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Service Information Bulletin

SUBJECT	DATE
SPN 521221 (TCM)	April 2017

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0140	DT12 Transmission	SPN 521221/FMI 19	This procedure has been rewritten.

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.



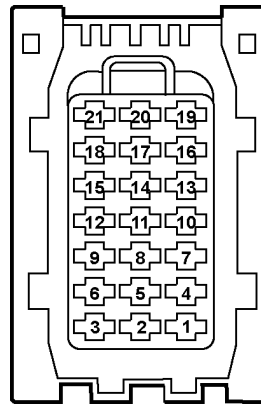
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No CAN Communication

Check as follows:

1. Are there any battery voltage faults (SPN 168/FMI any)?
 - a. Yes; troubleshoot battery voltage faults first.
 - b. No; Go to step 2.
2. Has the Transmission Control Module (TCM), Motor Control Module (MCM), Aftertreatment Control Module (ACM), or Common Powertrain Controller (CPC) been recently reprogrammed?
 - a. Yes; clear the fault codes. If the fault does not become active, release vehicle. If fault becomes active, Go to step 3.
 - b. No; clear the fault codes. If the fault does not become active, release vehicle. If fault becomes active, Go to step 3.
3. Disconnect the TCM X1 21-pin connector.
4. Inspect TCM X1 21-pin connector for corrosion, water intrusion or pin damage. Are there any damaged pins?
 - a. Yes; repair as necessary.
 - b. No; Go to step 5.
5. Turn the ignition ON (key ON, engine OFF).



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6. Measure the voltage between TCM X1 21-pin connector pins 1, 2, 3, 4, 6 (ignition/battery voltage), and ground. Is the voltage less than 11.5 volts?
 - a. Yes; restore voltage to TCM X1 21-pin connector pins 1, 2, 3, 4, and 6.
 - b. No; Go to step 7.
7. Turn the ignition OFF.
8. Measure the resistance between TCM X1 21-pin connector pins 16, 19, 20, 21, and the negative battery post. Is resistance greater than three ohms?
 - a. Yes; restore battery ground to TCM X1 21-pin connector pins 16, 19, 20 and 21.
 - b. No; Go to step 9.
9. Measure the resistance between TCM X1 21-pin connector pins 10 and 11. Is the resistance between 55 and 65 ohms?
 - a. Yes; replace the Transmission Control Module (TCM).
 - b. No; repair Powertrain Controller Area Network (CAN) harness.
 For GHG14; Refer to section "SPN 625/FMI 13 – GHG14" for further diagnostics.
 For GHG17; Refer to section "SPN 625/FMI 13 – GHG17" for further diagnostics.