Exhaust Manifolds, Risers and Exhaust Elbows

Models

All standard V6 and V8 gasoline engines with center outlet exhaust manifolds.

New Gaskets

IMPORTANT: These new gaskets are installed dry. No sealer is required.

P/N 27-863726 Gasket – 4 Slot.

P/N 27-863724 Gasket – Restrictor (with 2 holes and 2 slots). The 2 holes always go fore and aft.

P/N 27-863725 Gasket – Block-off (without holes or slots). This gasket stops coolant flow.

Fastener Torque Change

33 lb-ft (45 Nm). Use this new torque on all fasteners when installing exhaust elbows or risers onto exhaust manifolds.

Assembly

1. Clean all gasket surfaces before reassembly.

2. Check all gasket surfaces for damage.

NOTE: The following specifications are used only if the gasket surfaces on used exhaust components have to be machined to remove minor corrosion. The maximum material that can be removed is .010 in. (0.25 mm). The machining flatness specification is .003 in. (0.07 mm) maximum overall, with not more than a .001 in. (0.02 mm) difference within 1 in. (25 mm). Make sure that mounting bolts do not bottom out in threaded holes after machining.
3. Look at the condition of the metal around the exhaust outlet in the casting. Inspect for damaged metal caused by salt water or exhaust gas corrosion in the manifold, elbow and riser (if equipped). Replace all damaged parts.

![Diagram of exhaust manifold](image)

- Inspect Area Around Exhaust Outlet

**NOTE:** *The type of gasket used in certain locations has changed from what is shown in older service literature.*

4a. ▲ Raw water cooled engines with all the water from the thermostat housing going to the 90-degree fitting on bottom of the exhaust manifold:

Use P/N 27-863726 Gasket – 4 Slot between the exhaust manifold and the exhaust elbow.

If the engine has 3 in. (76 mm) or 6 in. (152 mm) risers, use P/N 27-863726 Gasket – 4 Slot between the riser and the exhaust manifold and exhaust elbow.

4b. ▲ Raw water cooled engines with the bypass water from the thermostat housing going to the fitting on the exhaust elbow and the warm water from the thermostat housing going to the 90-degree fitting on bottom of the exhaust manifold:

Use P/N 27-863724 Gasket – Restrictor between the exhaust manifold and the exhaust elbow.

If the engine has 3 in. (76 mm) or 6 in. (152 mm) risers, use P/N 27-863724 Gasket – Restrictor between the riser and the exhaust elbow. Use P/N 27-863726 Gasket – 4 Slot between the exhaust manifold and riser.

4c. ▲ Closed Cooled engines with the raw water from the heat exchanger going to the 90-degree fitting on bottom of the exhaust manifold:

Use P/N 27-863726 Gasket – 4 Slot between the exhaust manifold and the exhaust elbow.

If the engine has 3 in. (76 mm) or 6 in. (152 mm) risers, use P/N 27-863726 Gasket – 4 Slot between the riser and the exhaust manifold and exhaust elbow.
4d. Closed Cooled engines with the exhaust manifolds closed cooled and the raw water from the heat exchanger going to the fitting on the exhaust elbow:

Use P/N 27-863725 Gasket – Block-off between the exhaust manifold and the exhaust elbow.

If the engine has 3 in. (76 mm) or 6 in. (152 mm) risers, use P/N 27-863725 Gasket – Block-off between the exhaust manifold and the riser. Use P/N 27-863726 Gasket – 4 Slot between the riser and the exhaust elbow.

5. Assembly parts and torque fasteners to 33 lb-ft (45 Nm).