



service bulletin

No. 90-13A

Reversed Steering Control Cables – Thruster R33 and R45 Models

NOTICE

This is a revision of Outboard Service Bulletin 90-13. Destroy Bulletin 90-13 and insert Bulletin 90-13A. Revisions are underlined.

Early 1991 production Thruster R33 and R45 models may have been produced with the steering control cables reversed on the cable drum, causing the motor to turn (steer) in the opposite direction to normal operation of the foot control.

Normal steering operation will turn (steer) motor to the <u>left (counterclockwise)</u> when heel of foot control plate is pushed down and turn motor to the <u>right</u> (clockwise) when toe is pushed down.

MODELS:

Thruster R33 and R45 (S/N 0C930600 and below)

REPAIR PROCEDURE:

- 1. Remove direction indicator and control housing cover.
- 2. Remove retainer plate, idler gear and direction indicator gear.
- 3. Remove cable retainer and lift cable drum off vertical shaft.





- a Retainer Plate
- **b** Idler Gear
- c Direction Indicator Gear
- d Cable Retainer
- e Cable Drum

- 4. Thread adjustment nuts all the way up on control cables.
- 5. Reinstall control cables around cable drum as shown.



- a Control Cable (extends to heel of foot control plate) - Insert ball of cable into top socket on cable drum and wrap cable clockwise around drum
- Control Cable (extends to toe of foot control plate) - Insert ball of cable into bottom socket on cable drum and wrap cable counterclockwise around drum
- c Adjustment Nuts
- d Cable Drum
- 6. Position motor in desired direction vs. desired angle of foot pedal. Place cable drum on vertical shaft and secure cable ends with cable retainer.



7. Reinstall direction indicator gear, idler gear and retainer plate.



- a Retainer Plate
- **b** Idler Gear
- c Direction Indicator Gear
- 8. Adjust retainer plate so gears turn smoothly.



- a Screw
- b Retainer Plate
- 9. Use adjustment nuts to remove cable slack.



- a Adjustment Nuts
- 10. Install control housing cover and direction indicator.

WARRANTY:

Complete warranty claim listing;

Outboard serial number.

One half (0.5) hour labor.

Flat rate code EXCP.