

1 5 03-14



## Service Information Bulletin

SUBJECT	DATE
SPN 3599/FMI 3 and 4 (ACM)	May 2014

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	EPA10/ GHG14 DD Platform	SPN 3599/FMI 3 - ÖÜœ€	Corrections have been made to the diagnostic procedures. The procedures have also been separated by year due to power supply to different components. Wiring diagrams have been added.
		SPN 3599/FMI 3 - ÖPÖ1I	
		SPN 3599/FMI 4 - ÖÜœ€	
		SPN 3599/FMI 4 - GHG14	



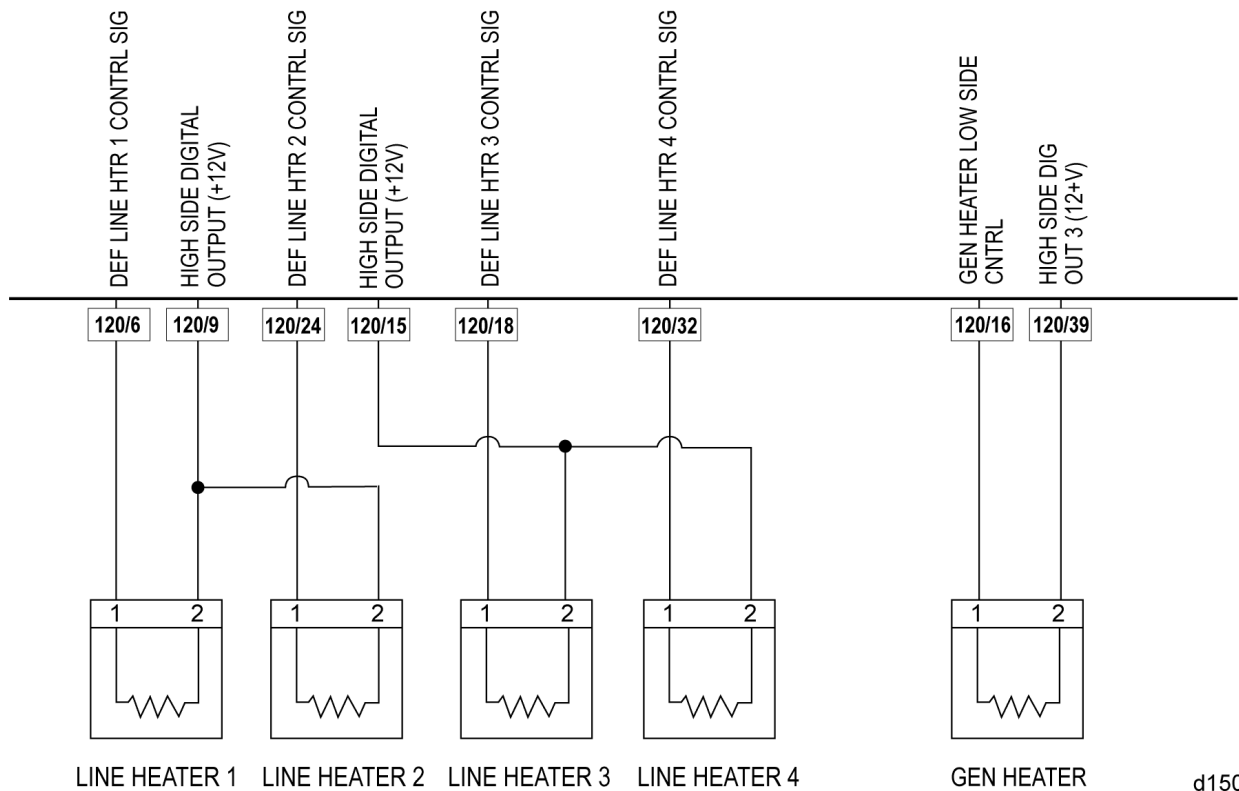
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## 2 SPN 3599/FMI 3 - EPA10

High Side Digital Output 3 Circuit Failed High

**Table 1.**

SPN 3599/FMI 3	
Description	This Code Sets When the Aftertreatment Control Module (ACM) Detects a Short to Power on Pins 9, 15, or 39 within One Second After the Ignition has Been Turned On.
Monitored Parameter	High Side Digital Output 3 Circuit
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	One Second After the Ignition is Cycled On
Typical Duration	1 Second
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Cycle the Ignition Key from the Off Position to the On Position.



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Check as follows:

1. Disconnect the 120-pin ACM connector. Go to step 2.
2. Connect DiagnosticLink™. Go to step 3.
3. Turn the ignition ON (key ON, engine OFF). Go to step 4.
4. Does code SPN 3599/FMI 3 still set?
  - a. Yes; replace the ACM and Refer to section "Removal of the Aftertreatment Control Module". Verify repair.

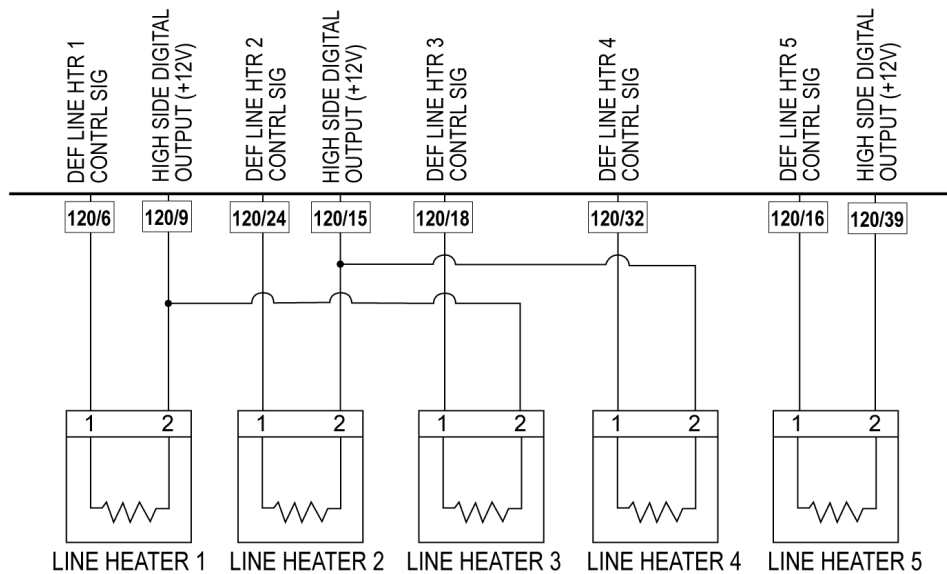
- b. No; turn the ignition OFF. Refer to OEM literature and repair the wire between the ACM and the line heaters/  
general heater in the dosing unit. Verify repair.

### 3 SPN 3599/FMI 3 - GHG14

High Side Digital Output 3 Circuit Failed High

**Table 2.**

SPN 3599/FMI 3	
Description	This Code Sets When the Aftertreatment Control Module (ACM) Detects a Short to Power on Pins 9, 15, or 39 within One Second After the Ignition has Been Turned On.
Monitored Parameter	High Side Digital Output 3 Circuit
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	One Second After the Ignition is Cycled On
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Cycle the Ignition Key from the Off Position to the On Position.



DTNA  
 HTR 1 = DOSER TO TANK DEF LINE (LONG-LINE EXTENSION ONLY)  
 HTR 2 = TANK TO PUMP DEF LINE  
 HTR 3 = PUMP TO DOSER DEF LINE (LONG-LINE EXTENSION ONLY)  
 HTR 4 = PUMP TO DOSER DEF LINE  
 HTR 5 = DOSER TO TANK DEF LINE

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Check as follows:

1. Disconnect the 120-pin ACM connector. Go to step 2.
2. Connect DiagnosticLink™. Go to step 3.
3. Turn the ignition ON (key ON, engine OFF). Go to step 4.
4. Does code SPN 3599/FMI 3 still set?
  - a. Yes; replace the ACM and Refer to section "Removal of the Aftertreatment Control Module". Verify repair.

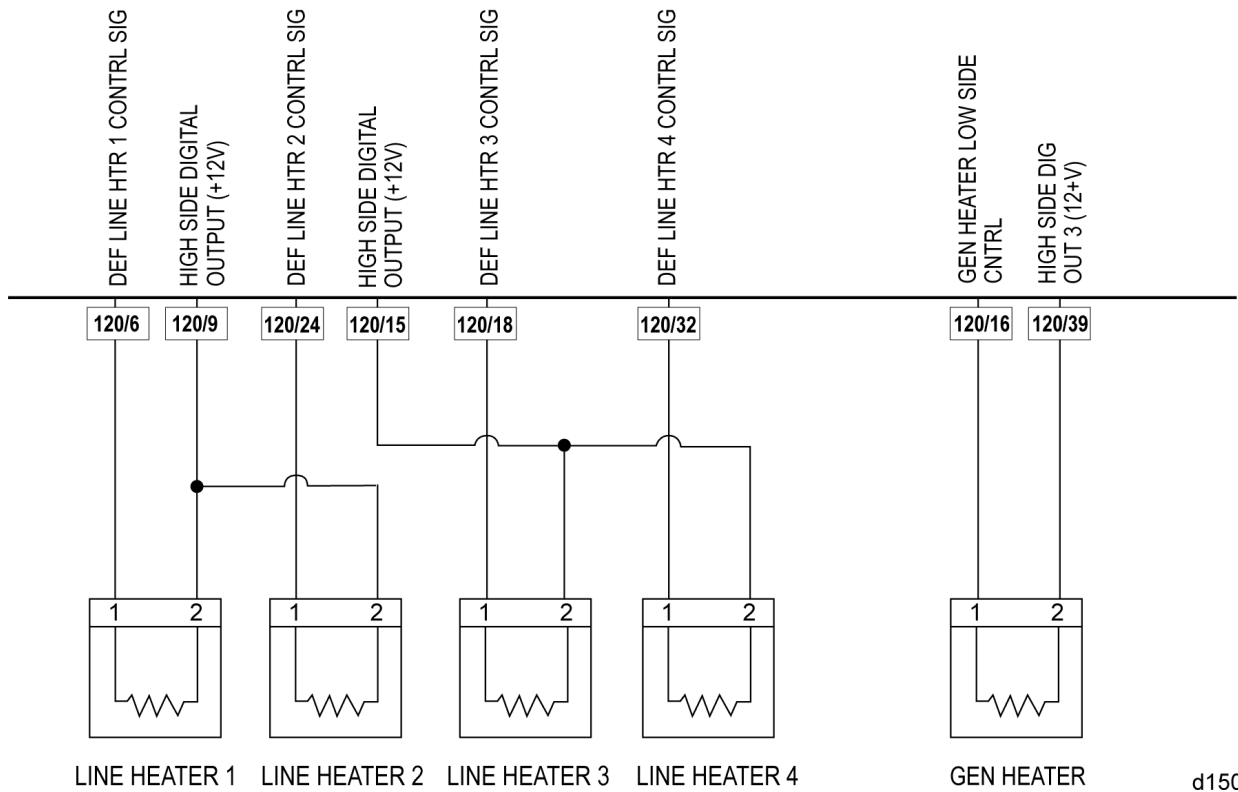
- b. No; turn the ignition OFF. Refer to OEM literature and repair the wire between the ACM and the line heaters.  
Verify repair.

## 4 SPN 3599/FMI 4 - EPA10

High Side Digital Output 3 Circuit Failed Low

**Table 3.**

SPN 3599/FMI 4	
Description	This Code Sets When the Aftertreatment Control Module (ACM) Detects a Short to Ground on Pins 9, 15, or 39.
Monitored Parameter	High Side Digital Output 3 Circuit
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Cycle the Ignition Key from the Off Position to the On Position.



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Check as follows:

1. Disconnect the 120-pin ACM connector. Go to step 2.
2. Connect DiagnosticLink™. Go to step 3.
3. Turn the ignition ON (key ON, engine OFF). Go to step 4.
4. Does code SPN 3599/FMI 4 still set?
  - a. Yes; replace the ACM and Refer to section "Removal of the Aftertreatment Control Module". Verify repair.

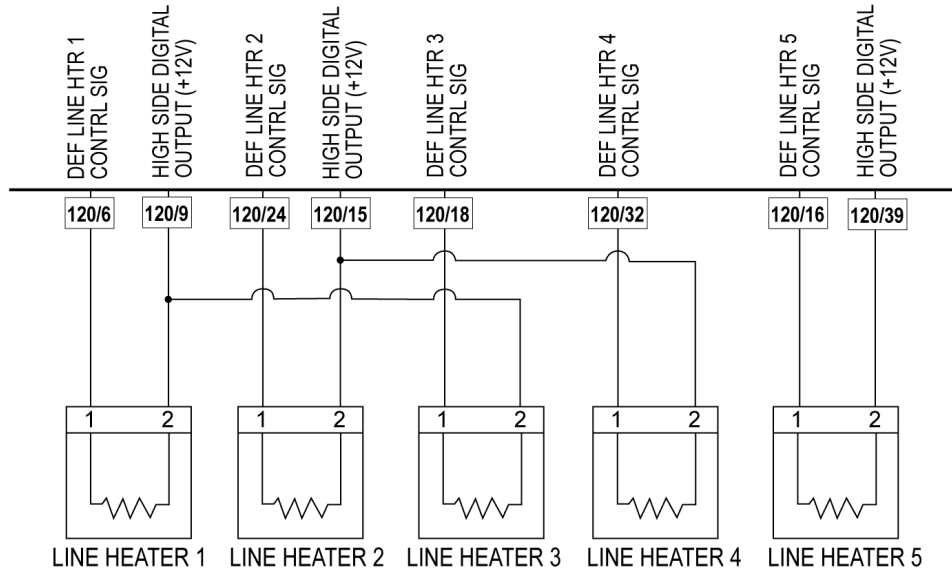
- b. No; turn the ignition OFF. Refer to OEM literature and repair the wire between the ACM and the line heaters/  
general heater in the dosing unit. Verify repair.

## 5 SPN 3599/FMI 4 - GHG14

High Side Digital Output 3 Circuit Failed Low

**Table 4.**

SPN 3599/FMI 4	
Description	This Code Sets When the Aftertreatment Control Module (ACM) Detects a Short to Ground on Pins 9, 15, or 39.
Monitored Parameter	High Side Digital Output 3 Circuit
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Cycle the Ignition Key from the Off Position to the On Position.



**DTNA**  
 HTR 1 = DOSER TO TANK DEF LINE (LONG-LINE EXTENSION ONLY)  
 HTR 2 = TANK TO PUMP DEF LINE  
 HTR 3 = PUMP TO DOSER DEF LINE (LONG-LINE EXTENSION ONLY)  
 HTR 4 = PUMP TO DOSER DEF LINE  
 HTR 5 = DOSER TO TANK DEF LINE

d150272

Check as follows:

1. Disconnect the 120-pin ACM connector. Go to step 2.
2. Connect DiagnosticLink™. Go to step 3.
3. Turn the ignition ON (key ON, engine OFF). Go to step 4.
4. Does code SPN 3599/FMI 4 still set?
  - a. Yes; replace the ACM and Refer to section "Removal of the Aftertreatment Control Module". Verify repair.

- b. No; turn the ignition OFF. Refer to OEM literature and repair the wire between the ACM and the line heaters. Verify repair.