### 1 05 25-16



# **Service Information Bulletin**

SUBJECT	DATE
SPN 707 (CPC) (GHG17)	May 2016

#### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
GHG17 DD	SPN 707/FMI 3 - GHG17		
DDC-SVC-MAN-0193	Medium	SPN 707/FMI 4 - GHG17	New DD5 and DD8 diagnostic procedures.
	Duty	SPN 707/FMI 5 - GHG17	
DDC-SVC-MAN-0191 GHG17 DD Platform	SPN 707/FMI 3 - GHG17		
	SPN 707/FMI 4 - GHG17	Updated GHG17 HD diagnostic procedures.	
		SPN 707/FMI 5 - GHG17	
DDC-SVC-MAN-0084 GHG14 DD Platform	SPN 707/FMI 3 - GHG14		
	SPN 707/FMI 4 - GHG14	Updated GHG14 HD diagnostic procedures.	
	SPN 707/FMI 5 - GHG14		

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.



13400 Outer Drive, West, Detroit, Michigan 48239-4001 Telephone: 313-592-5000 www.demanddetroit.com

## 2 SPN 707/FMI 3 - GHG17

Digital Output 2 10 Circuit Failed High

#### Table 1.

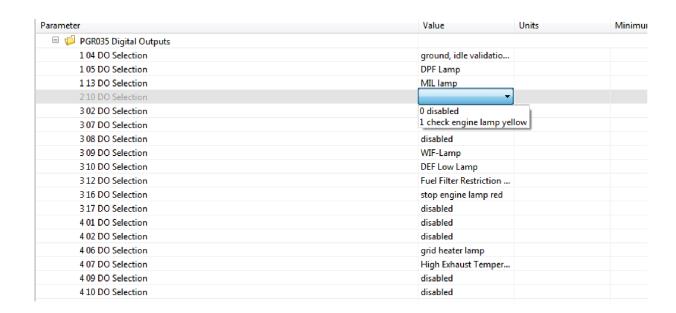
SPN 707/FMI 3		
Description	CPC Output 2 10 Short to Voltage	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

#### Check as follows:



#### **WARNING: ENGINE EXHAUST**

- 1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; verify that the correct CPC parameter list has been installed. If the correct calibration and correct parameter list have been installed, then Go to step 2.
  - b. No; Go to step 2.
- 2. Connect to DiagnosticLink ®.



- 3. Verify parameters by going to the parameters work window.
- 4. Verify that the parameter set to 2 10 DO Selection is set to the specific component to which this is configured. Are the parameters configured correctly?
  - a. Yes; repair the short to power between pin 10 of the CPC connector #2 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

## 3 SPN 707/FMI 4 - GHG17

Digital Output 2 10 Circuit Failed Low

#### Table 2.

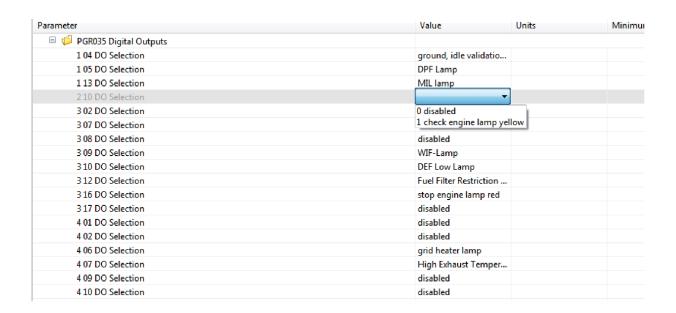
SPN 707/FMI 4		
Description	CPC Output 2 10 Short to Ground	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

#### Check as follows:



#### **WARNING: ENGINE EXHAUST**

- 1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; verify that the correct CPC parameter list has been installed. If the correct calibration and correct parameter list have been installed, then Go to step 2.
  - b. No; Go to step 2.
- 2. Connect to DiagnosticLink ®.



- 3. Verify parameters by going to the parameters work window.
- 4. Verify that the parameter set to 2 10 DO Selection is set to the specific component to which this is configured. Are the parameters configured correctly?
  - a. Yes; repair the short to ground between pin 10 of the CPC connector #2 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

## 4 SPN 707/FMI 5 - GHG17

Digital Output 2 10 Circuit Open

#### Table 3.

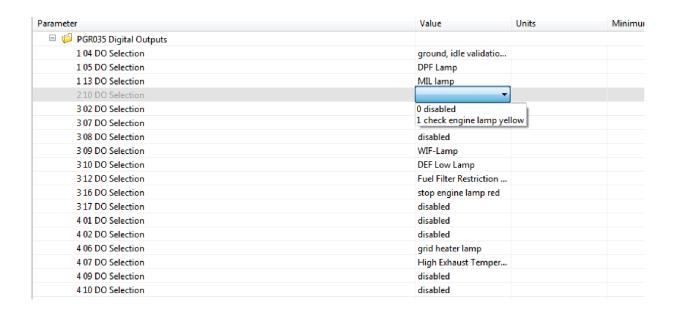
SPN 707/FMI 5		
Description	CPC Output 2 10 Open Circuit	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

#### Check as follows:



#### **WARNING: ENGINE EXHAUST**

- 1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; verify that the correct CPC parameter list has been installed. If the correct calibration and correct parameter list have been installed, then Go to step 2.
  - b. No; Go to step 2.
- 2. Connect to DiagnosticLink ®.



- 3. Verify parameters by going to the parameters work window.
- 4. Verify that the parameter set to 2 10 DO Selection is set to the specific component to which this is configured. Are the parameters configured correctly?
  - a. Yes; repair the open circuit between pin 10 of the CPC connector #2 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

## 5 SPN 707/FMI 3 - GHG17

Digital Output 2 10 Circuit Failed High

#### Table 4.

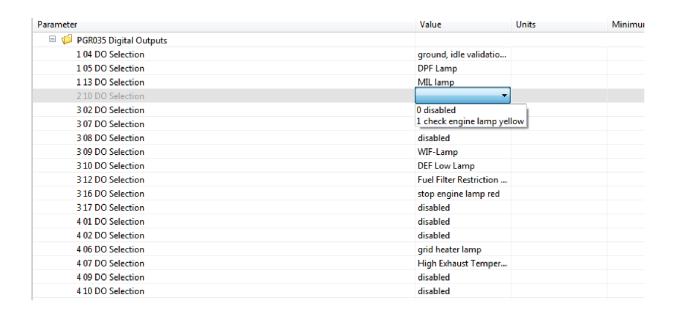
SPN 707/FMI 3		
Description	CPC Output 2 10 Short to Voltage	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

#### Check as follows:



#### **WARNING: ENGINE EXHAUST**

- 1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
  - a. Yes; verify that the correct CPC parameter list has been installed. If the correct calibration and correct parameter list have been installed, then Go to step 2.
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  - b. No; configure the parameters correctly.

## 6 SPN 707/FMI 4 - GHG17

Digital Output 2 10 Circuit Failed Low

#### Table 5.

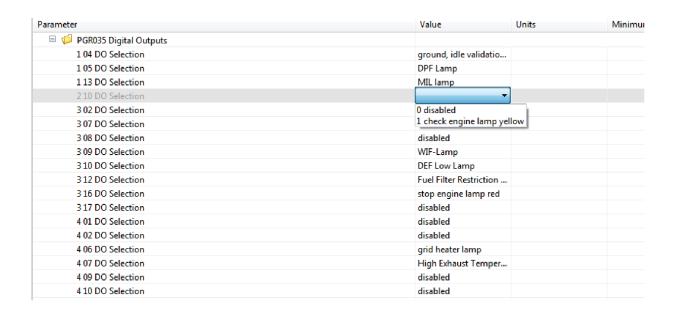
SPN 707/FMI 4		
Description	CPC Output 2 10 Short to Ground	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Continuous when enabling conditions met	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

#### Check as follows:



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- 1. Has the Common Powertrain Controller (CPC) recently been changed or reprogrammed?
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## 7 SPN 707/FMI 5 - GHG17

Digital Output 2 10 Circuit Open

#### Table 6.

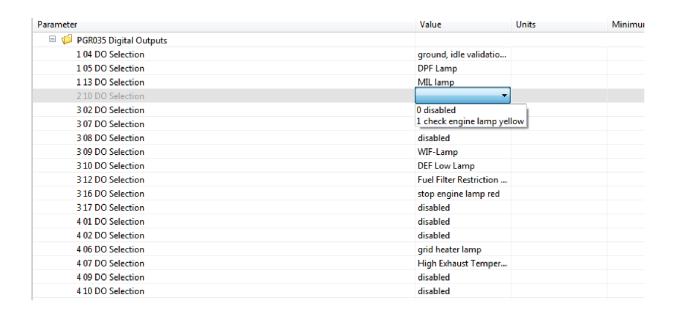
SPN 707/FMI 5		
Description	CPC Output 2 10 Open Circuit	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

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## 8 SPN 707/FMI 3 - GHG14

Digital Output 2 10 Circuit Failed High

#### Table 7.

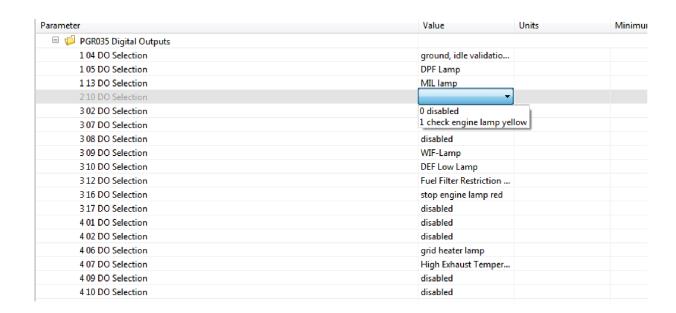
SPN 707/FMI 3		
Description	CPC Output 2 10 Short to Voltage	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
Verification	Engine On with Output Activation	

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  - b. No; configure the parameters correctly.

## 9 SPN 707/FMI 4 - GHG14

Digital Output 2 10 Circuit Failed Low

#### Table 8.

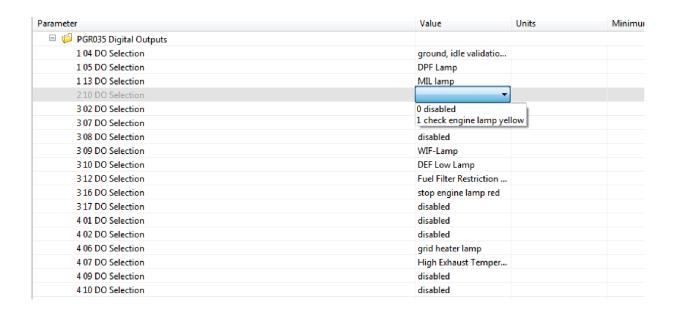
SPN 707/FMI 4		
Description	CPC Output 2 10 Short to Ground	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Continuous when enabling conditions met	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
Engine Reaction	None	
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  - a. Yes; repair the short to ground between pin 10 of the CPC connector #2 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

## 10 SPN 707/FMI 5 - GHG14

Digital Output 2 10 Circuit Open

#### Table 9.

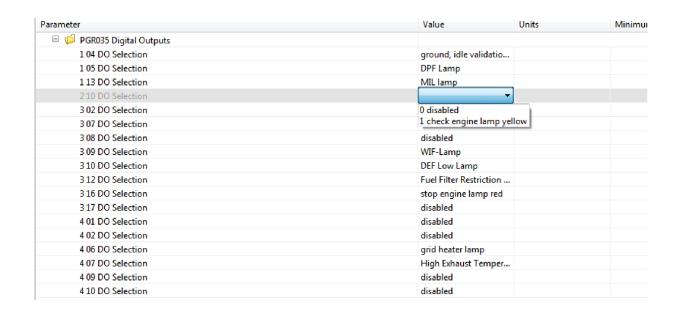
SPN 707/FMI 5		
Description	CPC Output 2 10 Open Circuit	
Monitored Parameter	CPC Output 2/10	
Typical Enabling Conditions	Always Enabled	
Monitor Sequence	None	
Execution Frequency	Always Enabled	
Typical Duration	Two Seconds	
Dash Lamps	CEL	
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