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Service Information Bulletin

SUBJECT	DATE
SPN 520296/FMI 19 and 31 - GHG14	August 2012

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	SPN 520296/FMI 19 - GHG14	New sections
		SPN 520296/FMI 31 - GHG14	



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2 SPN 520296/FMI 19 - GHG14

This diagnostic is typically EGR Valve Actuator, Communication Error.

Table 1.

SPN 520296/FMI 19	
Description	EGR Valve Actuator, Internal Test Running
Monitored Parameter	EGR Valve Actuator
Typical Enabling Conditions	EGR Valve Actuator internal self test at start up.
Monitor Sequence	None
Execution Frequency	Continuous when enabling conditions met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	Derate 25%

1. Check for multiple codes:
 - a. If SPN 168/FMI 1 is also present, repair the low voltage fault first. Verify repairs.
 - b. If only SPN 2791/FMI 16 is present, Go to step 2.
 2. Check Charging System and Starting System for proper operation. Refer to OEM procedures for testing.
 - a. If problem is present, repair as necessary. Verify repairs.
 - b. If no problems are present, Go to step 3.
 3. Turn the ignition OFF (key OFF, engine OFF).
 4. Visually inspect for signs of exhaust leaks in the area of the Exhaust Gas Recirculation (EGR) valve actuator.
 - a. If exhaust leaks are present, repair as necessary. Verify repairs.
 - b. If no exhaust leaks are present, Go to step 5.
 5. Disconnect the EGR valve actuator pull rod. Inspect the ball sockets on the pull rod for free movement.
 - a. If the sockets do not rotate or move freely, replace the EGR valve actuator pull rod.
For the DD13: Refer to section "Removal of the Exhaust Gas Recirculation Valve Actuator Pull Rod"
For the DD15 and DD16: Refer to section "Removal of the Exhaust Gas Recirculation Valve Actuator Pull Rod"
 - b. If the sockets move freely, Go to step 6.
 6. Physically move the EGR butterfly from stop-to-stop to check for full travel (some drag is normal).
 - a. If the EGR butterfly does not move stop-to-stop, replace the EGR valve.
For the DD13: Refer to section "Removal of the Exhaust Manifold"
For the DD15 and DD16: Refer to section "Removal of the DD15 and DD16 Exhaust Gas Recirculation Valve"
 - b. If the EGR butterfly moves stop-to-stop, replace the EGR valve actuator.
For the DD13: Refer to section "Removal of the DD13 Exhaust Gas Recirculation Valve Actuator"
For the DD15 and DD16: Refer to section "Removal of the DD15 and DD16 Exhaust Gas Recirculation Valve Actuator"
- Verify Repairs.
If a problem still persists, contact the Detroit™ Customer Support Center at 800-445-1980.

3 SPN 520296/FMI 31 - GHG14

This diagnostic is typically EGR Valve Actuator, Learn Cycle Incomplete.

1. Check for multiple codes:
 - a. If SPN 110/FMI 0 is also present, repair the cooling system first. Verify repairs.
 - b. If only SPN 2791/FMI 16 is present, Go to step 2.
2. Visually inspect for signs of exhaust leaks in the area of the Exhaust Gas Recirculation (EGR) valve actuator. Verify repairs.
 - a. If exhaust leaks are present, repair as necessary. Verify repairs.
 - b. If no exhaust leaks are present, Go to step 3.
3. Remove and inspect the EGR valve actuator cooler lines and fittings.
 - a. If the coolant lines or fittings are kinked or plugged, repair or replace the damaged component. Verify repairs.
 - b. If coolant lines are not damaged and problem still persists, contact the Detroit™ Customer Support Center at 800-445-1980.