

# INSTALLATION MANUAL

Manual #055000-609

Revision 1

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INSTALLER: THESE INSTRUCTIONS CONTAIN IMPORTANT SAFETY INFORMATION AND MUST BE FORWARDED TO THE BOAT OWNER.

# INSTALLATION AND OPERATION OF MJB SERIES SIDE MOUNT CONTROL

# **OWNER'S MANUAL**



Part Number CH2500P

For Single Station Use Only

# NOTICE

For use with Type 3300 cable for Throttle. For use with Type 6400 Cable for Shift.

#### **NOTICE**

Throughout this manual, Warnings and Cautions, accompanied by the International Hazard Symbol (!), are used to alert the

manufacturer or installer to special instructions concerning a particular service or operation that may be hazardous if performed incorrectly or carelessly.

Warnings alone do not eliminate dangers, nor are they a substitute for safe boat handling and proper accident prevention measures. *Observe these alerts carefully!* 

These "safety alerts" alone cannot eliminate the hazards they signal. **Strict compliance to these special instructions** when installing, operating or performing maintenance and using common sense are the most effective accident prevention measures.

#### **A** DANGER

Immediate Hazards which WILL result in severe personal injury or death.

## **A** CAUTION

Hazards or unsafe practices which COULD result in injury, product and/or property damage.

#### **WARNING**

Hazards or unsafe practices which COULD result in severe personal injury or death.

#### **NOTICE**

Information that is important to the proper installation, operation and maintenance, but is not hazard related.

# **▲ WARNING**

Before starting installation, read these instructions and the engine maker's instructions thoroughly or incorrect assembly can result in loss of control and cause property damage or injury.

Do not substitute parts from other manufacturers. They may cause a safety hazard which Teleflex Inc. (USA) cannot accept responsibility.

Cable installation and connections must be made in accordance with the motor manufacturer's instructions.

To insure best performance, free operation of all linkages and the remote control is essential. Follow the manufacturer's recommended procedures for adjustment and lubrication.

All specifications and features are subject to change without notice.

# **NOTICE**

Teleflex Marine highly recommends the installation, and usage of an engine shut off switch (sometimes called a "kill" switch) as an important emergency safety feature for boats. This switch should be connected by a cord to the boat driver. Should the driver be thrown from the helm position, the engine will automatically shut off.

This shut off switch is not a standard part of the control you are using. It can, however, be obtained from most marine dealers and distributors.

The Model MJB control provides remote control of the throttle and shift. Teleflex push-pull cables, which connect the control to the propulsion unit, are engineered specifically for use with this control to assure smooth, instant response to movement of the control levers.

The external brake on this control is designed to eliminate throttle creep and overcome governor back-pressure on diesel engines.

When determining the lengths of the cables required, choose the most direct path from the control head to the carburetor and shift lever. The cables should be run along an unobstructed path as straight as possible, avoiding any sharp bends. Make no bends in the cable of less than 8.00 in. [203.2] (for 30 Series) and 10.00 in. [254] (for 60 Series).

# **EQUIPMENT REQUIRED**

- A. One MJB Control
- B. One 3300 series cable (3 inch travel)
- C. One 6400 series cable (3 or 4 inch travel)
- D. Throttle Connection Kit (engine end)
- E. Clutch Connection Kit (engine end)

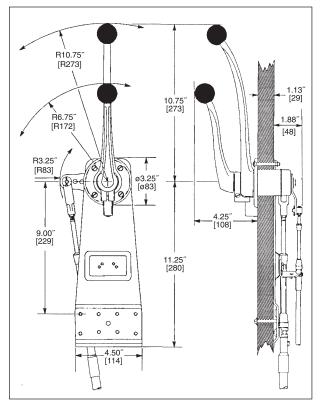


Figure 1

# LOCATING AND MOUNTING CONTROL

#### **NOTE:**

This control can be adapted for either right hand or left hand installation.

- Adequate clearance must be provided for the Control Head Hand Levers to move through their full ranges (approximately 90 degrees). See Figure 1.
- The location of the control head must allow clearance for full forward and reverse movement of the control hand levers, PLUS adequate space behind the mounting surface for the hanger assembly and an unobstructed path for running the control cables to the propulsion unit.
- 3. Cut or drill a 1.88 in. [47.6] mounting hole at the control head location. The mounting surface must be 1.13 in. [28.6] thick to allow for proper installation and stability of the control head. Shims must be added, if necessary, to achieve this thickness.
- 4. Remove the screw (Item #1), lockwasher (Item #2), throttle arm (Item #3), bolt (Item #6), nut (Item #35), clutch arm (Item #5) and nylon bearing (Item #7) from the control head. See exploded view for location of parts.
- 5. Insert the lever and housing assembly into the mounting hole.
- 6. Using the housing as a template, drill four .203 in. [5.16] holes for the mounting screws.
- 7. Using the mounting screws (Item #19) and nuts (Item #29) provided, secure the housing and hanger plate to the mounting surface in the position which allows the most direct cable path.
- 8. The hanger plate should also be secured to the mounting surface by inserting a .25 in. [6.4] bolt through the mounting surface and the .266 in. [6.76] hole in the hanger plate and tightened securely.

# **PUSH-PULL OPERATION VARIATIONS**

Although the typical right hand installation has the clutch arm positioned for push-to-go-forward and the throttle arm for pull-to-open, these operations can be changed to meet the individual requirements of the propulsion unit. Any combination of push-pull operations is possible without additional parts.

- 1. The clutch may be re-set 180 degrees from the original position. The cables must then be repositioned on the opposite side of the hanger plate (Item #9) by moving the cable clamp (Item #22) to the opposite side of the hanger plate.
- 2. Throttle operation can be changed from pull-to-open to push-to-open by rotating the throttle arm 180 degrees. The cable clip must then be repositioned to allow the throttle cable to line up with the cable terminal (Item #31).



#### **NOTE:**

Use Type 6400 cable.

 Mount the cable to the mounting bracket using the shim (Item #21), cable clamp (Item #22) and screws (Item #23) provided.

#### NOTE:

Ensure that the cable clamp engages the groove in the cable hub properly to assure proper mounting.

2. Thread the terminal (Item #28) onto the cable rod end until the clevis aligns with the desired hole.

#### NOTE:

The outer hole in the clutch lever arm (Item #5) gives 4.00 in. [101.6] of travel, and the middle hole gives 3.00 in. [76.2] of travel. Choose the hole that will allow the transmission shift lever to achieve full shift range.

- 3. Lubricate the clevis pin (Item #29) and attach the clevis to the proper hole in the clutch lever arm. Secure the clevis pin in place with the cotter pin (Item #31) provided.
- 4. Tighten the cable rod nut against the clevis to secure in place.

# INSTALLATION OF THROTTLE CABLE

#### **NOTE**

Use Type 3300 cable.

- Mount the throttle cable mounting bracket (Item #24) to the hanger plate using the screws (Item #25) and lockwashers (Item #26) provided. Refer to exploded view to determine which holes to use in regard to whether the cable is push-to-open or pull-to-open.
- 2. Secure the cable to the mounting bracket as described above for the clutch cable.
- 3. Thread the cable terminal (Item #31) onto the cable threaded rod until it aligns with the hole in the throttle lever Insert and secure with the cotter pin (Item #30) provided.

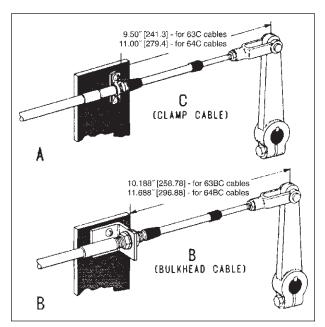


Figure 2

4. Tighten the cable rod nut against the terminal to secure in place.

# **CONNECT CABLES AT ENGINE Figure 2**

- 1. Instructions covering throttle connection are included in the throttle connection kit.
- 2. Instructions covering clutch connection are included in the clutch connection kit.

# FINAL CHECK AND ADJUSTMENT

- 1. Tighten all the cable supports, screws, nuts and cable terminals.
- 2. The control hand levers should operate freely. Any stiffness or binding can usually be traced to:
- a. Excessive number of bends in the cable.
- b. Bends smaller than the recommended minimum radius of 8.00 in. [203.2] (30 Series) or 10.00 in. [254] (60 Series).
- c. Tight or misaligned linkage on the propulsion unit.
- d. Cable compressed too tightly by cable supports.

#### **NOTE:**

Chrome plated parts should be washed off with fresh water occasionally and polished with a good metal polish. It is advisable to apply a small amount of light oil to the control if it is exposed to salt water.

#### PARTS KITS AVAILABLE

## **A** CAUTION

This control must be entirely disassembled and re-assembled to install contents of these kits. Because proper assembly and cable adjustment is so important to the boat's performance, we recommend this conversion be completed by a boat dealer or boat repair facility.

Bearing Replacement Kit CA68012P includes: Small bearings (2) Large bearings (2)

Handles Replacement Kit CA68011P includes: Throttle handle Clutch handle

Detent/Friction Replacement Kit CA68013P includes:
Throttle brake housing
Clutch detent parts

Hardware Kit #062307 includes:

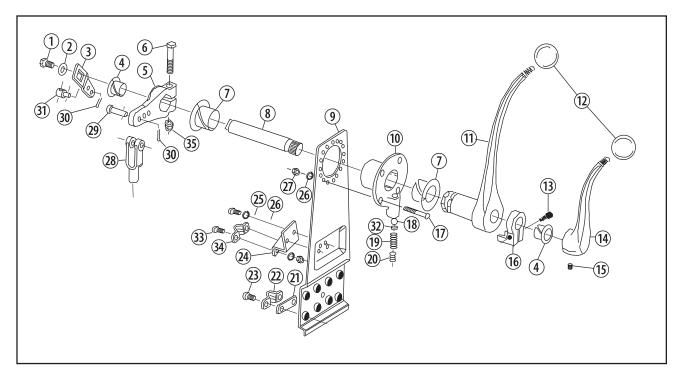
Clevis for 6400 series cable, Clevis pin, Cotter pins, Pivot for 3300 series cable,

Clamps to anchor both 3300 and 6400 series cables.

Ball Knob Kit CA68287P includes:

Red knob

Black knob



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