



# MERCRUISER SERVICE BULLETIN

Section: 10 (Bulletins)

Number: 71-7-04

Date : 5/27/71

A. Servicing Power Trim Cylinder Assembly - MC 120-thru-165 (Sec. 7A)

B. New MerCruiser Service Tools (For Tool Section 9)

## A. SERVICING POWER TRIM CYLINDER ASSEMBLY - MerCruiser 120-thru-165 (Sec. 7A, Page 24)

### 1. New MerCruiser 120-thru-165 Power Trim Cylinder Assembly

New trim cylinder B-45706A3 incorporates an improved design piston assembly. Early style piston assemblies may collapse when the piston rod is forcefully extended to the maximum tilt-up position. A trim cylinder with a collapsed piston could bind and not allow it to retract completely from the extended position.

New trim cylinders B-45706A3 are oil filled and plugged. (Connect hydraulic lines quickly to prevent loss of oil. Bleeding hydraulic lines is not necessary.)

First production run of the new trim cylinders (B-45706A3) were packaged without the trim cylinder rod end marked with a letter "3". Packages with Part No. B-45706A3 contain the "A3" trim cylinder. If the cylinder is not marked "3", it should be stamped with the letter "3" or have three dots stamped on the piston rod near the pivot end.

Complete trim cylinder assemblies no longer will be accepted for warranty replacement, unless major parts are damaged. See Item "B", following.

### 2. MerCruiser 120-thru-165 Power Trim Cylinder Overhaul Kit

Trim Cylinder Overhaul Kit B-45522A2 includes a new design piston along with other parts for repair of one trim cylinder. An Overhaul Kit should be installed in B-45706A1 trim cylinders which fail and are not marked "3" on piston rod near the pivot end.

If one trim cylinder fails, it is recommended to install a B-45522A2 Trim Cylinder Overhaul Kit in both trim cylinders (if not marked "3" on piston rod). Order a sufficient number of Trim Cylinder Overhaul Kits to cover your immediate needs. See Item "C", following.

One and two-piece piston assemblies are used in production trim cylinders, but only the two-piece piston is supplied with the overhaul kit.

A completed warranty claim must be returned with the replaced pistons for credit. Labor rate is 1.2 hours for overhaul of a trim cylinder (or 1.9 hours for both) which includes removal and replacement from stern unit and bleeding hydraulic lines. Time for repair of trim cylinder only (off unit) is 0.5 Hrs.

Only trim cylinder repairs within the warranty period will be accepted.

(OVER)

### 3. MerCruiser 120-thru-165 Trim Cylinder Repair Kits and Parts

The following trim cylinder repair kits and parts are to be used for repairs to hydraulic trim cylinders:

	U.S. List
B-45522A2 Trim Cylinder Overhaul Kit (Includes parts in "O" Ring Kit - new type piston assembly, end cap and pivot end with instructions)	\$9.65
B-25-60342A1 "O" Ring Kit (For "O" ring replacement only; includes instructions)	2.85
B-45706A4 Outer Tube Assembly (For outer tube replacement; includes instructions)	8.45

#### 4. Trim Cylinder Overhaul Reassembly "CAUTION"

When placing piston assembly into inner cylinder, care should be exercised in working piston thru cylinder. DO NOT force piston straight into cylinder, since it may damage the piston's quad ring.

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#### B. NEW MERCUISER SERVICE TOOLS (For Tool Section 9)

The following new MerCruiser service tools now are available.

##### 1. Snap Ring Plier Points (C-91-60688) (Sec. 9, Page 9-27)

Serves as a pair of replacement points for Snap Ring Pliers (C-91-37240A1) which is used to remove and replace gimbal bearing snap rings.

##### 2. Hex Driver Kit (C-91-60699) (Sec. 9, Page 9-28)

Used for removal of hex socketed hinge pins and plugs on MerCruiser Power Packages. Kit includes hex bits 5/16", 3/8", 7/16", 9/16", 5/8" and 3/4" with a 1/2" driver. They are held neatly in a tray for easy storage and use.

##### 3. Long 9/64" Hex Key (C-91-60697) (Sec. 9, Page 9-28)

Removes and replaces shifter gear stop screw in MerCruiser 215E Stern Drive Unit when selecting propeller shaft rotation.

##### 4. Work Stand Bracket Assembly (C-91-60524A1) (Sec. 9, Page 9-18) and (Sec. 9, Page 9-26)

Used for holding MerCruiser 215 drive shaft or gear housing during repairs. This tool must be used with MerCruiser III Work Stand Adaptor (C-91-52569A1) and MerCruiser Repair Stand (C-91-33750).

C-91-60688	Snap Ring Plier Points (Pair)	\$ .60 Net U.S.
C-91-60699	Hex Driver Kit (1/2" Driver and Bits in Tray)	9.20 Net U.S.
C-91-60697	9/64" Hex Key (Long)	.15 Net U.S.
C-91-60524A1	MC 215E Work Stand Bracket Assembly	5.50 Net U.S.