

TELEFLEX MORSE Marine Products

IMY Control

Owner's Manual

INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

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

**PLEASE READ THESE INSTRUCTIONS CAREFULLY AND
THOROUGHLY BEFORE INSTALLING OR OPERATING THIS CONTROL!**

All specifications and features are subject to change without notice.



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Important Safety Notices

This manual contains information important for you to know and understand. The information relates to USER SAFETY and PREVENTING EQUIPMENT DAMAGE. Symbols identifying WARNINGS, CAUTIONS and NOTES are used to alert operators to possible dangers or important information. Please pay particular attention to the following symbols; however, they do not eliminate dangers nor are they a substitute for safe boat handling and proper accident prevention measures.



WARNING: FAILURE TO COMPLY WITH A WARNING MAY RESULT IN INJURY TO BOAT OCCUPANTS OR OTHERS.



CAUTION: FAILURE TO COMPLY WITH CAUTION MAY RESULT IN FAILURE AND/OR DAMAGE TO CONTROL AND/OR EQUIPMENT.



NOTE: INDICATES INFORMATION AND/OR INSTRUCTIONS THAT ARE NECESSARY FOR PROPER INSTALLATION, MAINTENANCE OR OPERATION.

Maintenance And Operation

INTRODUCTION

The Teleflex Morse iMYi Control is a single function, flush mount control. The control provides convenient one-hand operation of throttle and/or shift for most popular outboards, sterndrives and gas or diesel inboards equipped with hydraulic transmissions. A typical control supplies the push or pull action at the transmission shift operation and/or at the engine throttle to control engine speed. Each lever controls one function.

The shift lever is normally the shorter hand lever. This lever allows the operator to shift into forward, neutral or reverse, and operates a neutral safety switch. The neutral safety switch is a safety feature that ensures that the operator cannot start the engine until the shift lever is in the neutral position. At the neutral position the switch completes the circuit between the ignition switch and the starter solenoid.

The throttle lever is normally the longer hand lever and permits the operator to control the engine speed from idle to full throttle.

The standard iMYi control is designed to provide the operator a feel for each selectable position and to prevent levers from creeping out of the selectable feel positions.

The iMYi control is virtually maintenance free and designed to be used with Teleflex Morse 33C or 33C SUPREME cables. Each control comes with terminal kits used to connect the cables to the hand lever arms.

Preliminary Installation Procedures



NOTE

TELEFLEX MORSE CONTROLS RECOMMENDS THE USE OF OUR 33C OR 33C SUPREME CABLES WITH THIS CONTROL FOR THE BEST OVERALL PERFORMANCE OF THIS CONTROL.

To install the control, the following operations must be performed:

1. Select the control location and cut the mounting hole.
2. Measure the cable path so that proper length cables may be obtained.
3. Install and connect the shift and throttle cables to the control.
4. Electrically wire in the neutral safety switch.
5. Mount the control.
6. Connect the cables to the engine and transmission.
7. Perform the final checks and adjustments.

Selecting The Control Location And Cutting The Mounting Hole.



NOTE

WHEN SELECTING LOCATION FOR THE CONTROL, THERE MUST BE ADEQUATE SPACE ABOVE THE MOUNTING SURFACE FOR OPERATION OF THE HAND LEVERS AND BELOW THE MOUNTING SURFACE FOR INSTALLATION OF THE CONTROL AND CABLES.

The mounting location should provide the following:

1. Adequate space for comfortable operation of the throttle and shift levers through their full range of movement. Refer to Figure 1 for control dimension.
2. The minimum clearance below the mounting surface should be at least 16-1/2". This clearance allows for the control and minimum of 8" radius for the cables. Cut the mounting holes using the removable template on page 13 in this booklet. The template provides drilling dimensions for mounting screws.

Measuring And Installing Cables



NOTE

PUSH-PULL TYPE CABLES SHOULD ALWAYS RUN AS STRAIGHT AS POSSIBLE. ALWAYS AVOID ANY SHARP BENDS, AS THIS WILL GREATLY REDUCE CABLE LIFE AND CAUSE CABLE BINDING AND/OR DAMAGE. MAKE NO CABLE BENDS OF LESS THAN 8" RADIUS.

To determine proper cable length needed, measure from throttle and shift lever(s) along an unobstructed path to the transmission lever and throttle lever at the engine. Refer to Figure 2 for a typical cable routing and its proper measuring system.

Cable length is determined by an overall measurement from rod end to rod end, as shown in Figure 2. When ordering cables, any length that ends in less than a foot (12"), should be rounded to the next whole foot (12").

To install the cable(s), follow the same path used originally to determine the cable length. Support the cable(s) with hangers (not supplied), or for extremely long runs use straight sections of conduit.

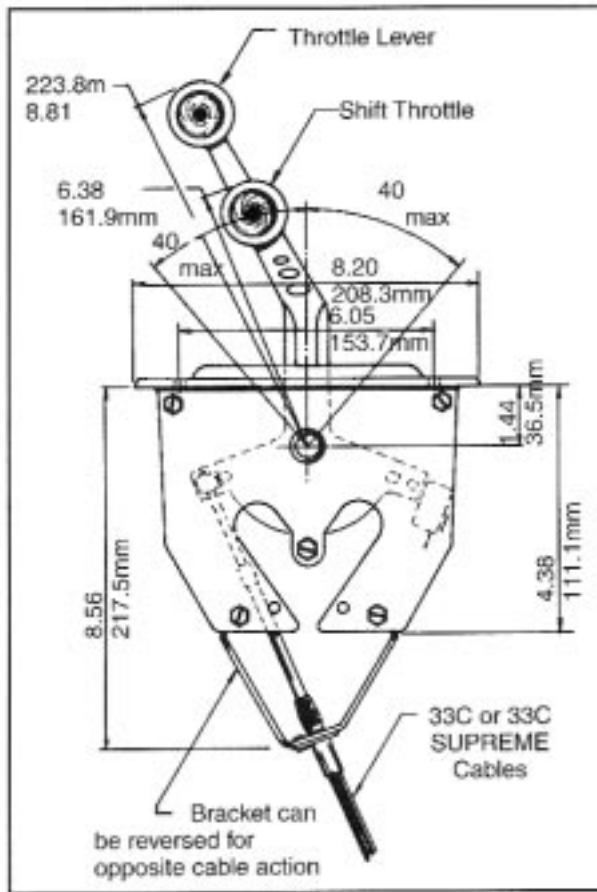


FIGURE 1

Connecting The Shift And Throttle Cables

If the control has standard idetentedi throttle, proceed with connection of the cables.

If control has the friction brake, read section marked iFRIC-TION BRAKEi before proceeding with connection of cables.



DISASSEMBLY OF THE CONTROLS IS NOT RECOMMENDED. ANY UNAUTHORIZED DISASSEMBLY WILL VOID THE WARRANTY.

Connect the Throttle and Shift cables as follows:

1. Use the terminal kit provided to connect the shift and throttle cables to their respective hand levers. Place jam nut into pocket of pivot and then screw the pivot onto the cable rod end until the rod extends through the pivot approximately 1/8i. Secure the pivot by tightening the cable nut against the bottom of the pivot, as shown in Figure 4.

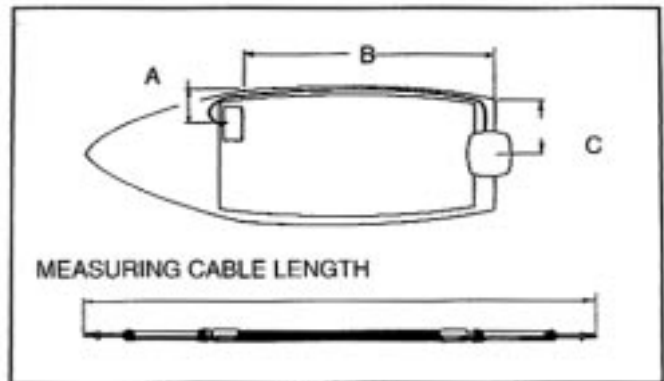


FIGURE 2

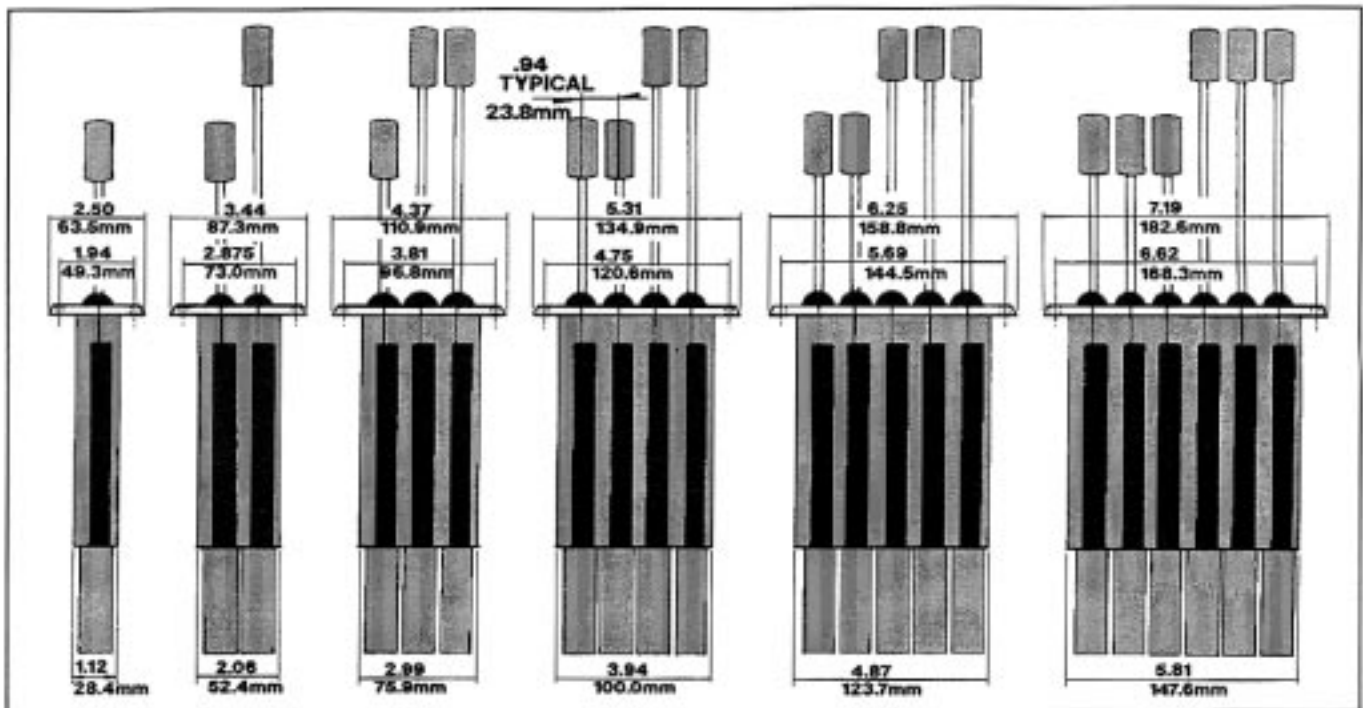


FIGURE 3

2. Position the shift and throttle levers to the full forward position for push-type control installation, or to the full reverse for pull-type control installations. See Figure 5.

3. Throttle and shift lever handles must point away from the opening in the mounting slot on the cable mounting bracket for proper installation of the cables. See Figure 6.



WARNING IMPROPER POSITIONING OF THE CABLE WILL CAUSE IMPROPER SHIFTING OR THE INABILITY TO SHIFT AT ALL. DAMAGE COULD RESULT TO THE CABLE OR BOAT; THE OPERATOR AND PASSENGERS COULD BE INJURED.

4. Insert the cable between the cable mounting brackets as shown in VIEW A of Figure 6.

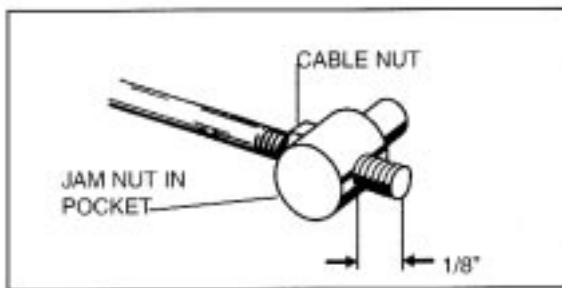


FIGURE 4

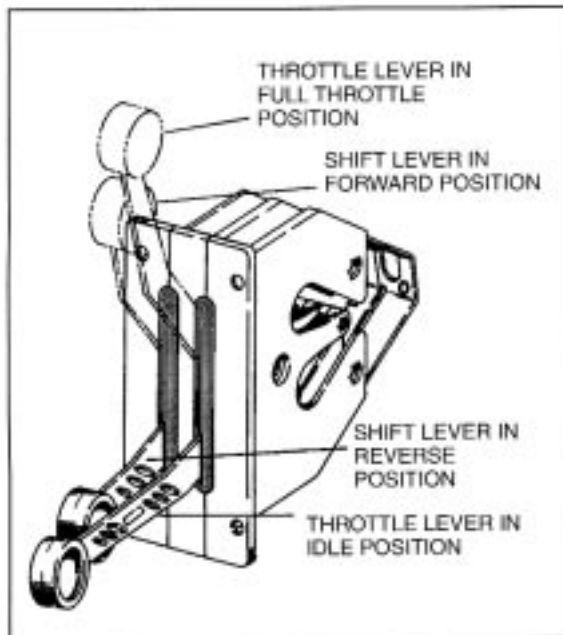


FIGURE 5



NOTE

THE INNER TRAVEL HOLE PROVIDES 2-3/4" OF SHIFT TRAVEL AND IS USED FOR OMC ENGINE INSTALLATIONS. THE OUTER TRAVEL HOLE PROVIDES 3-1/4" OF SHIFT TRAVEL AND IS USED FOR MERCURY, MERCURISERS AND MOST OTHER INSTALLATIONS. NORMALLY USE OUTER HOLE FOR MOST ALL THROTTLE INSTALLATIONS.

5. Insert the pin into either the inner or outer hole on the shift and/or throttle lever arm, as required. See VIEW B of Figure 6.



NOTE

NO SPECIAL ATTACHING HARDWARE IS REQUIRED FOR THE PIVOT SINCE THE PIVOT IS HELD IN PLACE BY SUPPORT WALLS.

6. Slide the cable groove into the mounting slot on the bracket past the retaining clip. See VIEW C in Figure 6.

7. Push the retainer clip back over the cable hub to trap the cable in the mounting slot.

8. Connect the shift and throttle cable to their respective transmission and throttle levers at the engine using the connection kits supplied with or recommended by the engine manufacturer. Follow the manufacturer's recommendations for proper connection and adjustments.

Friction Brake

1. Make sure that the friction brake is assembled on the side of the arm, opposite from the cable. If friction brake must be relocated, remove parts shown in Figure 9. Then reinstall in opposite location as specified by following procedure.

2. Pull the throttle arm back so that the holes in the mounting arm are accessible as shown in Figure 7.

3. Install the friction collet and adjustment screw into the Collet Housing. **DO NOT TIGHTEN THE ADJUSTMENT SCREW AT THIS TIME.** Place the collet housing into the INNER hole on the arm, as shown.



NOTE

THE COLLET HOUSING MUST BE SECURED TO THE LEVER ARM WITH AN E-RING AFTER IT IS INSTALLED.

4. Push the rod thru the bottom side of the collet housing (side opposite the adjustment screw) until the rod retainer can be installed thru the hole in the control housing, as shown in Figure 6. Secure the rod retainer with the e-ring provided.

Friction Brake Adjustment

1. Push the throttle lever away from the friction device, as shown in Figure 8.

2. Lift up the rubber seal to allow access to the collet adjustment screw with a screwdriver.

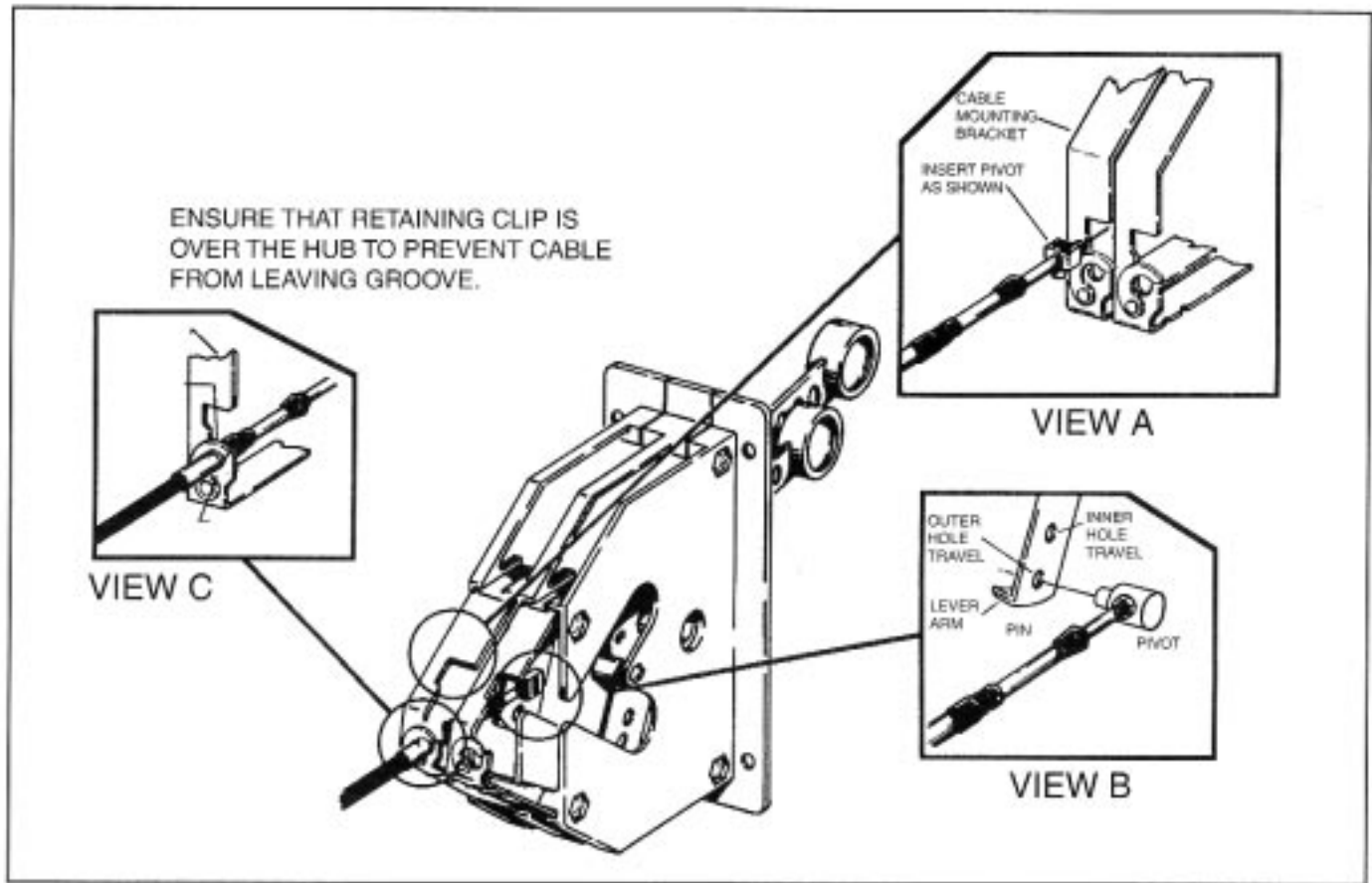


FIGURE 6



NOTE

THE SCREWDRIVER WILL ONLY FIT THE ADJUSTMENT SCREW WHEN THE CONTROL HAND LEVER IS SHIFTED COMPLETELY TO THE OTHER SIDE OF THE SLOT, AS SHOWN.

3. Tighten the screw (clockwise) to increase throttle friction; loosen it (counter-clockwise) to decrease throttle friction.

4. When the adjustments are complete, make sure that the rubber seal is secured back in place



NOTE

USE ONLY ENOUGH THROTTLE FRICTION TO OVERCOME THE THROTTLE RETURN SPRING ON THE ENGINE. EXCESS TIGHTENING OF THE ADJUSTMENT SCREW MAY CAUSE AN 'OBJECTIONABLE' FEEL TO THE LEVER.

Neutral Safety Switch Connection

Each control is equipped with a neutral safety switch as a safety feature to ensure that the engine cannot be started unless the shift lever is in the neutral position. The switch comes already mounted in the control with a wiring pigtail. The wiring installation is as follows.

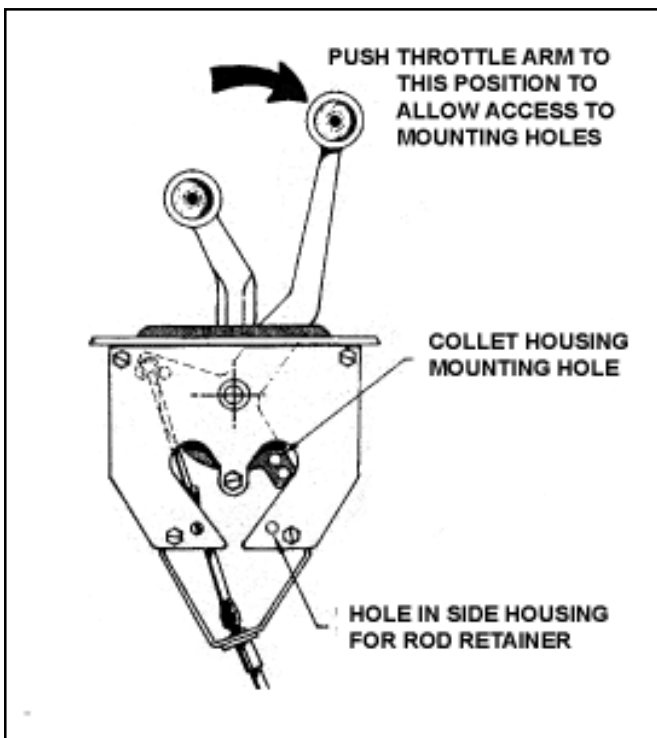


FIGURE 7

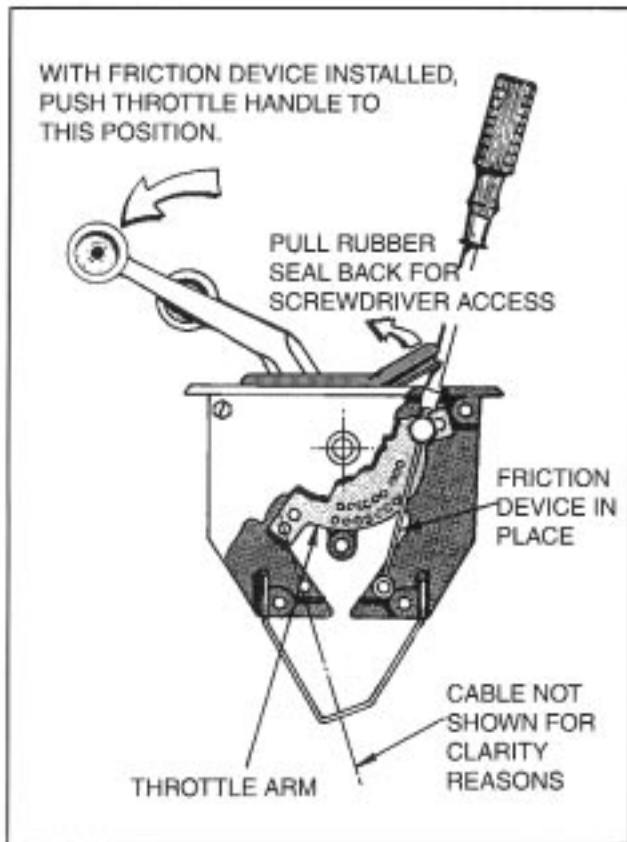


FIGURE 8

1. Connect the appropriate wires from the ignition switch and starter solenoid to either lead wire from the switch as shown in Figure 10.

2. Check the installation with a continuity tester to be sure the switch has continuity in neutral and is open in all other positions.

Replacement of the Neutral Safety Switch

Replace the neutral safety switch as follows:

1. Relieve pressure of the shift lever on the switch by placing it in the forward or reverse position to allow access clearance to the switch.
2. Push the switch toward the retainer spring while pulling the switch off the retaining pins on the support. See Figure 11. Slide the switch out. Be careful not to lose the spring when the switch is removed.



NOTE

SPRING IS ONLY RETAINED IN POCKET WHEN SWITCH IS IN PLACE. WHEN SWITCH IS NOT IN PLACE, SPRING MAY FALL OUT.

3. Remove the switch electrical leads by carefully pulling them off of the switch terminals. Carefully slide the terminals onto the new switch.

4. To install the new switch, use a screwdriver to compress the retainer spring into its pocket. Slide the

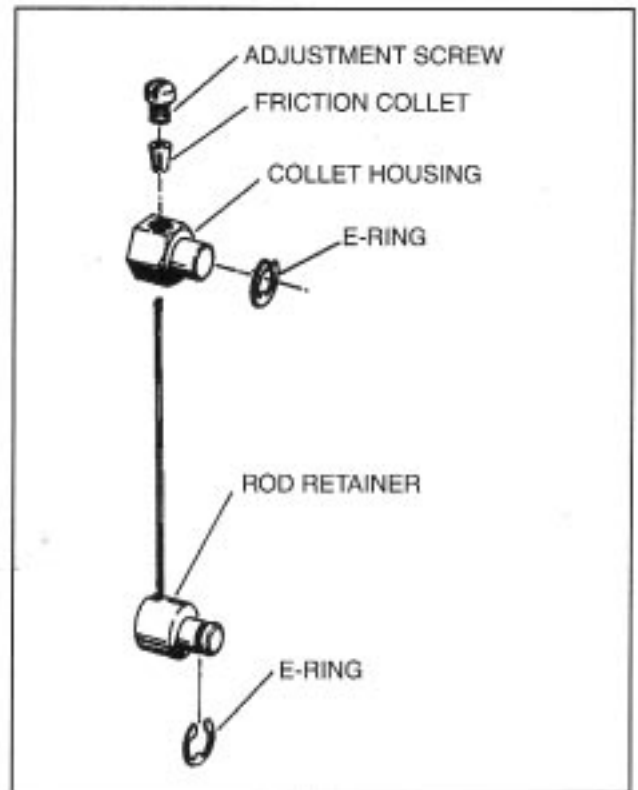


FIGURE 9

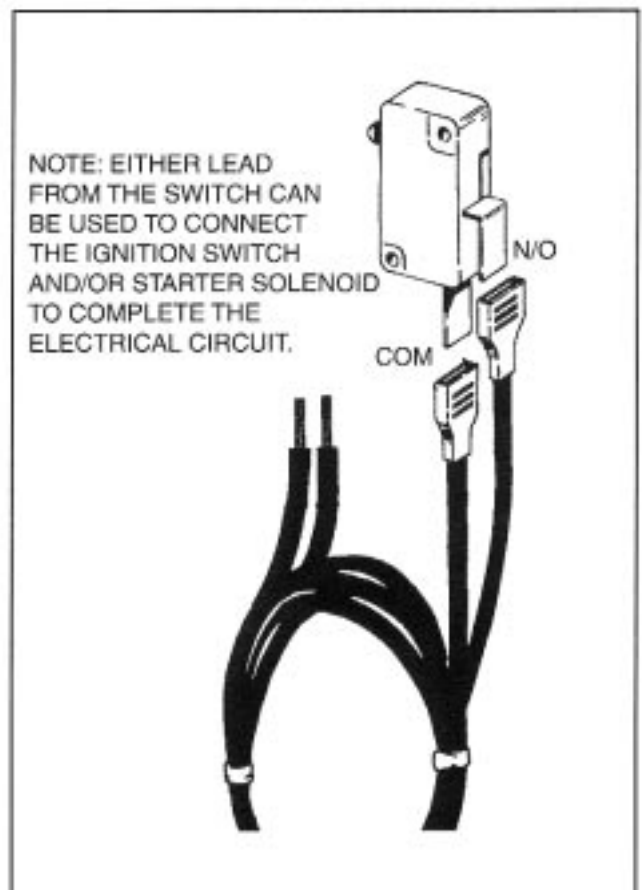


FIGURE 10

switch onto the retaining pins. Ensure that the terminals on the switch face **AWAY** from the hand levers as shown in Figure 11. Remove the screwdriver used to retain the spring.



THE TERMINALS ON THE NEUTRAL SAFETY SWITCH MUST BE HANDLED WITH CARE. ROUGH OR CARELESS HANDLING COULD DAMAGE THE SWITCH.

Mounting The Control

Check that the installation of the throttle and shift cables have been connected to the shift and throttle lever arms properly and that the wiring for the neutral safety switch has been completed. Position the control into the mounting hole, align the screw mounting holes and secure the control in place using the four each #10 stainless steel self-tapping screws provided.

Final Check And Adjustment

Check to see that all mounting hardware has been tightened, that the cable terminals are locked into position and that all cables are not excessively stressed in any way.



DO NOT FORCE THE SHIFT LEVER WHEN THE ENGINE IS NOT RUNNING. TO DO SO MAY DAMAGE THE CONTROL, CABLES AND/OR THE ENGINE.

The throttle lever should operate the engine throttle through its full range. With the standard throttle, there will be a feel of incremental detents through the throttle range. With the friction type throttle brake, there will be a smooth feel through the throttle range.

The shift lever should shift the transmission through forward, neutral and reverse. Each detent used in the shift lever should coincide with those used at the transmission lever at the engine.



NOTE

FOR ADJUSTMENTS AT THE TRANSMISSION AND/OR ENGINE THROTTLE LEVER, REFER TO THE ENGINE MANUFACTURER FOR RECOMENDATIONS AND INSTRUCTIONS

Operation Of The Control



ALWAYS BRING THE THROTTLE HAND LEVER BACK TO IDLE BEFORE OPERATING THE SHIFT HAND LEVER. SHIFTING AT HIGH THROTTLE COULD CAUSE DAMAGE TO THE TRANSMISSION, CONTROLS AND/OR CABLES.



DO NOT SHIFT TOO QUICKLY FROM FORWARD TO REVERSE OR REVERSE TO FORWARD TO PREVENT DAMAGE TO TRANSMISSION. STAY IN THE NEUTRAL POSITION UNTIL THE BOAT HAS LOST MOST OF ITS HEADWAY BEFORE ATTEMPTING TO SHIFT TO FORWARD OR REVERSE.

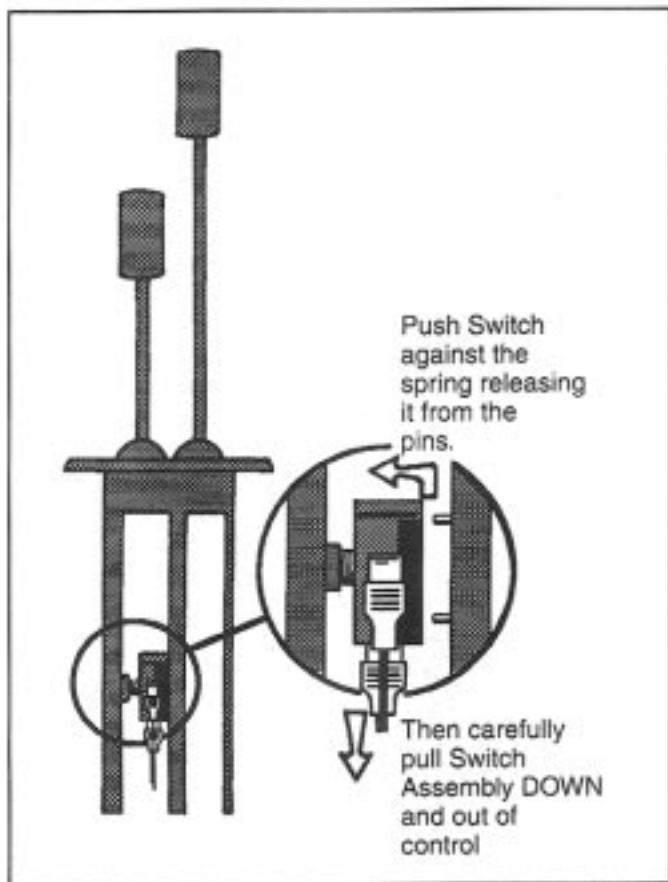


FIGURE 11

Corrosion Protection

For maximum protection, especially in salt water areas, apply all metallic parts (such as screw heads, cable sleeves, etc.) with oil or a good quality marine grease.

Mechanical Performance

1. Periodically check the control mechanism for loose fittings and fastenings, signs of wear of moving parts, particularly the cable terminals.
2. Periodically examine cables and engine connections for signs of physical wear, damage and corrosion. Replace these parts (and all parts) as required.

NOTE

ANY STIFFNESS OR BINDING IN THE SYSTEM CAN USUALLY BE TRACED TO:

1. TIGHT OR MISALIGNED THROTTLE OR SHIFT LINKAGE.
2. CABLE IS COMPRESSED TOO TIGHTLY BY THE CABLE SUPPORTS.
3. BENDS IN THE CABLE PATH ARE SMALLER THAN THOSE SPECIFIED.
4. THERE ARE AN EXCESSIVE NUMBER OF BENDS IN THE CABLE PATH.
5. CABLE IS DAMAGED.

Lubrication Points

Periodically lubricate all moving parts with a good quality marine grease. Refer to Figure 11 for lubrication points and lubricate as follows:

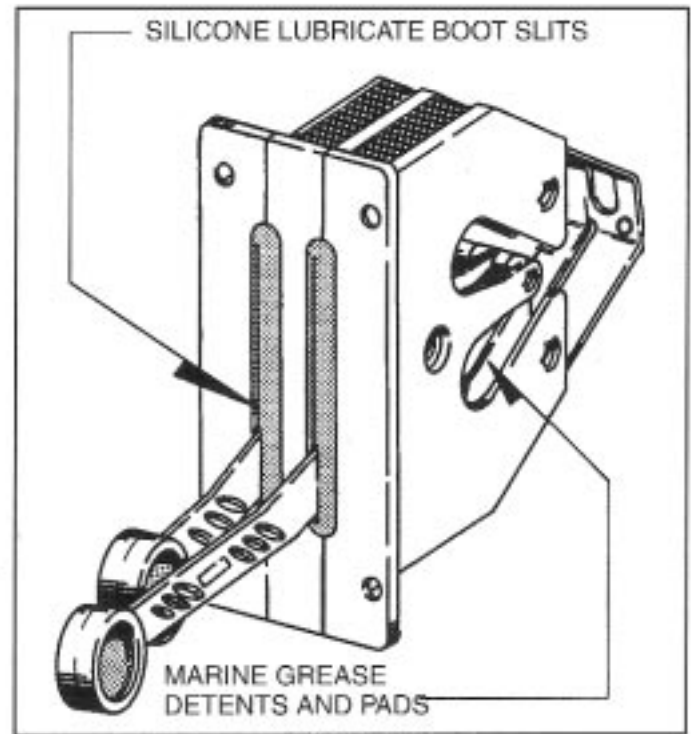


FIGURE 12

1. Lightly lubricate the slits on each hand lever boot with silicon lubrication (Dow 33 or equivalent). Work each lever to spread the lubricant.

CAUTION

REMEMBER NOT TO MOVE THE SHIFT LEVER UNLESS THE MOTOR IS RUNNING OR THE CABLE HAS BEEN DISCONNECTED FROM THE MOTOR.

2. Dab a light coat of marine grease to each hand lever around the areas of the spring detents and friction pads. Work each lever to spread the lubrication.

EXPLODED VIEW

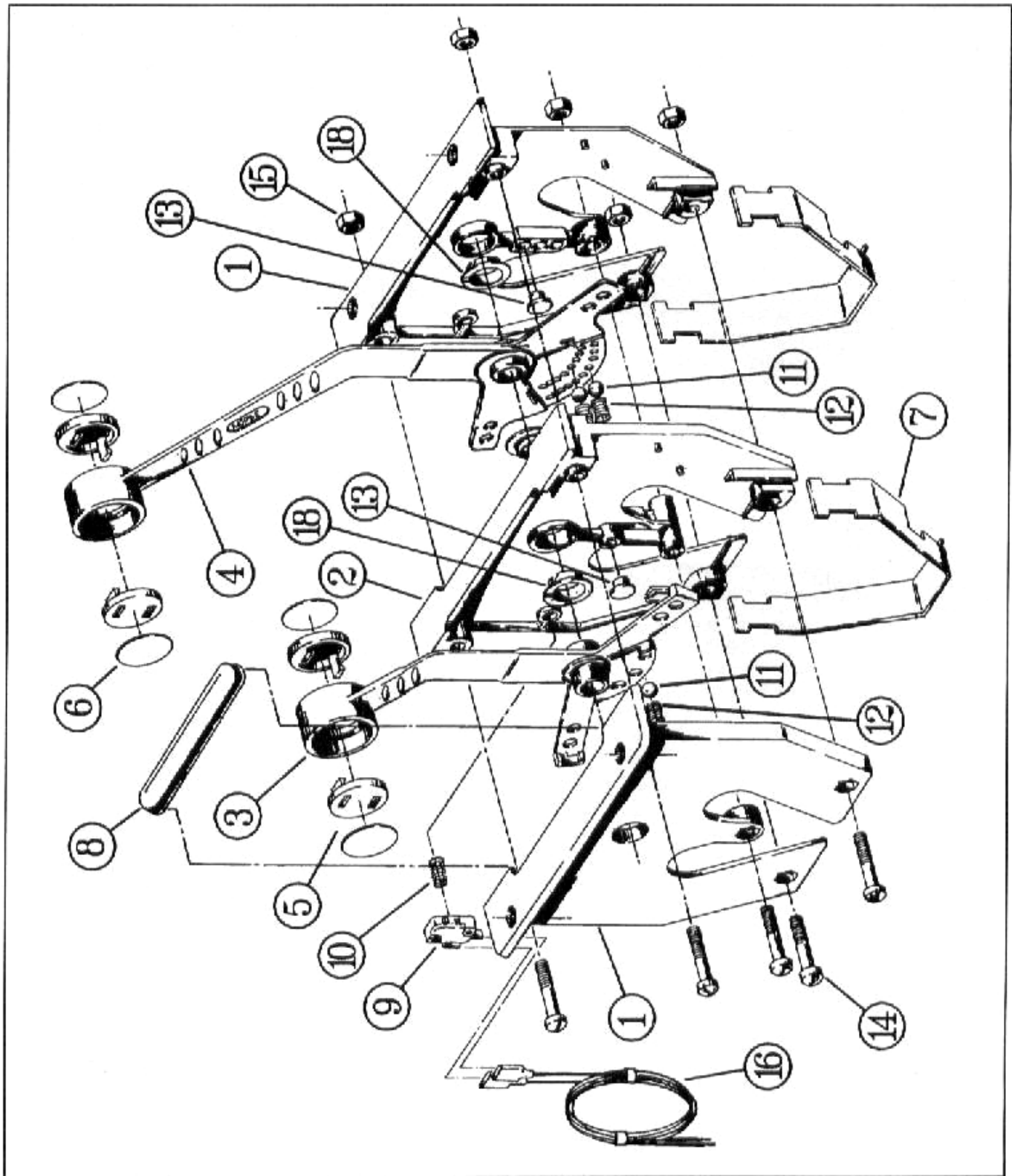


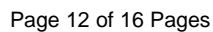
FIGURE 13

BILL OF MATERIALS		
ITEM NO.	QUANTITY REQUIRED	DESCRIPTION
1	2	SIDE SUPPORT
2	1 THRU 5 AS REQUIRED	CENTER SUPPORT - 2 SLOTS CENTER SUPPORT SPACER ó 1 SLOT NOT SHOWN
3	1 THRU 6 AS REQUIRED	SHIFT LEVER
4	1 THRU 6 AS REQUIRED	THROTTLE LEVER
5	2 PER LEVER	LEVER CAP - BLACK
6	2 PER LEVER	DECORATIVE MEDALLION
7	1 PER LEVER	CABLE RETAINER ASSEMBLY
8	1 PER LEVER	BOOT
9	1 PER SHIFT LEVER	NEUTRAL SAFETY SWITCH
10	1 PER SHIFT LEVER	SWITCH RETAINING SPRING
11	1 PER SHIFT LEVER, 2 PER THROTTLE LEVER	BALL - .250 DIA. STAINLESS STEEL
12	1 PER SHIFT LEVER, 2 PER THROTTLE LEVER	DETENT SPRING
13	1 PER LEVER	FRICTION SHOE
14	5	MACHINE SCREW - FILLISTER HEAD .250-28 x .75 LONG SINGLE LEVER .250-28 x 1.75 LONG TWO LEVER .250-28 x 2.75 LONG THREE LEVER .250-28 x 3.50 LONG FOUR LEVER .250-28 x 4.50 LONG FIVE LEVER .250-28 x 5.50 LONG SIX LEV
15	5	.250-28 HEX ELASTIC STOP NUT
16	1 PER NEUTRAL SAFETY SWITCH	WIRING HARNESS
17	1 PER LEVER	PIVOT TERMINAL KIT
18	2 PER LEVER	NYLINER BEARING

FRICTION BRAKE (IF USED)	
REFER TO FIGURE 8 FOR VIEW OF PARTS	
QUANTITY PER THROTTLE LEVER	DESCRIPTION
1	FRICTION COLLET
1	FRICTION COLLET HOUSING
1	ADJUSTMENT SCREW
1	ROD ASSEMBLY
2	E-RING, .312 NOMINAL

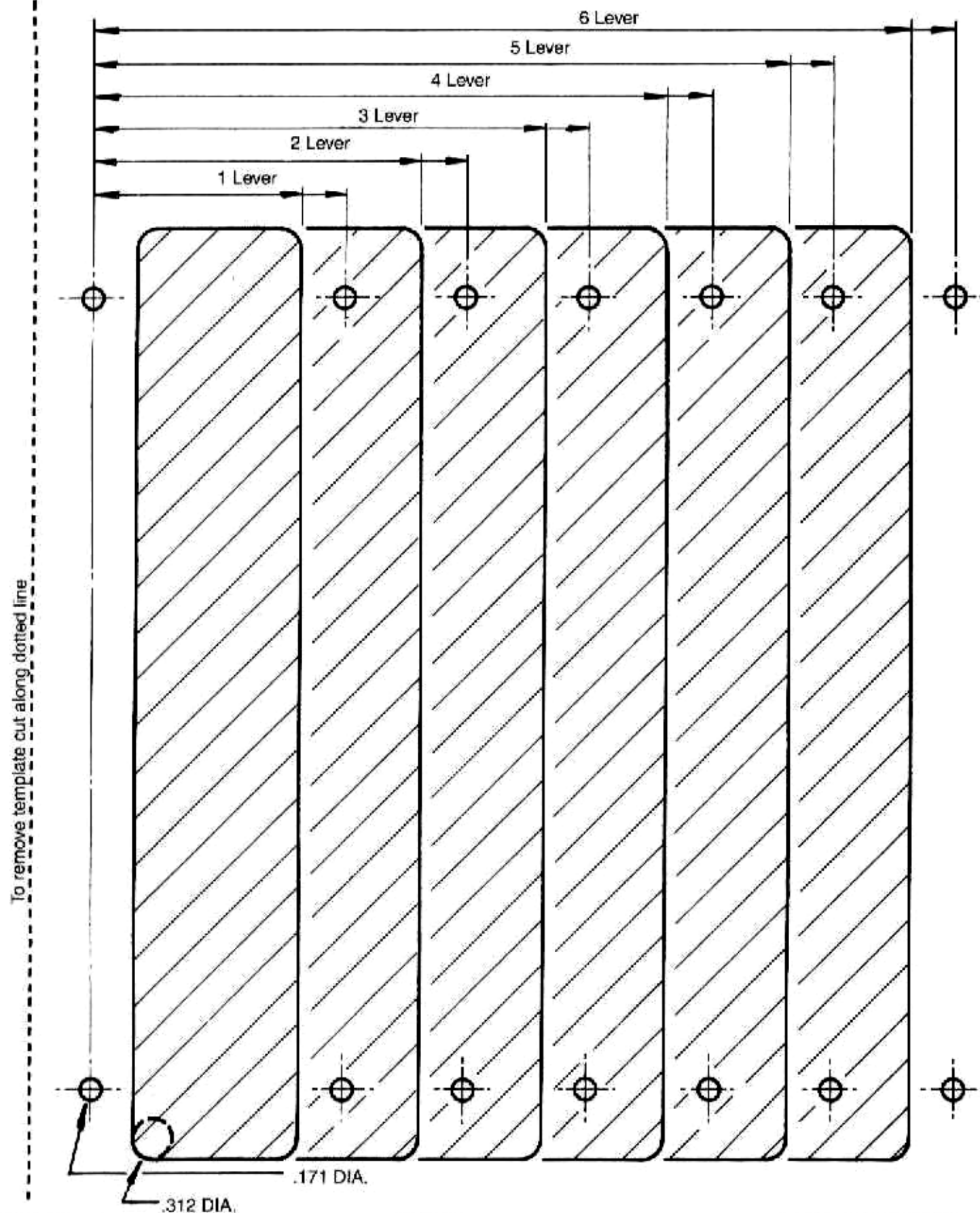
SPARE PARTS KITS	
PART NUMBER	DESCRIPTION OF KIT
306048-001	PIVOT KIT - SINGLE CABLE
306048-002	PIVOT KIT - TWO CABLES
306047	BLACK MOUNTING SCREW KIT (4ea. #10-16 x 1-1/4" LONG PHILLIPS OVAL HEAD SCREW, SELF-TAPPING)
306594	NEUTRAL SAFETY SWITCH KIT

These are dimensions for cutting and drilling the control's mounting surface. On the following page is a removeable template which can be used if desired.



"MY" CONTROL TEMPLATE

This removable template can be used for cutting and drilling of mounting surface, if required.
Please refer to Template Information page for actual dimensions.



LIMITED WARRANTY

Teleflex Morse warrants to the first retail (end user) purchaser of this product or a Teleflex Morse product incorporated in another vendors product that, for a period of one (1) year from the date of original purchase, such product will be free from defects in materials and workmanship. **TELEFLEX MORSE MAKES NO WARRANTY AS TO MERCHANTABILITY OR TO FITNESS OF ITS PRODUCTS FOR A PARTICULAR PURPOSE.**

The above warranty does not apply to a product that has not been installed or maintained in accordance with Teleflex Morse instructions, been subjected to damage in an accident or abuse during operation or repaired or modified by persons other than Teleflex Morse. This warranty is also void when Teleflex Morse Marine Products are installed on a boat or engine judged by Teleflex Morse to be an inappropriate application of its product or when Teleflex Morse Products are used with other marine accessory products which in Teleflex Morse's judgement are incompatible with the Teleflex Morse product or adversely affect its performance or durability.

If any Teleflex Morse product is used commercially for such purposes as rental or other income-producing activities, then this warranty is limited to 90 days from the date of original retail purchase. Teleflex Morse's responsibility in respect to warranty claims is limited solely to repair or replacement of product found by Teleflex Morse to be defective. Teleflex Morse **DOES NOT PAY FOR LABOR CHARGES** connected with removal of a product deemed to be defective or with installation of replacement or repaired product or for any other incidental or consequential damages.

To make a claim under this warranty, return the product believed to be defective to your local marine dealer or Teleflex Morse distributor, along with proof of purchase. If your dealer or distributor feels that a warranty claim is justified, he/she should contact Teleflex Morse giving a description of the product and requesting authorization to return it to the factory.

MERCHANDISE SHOULD NOT BE RETURNED TO TELEFLEX MORSE UNTIL A RETURN GOODS AUTHORIZATION FORM IS RECEIVED.

After receipt of an authorization form, he/she should return the product, freight prepaid, to:

Teleflex Morse
6980 Professional Parkway East
Sarasota, FL 34240.

If found to be defective, and if all return charges have been prepaid, Teleflex Morse will repair or replace the product and return it freight prepaid.



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