merCruiser STERN DRIVES & INBOARDS

service bulletin

NUMBER: 83-18

CIRCULATE TO:
SERVICE MANAGER ☐
PARTS MANAGER ☐
MECHANICS ☐
"Place in a Service Bulletin Binder"

A. New Trim Limit Switch on MerCruiser MCM 120R-thru-260R Models
B. Adjusting Trim Limit Switch on MerCruiser MCM 120R-thru-260R Models

A. NEW TRIM LIMIT SWITCH ON MERCRUISER MCM 120R-thru-260R MODELS

Newer production MerCruiser 120R-thru-260R Models (with transom assembly Serial No. 6271054 and Above) will be equipped with a new style trim limit switch (99122A2). This switch features a new sealing system for improved water resistance and durability. The trim limit switch leads also are connected internally on the new switch to help ensure good electrical integrity.

NOTE: Insulator (Figure 1) used with older style switch is not required when using new style switch.

The new style trim limit switch will be used as the replacement part for all MerCruiser 120R-thru-260R Models. Trim limit switch leads are provided with the new switch and are preconnected at the factory. Installation of switch with leads attached requires that bell housing and universal joint bellows be removed. However, to prevent this extensive disassembly, the switch can be connected to existing trim limit switch leads, using the procedure outlined following.

IMPORTANT: Before proceeding, make sure that trim limit switch leads are in good condition. Check for chafing damage, cracks in insulation, etc. An opening in the insulation may allow water to run down the center of the leads and into switch, which could cause switch to fail.

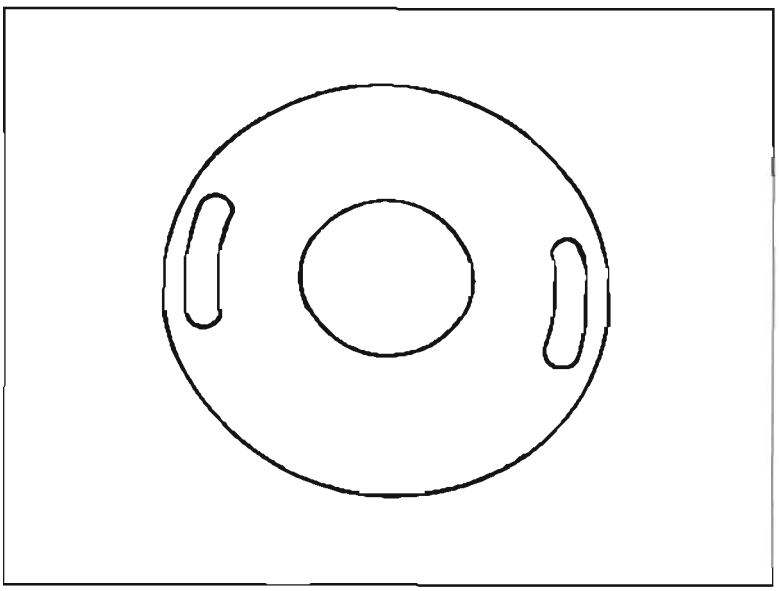


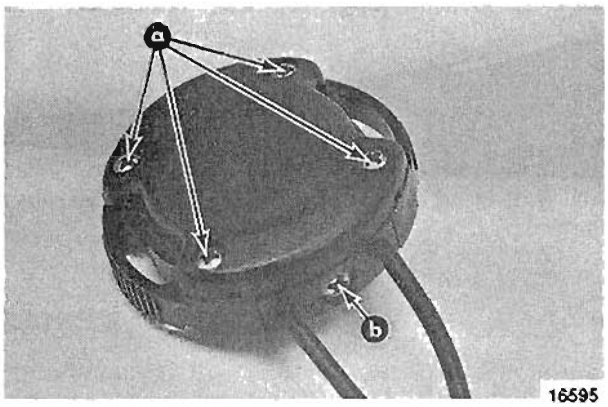
Figure 1. Insulator 85-63990

DISASSEMBLING NEW SWITCH

STEP 1

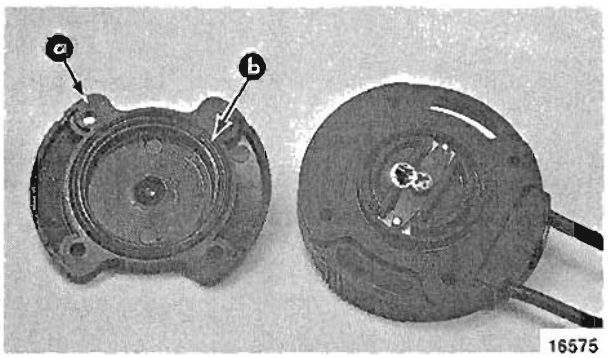
Remove cover screws (a) and retainer screw (b).

NOTE: When reassembling switch, retainer screw is the largest of the 5 screws.



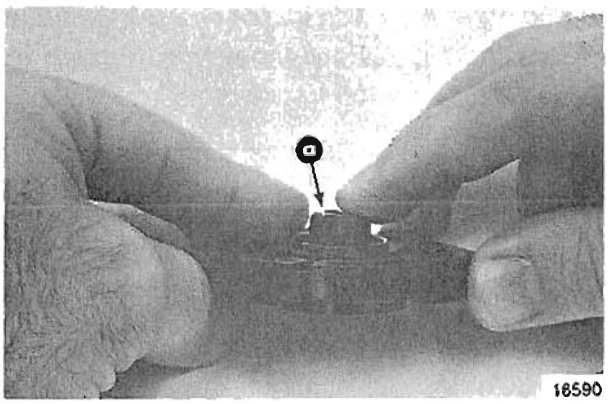
STEP 2

Remove cover (a) being careful not to lose "O" ring (b).



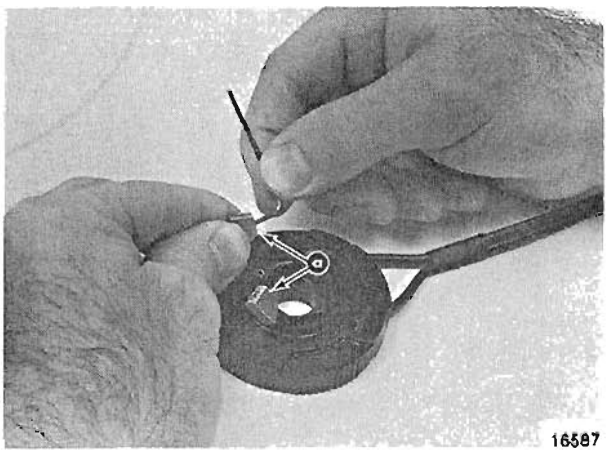
STEP 3

Remove rotor assembly (a) by pushing on rotor hex.



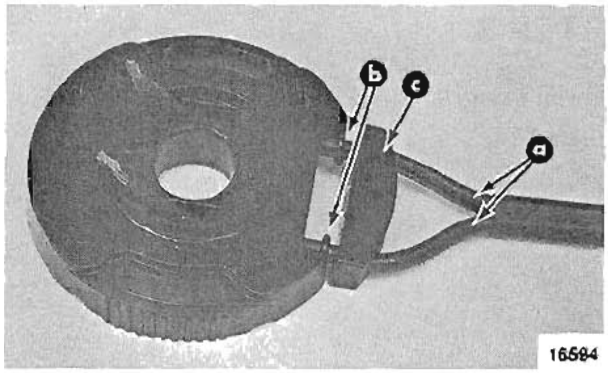
STEP 4

Remove contacts (a) from switch housing cavities. Using a 1/16" allen wrench, loosen contact screws and remove contacts.



STEP 5

Remove trim limit switch leads (a) from housing. Remove 2 "O" rings (b) and retainer (c) from leads. Discard leads.



PREPARING ORIGINAL LEADS FOR SWITCH INSTALLATION

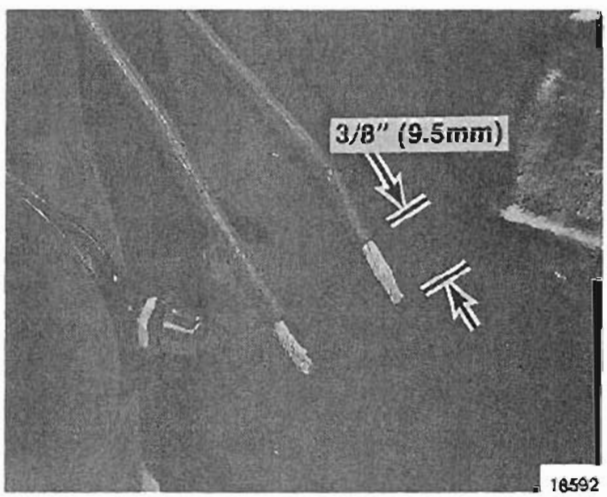
STEP 1.

Remove faulty trim limit switch.

STEP 2.

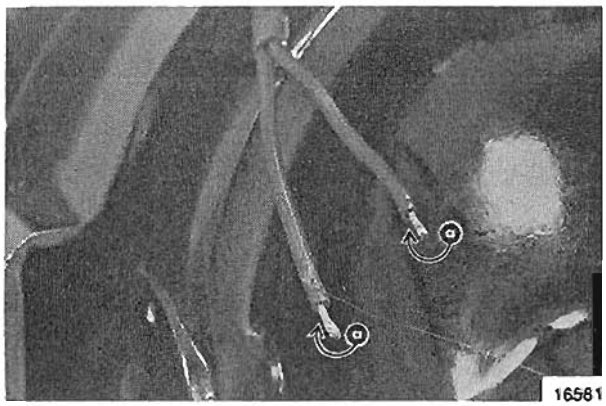
If unit was equipped with old style switch, cut off leads and strip insulation as shown.

IMPORTANT: Be sure to cut off leads as close as possible to ring terminal on shortest lead.



STEP 3.

Twist ends of leads (a), being sure all strands are included.



SWITCH INSTALLATION

STEP 1

Install new switch to original trim limit switch leads, using reversal of disassembly procedure. Be sure to observe the following.

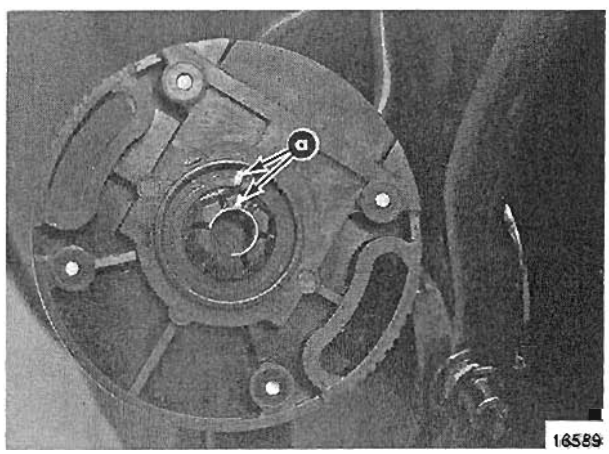
- Be sure to reinstall all "O" rings.
- Make sure that quad ring seals on rotor assembly are not twisted or damaged.
- When installing contacts, make sure that all strands of each trim limit switch lead are inserted thru hole in contact.
- Make sure that contacts fit flush in housing with allen screw side downward.
- Lubricate internal components with a liberal amount of Quicksilver 2-4-C Multi-Lube (92-86154).

  NOTE: In the future, trim limit switch will be furnished with insulating component. Use compound (instead of 2-4-C) if provided.

- Pull on trim limit switch leads after switch has been assembled to remove slack from inside of switch.

STEP 2.

Turn rotor to align index marks (a) on switch; then install switch with stern drive unit in the full "In" ("Down") position.



STEP 3.

Adjust switch as explained under Subject "B", following.

B. ADJUSTING TRIM LIMIT SWITCH ON MERCRUISER 120R-thru-260R MODELS

⚠WARNING

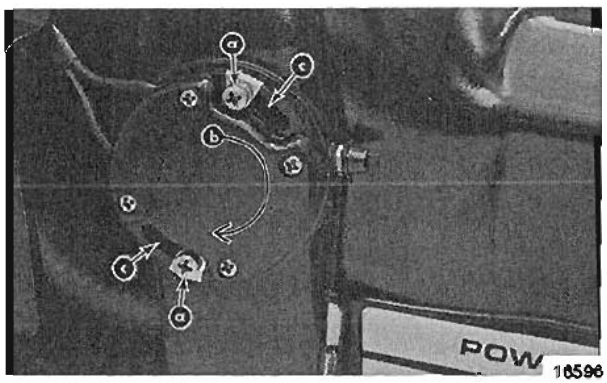
When adjusting trim limit switch, use extreme care that engine is not accidentally started and keep clear of area near propeller. Also, use care to prevent placing hands in an area where they could be injured by drive unit movement.

⚠CAUTION

Trim limit switch MUST BE adjusted exactly as outlined following. If switch is adjusted incorrectly, drive unit may move out beyond the gimbal ring support flanges and severe damage to stern drive may result.

STEP 1.

Loosen screws (a), which retain trim limit switch and turn switch clockwise (b) to ends of slots (c).

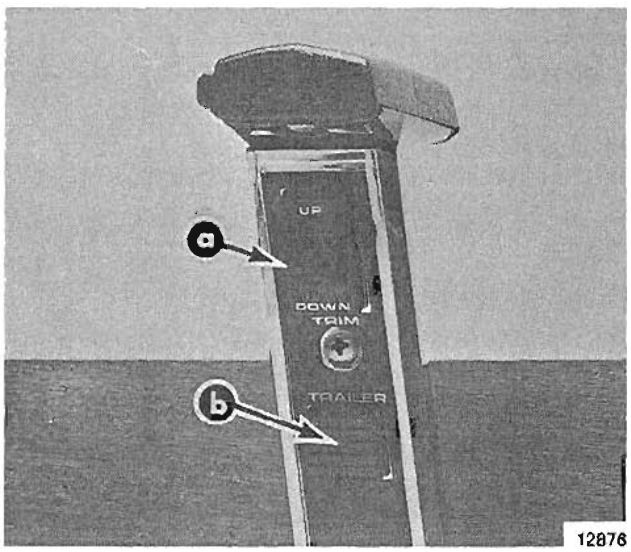


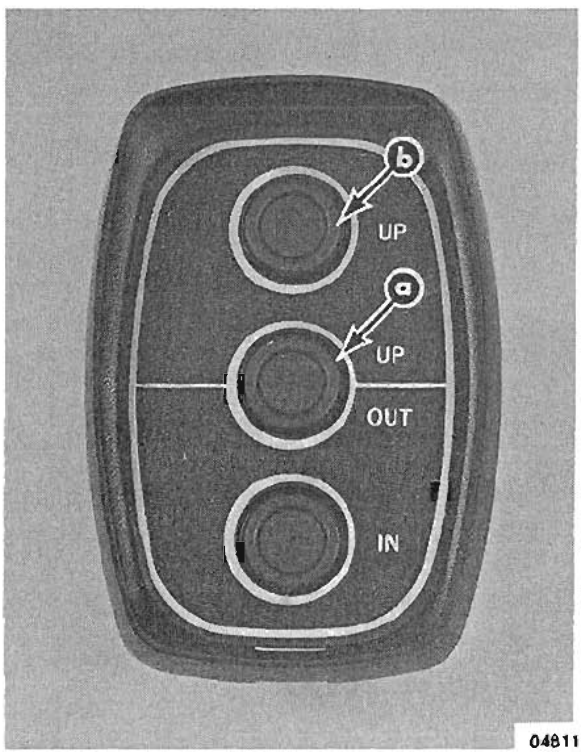
STEP 2.

Place stern drive unit in the full "In" ("Down") position.

STEP 3.

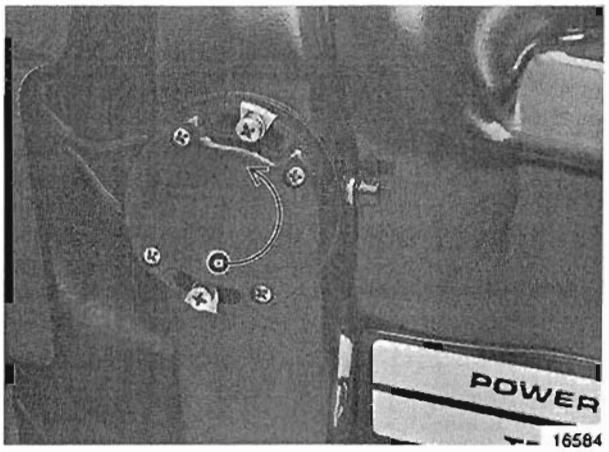
Have an assistant actuate switch used to trim drive unit "Out" (bow "Up") (a). DO NOT USE TRAILER SWITCH (b).

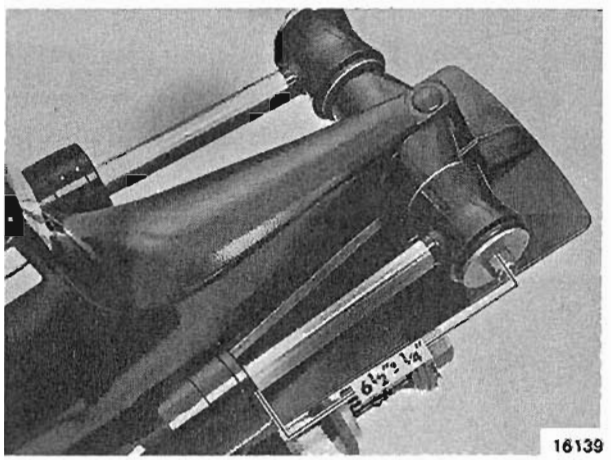




STEP 4.

While actuating switch, SLOWLY turn trim limit switch counterclockwise (a) until trim cylinders extend to dimension shown.





STEP 5.

Tighten trim limit switch retaining screws securely. Recheck trim limit switch adjustment.