



Technical Service Bulletin

Technical Service Bulletin: TSB230145

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New Three-Piece Exhaust Manifold

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Warranty Statement

The information in this document has no effect on present warranty coverage or repair practices, nor does it authorize TRP or Campaign actions.

Contents

Product Affected

- X12 CM2450 X137B

Description of Change

A new three-piece exhaust manifold has been released.

Reason for Change

The new exhaust manifold can prevent warpage and cracking which could result in soot leaks.

Service Instructions

- If one or more exhaust manifold pieces need replaced, verify the engine is equipped with a two- or three-piece exhaust manifold.
- Use Table 1 to determine the proper repair practice.

Table 1, Exhaust Manifold Decision Matrix

Engine Model Year	Current Exhaust Manifold	Service Action
2022 or Previous	Two-Piece	Replace as needed with two-piece exhaust manifold.
2023 or Newer	Two-Piece	Replace with three-piece exhaust manifold. See below for further information.
	Three-Piece	Replace as needed with three-piece exhaust manifold.

Service Parts

Service parts are offered. See Table 2 for part numbers.

Table 2, Service Parts

Part Description	Existing Part Number	Obsolete	Superseded	New Part Number
Manifold, Exhaust	3694307	No	Yes	5662641
				5662643
Manifold, Exhaust	3694111	No	Yes	5662645

In addition to the new exhaust manifold gaskets and lock washers (as required in the service procedure), the following hardware **must** be ordered to install a three-piece manifold on an engine currently using the two-piece exhaust manifold.

Table 3, Upfit Hardware

Part Description	Part Number	Quantity
Screw, Hex Flange Head Cap	3696335	8
Spacer, Mounting	3696530	8
Seal, Exhaust Manifold	3683940	1

Some engines using the three-piece manifold were built with two seals, Part Number 3683940, on each slip joint. If this is the case, replace with two seals on each slip joint for proper sealing.

Part Compatibility

- New three-piece exhaust manifold components are **not** compatible with existing two-piece manifold pieces.
- The three-piece exhaust manifold is also **not** compatible with MY22 or previous engines, and is **not** emissions compliant. Do **not** install a three-piece exhaust manifold on engines from these earlier model years.

Part Inventory Action

Use new part numbers for service of MY23 or newer ESNs. Older model years will continue to be serviced with the two-piece exhaust manifold.

Production Status

Implemented for production. See Table 4.

Table 4, Production Information

ESN First	Build Date ¹	Plant
75115774	26 June 2023	Jamestown Engine Plant

¹Engine build date can be found on the engine dataplate.

Publications Affected

Table 5 Publications Affected					
Manual Type	Engine	Bulletin Number	Procedure Title	Procedure	Section
Service Manual	X12 CM2450 X137B	5659705	Exhaust Manifold, Dry	Refer to Procedure 011-007 (/qs3/pubsys2/xml/en/procedures/674/674-011-007.html)	11

Document History

Date	Details
2023-7-27	Module Created