1 1 28-13

Service Information Bulletin

SUBJECT	DATE
SPN 511403/FMI 0,1,2,3,4,5,6,8,9,10,11,12,13,14	January 2013

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	GHG14 DD Platform	SPN 511403/FMI 0	New diagnostics for these FMIs.
		SPN 511403/FMI 1	
		SPN 511403/FMI 2	
		SPN 511403/FMI 3	
		SPN 511403/FMI 4	
		SPN 511403/FMI 5	
		SPN 511403/FMI 6	
		SPN 511403/FMI 8	
		SPN 511403/FMI 9	
		SPN 511403/FMI 10	
		SPN 511403/FMI 11	
		SPN 511403/FMI 12	
		SPN 511403/FMI 13	
		SPN 511403/FMI 14	

DEMAND PERFORMANCE™

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

2 SPN 511403/FMI 0 – GHG14

This diagnostic is typically J1939 Powertrain Message (AMT - Detroit Transmission) is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to Application and Installation Manual for correct parameter configuration. If configuration is correct, connect service link to determine which modules are configured for the vehicle and their communication status. Once this is done, follow appropriate module communication troubleshooting procedures for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

3 SPN 511403/FMI 1 – GHG14

This diagnostic is typically J1939 Powertrain Message (Transfer Case/PTO) is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure the parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for the correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

4 SPN 511403/FMI 2 – GHG14

This diagnostic is typically J1939 BM Message (Battery Main Switch) is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

5 SPN 511403/FMI 3 – GHG14

This diagnostic is typically a J1939 Transfer Case Information (TCI) Message is missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

6 SPN 511403/FMI 4 – GHG14

This diagnostic is typically J1939 AIR1 Message (Air Supply Pressure) is Missing from First Source Address.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

7 SPN 511403/FMI 5 – GHG14

This diagnostic is typically J1939 AIR1 Message (Air Supply Pressure) is Missing from Second Source Address.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

8 SPN 511403/FMI 6 – GHG14

This diagnostic is typically J1939 Electronic Axle Controller 1 (EAC1) Message is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
    a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
    b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
    c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
    a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
    b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
    a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
    b. No; clear faults codes and release vehicle.

9 SPN 511403/FMI 8 – GHG14

This diagnostic is typically a J1939 TC1 Message (Transmission Mode) is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

10 SPN 511403/FMI 9 – GHG14

This diagnostic is typically a Generator (Charging System) Terminal W - Allocation Error (Pulse/Rev Signal).

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for wiring schematic information.
   b. No, Go to step 4.
4. Check the condition of the alternator drive belt and replace if required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 5.
5. Check for loose alternator mounting and tighten or repair as required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 6.
6. Check for proper alternator operation and repair or replace as required.
   a. If fault is no longer active, erase fault code memory.
   b. If fault is still active, Go to step 7.
7. Check the condition of the battery; does it hold the charge? Replace if required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 8.
8. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
9. Turn ignition ON (key ON, engine OFF).
10. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
    a. Yes; Refer to Original Equipment Manufacturer (OEM) material for wiring schematic information.
    b. No; clear faults codes and release vehicle.

11 SPN 511403/FMI 10 – GHG14

This diagnostic is typically a Generator (Charging System) terminal W - Low Voltage.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for the correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for wiring schematic information.
   b. No, Go to step 4.
4. Check the condition of the alternator drive belt and replace if required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 5.
5. Check for loose alternator mounting and tighten or repair as required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 6.
6. Check for proper alternator operation and repair or replace as required.
   a. If fault is no longer active, erase fault code memory.
   b. If fault is still active, Go to step 7.
7. Check the condition of the battery; does it hold the charge? Replace if required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 8.
8. Turn the ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
9. Turn ignition ON (key ON, engine OFF).
10. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
    a. Yes; refer to Original Equipment Manufacturer (OEM) material for wiring schematic information.
    b. No; clear faults codes and release vehicle.

12 SPN 511403/FMI 11 – GHG14

This diagnostic is typically a Generator (Charging System) D+ Terminal Failure.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Check the condition of the alternator drive belt and replace if required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 5.
5. Check for loose alternator mounting and tighten or repair as required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 6.
6. Check for proper alternator operation and repair or replace as required.
   a. If fault is no longer active, erase fault code memory.
   b. If fault is still active, Go to step 7.
7. Check the condition of the battery; does it hold the charge? Replace if required.
   a. If fault is no longer active, verify repairs.
   b. If fault is still active, Go to step 8.
8. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
9. Turn ignition ON (key ON, engine OFF).
10. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
    a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
    b. No; clear faults codes and release vehicle.

13 SPN 511403/FMI 12 – GHG14

This diagnostic is typically a J1939 Powertrain Message (Engine Droop Control) is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) (Charging System) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

14 SPN 511403/FMI 13 – GHG14

This diagnostic is typically a J1939 PTODE Message (PTO Drive Engagement) is Missing.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
   a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) faults are present, troubleshoot these first.
   b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
   c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
   a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
   b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
   a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
   b. No; clear faults codes and release vehicle.

15 SPN 511403/FMI 14 – GHG14

This diagnostic is typically a J1939 CM1 Message (Maximum Vehicle Speed Limit) is Missing or Not Available.

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Check for multiple codes:
    a. If Common Powertrain Controller (CPC4) SPN 168/FMI (any) (battery voltage) faults are present, troubleshoot these first.
    b. If Controller Area Network (CAN) line faults SPN 625/FMI (any) are present, repair the CAN line faults.
    c. If only a J1939 Error fault is present, Go to step 3.
3. Has the CPC4 been recently reprogrammed?
    a. Yes; ensure parameters are configured correctly for vehicle application; refer to the Application and Installation Manual for correct parameter configuration. If configuration is correct, refer to Original Equipment Manufacturer (OEM) material for J1939 troubleshooting for the affected module.
    b. No, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF) and disconnect DDDL/DDRS. Wait five minutes for all modules to power down.
5. Turn ignition ON (key ON, engine OFF).
6. Reconnect DDDL/DDRS 7.08 SP2 or newer. Are fault codes active?
    a. Yes; Refer to section "SPN 625/FMI 9 - EPA10 - GHG14" for further PT CAN troubleshooting.
    b. No; clear faults codes and release vehicle.