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## Service Information Bulletin

SUBJECT	DATE
SPN 3847 (CPC)(GHG17)	June 2016

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0193	GHG17 DD Medium Duty	SPN 3847/FMI 3, 4 - GHG17	New DD5 and DD8 diagnostic procedures
DDC-SVC-MAN-0191	GHG17 DD Heavy Duty	SPN 3847/FMI 3, 4 - GHG17	Updated DD HD diagnostic procedures

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 3847/FMI 3 - GHG17

Digital Input 1 15 Circuit Failed High

**Table 1.**

SPN 3847/FMI 3	
Description	CPC Input 1 15 Short to Voltage
Monitored Parameter	CPC Input 1/15
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:

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®.



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3. Verify parameters - go to the parameters work window.
4. Verify that the parameter set to 1 15 DI 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 15 of the CPC connector #1 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

### 3 SPN 3847/FMI 4 - GHG17

Digital Input 1 15 Circuit Failed Low

**Table 2.**

SPN 3847/FMI 4	
Description	CPC Input 1 15 Short to Ground
Monitored Parameter	CPC Input 1/15
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; 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<sup>®</sup>.



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3. Verify parameters - go to the parameters work window.
4. Verify that the parameter set to 1 15 DI 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 15 of the CPC connector #1 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

## 4 SPN 3847/FMI 3 - GHG17

Digital Input 1 15 Circuit Failed High

**Table 3.**

SPN 3847/FMI 3	
Description	CPC Input 1 15 Short to Voltage
Monitored Parameter	CPC Input 1/15
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:

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<sup>®</sup>.



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3. Verify parameters - go to the parameters work window.
4. Verify that the parameter set to 1 15 DI 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 15 of the CPC connector #1 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.

## 5 SPN 3847/FMI 4 - GHG17

Digital Input 1 15 Circuit Failed Low

**Table 4.**

SPN 3847/FMI 4	
Description	CPC Input 1 15 Short to Ground
Monitored Parameter	CPC Input 1/15
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; 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<sup>®</sup>.



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3. Verify parameters - go to the parameters work window.
4. Verify that the parameter set to 1 15 DI 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 15 of the CPC connector #1 and the wired component. For wiring schematic information, refer to Original Equipment Manufacturer (OEM) literature.
  - b. No; configure the parameters correctly.