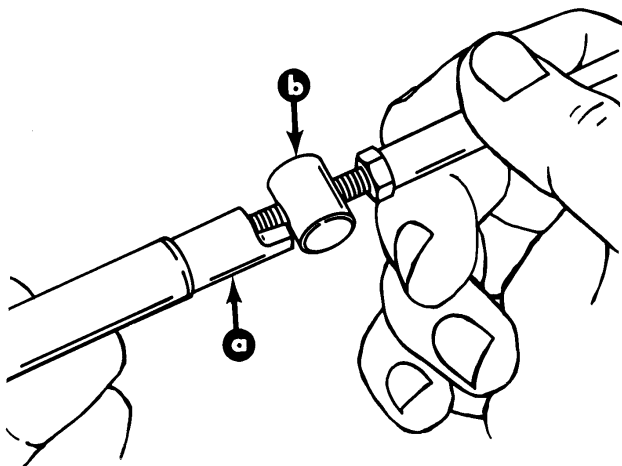
14. Measure distance between center of hole in shift cable end guide and center of brass barrel. Measurement should be 6 in. (153 mm).



50484

- a - End Guide
- b - Brass Barrel
- c - 6 in. (153 mm)

15. If old shift cable was equipped with an end guide stop clip, remove clip from old shift cable. Once brass barrel adjustment is correct, install end guide stop clip on threaded tube. Position as shown, with tang touching brass barrel.



50484

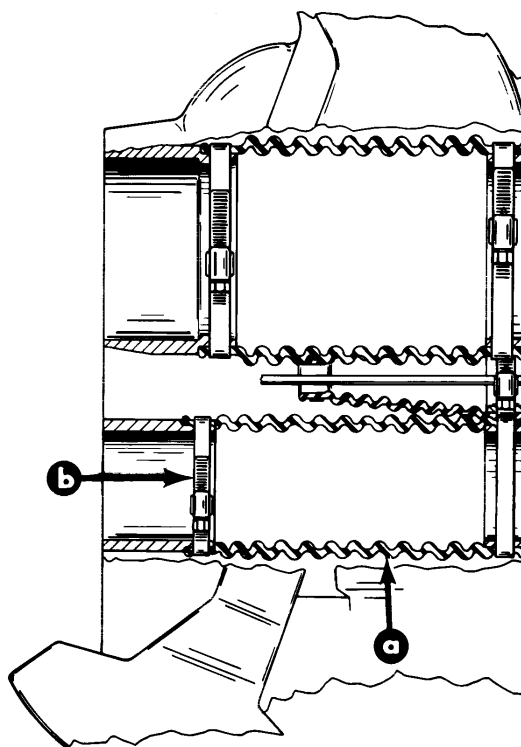
- a - Stop Clip
- b - Brass Barrel

16. Adjust shift cable. (Refer to Section 2A).

## Exhaust Bellows

### REMOVAL

1. Remove sterndrive unit (Refer to Section 2A).
2. Loosen hose clamps and remove exhaust bellows.



23158

- a - Exhaust Bellows
- b - Hose Clamp

### CLEANING AND INSPECTION

1. Inspect exhaust bellows for internal charring, cracks, cuts or hardening.
2. Clean old adhesive from bellows mounting flange on gimbal housing and on bell housing using lacquer thinner.
3. Clean old adhesive from mounting surfaces of exhaust bellows if reusing old bellows.
4. Roughen exhaust bellows mating surfaces with sandpaper and wipe clean with lacquer thinner.