

# TS CONTROL LEVER

Part Number: 308601 Single Lever (Throttle and Shift Control)

308602 Twin Lever (Throttle and Shift Control)

**Owner's Manual** Installation, Operation and Maintenance Instructions

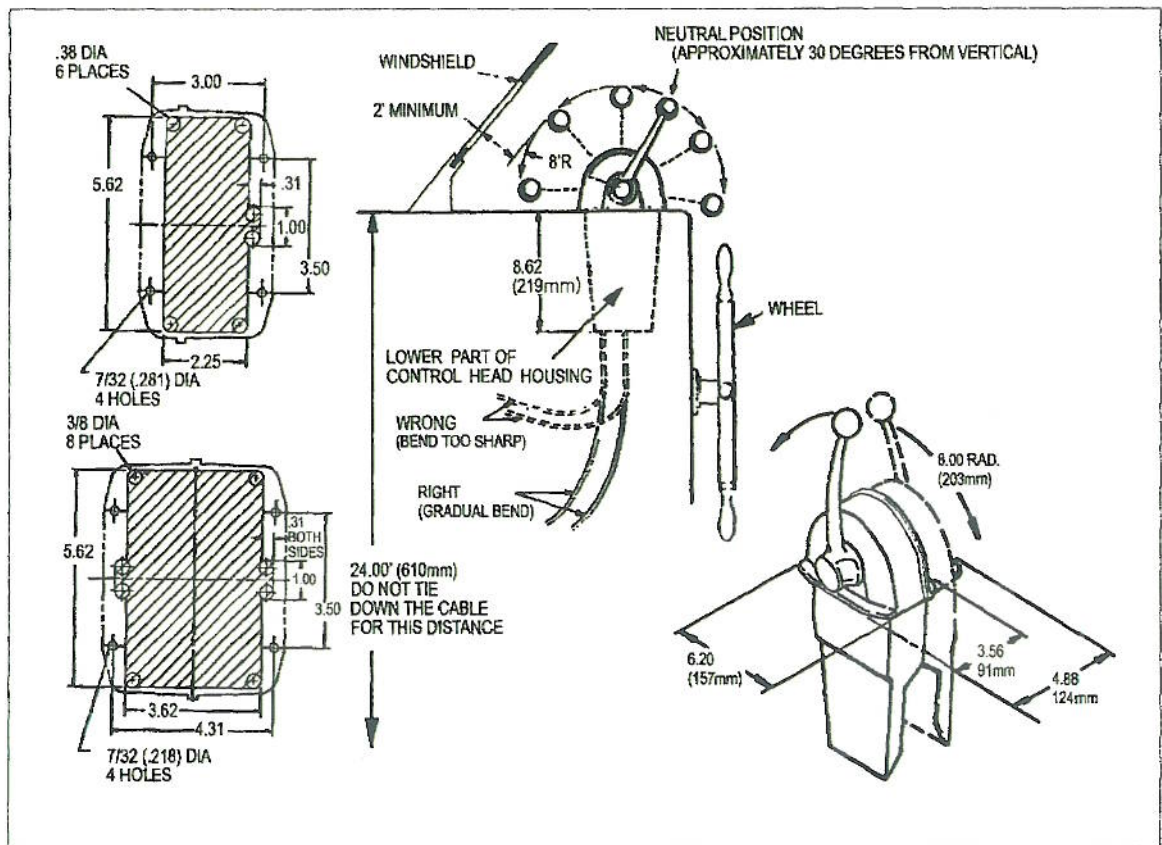
Please read these instructions carefully before installing or operating this control



**ALL SPECIFICATIONS AND FEATURES ARE SUBJECT TO CHANGE WITHOUT NOTICE**

## B. Cable Measurement and Routing

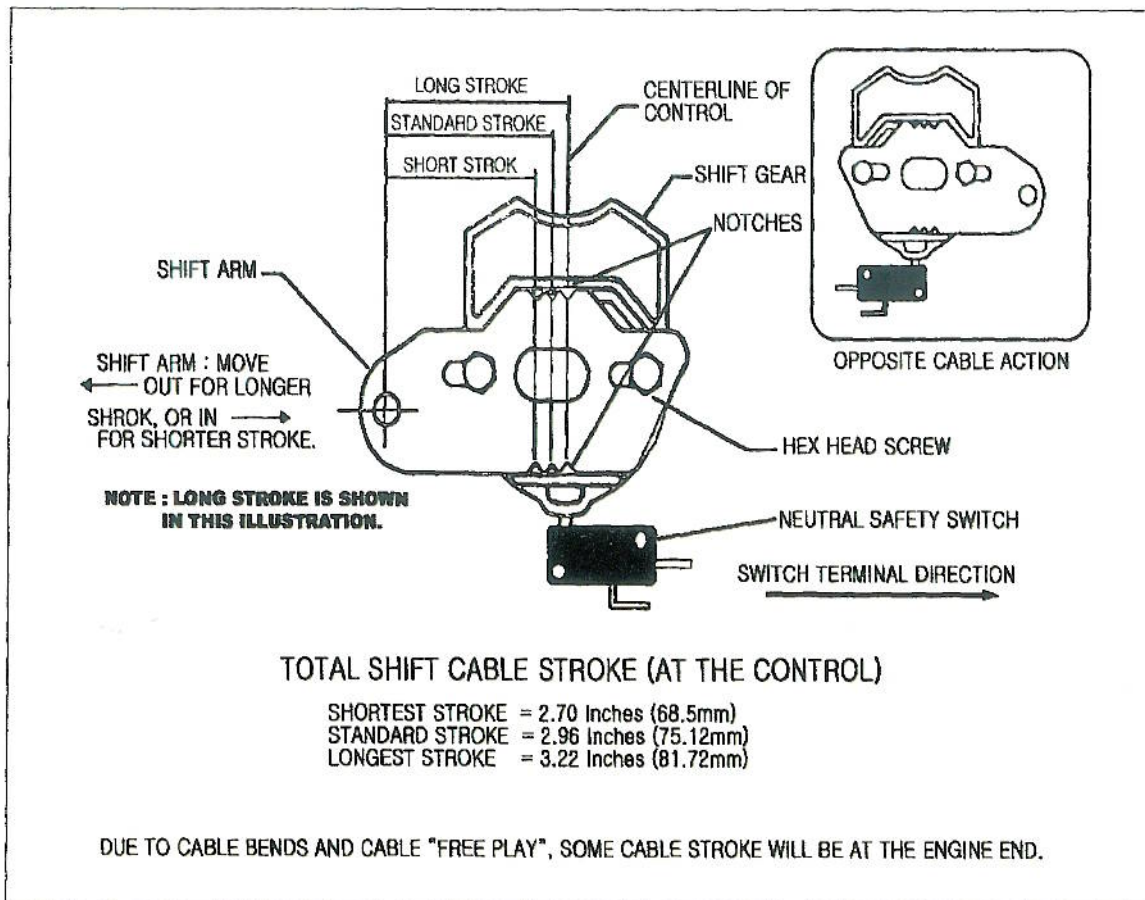
- Measure from the Control Head position along an unobstructed path to the shift and throttle connections.
- Cable lengths are measured from end to end. When a measurement is in feet and inches, round-up to the next whole foot.
- For outboard engines, add 4 feet (1,200 mm) to the length of the cable for a loop to allow for engine swing.
- Avoid any sharp ends or obstacles and minimize the number of cable runs. Make no bends in Cables less than 8 inches (203 mm) radius.
- The cables should be supported by suitable Cable Hangers or Clamps or by running them through segments of conduit for long straight runs.
- The use of inappropriate cable hangers or clamps could be resulted in impairment of function of the cable.



[FIGURE 1. Control Measurements]

3. Tighten the Hex Head Screws.

For opposite cable action, Shift Arm and Neutral Safety Switch should be a mirror image of that which is shown below.

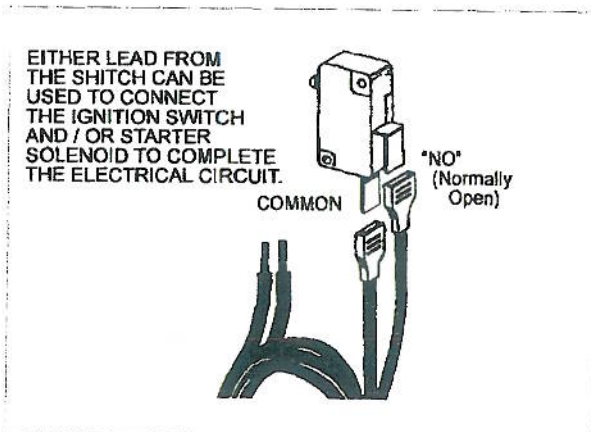


[FIGURE 2. Shift Stroke Adjustment]

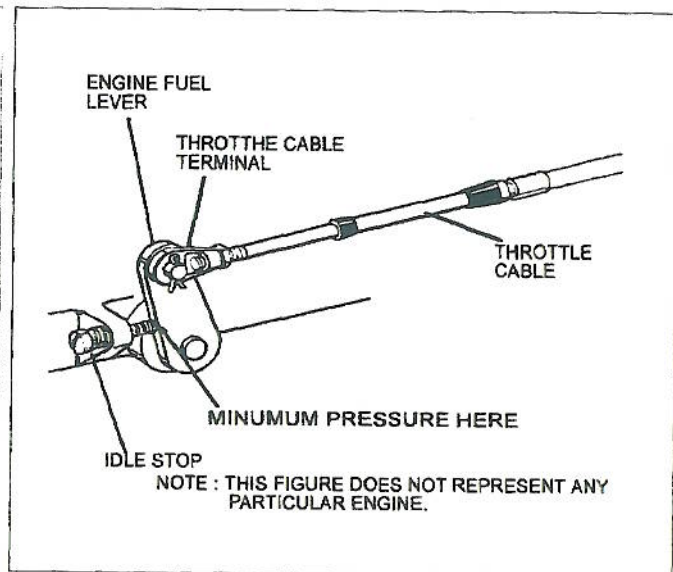
Total Shift Cable Stroke at the Control
Shortest Stroke = 2.70 inches (68.5 mm)
Standard Stroke = 2.96 inches (75.12 mm)
Longest Stroke = 3.22 inches (81.72 mm)

b. Connecting Shift Cable

1. Insert the Jam Nut' in the pocket of the Pivot.
2. Insert the end of the Shift Cable into the Pivot. Cable Rod End should be extended 1/8 inch (3.18 mm) from the surface of the Pivot. Refer to Figure 3.



[FIGURE 6. Neutral Safety Switch]



[FIGURE 7. Throttle Connection]

### E. Neutral Safety Switch

A Neutral Safety Switch is included in TS Control to prevent the engine from starting in gear. To check continuity, use a battery powered test light.

1. Make sure the Control is in Neutral Position
2. Connect one wire to the tester to the common terminal, and one wire to the "NO"(Normally Open) Terminal. The test light must light.
3. Connect one terminal of the Neutral Safety Switch to the ignition switch (start lead) and the other one to the starter solenoid. Use the Terminals and Insulators provided with the Control to avoid an electrical short circuit.
4. Check to make sure that there is electrical continuity when the Control is in Neutral. Absolutely no electrical continuity is allowed when the Control is in gear.

### F. Maintenance and Corrosion Protection

For maximum protection, especially in a salt water environment, the Control Head and Hand Lever should be washed with fresh water and waxed periodically.

Perform periodic check-up on the Control Head Mechanism for loose fasteners and signs of wear and corrosion on moving parts, cables, and engine connections. The moving parts should be well lubricated with a moisture-displacing lubricant. Replace as necessary on any parts.

# EXPLODED VIEW

