

Section: XII (Bulletins)

Number: 21-1 70-13

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

A. MerCruiser I Type Drive Unit Noises (Drive Unit Section)

B. MC I-thru-165 Gear Case Cover Tool Adaptor (Tool Section)

C. MerCruiser IA-IB-IC Superseded Drives (Drive Unit Sec.)

D. MC 120-thru-165 Drive Shaft Bearing Preload (Drive Unit Sec.)

E. Power Steering and Ride-Guide Cable Lube (Miscellaneous Sec.,

## A. MERCRUISER I TYPE DRIVE UNIT NOISES (For Drive Unit Section)

If an undetermined sound is emitted from a MerCruiser I type stern drive unit, the following are probable causes:

- 1. Bent propeller or propeller shaft which causes vibration.
- 2. Improper engine alignment which causes the universal joint shaft to run off center and vibrate.
- 3. Loose fit between the gimbal bearing and universal joint shaft.
- 4. Gimbal bearing not shimmed tight in gimbal housing.
- 5. Universal joint crosses and/or bearings worn from lack of lubrication or from water which has entered the bellows.
- 6. Internal drive damage or failure, due to lack of oil, worn gears or bearings.
- 7. Gimbal ring not properly shimmed (vertically), which telegraphs noises when gimbal ring moves up-and-down on swivel shaft. This problem can be corrected by shimming gimbal ring according to procedure outlined in MerCruiser Service Manual.

## B. MERCRUISER I-thru-165 GEAR HOUSING COVER TOOL ADAPTOR

(For Tool Section)

Adaptor C-91-59553 is placed on Cover Tool C-91-53126 for applying proper torque to gear housing cover nut when tightening cover nut. (Figure 1)

## TORQUE VALUES

150 lbs. ft. (20.75mkg) for bearing carrier WITH lock tab feature 200 lbs. ft. (34.58mkg) for bearing carrier WITHOUT lock tab feature

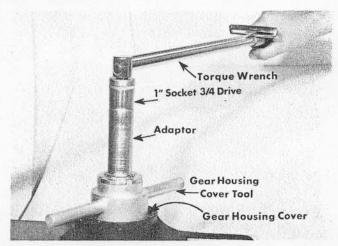


Figure 1. Gear Housing Cover Tool and Adaptor

Tool Part No.	Description	Price Net U.S.
C-91-59553	Adaptor - Gear Housing Cover Tool	\$ 5.35
C-91-53126	Gear Housing Cover Tool (MerCruiser 60-thru-II)	8.05
C-91-52523	Torque Wrench (300 Ft. Lbs.)	38.50

# C. MERCRUISER IA-IB-IC SUPERSEDED COMPLETE DRIVES (For Drive Unit Section)

MerCruiser IA and IB or IC drive shaft housing assembly with gear housing assembly complete has been superseded by the drive shaft housing assembly less gear housing.

When a complete drive is required, it will be necessary to order a gear housing assembly complete (B-1623-2511A5) with the drive shaft housing. This applies ONLY to MerCruiser IA and IB or IC drives.

# IA-IB Drive Shaft Housing and Gear Housing Assembly Complete

Order (1) B-1547-2411A16

(1) B-1623-2511A5

# IC Drive Shaft Housing and Gear Housing Assembly Complete

Order (1) B-1547-2411A17 14

(1) B-1623-2511A5

# D. MERCRUISER 120-thru-165 DRIVE SHAFT BEARING PRELOAD (For Drive Unit Section)

MerCruiser 120-thru-165 upper drive shaft (13 spline) bearing preload is determined automatically by a Belleville washer in the top cover.

When replacing this top cover, use Quicksilver Multipurpose Lubricant (C-92-49588) to hold the Belleville washer in place. If the washer moves out of position, excessive bearing preload will result in stern drive unit bearing failure.

## E. MERCRUISER POWER STEERING and RIDE-GUIDE STEERING CABLE LUBRICATION

(For Miscellaneous Section)

Anti-Corrosion Grease (C-92-45134) no longer is recommended as a lubricant for any attaching or moving parts for Power Steering or Ride-Guide Steering systems. Use New Multipurpose Lubricant (C-92-49588),