

TELEFLEX MORSE Marine Products

MJB Marine Control

with External Brake

Part Number: 044716-001

For use with: Morse Type 33C, Teleflex 3300 Cables
Morse Type 64C, Teleflex 6300 Cables

Installation Instructions

This manual must be accessible to the owner/user of the Teleflex Morse Marine Product.

**PLEASE READ THESE INSTRUCTIONS THROUGH CAREFULLY
AND ENTIRELY BEFORE BEGINNING INSTALLATION!**



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NOTE:

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

The external brake on this control is designed to eliminate throttle icreep 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" [203.2] (for 30 Series) and 10.00" [254] (for 60 Series).

Equipment Required

- A. One MJB Control (with external brake)
- B. One 33C Red-Jaket cable (3 inch travel)
- C. One 63C or 64C Red-Jaket cable (3 or 4 inch travel)
- D. Throttle Connection Kit
- E. Clutch Connection Kit

Locating and Mounting Control

NOTE:

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

1. Adequate clearance must be provided for the Control Head Hand Levers to move through their full ranges (approximately 90°). See Figure 1.
2. 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" [47.6] mounting hole at the control head location. The mounting surface must be 1.13" [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 13/64" [5.16] holes for the mounting screws.
7. Using the mounting screws (Item #17) and nuts & washers (Item #27 & 26) 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" [6.4] bolt (not supplied) through the mounting surface and the

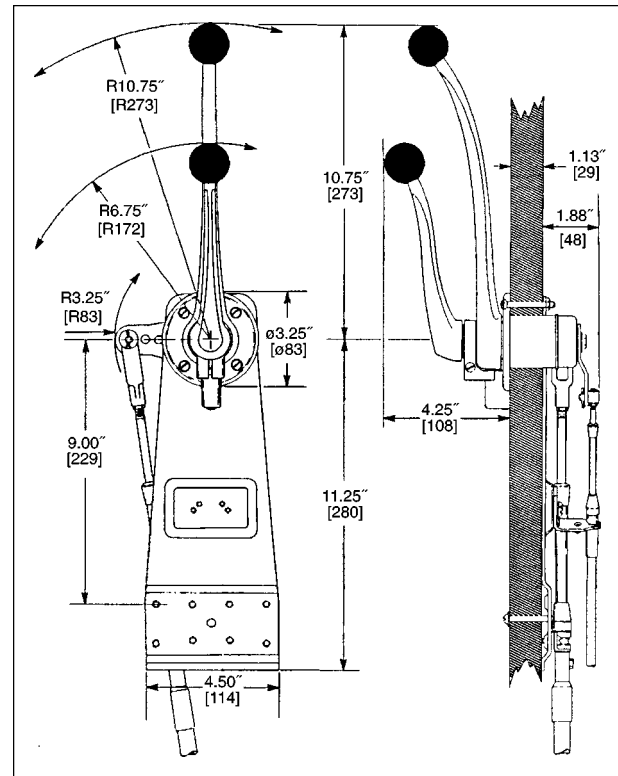


Figure 1

1.266" [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° 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 #21 & 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°. The cable clip must then be repositioned to allow the throttle cable to line up with the cable terminal pivot (Item #31).

Installation of the Clutch Cable

NOTE:

Use Type 63C or 64C cable.

1. 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" [101.6] of travel, and the middle hole gives 3.00" [76.2] of travel. Choose the hole that will allow the transmission shift lever 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 #30) provided.
4. Tighten the cable rod nut against the clevis to secure in place.

Installation of Throttle Cable

NOTE

Use Type 33C cable.

1. 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 regards 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 pivot (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.
4. Tighten the cable rod nut against the terminal to secure in place.

Connect Cables

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

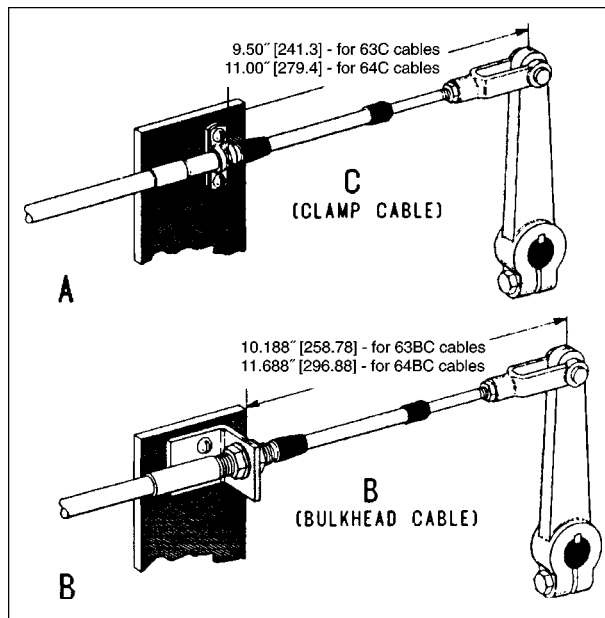


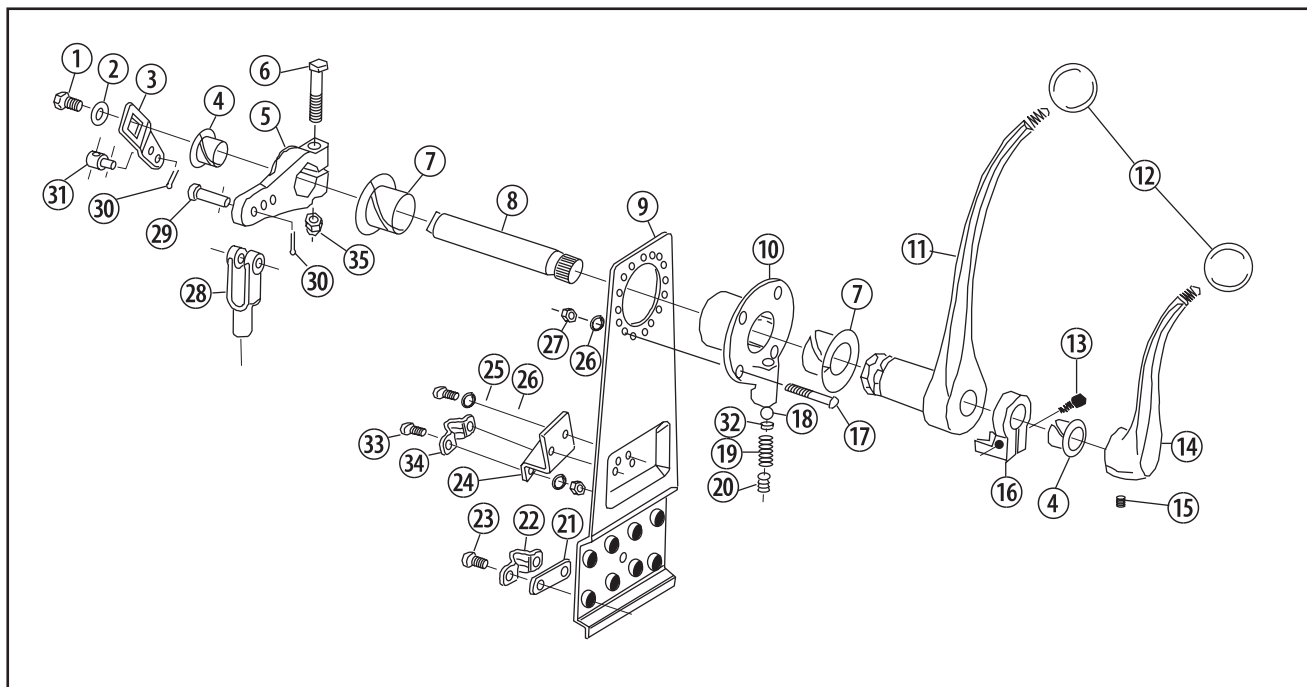
Figure 2

Final Check And Adjustment

1. Tighten all the cables supports, screws, nuts and cable terminals.
2. The control hand levers should operate freely. Any stiffness or binding can usually be traced to:
 - ï Excessive number of bends in the cable.
 - ï Bends smaller than the recommended minimum radius of 8" [203.2] (30 Series) or 10" [254] (60 Series).
 - ï Tight or misaligned linkage on the propulsion unit.
 - ï 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.



Item Number	Description	Number Required	Part Number
1	Hex Head Screw 1/4-28 x .50" [12.7] long	1	301489
2	Washer	1	302068
3	Throttle Lever	1	031784
4	Nyliner Bearing	2	062947
5	Clutch Lever	1	036384-003
6	Hex Head Bolt 5/16-24 x 2.25" [57.2] long	1	050407-503
7	Clutch Shaft Bearing	2	036433
8	Throttle Shaft	1	044496
9	Hanger Plate	1	045204
10	Housing (Chrome)	1	036395-001
11	Clutch Handle (Chrome)	1	036385-001
12	Knob, Black	1	035232-004
	Knob, Red	1	035232-001
13	Fil Head Screw 10-32 x .75" [19.1] long	1	050112-570
14	Throttle Handle (Chrome)	1	031046-002
15	Set Screw 5/16-18 x .32" [7.9] long	1	050414-002
16	External Brake (Chrome)	1	044501-001
17	Oval Head Screw 10-32 x 1.75" [44.5] long	4	050127-618

Item Number	Description	Number Required	Part Number
18	Detent Ball	1	046009
19	Detent Spring	1	044916
20	Detent Plug	1	036411
21	Shim	1	037884
22	Cable Clamp, 60 Series	1	036733
23	Rd Head Slot Screw 1/4-20 x .50" [12.7] long	2	050146-045
24	Cable Support Bracket	1	0301924
25	Rd Head Slot Screw 10-24 x .50" [12.7] long	2	050145-045
26	F10 Lockwasher	4	050801-309
27	Hex Nut 10-32	8	050900-078
28	Cable Terminal Clevis	1	029132-001
29	Yoke Pin .32" [7.9] long (Part of 28)	6	6
30	Cotter Pin 3/32 x .50" [12.7] long	1	051001-028
31	Cable Terminal Pivot	1	031029
32	Ball Seat	1	067910
33	Fil Head Screw 10-32 x .50" [12.7] long	2	050112-545
34	Cable Clamp, 30 Series	1	031509
35	Hex Nut 5/16-24	1	050908-086