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Service Information Bulletin

SUBJECT	DATE
SPN 70 (CPC)(GHG17)	June 2016

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0193	GHG17 DD Medium Duty	SPN 70/FMI 2, 13, 19 - GHG17	New DD5 and DD8 diagnostic procedures
DDC-SVC-MAN-0191	GHG17 DD Heavy Duty	SPN 70/FMI 2, 13, 19 - GHG17	Updated GHG17 HD diagnostic procedures added graphic

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 70/FMI 2 - GHG17

J1939 Park Brake Switch Signal from Source #1, #2, or #3 Data Erratic, Intermittent or Incorrect

Table 1.

SPN 70/FMI 2	
Description	Park Brake Switch Signal Data Incorrect
Monitored Parameter	Park Brake Switch
Typical Enabling Conditions	Always On
Monitor Sequence	Key ON
Execution Frequency	Continuous When Enabling Conditions are Met
Typical Duration	Two Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Key ON, Engine OFF

Check as follows:

1. Check for multiple codes; are fault codes (CPC) SPN 168/FMI 0/14/18 present?
 - a. Yes; troubleshoot and repair these first.
 - b. No; Go to step 2.
2. Is (MCM) SPN 625/FMI 9 present?
 - a. Yes; troubleshoot and repair the Controller Area Network (CAN) line.
 - b. No; Go to step 3.
3. Has the CPC been recently reprogrammed?
 - a. Yes; check the proper configuration of the CPC.

Parameter	Value	Units	Minimur
Evobus Retarder Lever Enable	disabled		
Park Brake Switch Config	<input type="text" value=""/>		
Service Brake Switch Config	0 hardwired		
Stop Eng Override Sw Config	1 Ccvs1		
Switchable Torque via 3 18	2 Ccvs2	ft-lb	-3687.8
Switchable Torque via 4 13	3 Ccvs3	ft-lb	-3687.8
	-3687.81	ft-lb	-3687.8

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- b. No; determine which modules are configured for the vehicle and their communication status. Once this is done, follow the appropriate module communication troubleshooting procedures for the affected module.

3 SPN 70/FMI 13 - GHG17

J1939 Park Brake Switch Signal from Source #1, #2, or #3 is Missing

Table 2.

SPN 70/FMI 13	
Description	Park Brake Switch Signal Data Missing
Monitored Parameter	Park Brake Switch
Typical Enabling Conditions	Always On
Monitor Sequence	Key ON
Execution Frequency	Continuous When Enabling Conditions are Met
Typical Duration	Two Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Key ON, Engine OFF

Check as follows:

1. Check for multiple codes; are fault codes (CPC) SPN 168/FMI 0/14/18 present?
 - a. Yes; troubleshoot and repair these first.
 - b. No; Go to step 2.
2. Is (MCM) SPN 625/FMI 9 present?
 - a. Yes; troubleshoot and repair the Controller Area Network (CAN) line.
 - b. No; Go to step 3.
3. Has the CPC been recently reprogrammed?
 - a. Yes; check the proper configuration of the CPC.

Parameter	Value	Units	Minimur
Evobus Retarder Lever Enable	disabled		
Park Brake Switch Config	▼		
Service Brake Switch Config	0 hardwired		
Stop Eng Override Sw Config	1 Ccvs1		
Switchable Torque via 3 18	2 Ccvs2	ft-lb	-3687.8
Switchable Torque via 4 13	3 Ccvs3	ft-lb	-3687.8
	-3687.81	ft-lb	-3687.8

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- b. No; determine which modules are configured for the vehicle and their communication status. Once this is done, follow the appropriate module communication troubleshooting procedures for the affected module.

4 SPN 70/FMI 19 - GHG17

J1939 Park Brake Switch Signal from Source #1, #2, or #3 is Erratic

Table 3.

SPN 70/FMI 19	
Description	Park Brake Switch Signal Erratic
Monitored Parameter	Park Brake Switch
Typical Enabling Conditions	Always On
Monitor Sequence	Key ON
Execution Frequency	Continuous When Enabling Conditions are Met
Typical Duration	Two Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Key ON, Engine OFF

Check as follows:

1. Check for multiple codes; are fault codes (CPC) SPN 168/FMI 0/14/18 present?
 - a. Yes; troubleshoot and repair these first.
 - b. No; Go to step 2.
2. Is (MCM) SPN 625/FMI 9 present?
 - a. Yes; troubleshoot and repair the Controller Area Network (CAN) line.
 - b. No; Go to step 3.
3. Has the CPC been recently reprogrammed?
 - a. Yes; check the proper configuration of the CPC.

Parameter	Value	Units	Minimur
Evobus Retarder Lever Enable	disabled		
Park Brake Switch Config	<input type="text" value=""/>		
Service Brake Switch Config	0 hardwired		
Stop Eng Override Sw Config	1 Ccvs1		
Switchable Torque via 3 18	2 Ccvs2	ft-lb	-3687.8
Switchable Torque via 4 13	3 Ccvs3	ft-lb	-3687.8
	-3687.81	ft-lb	-3687.8

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- b. No; determine which modules are configured for the vehicle and their communication status. Once this is done, follow the appropriate module communication troubleshooting procedures for the affected module.

5 SPN 70/FMI 2 - GHG17

J1939 Park Brake Switch Signal from Source #1, #2, or #3 Data Erratic, Intermittent or Incorrect

Table 4.

SPN 70/FMI 2	
Description	Park Brake Switch Signal Data Incorrect
Monitored Parameter	Park Brake Switch
Typical Enabling Conditions	Always On
Monitor Sequence	Key ON
Execution Frequency	Continuous When Enabling Conditions are Met
Typical Duration	Two Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Key ON, Engine OFF

Check as follows:

1. Check for multiple codes; are fault codes (CPC) SPN 168/FMI 0/14/18 present?
 - a. Yes; troubleshoot and repair these first.
 - b. No; Go to step 2.
2. Is (MCM) SPN 625/FMI 9 present?
 - a. Yes; troubleshoot and repair the Controller Area Network (CAN) line.
 - b. No; Go to step 3.
3. Has the CPC been recently reprogrammed?
 - a. Yes; check the proper configuration of the CPC.

Parameter	Value	Units	Minimur
Evobus Retarder Lever Enable	disabled		
Park Brake Switch Config			
Service Brake Switch Config	0 hardwired		
Stop Eng Override Sw Config	1 Ccvs1		
Switchable Torque via 3 18	2 Ccvs2	ft-lb	-3687.8
Switchable Torque via 4 13	3 Ccvs3	ft-lb	-3687.8
	-3687.81	ft-lb	-3687.8

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- b. No; determine which modules are configured for the vehicle and their communication status. Once this is done, follow the appropriate module communication troubleshooting procedures for the affected module.

6 SPN 70/FMI 13 - GHG17

J1939 Park Brake Switch Signal from Source #1, #2, or #3 is Missing

Table 5.

SPN 70/FMI 13	
Description	Park Brake Switch Signal Data Missing
Monitored Parameter	Park Brake Switch
Typical Enabling Conditions	Always On
Monitor Sequence	Key ON
Execution Frequency	Continuous When Enabling Conditions are Met
Typical Duration	Two Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Key ON, Engine OFF

Check as follows:

1. Check for multiple codes; are fault codes (CPC) SPN 168/FMI 0/14/18 present?
 - a. Yes; troubleshoot and repair these first.
 - b. No; Go to step 2.
2. Is (MCM) SPN 625/FMI 9 present?
 - a. Yes; troubleshoot and repair the Controller Area Network (CAN) line.
 - b. No; Go to step 3.
3. Has the CPC been recently reprogrammed?
 - a. Yes; check the proper configuration of the CPC.

Parameter	Value	Units	Minimur
Evobus Retarder Lever Enable	disabled		
Park Brake Switch Config	<input type="text" value=""/>		
Service Brake Switch Config	0 hardwired		
Stop Eng Override Sw Config	1 Ccvs1		
Switchable Torque via 3 18	2 Ccvs2	ft-lb	-3687.8
Switchable Torque via 4 13	3 Ccvs3	ft-lb	-3687.8
	-3687.81	ft-lb	-3687.8

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- b. No; determine which modules are configured for the vehicle and their communication status. Once this is done, follow the appropriate module communication troubleshooting procedures for the affected module.

7 SPN 70/FMI 19 - GHG17

J1939 Park Brake Switch Signal from Source #1, #2, or #3 is Erratic

Table 6.

SPN 70/FMI 19	
Description	Park Brake Switch Signal Erratic
Monitored Parameter	Park Brake Switch
Typical Enabling Conditions	Always On
Monitor Sequence	Key ON
Execution Frequency	Continuous When Enabling Conditions are Met
Typical Duration	Two Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Key ON, Engine OFF

Check as follows:

1. Check for multiple codes; are fault codes (CPC) SPN 168/FMI 0/14/18 present?
 - a. Yes; troubleshoot and repair these first.
 - b. No; Go to step 2.
2. Is (MCM) SPN 625/FMI 9 present?
 - a. Yes; troubleshoot and repair the Controller Area Network (CAN) line.
 - b. No; Go to step 3.
3. Has the CPC been recently reprogrammed?
 - a. Yes; check the proper configuration of the CPC.

Parameter	Value	Units	Minimur
Evobus Retarder Lever Enable	disabled		
Park Brake Switch Config	▼		
Service Brake Switch Config	0 hardwired		
Stop Eng Override Sw Config	1 Ccvs1		
Switchable Torque via 3 18	2 Ccvs2	ft-lb	-3687.8
Switchable Torque via 4 13	3 Ccvs3	ft-lb	-3687.8
	-3687.81	ft-lb	-3687.8

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- b. No; determine which modules are configured for the vehicle and their communication status. Once this is done, follow the appropriate module communication troubleshooting procedures for the affected module.