

Section: 10 (Bulletins)
Number: 77-270-15

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

- A. Exhaust Manifold Water Flow Reversal Kits Inboards (Sec. 10)
- B. MerCruiser 215E and 215H Short Block Assemblies (Sec. 5D)
- C. Exhaust Elbow Water Discharge Port Clogging (Section 5)

A. EXHAUST MANIFOLD WATER FLOW REVERSAL KITS - MERCRUISER INBOARD ENGINES

(For Miscellaneous Section 10)

(Replaces Information Contained in Paragraph "B" of Service Bulletin No. 70-15, Dated 7/10/70)

Under certain operating conditions, exhaust manifolds have cracked on some MerCruiser 215, 225, 250, 270 and 325 Inboard Engines. This problem is caused by a steam pocket which forms in the manifold water jacket.

To guard against this possibility, the water flow in the exhaust manifold must be reversed on certain engine applications. The following water flow reversal kits are available and should be installed on the engine applications shown:

B-52837A3 Water Flow Reversal Kit

For MerCruiser 225-250 and 270 Inboard Engines (equipped with B-52965A1 fresh water cooling) and MerCruiser 325 Inboard Engines (equipped with B-52966A1 fresh water cooling) that have an installed angle of 5° or more, and rear (transmission end) of the engine is lower than the front.

Flat Rate Labor Time Allowance: 0.5 Hour

B-52837A2 Water Flow Reversal Kit

For MerCruiser 225-250-270 and 325 Inboard Engines (without fresh water cooling) that have an installed angle of 50 or more and the rear (transmission end) of the engine is lower than the front.

Flat Rate Labor Time Allowance: 1.0 Hour

B-52837A4 Water Flow Reversal Kit

For MerCruiser 215 Inboard Engines (without fresh water cooling) that have an installed angle of 5° or more and the rear (transmission end) of the engine is lower than the front.

Flat Rate Labor Time Allowance: 1.0 Hour

These kits should be installed on all MerCruiser Inboard Engine Installations which fall into the categories described.

B. MERCRUISER 215E and 215H SHORT BLOCK ASSEMBLIES

(For Engine Section 5D)

Flywheels no longer are part of the MerCruiser 215E or H short block. They have been removed so that short block B-55793A3 supersedes B-56379A4 and can be used as a replacement for both engines.

C. EXHAUST ELBOW WATER DISCHARGE PORT CLOGGING - MerCruiser 90, 120, 140, 165, 200, 215, 225, 250, 270 and 325 Stern Drive Engines and MerCruiser 215, 250, 270, 325 and 390 Inboard Engines (For Engine Section 5)

A new Exhaust Elbow Water Separation Tube (B-32-58616A1) is available for installation on the above engines and should be installed in cases where the water discharge port (located inside exhaust elbow[s]) becomes clogged with rust scale or other foreign material. The new separation tube provides additional clearance between the tube and exhaust elbow, thus reducing possibility of discharge port clogging.

Installation Procedure

- 1. Remove exhaust elbow from manifold.
- 2. Remove separation tube from elbow. Tube is press-fit in elbow.
- 3. Clean area, which retains tube in elbow, with a wire brush to remove hardened sealer.
- 4. Check discharge port size. Port should be 4" x 2" minimum. If necessary, remove casting flash to enlarge port opening.
- 5. Remove all scale or foreign material from elbow water jacket. Check manifold water jacket for obstructions and, if necessary, remove manifold end caps and clean out passages.
- Apply Locquic Primer (C-92-59327-1) and #35 Loctite (C-92-59328-1) to tube and elbow as outlined in directions on primer container.
- 7. Set tube in position in elbow and place a block of wood over end of tube. Drive tube into elbow by striking block with a hammer.
- 8. Reinstall elbow on manifold and allow Loctite to cure for 3 hours before running engine.