

18-7633

TRIM LIMIT/SENDER KIT FOR ALPHA AND BRAVO MODELS (ANALOG)

DO NOT DISCARD
 After completing installation, instructions should be placed with the product for the owner's future use.

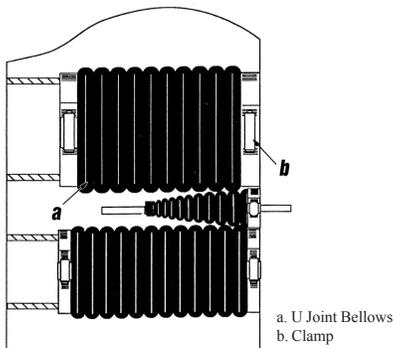
WARNING
 Disconnect both battery cables before installing new sender.

REMOVAL
 (Refer to service manual for specific procedures)

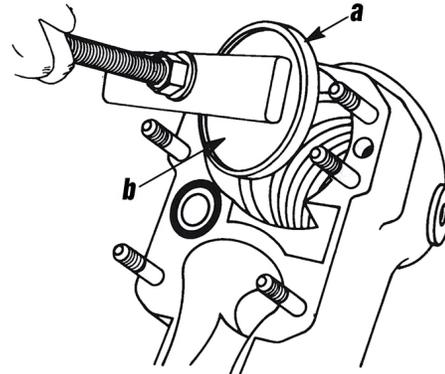
1. Remove stern drive unit.
2. Remove trim limit switch.
3. Remove trim position sender.



4. **Earlier Alpha One Models** - Loosen front hose clamp on u-joint bellows. Remove bellows from flange.

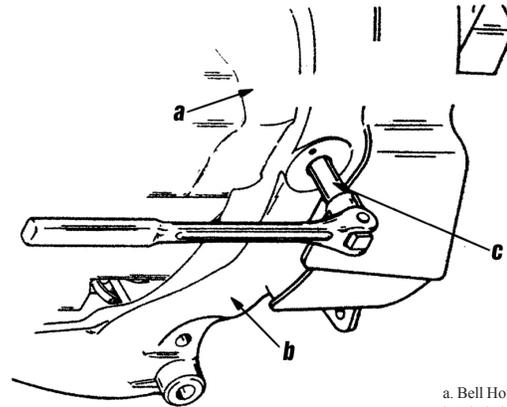


5. **Bravo and Later Alpha One Models** - Remove u-joint bellows sleeve.



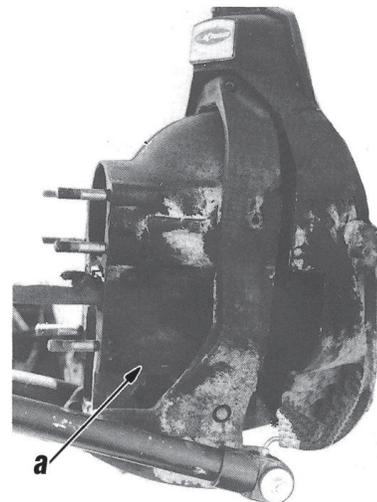
a. Sleeve
 b. Sleeve Tool 18-9871

6. Remove both hinge pins.



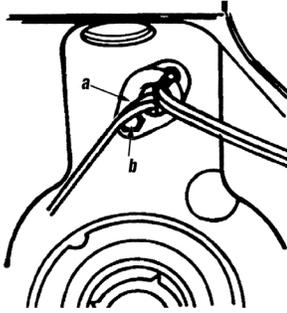
a. Bell Housing
 b. Gimbal Ring
 c. Hinge Pin Tool 18-9861

7. Pull back on bell housing and turn 90 degrees to allow access to the trim wire retainer bolt.



a. Bell Housing

8. Remove trim wire retainer bolt and retainer. 3.

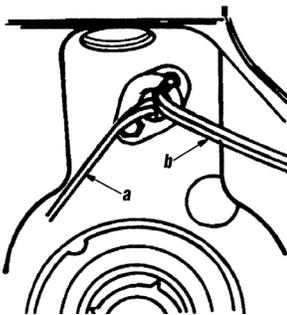


a. Clamp
b. Bolt

9. Disconnect trim position sender wires from engine harness.

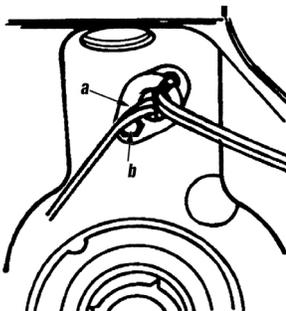
INSTALLATION

1. Install new sender wires through hole. Bring together the two grommet halves and ensure they are seated tightly in the hole and that the flat edges that mate together are vertically aligned. Maintain light tension on the wires from inside the boat, to hold the grommets in the hole.



a. Trim Limit Switch Wires
b. Trim Position Sender Wires

2. Reinstall retainer and torque to 90-100 lb. in. (10.2-11.3 Nm)



a. Clamp
b. Bolt

Earlier Alpha One Models - Prepare U-joint bellows for installation as follows.

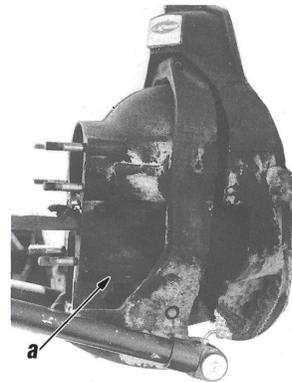
- i. Clean gimbal housing mounting flange with sand paper and wipe clean with lacquer thinner.
- ii. Apply bellows adhesive (18-9031) to mounting surface on the inside of bellows.

WARNING

Be sure to read and follow package label directions when using bellows adhesive.

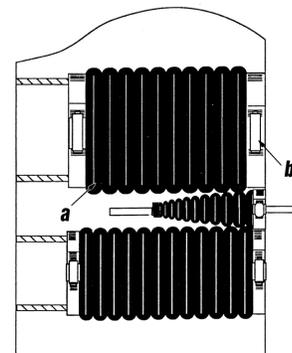
- iii. Position grounding clip and hose clamp over bellows end.

4. Install bell housing between gimbal ring. Push on bell housing and guide U-joint bellows onto gimbal housing mounting flange.



a. Bell Housing

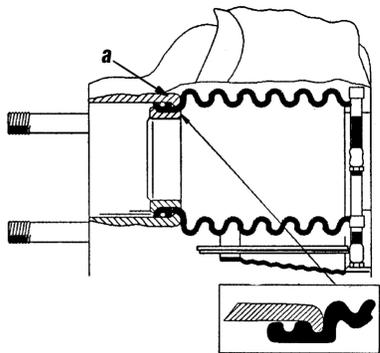
5. Position u-joint bellows hose clamp as shown and tighten securely.



a. U Joint Bellows
b. Clamp

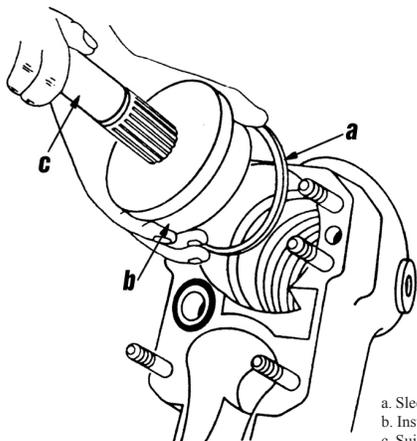
6. **Bravo and Later Alpha One Models** - Connect U-joint bellows to bell housing as follows:

- i. Position U-joint bellows on bell housing. Ensure that the bell housing flange rests in the second groove from the end of bellows.



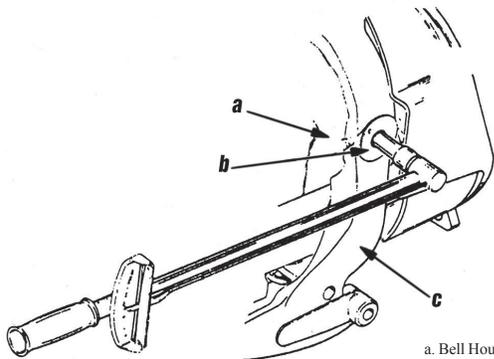
a. Bell Housing Flange

- ii. Lubricate sleeve O.D. with water or engine cleaner and install sleeve with tool and suitable driving rod.



a. Sleeve
b. Installation Tool 18-9870
c. Suitable Driving Rod

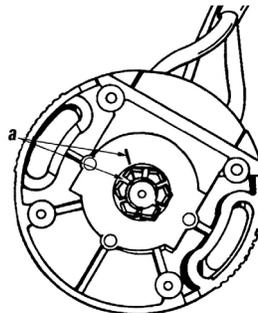
- 7. Apply Loctite Primer "T" to internal bell housing threads and external hinge pin threads and allow to dry. Apply Loctite™ 271 to bell housing threads and install hinge pins. Torque hinge pins to 95 lb. ft. (129 Nm).



a. Bell Housing
b. Gimbal Ring
c. Hinge Pin Tool 18-9861

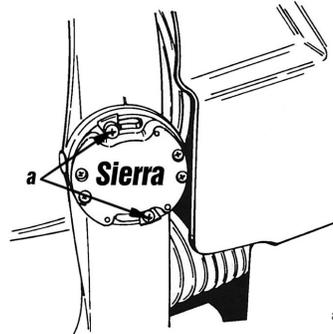
- 8. Reinstall trim position sender as follows:

- i. Place stern drive unit in the full down/in position.
- ii. Turn center rotor of trim position sender to align index mark with index mark on sender.



a. Index Marks

- iii. Install trim position sender.



a. Screws, Washers and Retainers

- 9. Reinstall battery cables.
- 10. Reconnect trim position sender wires to engine harness.

NOTE: Older models with ring terminal connections to engine harness will require use of adaptor wire (included) to connect to bullet connectors on limit and sender.

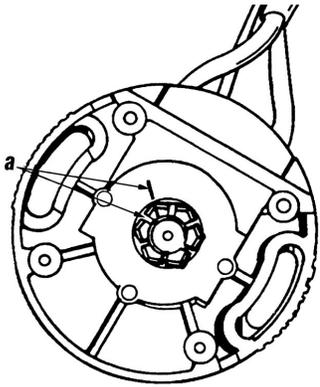
- 11. Turn ignition key to the "RUN" position. DO NOT START ENGINE. Rotate sender until needle reads at bottom arc of gauge.



12. Tighten trim position sender retaining screws and recheck gauge reading.

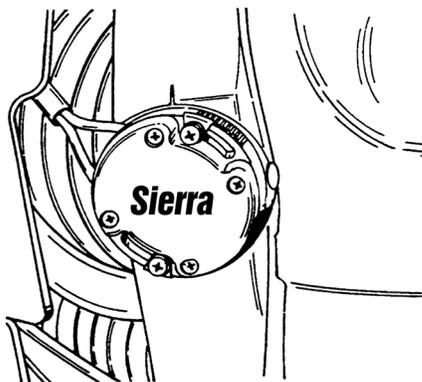
13. Reinstall trim limit switch as follows:

- i. Place drive unit in full "DOWN/IN" position.
- ii. Align index marks on switch.

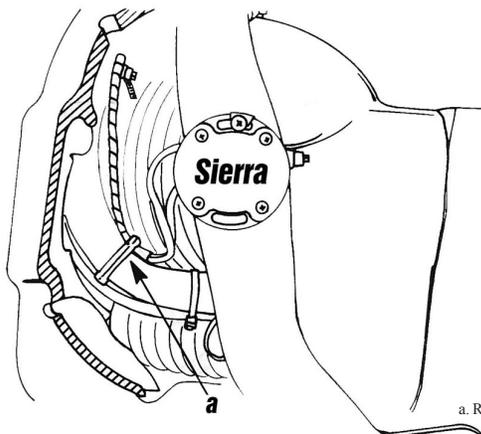


a. Index Marks

iii. Install trim limit switch and secure.



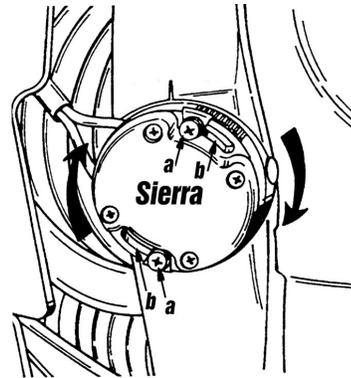
14. Secure the trim limit switch harness to the water hose with the plastic retaining clip.



a. Retaining Clip

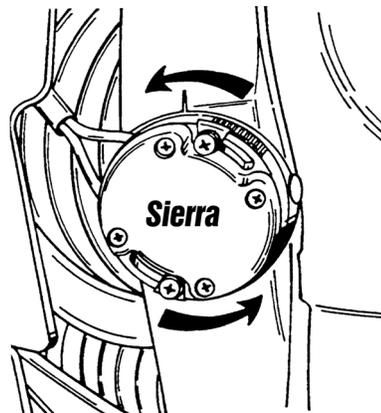
15. Adjust trim limit switch as follows:

- i. Loosen screws located in slot of switch and turn clockwise to end of slots.



a. Screws
b. Slots

- ii. Ensure drive unit is trimmed to the full "DOWN/IN" position.
- iii. Trim drive unit "UP/OUT". Do not use trailer switch.
- iv. Slowly turn trim limit switch counter clockwise until trim cylinders extend to dimension listed below.



EARLIER R/MR/ALPHA ONE MODELS
21-3/4 in. Max. (554mm)

ALPHA ONE GENERATION II MODELS
20-3/4 in. Max. (520mm)

BRAVO MODELS
21-3/4 in. Max. (554mm)

- v. Tighten screws when adjustment is correct.

