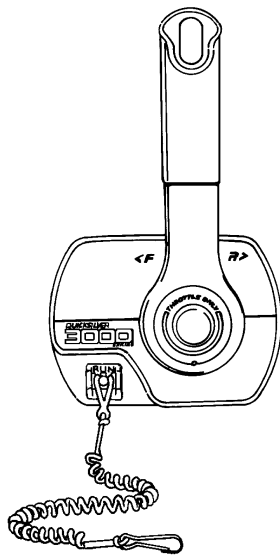




COMMANDER 3000 CLASSIC PANEL MOUNT REMOTE CONTROL



74428



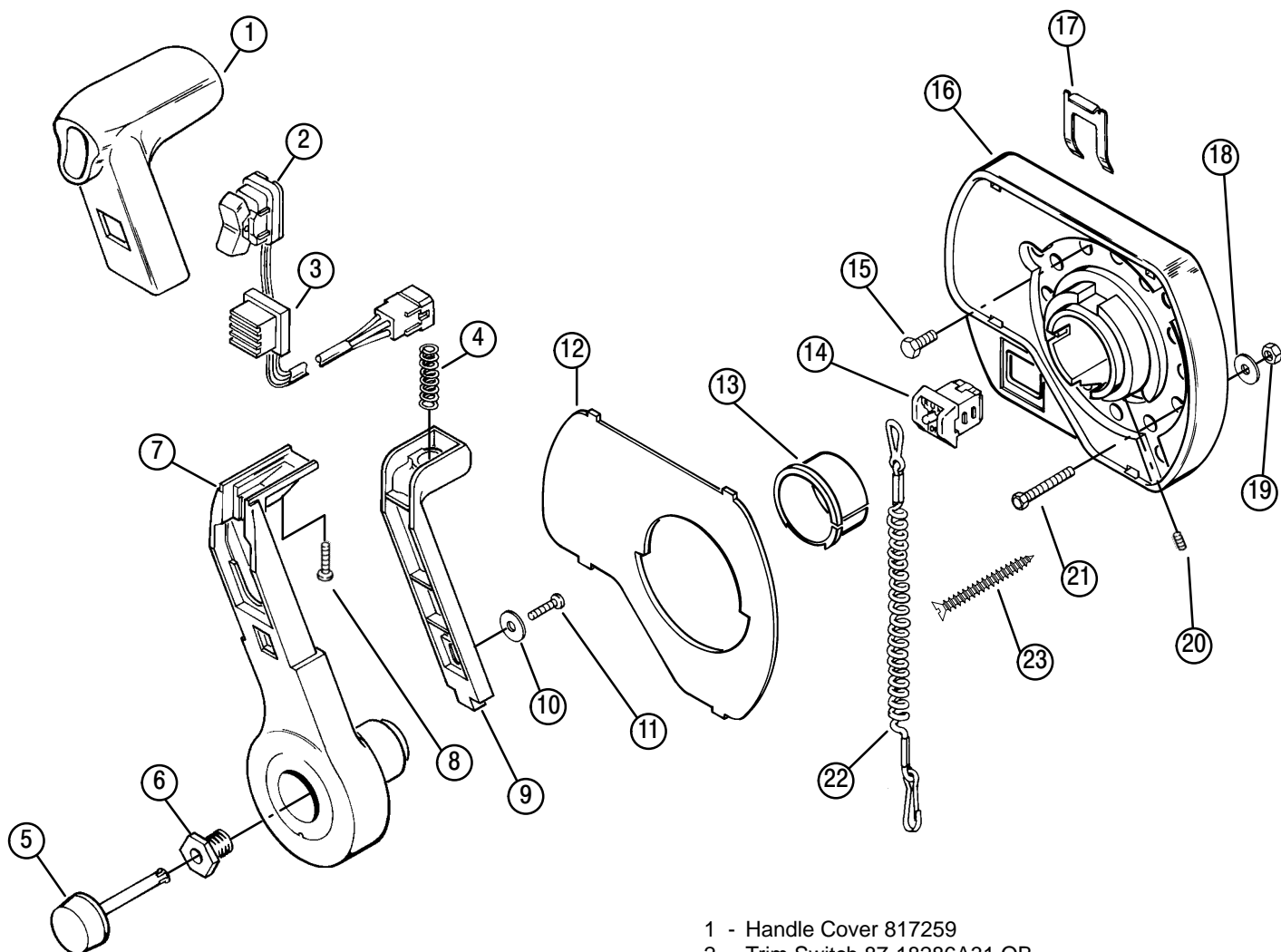
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Commander 3000 Classic Remote Control Maintenance and Replacement Parts

Panel Mount Controls



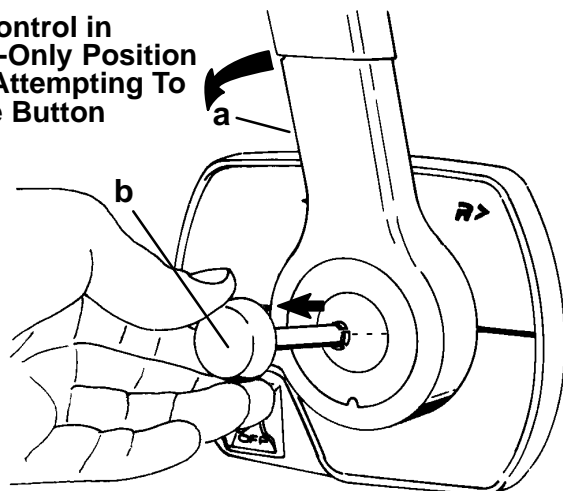
- 1 - Handle Cover 817259
- 2 - Trim Switch 87-18286A31 OB
- 3 - Trawling Switch MCM Only 87-18286A33
- 4 - Spring 24-16924
- 5 - Throttle-Only Button 822212
- 6 - Brass Locking Hex Bolt 10-822213--1
- 7 - Control Handle 822211--1
- 8 - Screw 10-52376
- 9 - Shift Release 817259
- 10- Washer (.188x.428) 12-28001
- 11- Screw (10-3 x.25)
- 12- Bezel Cover 37-827289
- 13- Flanged Bushing 23-822980
- 14- Lanyard Stop Switch (87-13398 MCM, 87-13398--1 OB)
- 15- Screw (.250x20x.750) 10-53099
- 16- Bezel 822216A1
- 17- Retainer 12044--1
- 18- Washer (.281x.734x.063) 12-69057
- 19- Nut (.281x.734x.0) 11-814101
- 20- Friction Screw 10-824831
- 21- Screw (.250x20x1.750) 10-822214
- 22- Lanyard Cord 15920A54
- 23- Wood Screw (3) 10-96952



Disassembly

1. Remove control handle by first removing throttle-only button. Place the control handle in the throttle-only position. Push "In" on button and place control handle forward. Throttle-only button can now be removed. If button cannot be removed with fingers, use a small screwdriver and pry out gently.

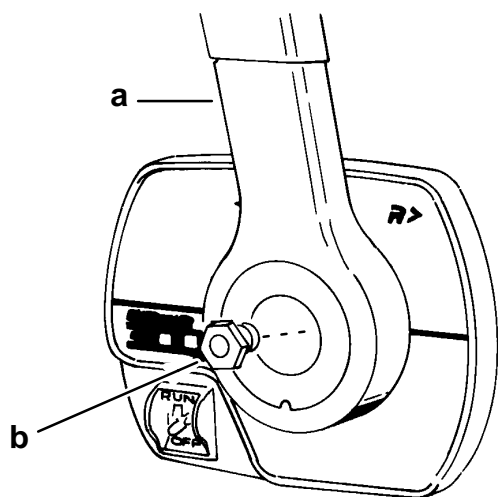
Place Control in Throttle-Only Position Before Attempting To Remove Button



74410

- a - Handle Assembly
- b - Throttle-Only Button

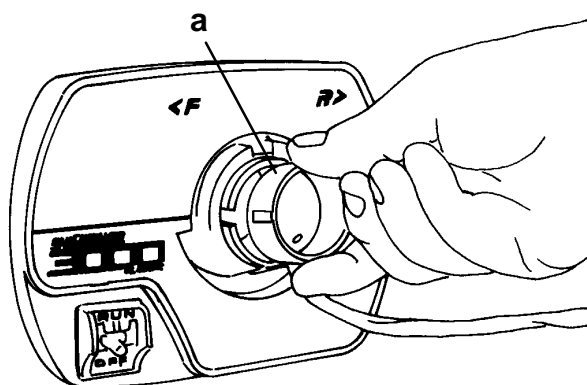
2. Remove 11/16" retainer bolt holding handle to module.



74409

- a - Handle Assembly
- b - Retaining Bolt

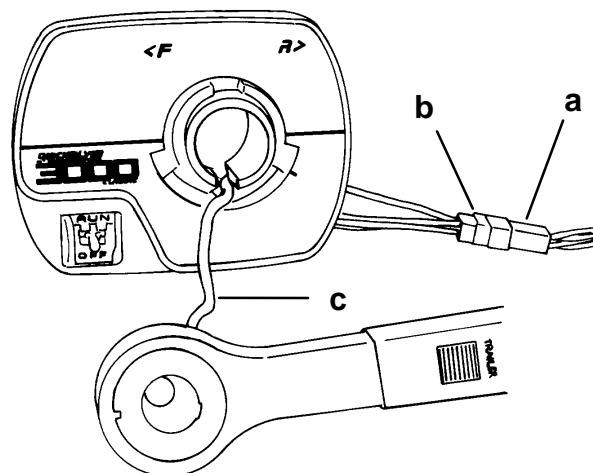
3. Remove handle and handle bushing.



74407

- a - Bushing

4. Feed trim wires from behind bezel and unplug at connector.

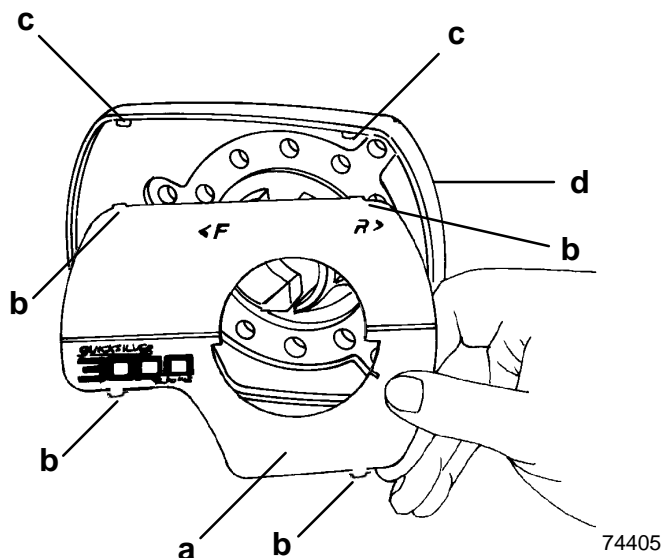


74406

- a - Wiring Harness Connector
- b - Trim and Trailing Switch Wiring Connector
- c - Trim and Trailing Switch Wires

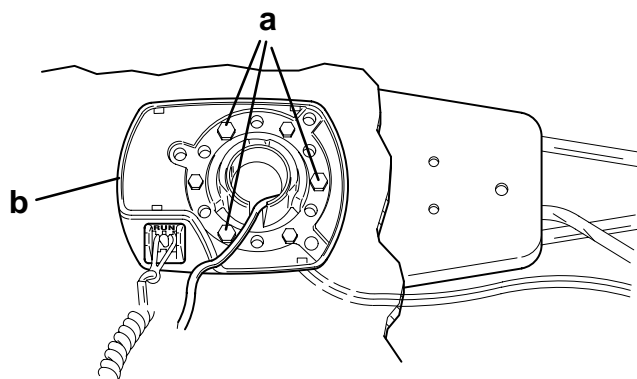


5. Remove bezel cover using a small screwdriver and prying on either the top or bottom of bezel to pop tabs out of the bezel notches.



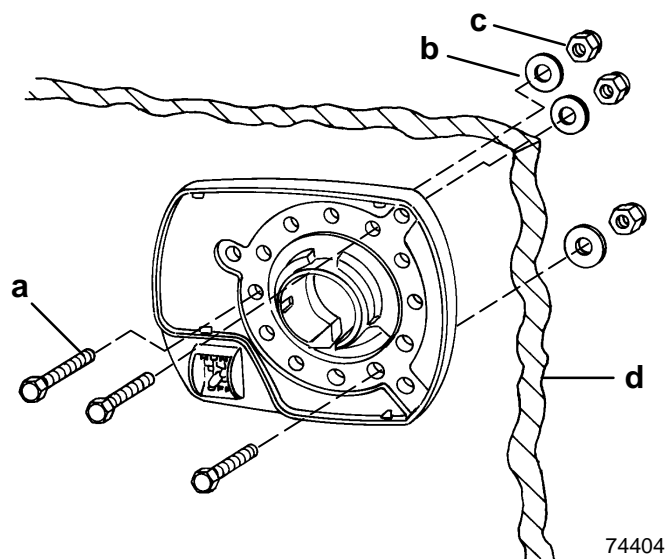
- a - Bezel Cover
b - Cover Tab
c - Notch in Bezel
d - Bezel

6. Remove module assembly by loosening three .250x20x.750 hex screws fastening module assembly to bezel assembly.



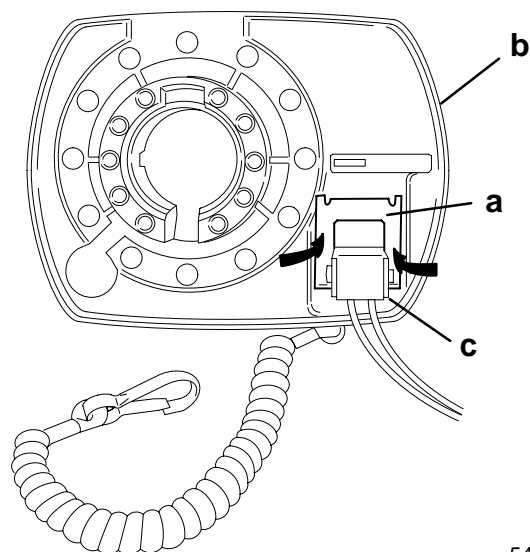
- a - .250x20x.750 Hex Screws
b - Bezel

7. Remove bezel from boat panel by removing screws and nuts as shown.



- a - Screw .250x20x1.750 (3)
b - Washers (3)
c - Nuts .250x20 (3)
d - Mounting Surface

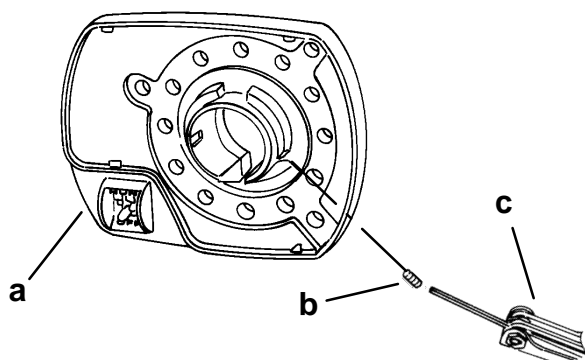
8. Remove lanyard switch by pushing up on lanyard retainer, located on back of bezel. Locate wire connections for switch and unplug. This will be an electrical connection or soldered connection.



- a - Lanyard Retainer
b - Bezel
c - Lanyard Switch

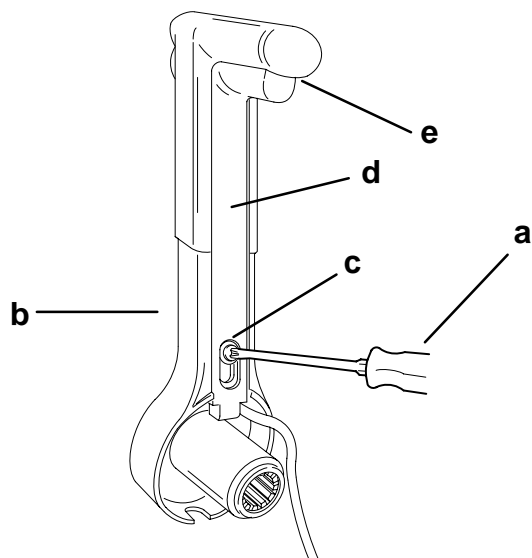


9. Remove friction set screw using a 1/8" allen wrench.



- a - Bezel
- b - Friction Set Screw
- c - 1/8" Allen Wrench

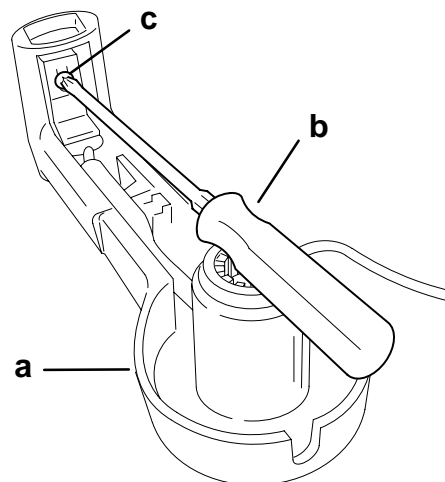
10. Disassemble handle by first removing phillip screw and washer holding shift release. Remove release lever and spring.



54588

- a - Phillip Screwdriver
- b - Handle Assembly
- c - Phillip Screw
- d - Release Lever
- e - Spring (Located inside of Release Lever)

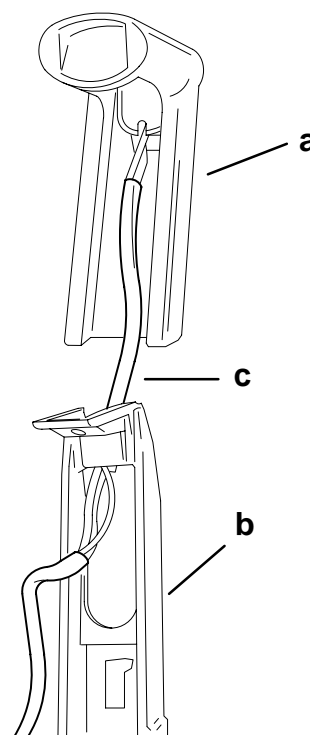
11. Remove phillip screw securing handle cover to control handle.



54589

- a - Handle Assembly
- b - Screwdriver
- c - Phillip Head Screw

12. Slide two components apart.

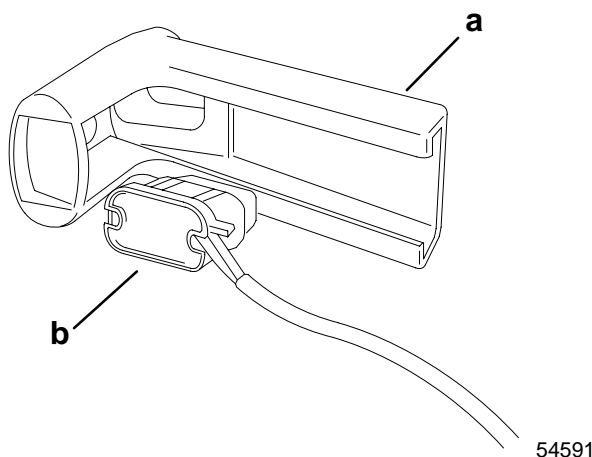


54590

- a - Control Handle Cover
- b - Control Handle
- c - Trim Switch



13. Remove trim switch. If control has a trailer switch, this can be removed with trim switch.



a - Control Handle Cover
b - Trim Switch

14. For module disassembly, refer to Section 13.

Cleaning and Inspection

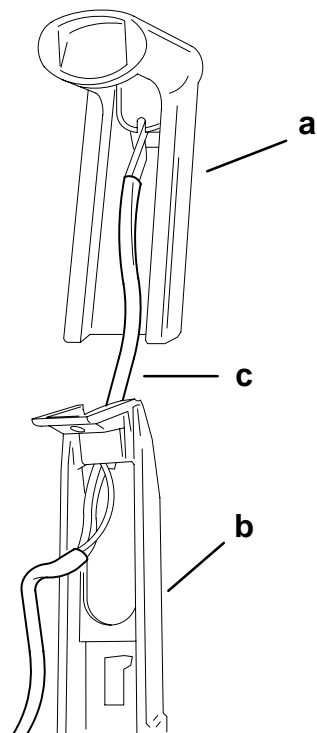
1. Clean all components thoroughly and check for wear or breakage.

⚠ CAUTION

Do not clean electrical, non metallic, or components with decals or stickers with any solvent cleaners or damage to component may occur.

Assembly

1. Install trim switch into handle grip as shown. If control has a trailer switch, install both switches into handle grip.



54590

a - Control Handle Cover
b - Control Handle
c - Trim Switch

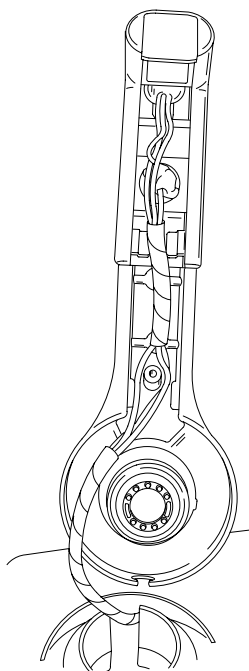
Route wires through handle as shown. Slide control handle into handle grip until grip seats against handle completely. Install screw to secure grip to handle.

⚠ CAUTION

Modules with trailer switch, be careful sliding two parts together. Trailer wires catch on handle very easily.

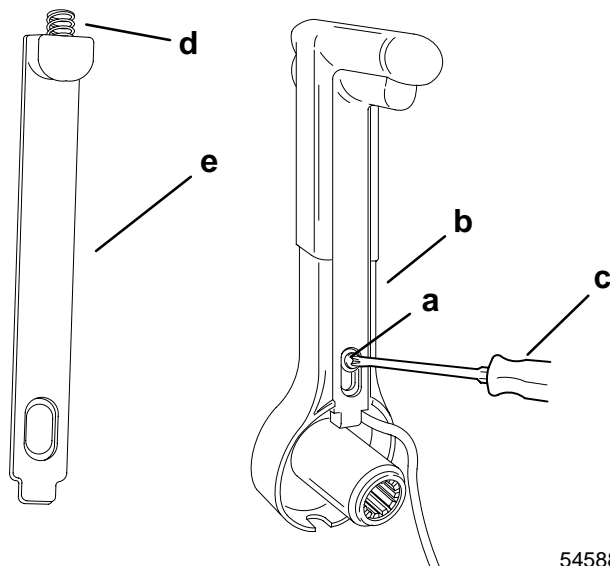


2. Divide trim wires over screw boss and route wires around handle shaft as shown.



55133

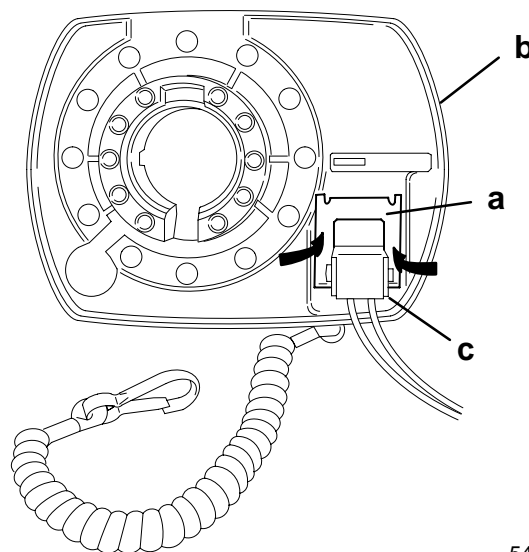
Install spring into round boss on top of red shift release lever. Attach both spring and lever to control handle by positioning shift lever spring over handle grip screw. Push "Up and In" on shift lever until screw boss is located into shift lever slot. Install screw and washer.



54588

- a - Phillip Head Screw
- b - Handle Assembly
- c - Screwdriver
- d - Spring
- e - (Red) Shift Release Lever

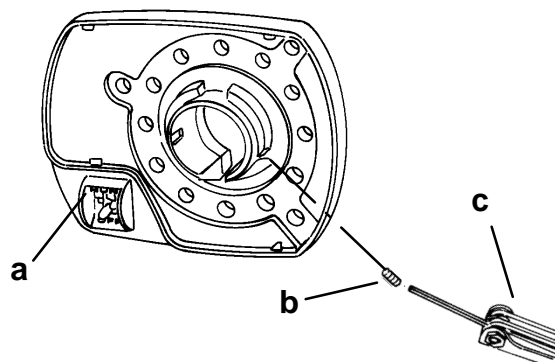
3. Install lanyard switch by placing switch into control bezel from the front side. Push lanyard retain-er over switch on the rear side of bezel to hold switch into place.



54592

- a - Lanyard Retainer
- b - Bezel
- c - Lanyard Switch

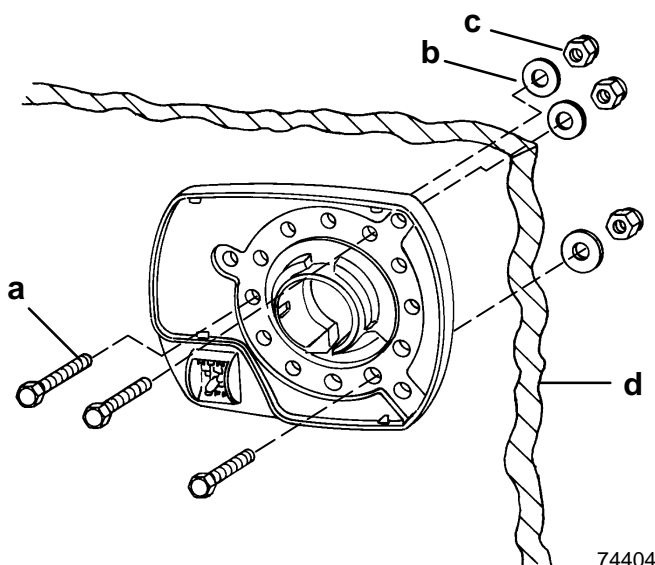
4. Install friction set screw using a 1/8" allen wrench. Do not install allen screw beyond flush with center bore. The friction will be adjusted after control installation.



- a - Bezel
- b - Friction Set Screw
- c - 1/8" (3.1mm) Allen Wrench



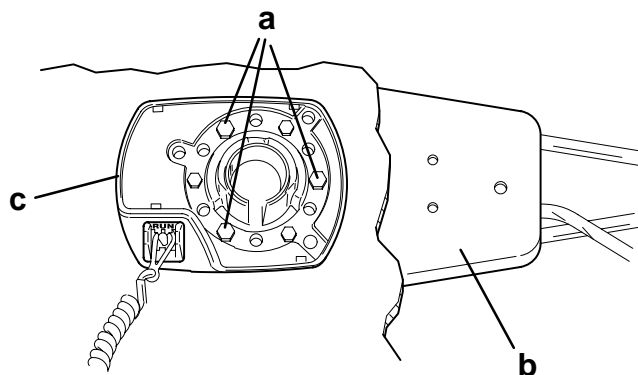
5. Feed lanyard switch wires through mounting surface hole and install bezel to mounting surface using three screws, torque to 100 lb. in. (11.3 N·m).



- a - Screw .250x20x1.750 (3)
b - Washers (3)
c - Nuts .250x20 (3)
d - Mounting Surface

NOTE: If mounting hole has not been installed, refer to *Installation and Operations Guide* for hole dimensions and templates.

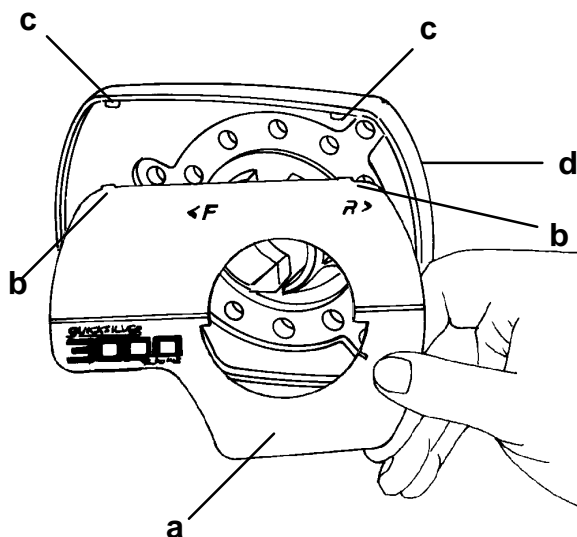
6. Install control module assembly to bezel using three .250x20x.750 hex screws. Torque to 25 lb. in.



- a - .250x20x.750 Hex Screws
b - Control Module Assembly
c - Bezel

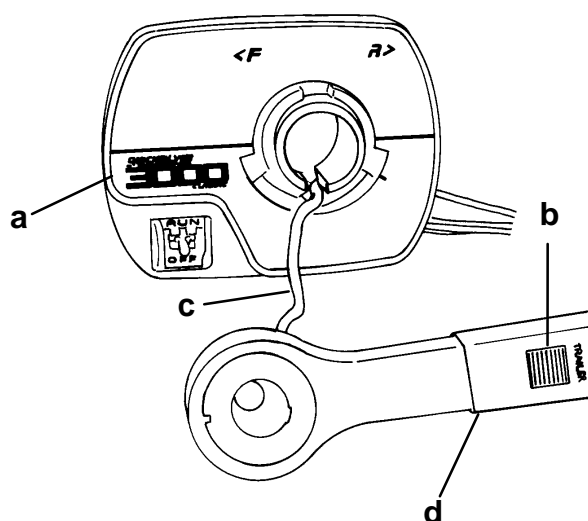
If control module is not assembled, refer to **“Module Assembly”** in **Section 13**. For shift and throttle cable installation, refer to **“Installation and Operator’s Manual” (90-827290--1)**.

7. Install the bezel cover. Secure the bezel cover by inserting the cover tabs into the notches in the bezel.



- a - Bezel Cover
b - Cover Tab
c - Notch in Bezel
d - Bezel

8. Route the trim switch and trawling switch leads from the handle assembly thru the bezel opening as shown.



- a - Bezel
b - Trailer Switch
c - Trim and Trailer Switch Leads
d - Handle



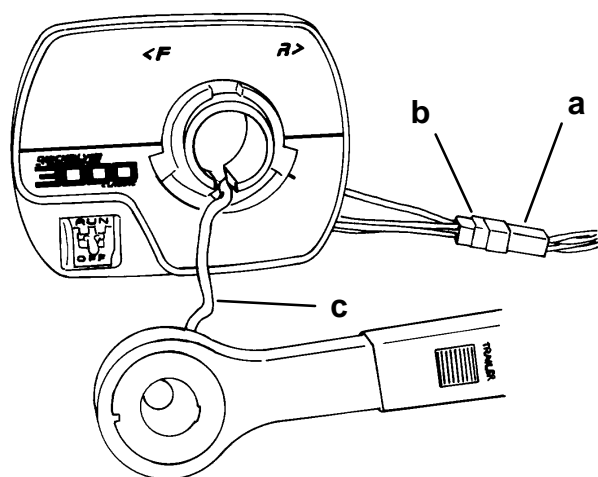
⚠ CAUTION

Verify trim/trailer wires are not pinched when mounting remote control module to panel of boat. Trim wires must be free to move with the remote control handle.

⚠ CAUTION

DO NOT sta-strap or otherwise secure trim leads within 12 in. (305 mm) of panel exit. Allow sufficient slack in leads to permit free movement of trim leads through the full range of shift handle motion.

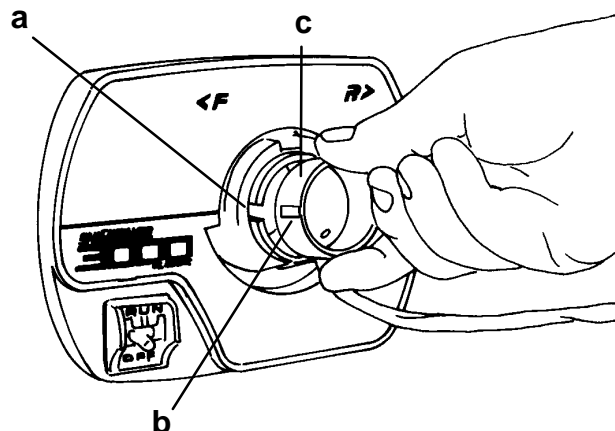
9. Connect the trim and trawling switch wires to appropriate wiring harness.



74406

- a - Wiring Harness Connector
- b - Trim and Trawling Switch Wiring Connector
- c - Trim and Trawling Switch Wires

10. Install the bushing into the Commander 3000 Classic bezel. Line up the notch in the bezel with the rectangular protrusion in the bushing.



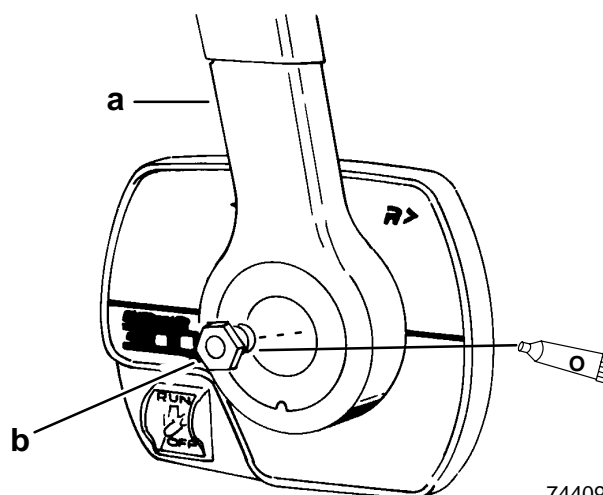
74407

- a - Notch in Bezel
- b - Rectangular Protrusion
- c - Bushing

⚠ WARNING

The control handle 11/16 in. hex retaining bolt must be torqued to 150 lb. in. (17 N·m). Failure to torque retaining bolt as specified could allow handle to disengage with subsequent loss of throttle/shift control. If the remote control handle is removed and reinstalled for any reason, place Loctite 271 (obtain locally) on threads of retaining bolt and torque to 150 lb. in. (17 N·m). Excessive tightening torque may result in handle shaft failure.

11. Place handle assembly onto the remote control module in the neutral detent position and secure with 11/16 in. brass hex bolt. Torque bolt to 150 lb. in. (17 N·m).



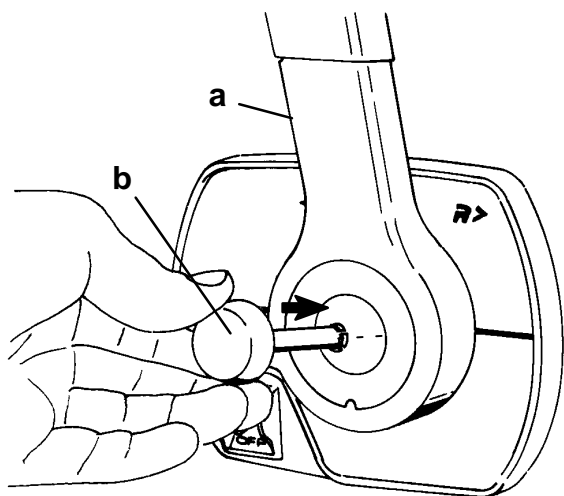
74409

- a - Handle Assembly
- b - Retaining Bolt [Torque to 150 lb. in. (17 N·m)]

Loctite 271 (Obtain Locally)



12. Install Throttle-Only button.

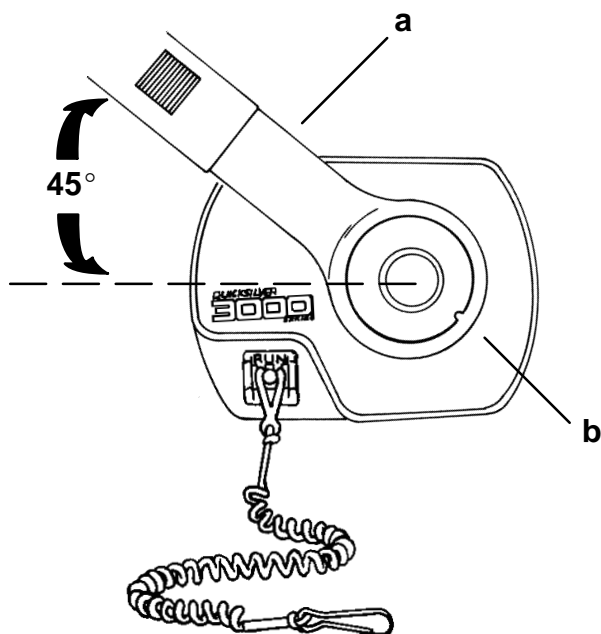


74410

- a - Handle Assembly
- b - Throttle-Only Button

13. Make wiring connections for neutral start safety switch, lanyard stop switch (if equipped) and trim switch (if equipped). Attach power trim harness connector (if equipped). **Refer to "Electrical Connections" Section 14.**

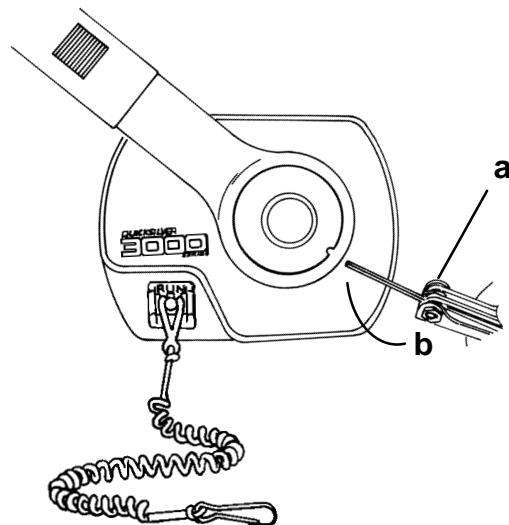
14. Move the control handle forward 45 degrees to expose the handle tension adjusting screw.



74411

- a - Control Handle
- b - Tension Adjusting Screw

15. Use an allen wrench to adjust the control handle tension to desired tension.



74412

- a - 1/8" (3.1mm) Allen Wrench
- b - Control Handle Tension Screw
(Clockwise - Increase)
(Counterclockwise - Decrease)