



MERCUISER SERVICE BULLETIN

Section: XII (Bulletins)

Number: 69-X-68-16

Date: 10/10/68

Put individual items along broken lines and attach in appropriate sections of your MerCruiser Service Manual.

- A. New MerCruiser II (1.78:1) Service Tools (Section XI)
- B. Key Switch Installation (For Installation Section II)
- C. MerCruiser II Drive Unit Installation (Section II)
- D. Locking MerCruiser 200-225 Clamp Nut (Section II)
- E. MerCathode Ground Connection - MerCr. 120 thru 160 (Sec. X)
- F. Power Trim Operation and Control Panel Change (Section II)
- G. Power Trim Schematic Wiring Circuit (For Section II)

A. NEW MERCUISER II (1.78:1) SPECIAL SERVICE TOOL LIST

(For Tool Section XI)

The following special service tools have been added to the MerCruiser II (1.78:1) list:

Part No.	Description	U.S. List
C-91-52001	Shimming Tool, Forward & Reverse	\$ 26.50
C-91-52002	Shimming Tool, Upper Pinion Gear	
C-91-52393	Driver, Needle Bearing	1.45
C-91-52394	Head Puller Rod	3.50
C-91-53122	Swaging Tool	3.90

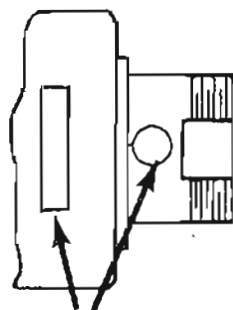
B. KEY SWITCH INSTALLATION

(For P. 24A of Installation II)

It has been brought to our attention that key switches are being installed upside-down. A hole is drilled in the bottom of the switch for drainage. (Figure 1)

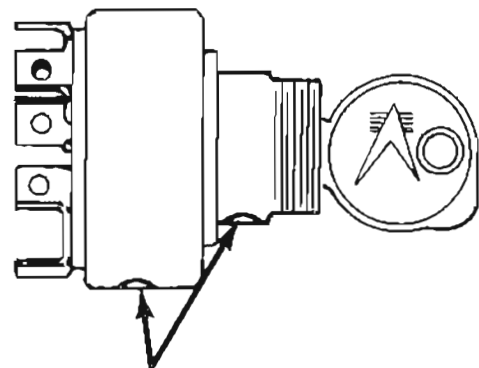
Holes must face down when switches are installed. Quick identification of proper installation can be made by noting the key position in the switch. The wider portion of the key will be at the bottom. (Figure 2) See chart, above, for new part number which supersedes old part.

Original Drain-in-Neck Key Switch Part No.	New Hole Drain-in-Body Key Switch Part No.
A-30590	A-52335
A-30162	A-52336
A-30163	A-52337
A-34198	A-52338



HOLES IN BOTTOM

Figure 1. Drainage Holes



HOLES IN BOTTOM

Figure 2. Profile of Key

C. MERCUISER II DRIVE UNIT INSTALLATION

(For Installation Section II)

Reports have been received that some MerCruiser II drive units will not tighten in the transom plates when the clamp nut is tightened.

To remedy, first check that the clamp nut is installed properly, "Forward" (tapered end) toward flywheel of engine. If it is not, remove and install correctly. If the clamp nut is installed correctly, and drive unit still will not tighten in transom plates, remove the drive unit. Check that 1) the drive locating pin has not broken off, which would keep the drive teeth in the steering lever housing from mating with the teeth in the transom plates, or 2) that the locating pin is installed off center. In either case, remove the locating pin and reinstall the drive, aligning it by sight to be vertical. When tightening the clamp nut, check the drive for proper engagement into the mating teeth of the transom plate. The drive unit will lock into the outer transom plate if installed correctly.

D. LOCKING MERCUISER 200-225 CLAMP NUT

(For Installation Section II)

Install new eccentric locking washer (C-12-54208) and screw (C-10-35192) on the inner transom plate of all MerCruiser II (1.78:1) drive to retain clamp nut on all units presently using regular flat washer. (Figure 3)

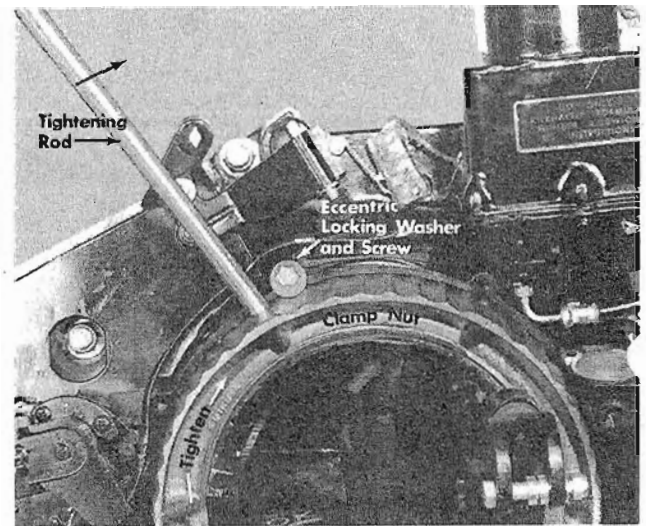


Figure 3. Installation of Eccentric Washer and Screw

C-10-35192

Screw

\$.25 U.S. List

B-12-54208

Eccentric Washer

U.S. List

E. MERCATHODE GROUND CONNECTION -

MerCruiser 120 thru 160

(For Miscellaneous Section X)

When connecting MerCathode ground strap to steering lever on later MerCruiser 120 thru 160 stern drives, use screw C-10-31919 and nut C-11-27164. (Figure 4)

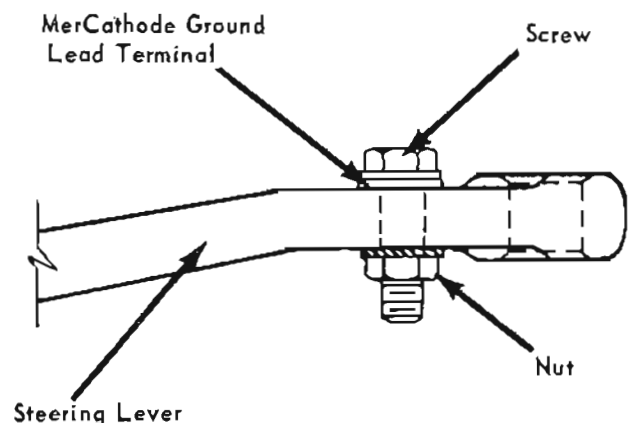


Figure 4. Connecting MerCathode Ground Strap

C-10-31919

Screw

\$.10 U.S. List

C-11-27164

Nut

.15 U.S. List

F. POWER TRIM OPERATION and CONTROL PANEL CHANGE

(For Installation Section II)

A change has been made in the appearance and operation of the Power Trim control panel. (Figure 5)

The new panel can be identified by the push button color:

- Red - "UP"
- Red/Green - "UP/OUT"
- White - "IN"

The complete new operation procedure is outlined in the customer's "Operation and Maintenance Manual" which accompany each unit. Following is a brief operational outline:

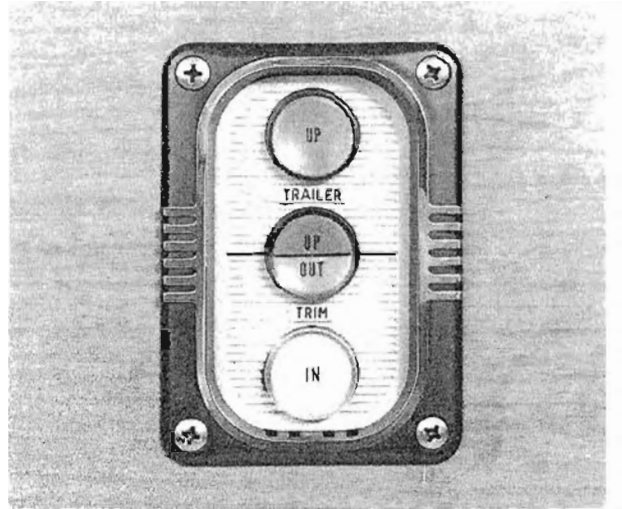


Figure 5. New Power Trim Control Panel

TRIMMING BOAT

Unit "Out" - press "UP/OUT" button; unit "In" - press "IN" button.

TRAILERING or LAUNCHING BOAT

To "Raise" unit - press "UP/OUT" and "UP" buttons at same time; to "Lower" unit - press "IN" button.

If button is held depressed for a period of time after drive unit reaches end of upward travel, an overload cutout switch will open and pump motor will stop. To prevent cutout from opening, it is recommended that "UP" and "UP/OUT" buttons be released as soon as drive unit reaches the end of upward travel. If cutout should open, do not depress switches for approximately one minute.

After this period of time, cutout will close and unit may be operated.

G. POWER TRIM SCHEMATIC WIRING CIRCUIT

(For Installation Section II)

The electrical circuit for new Power Trim (Figure 6) is not the same as on earlier MerCruiser Power Trim. **DO NOT** rewire control panels according to earlier wiring diagrams.

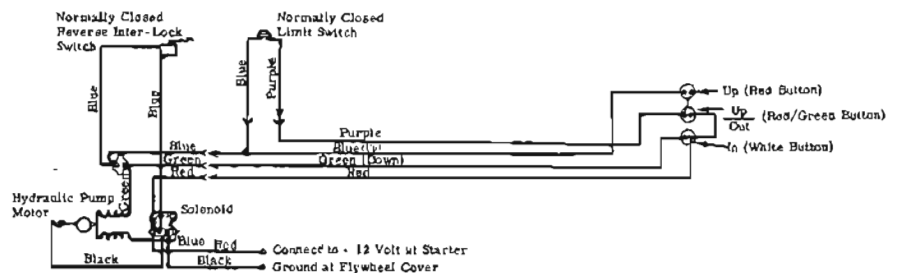


Figure 6. New Power Trim Schematic Wiring Circuit