



NUMBER: 18-031-03

GROUP: Vehicle
Performance

DATE: Sep. 05, 2003

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SUBJECT:

4.0L Rough Engine Idle After Restart Following A Hot Soak

OVERVIEW:

This bulletin involves the installation of a fuel injector insulator sleeve.

MODELS:

2000-2004	(TJ)	Wrangler (Domestic and International Markets)
1999-2004	(WJ)	Grand Cherokee (Domestic and International Markets)
2001-2004	(WG)	Grand Cherokee (International Market)
2000-2001	(XJ)	Jeep Cherokee (Domestic and International Markets)

NOTE: This bulletin applies to vehicles equipped with a 4.0L engine (sales code = ERH)

SYMPTOM/CONDITION:

Customers may describe a 20 to 30 second rough idle following the restart of a heat soaked engine. This condition may be most noticeable when the engine is restarted following a prior 10 to 20 minute heat soak in hot ambient conditions of approximately 32°C (90°F) or higher. This condition may be consistent with short city stop-and-go driving trips and can be aggravated by the use of fuel with a high ethanol content. Depending upon various conditions a MIL may occur due to DTC P0303 - Cylinder #3 Misfire.

This condition may be caused by heat from the exhaust manifold that following engine shut down migrates to the area around injector #3 and causes fuel vapor to form within the injector. This in turn may cause a momentary misfire of cylinder #3 until the fuel vapor is cleared of injector #3. The insulator sleeve lowers the injector #3 temperature to a point below which the fuel will not normally vaporize.

DIAGNOSIS:

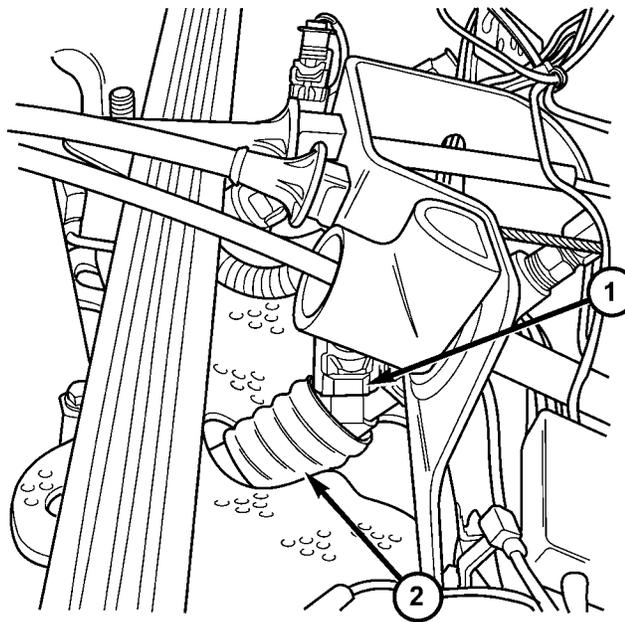
1. If vehicle exhibits a rough idle, and if a misfire of cylinder #3 is observed following a 10 to 20 minute hot soak, perform the Repair Procedure.

PARTS REQUIRED:

Qty.	Part No.	Description
1	56028371AA	Ignition Wire Shield

REPAIR PROCEDURE:

1. Cut insulator sleeve, p/n 56028371AA, to make two (2) insulator sleeves about 25-30 mm (1 in.) in length.
2. Install one sleeve around injector #3, with the slit on the upward facing side of the injector. Install the other sleeve with the slit on the downward facing side of the injector.
3. Confirm sleeve is flush to intake manifold surface around injector.
4. Check injector #3 wire and ensure that the injector is rotated to a 2 o'clock position (from driver's side of vehicle).



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Fig. 1 SLEEVE INSTALLATION

- 1 - # 3 INJECTOR
- 2 - INSTALLED SLEEVE

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
14-30-20-97	Install Heat Insulator to #3 Fuel Injector	0.2 Hrs.

FAILURE CODE:

AM	Authorized Modification
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