

Exhaust Manifold - Exhaust Leaks

[Notes](#)

Article No.
98-15-6

08/03/98

**EXHAUST - EXHAUST LEAK AT EXHAUST
MANIFOLDS - VEHICLES EQUIPPED WITH 7.0L OR
7.5L ENGINE**

LIGHT TRUCK:
1993-96 E-350
1993-97 F SUPER DUTY, F-250 HD, F-350

MEDIUM/HEAVY TRUCK:
1992-97 F-700, F-800

This TSB article is being republished in its entirety to correct the Labor Operation Times listed.

ISSUE

An exhaust leak at the [exhaust manifolds](#) may be evident on some vehicles. This may be due to heat causing a reduction in bolt torque on the exhaust manifolds.

ACTION

PART APPLICATION			
Engine Size	Part	Part Number	Quantity
7.0L	Bolt - 3/8"-16x2.87	391730-S101	3
7.0L	Stud - 3/8"-16x4.10	391732-S101	7
7.0L	Bolt - 3/8"-16x1.74	391729-S101	4
7.0L	Stud - 3/8"-16x2.87	391845-S101	2
7.0L MFV/LPG	Manifold - RH	F1HZ-9430-B	1
7.0L MFV/LPG	Manifold - LH	F1HZ-9431-B	1
7.5L	Bolt - 3/8"-16x2.87	391730-S101	4
7.5L	Stud - 3/8"-16x4.10	391732-S101	4
7.5L	Stud - 3/8"-16x2.87	391845-S101	7
7.5L	Bolt - 3/8"-16x1.74	391729-S101	1 (F-Series)
7.5L	Stud - 3/8"-16x2.87	391845-S101	1 (Econoline)
7.5L E/F 250-350	Manifold - RH	F4TZ-9430-C	1
7.5L E/F 250-350	Manifold - LH	F4TZ-9431-C	1
7.5L F-53 S/D	Manifold - RH	F5TZ-9430-B	1
7.5L F-53 S/D	Manifold - LH	F5TZ-9431-C	1
7.5L CA Only	Manifold - RH	F6TZ-9430-NA	1
7.5L CA Only	Manifold - LH	F6TZ-9431-LA	1

[Zoom](#)

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Install new exhaust manifold bolts. Refer to the following Service Procedure and

Part Application Chart for details.

SERVICE PROCEDURE

1. If an exhaust leak exists at the [exhaust manifold](#) due to a reduction in bolt torque, remove the manifold bolts and the exhaust manifold and check the overall flatness of the manifold. The manifold should not exceed 0.25 mm (0.010") out-of-flat. Refer to the appropriate model/year Service Manual for manifold removal procedures.
2. If the vehicle is covered under the emissions warranty period, replace the manifold if it is out-of-flat. If the vehicle is out of the emissions warranty period, resurface the [exhaust manifold](#).

NOTE IF THE MANIFOLD IS TO BE RESURFACED, THE BOLTS MUST BE SHORTENED TO ACCOMMODATE THE [EXHAUST MANIFOLD](#). THE BOLTS SHOULD HAVE THE LEADING "DOG POINT" REMOVED TO PREVENT BOTTOMING INTO THE HOLE.

3. Install the manifold using new mounting hardware, but **DO NOT USE WASHERS TO INSTALL THE MANIFOLD**. Torque the bolts to 34-47 N.m (25-35 lb-ft).

NOTE THERE SHOULD NOT BE ANY TYPE OF GASKET USED BETWEEN THE [EXHAUST MANIFOLD](#) AND THE CYLINDER HEAD.

4. Check all exhaust system fittings loosened during repair for adequate tightness and allow engine to warm up. Recheck exhaust system for leaks and repair as required.

PART NUMBER	PART NAME
391730-S101	Bolt
391732-S101	Stud
391729-S101	Bolt
391845-S101	Stud
F1HZ-9430-B	Exhaust Manifold
F4TZ-9430-C	Exhaust Manifold
F5TZ-9430-B	Exhaust Manifold
F1HZ-9431-B	Exhaust Manifold
F5TZ-9431-C	Exhaust Manifold
F6TZ-9430-NA	Exhaust Manifold
F4TZ-9431-C	Exhaust Manifold
F6TZ-9431-LA	Exhaust Manifold

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Parts Block

OTHER APPLICABLE ARTICLES: NONE

SUPERSEDES: 97-26-23

WARRANTY STATUS: Eligible Under The Provisions Of Bumper To Bumper

Warranty Coverage And Emissions Warranty Coverage

OPERATION	DESCRIPTION	TIME
981506AL	Replace Exhaust Manifold , Left Side - 1993-96 E-350/E-Super Duty 7.5L	1.5 Hrs.
981506AR	Replace Exhaust Manifold , Right Side - 1993-96 E-350/E-Super Duty 7.5L	2.7 Hrs.
981506AT	Replace Exhaust Manifold , Both Sides - 1993-96	3.8 Hrs.
981506BL	E-350/E-Super Duty 7.5L Replace Exhaust Manifold , Left Side - 1993-97 F-250HD/F-350/F-Super Duty 7.5L	2.1 Hrs.
981506BR	Replace Exhaust Manifold , Right Side - 1993-97 F-250HD/F-350/F-Super Duty 7.5L	2.5 Hrs.
981506BT	Replace Exhaust Manifold , Both Sides - 1993-97 F-250HD/F-350/F-Super Duty 7.5L	4.4 Hrs.
981506CL	Replace Exhaust Manifold , Left Side - 1992-97 F-700/F-800 7.0L	1.2 Hrs.
981506CR	Replace Exhaust Manifold , Right Side - 1992-97 F-700/F-800 7.0L	1.2 Hrs.
981506CT	Replace Exhaust Manifold , Both Sides - 1992-97 F-700/F-800 7.0L	2.2 Hrs.

DEALER CODING

BASIC PART NO.	CONDITION CODE
9430	12

OASIS CODES: 403000