

1 06 04-17



## Service Information Bulletin

SUBJECT	DATE
SPN 712 (CPC) (GHG17)	June 2017

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	GHG14 HD DD	SPN 712/FMI 3 SPN 712/FMI 4 SPN 712/FMI 5	Updated diagnostic procedures.
DDC-SVC-MAN-0191	GHG17 HD DD		
DDC-SVC-MAN-0193	GHG17 DD5		
DDC-SVC-MAN-0200	GHG17 DD8		

DiagnosticLink users: Please update the troubleshooting guides in DiagnosticLink with this newest version. To update the tool troubleshooting guide, open DiagnosticLink and from the Help – Troubleshooting Guides menu, select the appropriate troubleshooting manual, then click Update.



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## 2 SPN 712/FMI 3 - GHG14

Digital Output 1 04 Circuit Failed High

**Table 1.**

SPN 712/FMI 3	
Description	CPC Output 1 04 Short to Voltage
Monitored Parameter	CPC Output 1/4
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	Two Seconds
Dash Lamps	CEL
Engine Reaction	None
Verification	Engine On with Output Activation



**WARNING: ENGINE EXHAUST**

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.

Check as follows:

1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; program the CPC to the correct settings.
  - b. No; repair the short to power between pin 4 of the CPC connector #1 and the idle validation switch/analog accelerator pedal. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.

### 3 SPN 712/FMI 4 - GHG14

Digital Output 1 04 Circuit Failed Low

**Table 2.**

SPN 712/FMI 4	
Description	CPC Output 1 04 Short to Ground
Monitored Parameter	CPC Output 1/4
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	Two Seconds
Dash Lamps	CEL
Engine Reaction	None
Verification	Engine On with Output Activation



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1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; program the CPC to the correct settings.
  - b. No; repair the short to ground between pin 4 of the CPC connector #1 and the idle validation switch/analog accelerator pedal. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.

## 4 SPN 712/FMI 5 - GHG14

Digital Output 1 04 Circuit Open

**Table 3.**

SPN 712/FMI 5	
Description	CPC Output 1 04 Open Circuit
Monitored Parameter	CPC Output 1/4
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	Two Seconds
Dash Lamps	CEL
Engine Reaction	None
Verification	Engine On with Output Activation



**WARNING: ENGINE EXHAUST**

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Check as follows:

1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; program the CPC to the correct settings.
  - b. No; repair the short to power between pin 4 of the CPC connector #1 and the idle validation switch/analog accelerator pedal. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.

## 5 SPN 712/FMI 3 - GHG17

Digital Output 1 04 Circuit Failed High

**Table 4.**

SPN 712/FMI 3	
Description	CPC Output 1 04 Short to Voltage
Monitored Parameter	CPC Output 1/4
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	Two Seconds
Dash Lamps	CEL
Engine Reaction	None
Verification	Engine On with Output Activation



### **WARNING: ENGINE EXHAUST**

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Check as follows:

1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; program the CPC to the correct settings.
  - b. No; repair the short to power between pin 4 of the CPC connector #1 and the idle validation switch/analog accelerator pedal. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.

## 6 SPN 712/FMI 4 - GHG17

Digital Output 1 04 Circuit Failed Low

**Table 5.**

SPN 712/FMI 4	
Description	CPC Output 1 04 Short to Ground
Monitored Parameter	CPC Output 1/4
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	Two Seconds
Dash Lamps	CEL
Engine Reaction	None
Verification	Engine On with Output Activation



**WARNING: ENGINE EXHAUST**

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Check as follows:

1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; program the CPC to the correct settings.
  - b. No; repair the short to ground between pin 4 of the CPC connector #1 and the idle validation switch/analog accelerator pedal. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.

## 7 SPN 712/FMI 5 - GHG17

Digital Output 1 04 Circuit Open

**Table 6.**

SPN 712/FMI 5	
Description	CPC Output 1 04 Open Circuit
Monitored Parameter	CPC Output 1/4
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	Two Seconds
Dash Lamps	CEL
Engine Reaction	None
Verification	Engine On with Output Activation



### **WARNING: ENGINE EXHAUST**

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Check as follows:

1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; program the CPC to the correct settings.
  - b. No; repair the short to power between pin 4 of the CPC connector #1 and the idle validation switch/analog accelerator pedal. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.