



MERCUISER SERVICE BULLETIN

Section: XII (Bulletins)
Number: 78-169-14
Date: 11/25/69

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

- A. Reverse Gear Reshimming - MerCruiser I-thru 160 (Section IX)
- B. Timing Gear Noise - MerCruiser 140 (Section VIII)
- C. Torque Wrench Adaptor - MerCruiser 200 (Section XI)

A. REVERSE GEAR RESHIMMING - MerCruiser I-thru-160

(For Drive Unit Section IX)

When servicing gear housing assemblies, reshim reverse gear to new, recommended .015" to .020" (.38mm to .51mm) reverse gear backlash. (The .006" to .008" backlash is no longer recommended.) Refer to Section IX of the Service Manual for particular gear housing shimming procedure.

IMPORTANT: Replace thrust ring (B-35915).

Reshim reverse gear to obtain a .015" to .020" reverse gear backlash with cover nut torqued as follows:

- 150 ft. lbs.* (20.75mkg) for bearing carrier with lock tab feature.
- 250 ft. lbs.* (34.58mkg) for those without lock tab feature.

* Use 3' (90cm) long pipe on handle of Gearcase Cover Tool (C-91-30291A2) and exert 50 lbs. of pull on end to obtain 150 ft. lbs. of torque at cover nut or exert 83 lbs. of pull for 250 ft. lbs. of torque at cover nut.

DO NOT over-torque cover nut. Recheck gear backlash after torquing and reshim if necessary.

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| B-35915 | Thrust Ring | \$1.65 U.S. List |
| C-15-31535A1 | Shims | \$1.40 U.S. List |

B. TIMING GEAR NOISE - MerCruiser 140

(For Engine, Mechanical Section VIII)

A steel timing gear is incorporated in the MerCruiser 140 Marine Engine. While it is superior in strength, the gear, occasionally, may issue a hollow, rapping sound. The sound usually is heard at idle, although it may be heard thru the 2000 RPM range. This condition causes no harm to the engine, and there is no corrective measure which can be taken at this time.

C. TORQUE WRENCH ADAPTOR - MerCruiser 200

(For Tool Section XI)

A new Torque Wrench Adaptor (C-91-54638 with a 9/16"x1/2" square drive) is available for removing and installing the 9/16" engine coupling nuts on MerCruiser 200 Stern Drive Engines. The adaptor is used with a 1/2" square drive flex handle to remove nuts and with a 1/2" drive ft. lb. torque wrench for tightening nuts.

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| C-91-54638 | Torque Wrench Adaptor | \$3.20 Net U.S. |
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