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Service Information Bulletin

SUBJECT	DATE
SPN 3251/FMI 0, 1, and 16	April 2014

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	SPN 3251 FMI 0 - EPA07	The diagnostics have been corrected and are all new.
		SPN 3251 FMI 0 - EPA10	
		SPN 3251 FMI 0 - GHG14	
		SPN 3251 FMI 1 - EPA07	
		SPN 3251 FMI 1 - EPA10	
		SPN 3251 FMI 1 - GHG14	
		SPN 3251 FMI 16 - EPA07	
		SPN 3251 FMI 16 - EPA10	
		SPN 3251 FMI 16 - GHG14	



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2 SPN 3251/FMI 0 - EPA07

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range Very High.

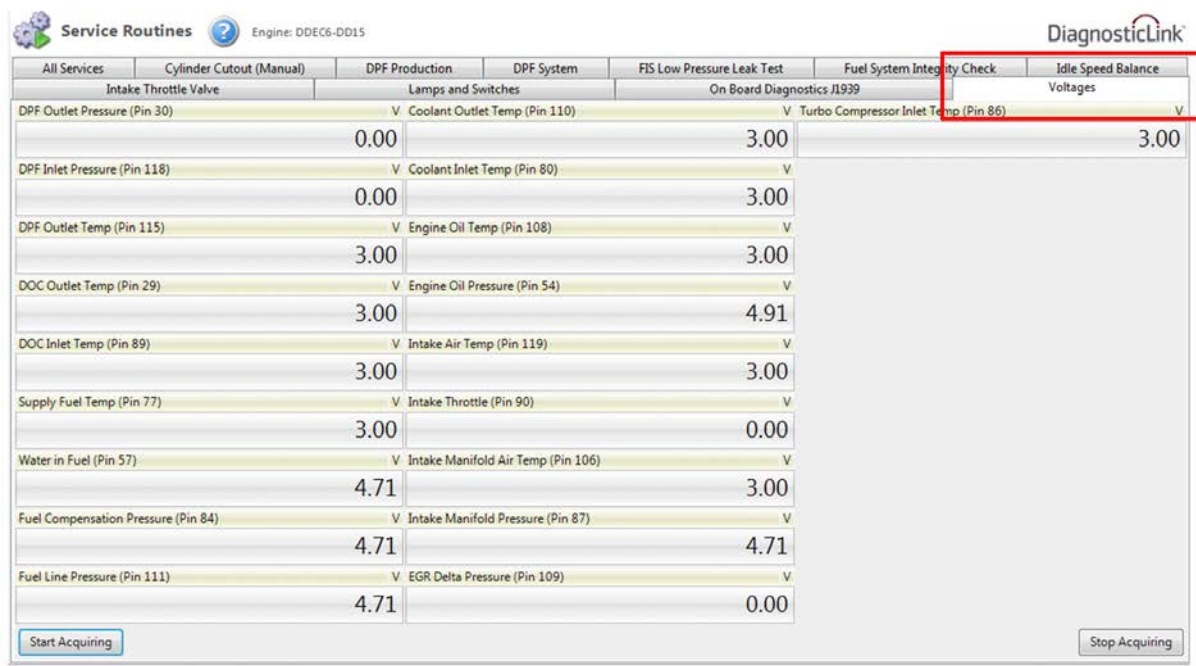
This fault code sets when the DPF outlet pressure is greater than 35 kPa (5 psi) for more than 10 seconds.

Table 1.

SPN 3251/FMI 0	
Description	Diesel Particulate Filter (DPF) Pressure Out of Range Very High
Monitored Parameter	Exhaust Pressure
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1200 to 1800 rpm With a Load Less Than 10%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > Voltages. Go to step 4.



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4. Click the "start acquiring" tab and monitor the DPF outlet pressure (pin 30) parameter. Is the DPF outlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; disconnect the exhaust behind the DPF and repair the restriction. Verify repair.

- b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the EPA07 Pressure Sensors". Verify repair.

3 SPN 3251/FMI 0 - EPA10

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range Very High.

This fault code sets when the DPF outlet pressure is greater than 35 kPa (5 psi) for more than 10 seconds.

Table 2.

SPN 3251/FMI 0	
Description	DPF Pressure Out of Range Very High
Monitored Parameter	DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1200 to 1800 rpm With a Load Less Than 10%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink, go to Service Routines > SCR and DPF voltages. Go to step 4.

All Services		Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System		Tilt Sensor	Transmission Shift Abort Counter	Variable Speed Fan Control	Voltages		
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939	SCR and DPF Voltages
DEF Tank Temperature Sensor Voltage		V DOC Inlet Temp (Pin 107)		V			
1.14		0.50					
DEF Tank Level Sensor Voltage		V DOC Outlet Temp (Pin 27)		V			
1.67		0.50					
SCR Inlet Temperature Sensor Voltage		V DPF Outlet Temp (Pin 97)		V			
0.50		0.50					
SCR Outlet Temperature Sensor Voltage		V DOC Inlet Pressure (Pin 87)		V			
0.50		0.48					
DEF Temperature Sensor Voltage		V DPF Outlet Pressure (Pin 72)		V			
3.00		0.45					
DEF Pressure Sensor Voltage		Started acquiring sensor voltage signals...					
0.48							
Start Acquiring				Stop Acquiring			

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4. Click the "start acquiring" tab and Monitor the DPF outlet pressure (pin 72) parameter. Is the DPF outlet pressure sensor voltage between 0.44 and 0.56 volts?
 - a. Yes; remove the Selective Catalyst Reduction (SCR) system as necessary and repair the restriction. Verify repair.
 - b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the EPA10 Diesel Particulate Filter Outlet Pressure Sensor". Verify repairs.

4 SPN 3251/FMI 0 – GHG14

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range Very High.

This fault code sets when the DPF outlet pressure is greater than 35 kPa (5 psi) for more than 10 seconds.

Table 3.

SPN 3251/FMI 0	
Description	DPF Pressure Out of Range Very High
Monitored Parameter	DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1200 to 1800 rpm With a Load Less Than 10%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > SCR and DPF voltages. Go to step 4.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test	
SCR System		Tilt Sensor	Transmission Shift Abort Counter		Variable Speed Fan Control		Voltages
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939	SCR and DPF Voltages
DEF Tank Temperature Sensor Voltage				V DOC Inlet Temp (Pin 107)		V	
1.14						0.50	
DEF Tank Level Sensor Voltage				V DOC Outlet Temp (Pin 27)		V	
1.67						0.50	
SCR Inlet Temperature Sensor Voltage				V DPF Outlet Temp (Pin 97)		V	
0.50						0.50	
SCR Outlet Temperature Sensor Voltage				V DOC Inlet Pressure (Pin 87)		V	
0.50						0.48	
DEF Temperature Sensor Voltage				V DPF Outlet Pressure (Pin 72)		V	
3.00						0.45	
DEF Pressure Sensor Voltage				V Started acquiring sensor voltage signals...		V	
0.48							
Start Acquiring				Stop Acquiring			

- b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the GHG14 Diesel Particulate Filter Outlet Pressure Sensor". Verify repairs.

5 SPN 3251/FMI 1 - EPA07

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range Low.

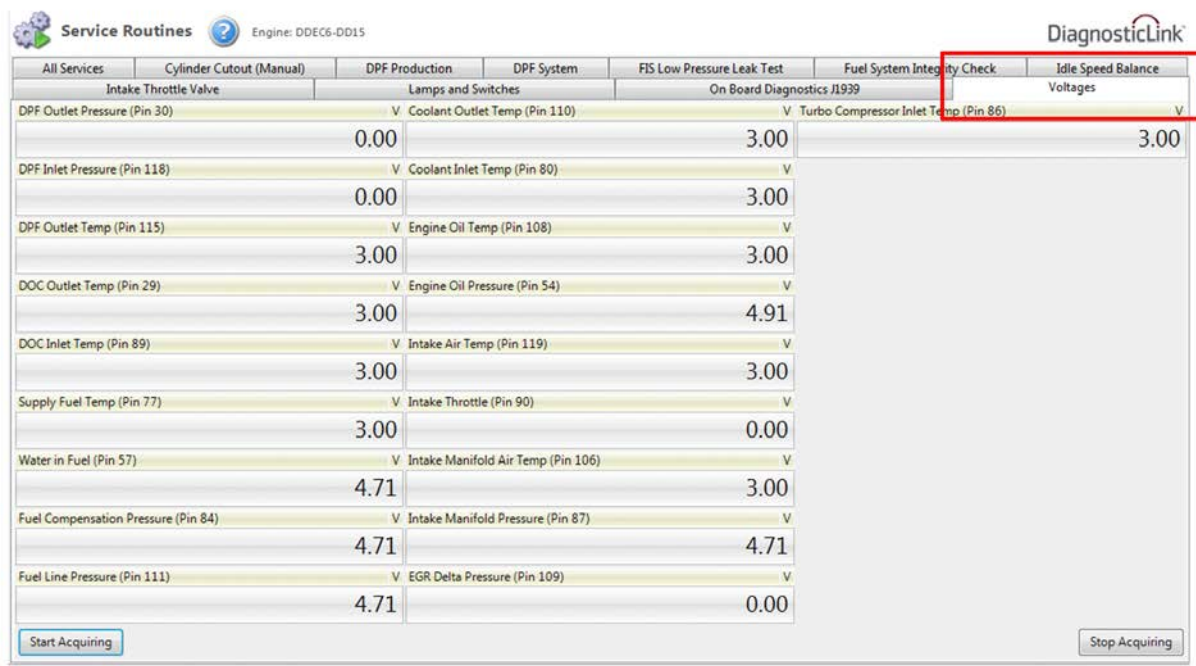
This fault code sets when the pressure across the DPF is less than 1.5 kPa (0.2 psi) for more than 10 seconds.

Table 4.

SPN 3251/FMI 1	
Description	DPF Pressure Out of Range Low
Monitored Parameter	DPF Inlet Pressure Sensor, DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1500 to 1900 rpm With a Load Less Than 80%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > Voltages. Go to step 4.



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4. Click the "start acquiring" tab and monitor the DPF inlet pressure (pin 118) parameter. Is the DPF inlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; Go to step 5.

- b. No; replace the DPF inlet pressure sensor. Refer to section "Removal of the EPA07 Temperature Sensors". Verify repair.
- 5. Monitor the DPF outlet pressure (pin 30) parameter. Is the DPF outlet pressure sensor voltage between 0.44 and 0.56 volts?
 - a. Yes; Go to step 6.
 - b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the EPA07 Temperature Sensors". Verify repair.
- 6. Remove the DPF inlet pressure sensor tube, hose and elbow. Go to step 7.
- 7. Inspect the DPF inlet pressure sensor port on the DPF, the port on the DPF inlet pressure sensor, the DPF inlet pressure sensor tube, hose and elbow. Are there any restrictions present?
 - a. Yes, repair as necessary. Verify repair.
 - b. No; Go to step 8.
- 8. Remove the DPF outlet pressure sensor tube, hose and elbow. Go to step 9.
- 9. Inspect the DPF outlet pressure sensor port on the DPF, the port on the DPF outlet pressure sensor, DPF outlet pressure sensor tube, hose and elbow. Are there any restrictions present?
 - a. Yes; repair as necessary. Verify repair.
 - b. No; replace the DPF. Refer to section "Removal of the EPA07 Aftertreatment Device from the Vehicle". Verify repair.

6 SPN 3251/FMI 1 - EPA10

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range Low.

This fault code sets when the pressure across the DPF is less than 1.5 kPa (0.2 psi) for more than 10 seconds.

Table 5.

SPN 3251/FMI 1	
Description	DPF Pressure Out of Range Low
Monitored Parameter	DPF Inlet Pressure Sensor, DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1500 to 1900 rpm With a Load Less Than 80%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > SCR and DPF Voltages. Go to step 4.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System	Tilt Sensor	Transmission Shift Abort Counter	Variable Speed Fan Control	On Board Diagnostics J1939	On Board Diagnostics J1939	SCR and DPF Voltages
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939
DEF Tank Temperature Sensor Voltage	1.14	V	DOC Inlet Temp (Pin 107)	0.50	V	
DEF Tank Level Sensor Voltage	1.67	V	DOC Outlet Temp (Pin 27)	0.50	V	
SCR Inlet Temperature Sensor Voltage	0.50	V	DPF Outlet Temp (Pin 97)	0.50	V	
SCR Outlet Temperature Sensor Voltage	0.50	V	DOC Inlet Pressure (Pin 87)	0.48	V	
DEF Temperature Sensor Voltage	3.00	V	DPF Outlet Pressure (Pin 72)	0.45	V	
DEF Pressure Sensor Voltage	0.48	V	Started acquiring sensor voltage signals...			
Start Acquiring		Stop Acquiring				

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4. Click the "start acquiring" tab and monitor the Diesel Oxidation Catalyst (DOC) inlet pressure (pin 87) parameter. Is the DOC inlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; Go to step 5.
 - b. No; replace the DOC inlet pressure sensor. Refer to section "Removal of the EPA10 Diesel Oxidation Catalyst Inlet Pressure Sensor". Verify repair.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System	Tilt Sensor	Transmission Shift Abort Counter	Variable Speed Fan Control	On Board Diagnostics	On Board Diagnostics J1939	Volts
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	SCR and DPF Voltages
DEF Tank Temperature Sensor Voltage	V	DOC Inlet Temp (Pin 107)	V			
1.14		0.50				
DEF Tank Level Sensor Voltage	V	DOC Outlet Temp (Pin 27)	V			
1.67		0.50				
SCR Inlet Temperature Sensor Voltage	V	DPF Outlet Temp (Pin 97)	V			
0.50		0.50				
SCR Outlet Temperature Sensor Voltage	V	DOC Inlet Pressure (Pin 87)	V			
0.50		0.48				
DEF Temperature Sensor Voltage	V	DPF Outlet Pressure (Pin 72)	V			
3.00		0.45				
DEF Pressure Sensor Voltage	V	Started acquiring sensor voltage signals...				
0.48						
Start Acquiring						Stop Acquiring

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5. Monitor the DPF outlet pressure (pin 72) parameter. Is the DPF outlet pressure sensor voltage between 0.44 and 0.56 volts?
 - a. Yes; Go to step 6.
 - b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the EPA10 Diesel Oxidation Catalyst Inlet Pressure Sensor". Verify repair.
6. Remove the DOC inlet pressure sensor tube, hose and elbow. Refer to section "Removal of the EPA10 Diesel Oxidation Catalyst Inlet Pressure Sensor Tube and Elbow". Go to step 7.
7. Inspect the DOC inlet pressure port on the DOC, the port on the DOC inlet pressure sensor, the DOC inlet pressure tube, hose and elbow. Are there any restrictions present?
 - a. Yes, repair as necessary. Verify repair.
 - b. No, Go to step 8.
8. Remove the DPF outlet pressure sensor tube, hose and elbow. Refer to section "Removal of the EPA10 Diesel Oxidation Catalyst Inlet Pressure Sensor". Go to step 9.
9. Inspect the DPF outlet pressure sensor port on the DPF, the port on the DPF outlet pressure sensor, the DPF outlet pressure sensor tube, hose and elbow. Are there any restrictions present?
 - a. Yes; repair as necessary. Verify repair.
 - b. No; Go to step 10.
10. Inspect the front face of the DOC. Is there a restriction present?
 - a. Yes; replace the DOC. Verify repair.
 - b. No; replace the DPF. Verify repair.

7 SPN 3251/FMI 1 - GHG14

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range Low.

This fault code sets when the pressure across the DPF is less than 1.5 kPa (0.2 psi) for more than 10 seconds.

Table 6.

SPN 3251/FMI 1	
Description	DPF Pressure Out of Range Low
Monitored Parameter	DOC Inlet Pressure Sensor, DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1500 to 1900 rpm With a Load Less Than 80%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > SCR and DPF Voltages. Go to step 4.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System	Tilt Sensor	Transmission Shift Abort Counter	Variable Speed Fan Control	On Board Diagnostics	On Board Diagnostics J1939	SCR and DPF Voltages
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939
DEF Tank Temperature Sensor Voltage	1.14	V	DOC Inlet Temp (Pin 107)	0.50	V	
DEF Tank Level Sensor Voltage	1.67	V	DOC Outlet Temp (Pin 27)	0.50	V	
SCR Inlet Temperature Sensor Voltage	0.50	V	DPF Outlet Temp (Pin 97)	0.50	V	
SCR Outlet Temperature Sensor Voltage	0.50	V	DOC Inlet Pressure (Pin 87)	0.48	V	
DEF Temperature Sensor Voltage	3.00	V	DPF Outlet Pressure (Pin 72)	0.45	V	
DEF Pressure Sensor Voltage	0.48	V	Started acquiring sensor voltage signals...			
Start Acquiring		Stop Acquiring				

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4. Click the "start acquiring" tab and monitor the Diesel Oxidations Catalyst (DOC) inlet pressure (pin 87) parameter. Is the DOC inlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; Go to step 5.
 - b. No; replace the DOC inlet pressure sensor. Refer to section "Installation of the GHG14 Diesel Oxidation Catalyst Inlet Pressure Sensor". Verify repair.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System	Tilt Sensor	Transmission Shift Abort Counter	Variable Speed Fan Control			
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939
						SCR and DPF Voltages
DEF Tank Temperature Sensor Voltage						
DEF Tank Level Sensor Voltage						
SCR Inlet Temperature Sensor Voltage						
SCR Outlet Temperature Sensor Voltage						
DEF Temperature Sensor Voltage						
DEF Pressure Sensor Voltage						

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5. Monitor the DPF outlet pressure (pin 72) parameter. Is the DPF outlet pressure sensor voltage between 0.44 and 0.56 volts?
 - a. Yes; Go to step 6.
 - b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the GHG14 Diesel Particulate Filter Outlet Pressure Sensor". Verify repair.
6. Remove the DOC inlet pressure sensor tube and hose. Refer to section "Removal of the GHG14 Diesel Oxidation Catalyst Inlet Pressure Sensor Tube". Go to step 7.
7. Inspect the DOC inlet pressure port on the DOC, the port on the DOC inlet pressure sensor, the DOC inlet pressure sensor tube and hose. Are there any restrictions present?
 - a. Yes, repair as necessary. Verify repair.
 - b. No, Go to step 8.
8. Remove the DPF outlet pressure sensor tube and hose. Refer to section "Removal of the GHG14 Diesel Particulate Filter Outlet Pressure Sensor Tube ". Go to step 9.
9. Inspect the DPF outlet pressure sensor port on the DPF, the port on the DPF outlet pressure sensor, the DPF outlet pressure sensor tube and hose. Are there any restrictions present?
 - a. Yes; repair as necessary. Verify repair.
 - b. No; Go to step 10.
10. Inspect the front face of the DOC. Is there a restriction present?
 - a. Yes; replace the DOC. Verify repair.
 - b. No; replace the DPF. Verify repair.

8 SPN 3251/FMI 16 - EPA07

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range High.

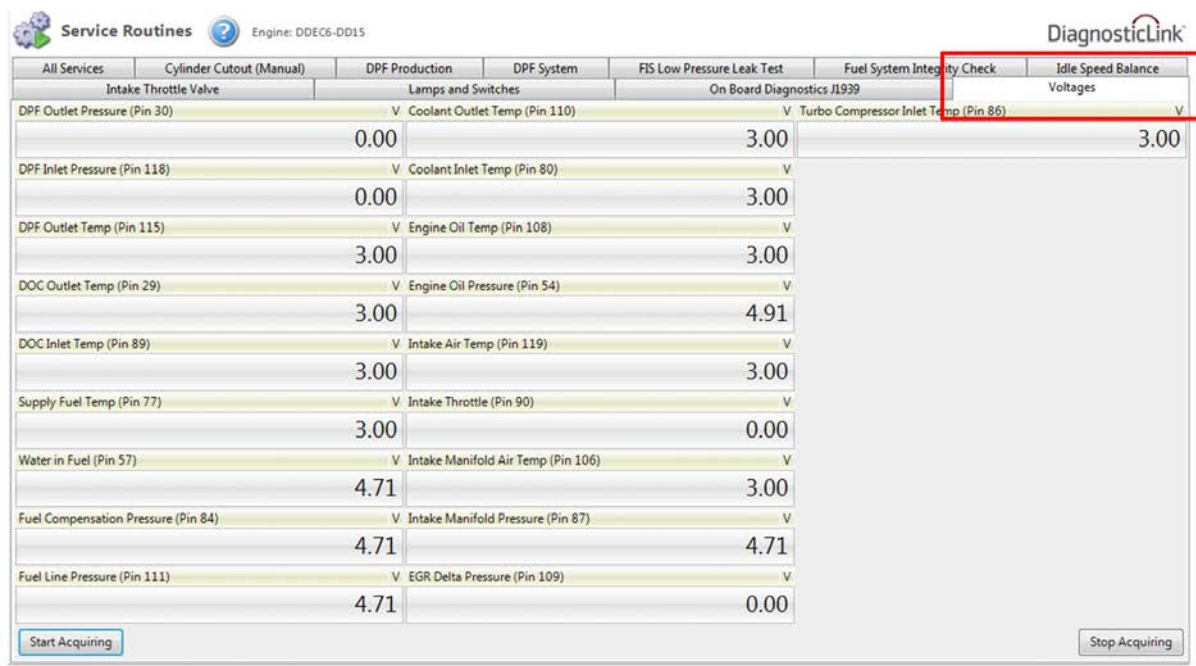
This fault code sets when the DPF outlet pressure is greater than 30 kPa (4.2 psi) for more than 10 seconds.

Table 7.

SPN 3251/FMI 16	
Description	DPF Pressure Out of Range High
Monitored Parameter	DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1200 to 1800 rpm With a Load Less Than 10%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > Voltages. Go to step 4.



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4. Click the "start acquiring" tab and monitor the DPF outlet pressure (pin 30) parameter. Is the DPF outlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; disconnect the exhaust behind the DPF and repair the restriction. Verify repair.

- b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the EPA07 Pressure Sensors". Verify repair.

9 SPN 3251/FMI 16 - EPA10

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range High.

This fault code sets when the DPF outlet pressure is greater than 30 kPa (4.2 psi) for more than 10 seconds.

Table 8.

SPN 3251/FMI 16	
Description	DPF Pressure Out of Range High
Monitored Parameter	DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1200 to 1800 rpm With a Load Less Than 10%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > SCR and DPF Voltages. Go to step 4.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System	Tilt Sensor	Transmission Shift Abort Counter			Variable Speed Fan Control	Voltages
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939
						SCR and DPF Voltages
DEF Tank Temperature Sensor Voltage			V DOC Inlet Temp (Pin 107)			
1.14			0.50			
DEF Tank Level Sensor Voltage			V DOC Outlet Temp (Pin 27)			
1.67			0.50			
SCR Inlet Temperature Sensor Voltage			V DPF Outlet Temp (Pin 97)			
0.50			0.50			
SCR Outlet Temperature Sensor Voltage			V DOC Inlet Pressure (Pin 87)			
0.50			0.48			
DEF Temperature Sensor Voltage			V DPF Outlet Pressure (Pin 72)			
3.00			0.45			
DEF Pressure Sensor Voltage			V Started acquiring sensor voltage signals...			
0.48						
<div>Start Acquiring</div> <div>Stop Acquiring</div>						

d500220

4. Click the "start acquiring" tab and monitor the DPF outlet pressure (pin 72) parameter. Is the DPF outlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; remove the Selective Catalyst Reduction (SCR) system as necessary and repair the restriction. Verify repair.
 - b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the EPA10 Diesel Particulate Filter Outlet Pressure Sensor". Verify repair.

10 SPN 3251/FMI 16 – GHG14

This diagnostic is typically Diesel Particulate Filter (DPF) Pressure Out of Range High.

This fault code sets when the DPF outlet pressure is greater than 30 kPa (4.2 psi) for more than 10 seconds.

Table 9.

SPN 3251/FMI 16	
Description	DPF Pressure Out of Range High
Monitored Parameter	DPF Outlet Pressure Sensor
Typical Enabling Conditions	Always On
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL, SEL
Engine Reaction	Derate 25%
Verification	Run Engine Between 1200 to 1800 rpm With a Load Less Than 10%

Check as follows:

1. Connect DiagnosticLink™. Go to step 2.
2. Turn the ignition ON (key ON, Engine OFF). Go to step 3.
3. Using DiagnosticLink go to Service Routines > SCR and DPF Voltages. Go to step 4.

All Services	Cylinder Cutout (Manual)	DPF Production	DPF System	FIS Fuel Filter	FIS Fuel Quantity Control Valve	FIS Low Pressure Leak Test
SCR System	Tilt Sensor	Transmission Shift Abort Counter	Variable Speed Fan Control	Voltages		
FIS Water in Fuel	Fuel System Integrity Check	Idle Speed Balance	Intake Throttle Valve	Lamps and Switches	On Board Diagnostics	On Board Diagnostics J1939
DEF Tank Temperature Sensor Voltage				V DOC Inlet Temp (Pin 107)		
				1.14		0.50
DEF Tank Level Sensor Voltage				V DOC Outlet Temp (Pin 27)		
				1.67		0.50
SCR Inlet Temperature Sensor Voltage				V DPF Outlet Temp (Pin 97)		
				0.50		0.50
SCR Outlet Temperature Sensor Voltage				V DOC Inlet Pressure (Pin 87)		
				0.50		0.48
DEF Temperature Sensor Voltage				V DPF Outlet Pressure (Pin 72)		
				3.00		0.45
DEF Pressure Sensor Voltage				V Started acquiring sensor voltage signals...		
				0.48		
Start Acquiring				Stop Acquiring		

d500220

4. Click the "start acquiring" tab and monitor the DPF outlet pressure (pin 72) parameter. Is the DPF outlet pressure sensor voltage between 0.44 to 0.56 volts?
 - a. Yes; disconnect the exhaust behind the DPF and repair the restriction. Verify repair.

- b. No; replace the DPF outlet pressure sensor. Refer to section "Removal of the GHG14 Diesel Particulate Filter Outlet Pressure Sensor". Verify repair.