GM Bulletin No.: 14907

Date: February 2015

# Service Bulletin SB-10057681-1812

# SERVICE UPDATE

SUBJECT: Service Update for Inventory and Customer Vehicles

Transmission Replacement Expires with Base Warranty

**MODELS:** 2015 Chevrolet City Express

This service update includes vehicles in dealer inventory and customer vehicles that return to the dealership for any reason. This bulletin will expire at the end of the involved vehicle's New Vehicle Limited Warranty period.

#### **PURPOSE**

This bulletin provides a service procedure to replace the transmission on **certain** 2015 model year Chevrolet City Express vehicles. The continuous variable transmissions in these vehicles were misbuilt with nonconforming parts that can lead to a loss of oil pressure in the torque converter, which results in a reduction in acceleration performance.

This service procedure should be completed as soon as possible on involved vehicles currently in dealer inventory and customer vehicles that return to the dealer for any type of service during the New Vehicle Limited Warranty coverage period.

## **VEHICLES INVOLVED**

All involved vehicles are identified by VIN in the Global Warranty Management System – Investigate Vehicle History Application. Dealership technicians should always check this site to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It is important to routinely use this tool to verify eligibility because not all similar vehicles may be involved regardless of description or option content.

Additionally, a list of involved vehicles currently in dealer inventory is available on the "Service Update Bulletin Information" link under the "Service" tab in GM GlobalConnect. Customer vehicles that return for service, for any reason, and are still covered under the vehicle's base warranty should also be checked for vehicle eligibility.

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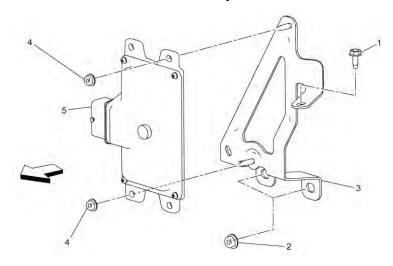
# **PART INFORMATION**

Parts required to complete this service update are to be obtained from General Motors Customer Care and Aftersales (GMCC&A). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

Part Number	Description	Quantity/Vehicle	
19317710	TRANSAXLE, AUTO (SERVICE)	1	
19316303	GASKET, EXH MANIF	1 (if req'd)	
19316302	GASKET, EXHAUST MANIF	1 (if req'd)	
19260800	FLUID, A/TRANS (ACDELCO CVT FLUID) (32 Oz)	8	
19317140	COOLANT, ENGINE (BLUE) (1 GALLON)	1	
19317005	SEAL, A/C EVPR HOSE (O RING)	1	
19317004	SEAL, A/C CNDSR HOSE (O RING)	1	
19316497	SEAL, TRANS FLUID FIL TUBE (O RING)	1	
19316146	STEERING LINKAGE OUTER TIE ROD NUT	2	
19317610	CVT COOLER BYPASS VALVE	1	
19317613	SEAL, TRANS FLUID COOLER PIPE	4	
Obtain Locally	COTTER PIN	2	

### SERVICE PROCEDURE

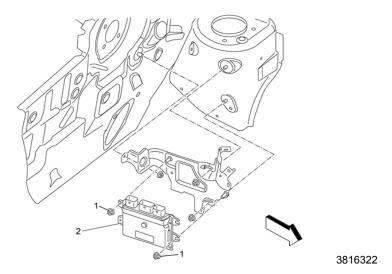
- Raise hood.
- 2. Remove the 15A fuse F48UA from the Under Hood Fuse Block X50A to disable the fuel pump relay. Refer to *X50A Fuse Block Under Hood Top View* in SI.
- 3. Relieve fuel pressure from system. Refer to Fuel Pressure Relief in SI.
- 4. Remove the air cleaner assembly. Refer to Air Cleaner Assembly Replacement in SI.
- Disconnect and remove battery from vehicle. Refer to Battery Replacement in SI.



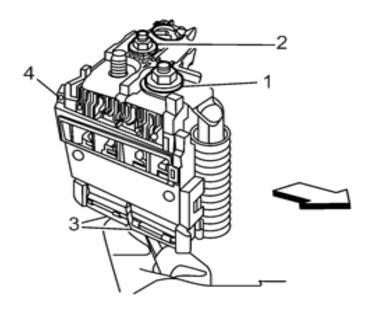
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6. Remove the TCM transmission control module (5) from the mounting bracket (3). Refer to *Transmission Control Module Replacement* in SI.

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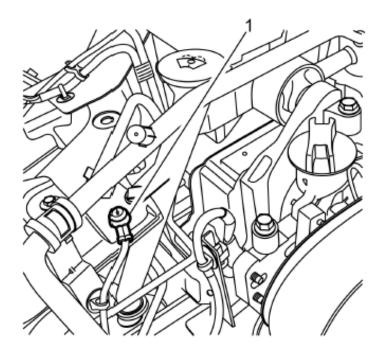


- 7. Remove the ECM engine control module (2) from the mounting bracket. Refer to *Engine Control Module Replacement* in SI.
- 8. Unclip wiring harness retainers, and remove the battery tray. Refer to *Battery Tray* Replacement in SI.

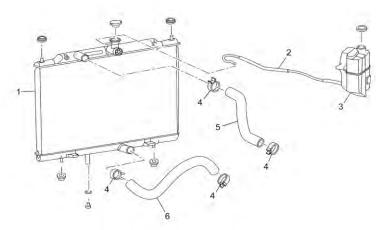


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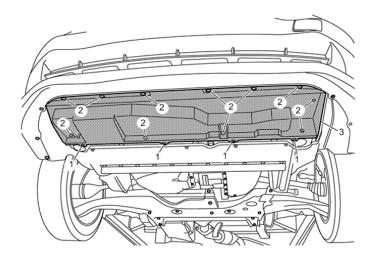
9. Disconnect the electrical connectors (3) from the battery positive cable junction block (4). Refer to *Battery Positive Cable Junction Block Replacement* in SI.



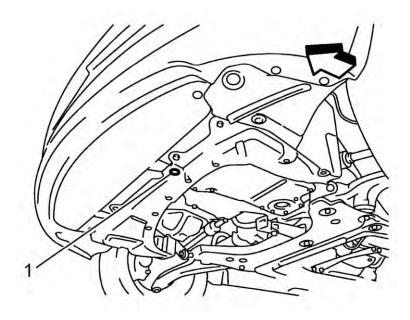
10. Remove the engine ground strap (1) located forward of the radiator surge tank and windshield washer fill.



- 11. Relocate the radiator surge tank (3) and remove the coolant pressure cap.
- 12. Recover refrigerant from A/C system. Refer to Refrigerant Recovery and Recharging in SI.
- 13. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in SI.

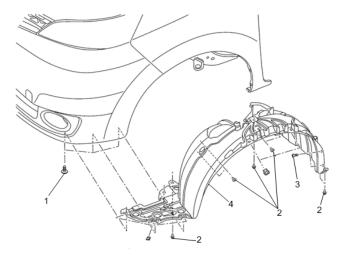


14. Remove the lower noise shield fasteners (1, 2) and shield (3). Refer to *Engine Compartment Lower Noise Shield Replacement* in SI.



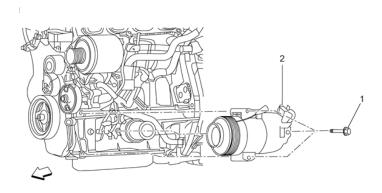
- 15. Remove the drain plug screw (1). Drain the cooling system into a clean container for refill. Refer to *Cooling System Draining and Filling* in SI.
- 16. Drain the transmission fluid. Refer to Transmission Fluid Drain and Fill (Repair) in SI.
- 17. Remove both front tires and wheels. Refer to Tire and Wheel Removal and Installation in SI.

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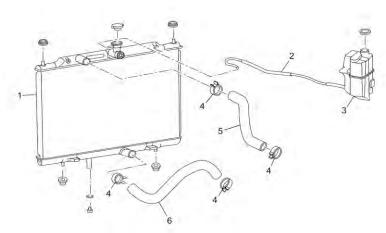
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- 18. Remove both front wheelhouse fasteners (1, 2, 3) and liners (4). Refer to *Front Wheelhouse Liner Replacement* in SI.
- 19. Remove the engine drive belt. Refer to Drive Belt Replacement in SI.



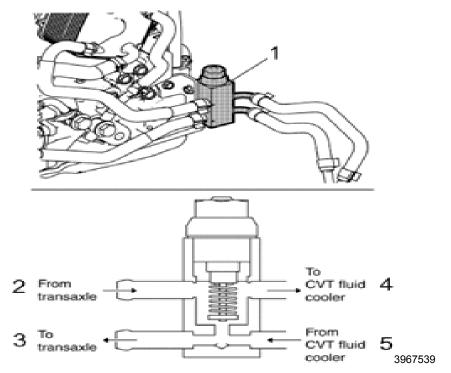
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20. Remove the A/C compressor. Refer to Air Conditioning Compressor Replacement in SI.

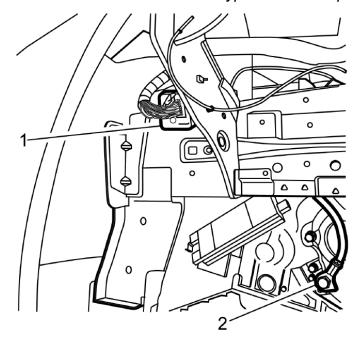


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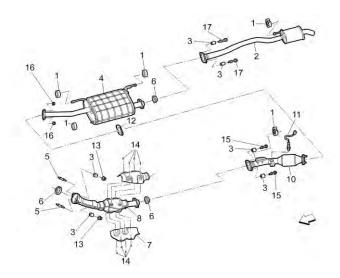
21. Remove the radiator outlet hose (6) from the bottom of the radiator. Refer to *Radiator Outlet Hose Replacement* in SI.



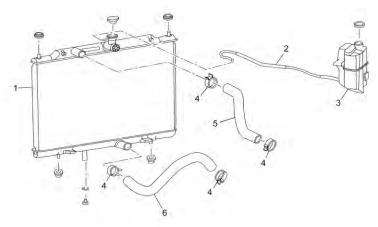
22. Remove the CVT fluid cooler lines from the bypass valve (1) located in the LH wheelhouse. Refer to *Transmission Cooler Bypass Valve Replacement* in SI.



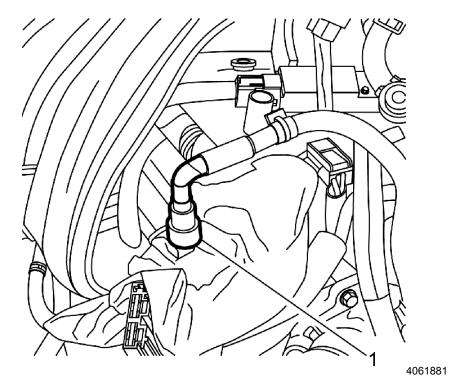
- 23. Release the locking handle, and disconnect the Engine Wiring Harness (1) located in the LH wheelhouse.
- 24. Disconnect the transmission ground strap (2) located in the LH wheelhouse.



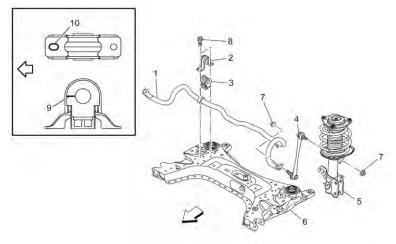
- 25. Disconnect the heated oxygen sensor electrical connector (11) from the forward harness.
- 26. Remove the exhaust front pipe (8). Refer to Exhaust Front Pipe Replacement in SI.
- 27. Lower the vehicle.



- 28. Remove the radiator inlet hose (5) from the radiator. Refer to *Radiator Inlet Hose Replacement* in SI.
- 29. Disconnect the heater core inlet and outlet hoses from the engine.



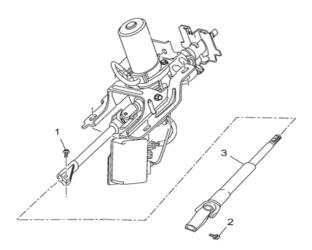
- 30. Disconnect the fuel feed tube (1) at the engine. Refer to *Fuel Injection Fuel Rail Assembly Replacement* in SI.
- 31. Disconnect the Range Selector Lever Cable at the transmission. Refer to *Range Selector Lever Cable Replacement* in SI.
- 32. Disconnect the brake booster vacuum hose at the rear of the engine intake manifold. Refer to *Power Brake Booster Vacuum Hose Replacement* in SI.
- 33. Disconnect the evaporative emission canister hose at the engine intake manifold throttle body.
- 34. Raise the vehicle.



- 35. Remove LH stabilizer shaft link (4) upper fastener (7).
- 36. Remove the left hand drive shaft. Refer to Front Wheel Drive Shaft Replacement (LH) in SI.
- 37. Remove the RH stabilizer shaft link upper fastener.

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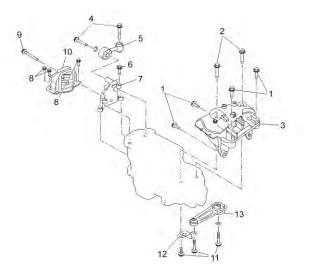
38. Remove the right hand drive shaft. Refer to *Front Wheel Drive Shaft Replacement (RH)* in SI.



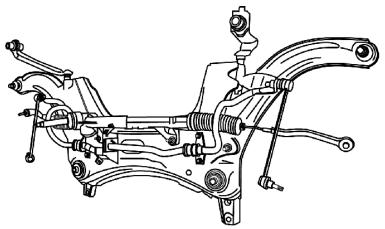
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**Note**: Place match marks on the steering gear pinion shaft, and intermediate steering shaft yoke before disassembly.

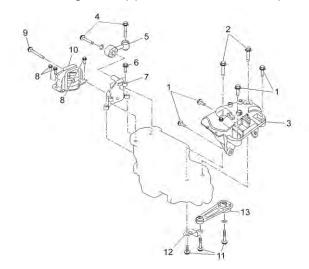
39. Remove the intermediate steering shaft lower bolt (2). Refer to *Intermediate Steering Shaft Replacement* in SI.



- 40. Remove the transmission rear mount (13). Refer to *Transmission Rear Mount Replacement* in SI.
- 41. Position the support table under the front suspension frame assembly.



- 42. Remove the drivetrain and front suspension frame along with still attached steering gear rack. Refer to *Drivetrain and Front Suspension Frame Replacement* in SI.
- 43. Position the engine support table under the powertrain assembly.



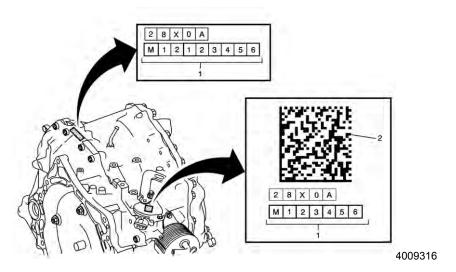
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- 44. Remove the LH side fasteners (1) from the mount (3). Refer to *Engine Mount Replacement Left Side* in SI.
- 45. Remove the RH side fasteners (8) from the mount (10). Refer to *Engine Mount Replacement Right Side* in SI.
- 46. Carefully raise the vehicle body up and away from the powertrain.

**Note:** The transmission oil cooler and pipes must be flushed and flow checked using DT-45096 when the transmission is replaced. Use compressed air to blow the residual transmission fluid out of the oil cooler and lines before and after flush. Refer to Transmission Fluid Cooler Flushing and Flow Test for directions.

47. Flush CVT cooler prior to installation of transmission.

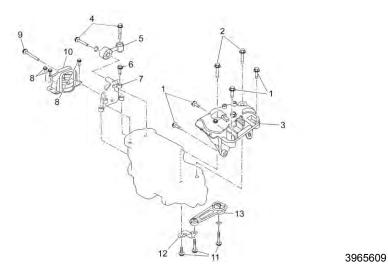
**Note**: Copy the new transmission serial number, and QR code, for programming information. Refer to Control Solenoid Valve and Transmission Control Module Assembly Programming and Setup in SI.



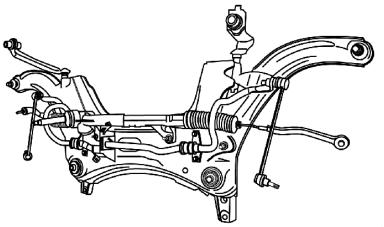
48. Replace the transmission. Refer to *Transmission Replacement* in SI.

# **INSTALLATION PROCEDURE**

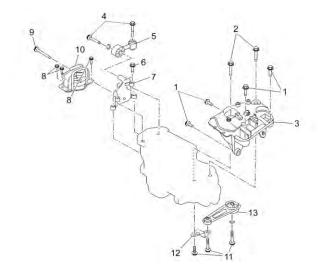
49. Carefully lower the vehicle until the frame contacts the engine and transmission support table.



- 50. Install the RH engine mount fasteners (8). Refer to *Engine Mount Replacement Right Side* in SI.
- 51. Install the LH engine mount fasteners (2). Refer to *Engine Mount Replacement Left Side* in SI.
- 52. Remove the engine support fixture.
- 53. Raise the vehicle.

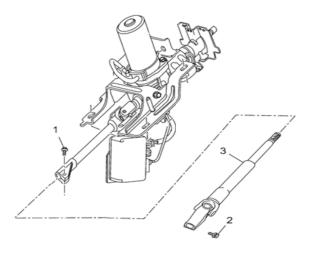


- 54. Position the support table under the front suspension frame assembly.
- 55. Install the drivetrain and front suspension frame along with still attached steering gear rack. Refer to Drivetrain and Front Suspension Frame Replacement in SI.

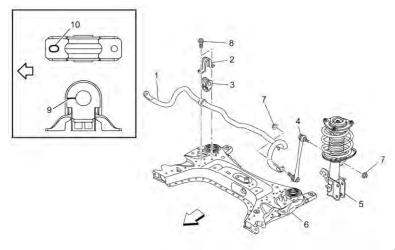


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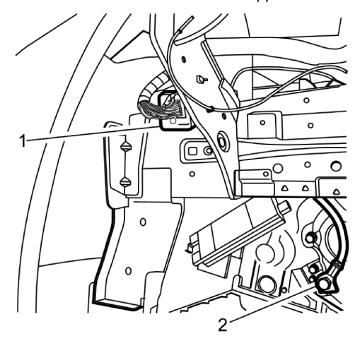
56. Install the transmission rear mount (13). Refer to *Transmission Rear Mount Replacement* in SI.



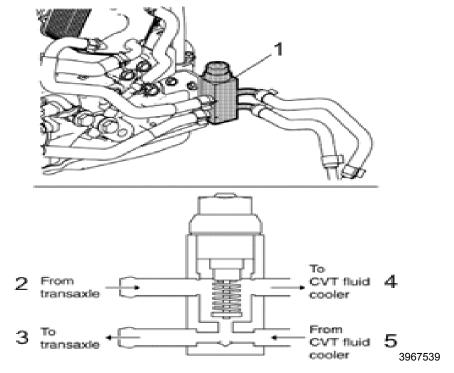
- 57. Install the intermediate steering shaft lower bolt (2) with the indexed shafts. Refer to *Intermediate Steering Shaft Replacement* in SI.
- 58. Install the right hand drive shaft. Refer to Front Wheel Drive Shaft Replacement (RH) in SI.



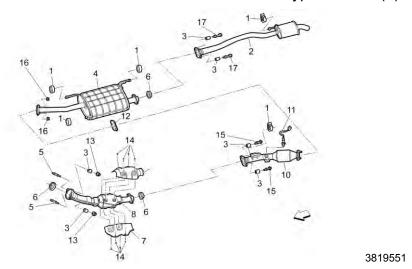
- 59. Install the right hand stabilizer shaft upper link fastener (7).
- 60. Install the left hand drive shaft. Refer to Front Wheel Drive Shaft Replacement (LH) in SI.
- 61. Install the left hand stabilizer shaft upper link fastener.



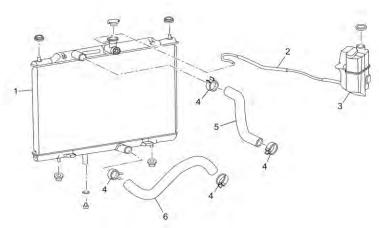
- 62. Connect the Engine Wiring Harness (1) located in the LH wheelhouse, and secure the locking handle.
- 63. Connect the transmission ground strap (2) to the transmission in the LH wheelhouse area.



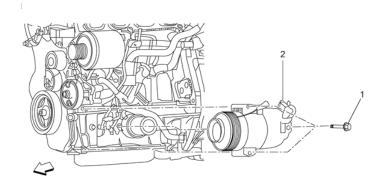
64. Install the CVT lines from the cooler to the bypass valve (1).



- 65. Install the exhaust front pipe (8). Refer to Exhaust Front Pipe Replacement in SI.
- 66. Connect the heated oxygen sensor electrical connector (11) to the forward harness.

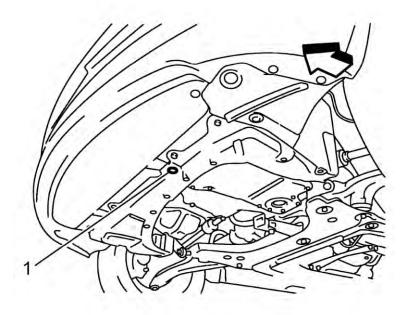


67. Install the radiator outlet hose (6) to the bottom of the radiator (1). Refer to *Radiator Outlet Hose Replacement* in SI.

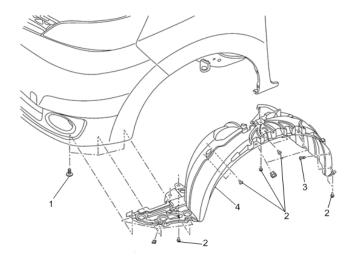


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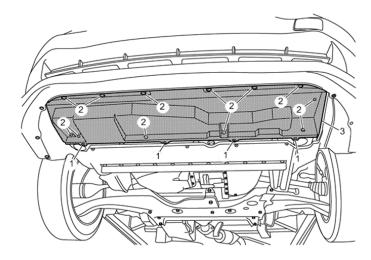
68. Install the A/C compressor. Refer to Air Conditioning Compressor Replacement in SI.



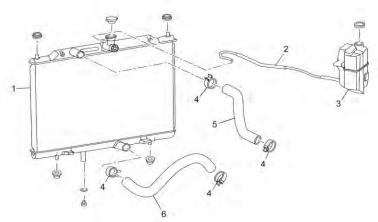
- 69. Install the drain plug screw (1) in the bottom of the radiator. Refer to *Cooling System Draining and Filling* in SI.
- 70. Install the engine drive belt. Refer to Drive Belt Replacement in SI.



- 71. Install both front wheelhouse liners (4), with fasteners (1, 2, 3). Refer to *Front Wheelhouse Liner Replacement* in SI.
- 72. Install both front tires and wheels. Refer to Tire and Wheel Removal and Installation in SI.

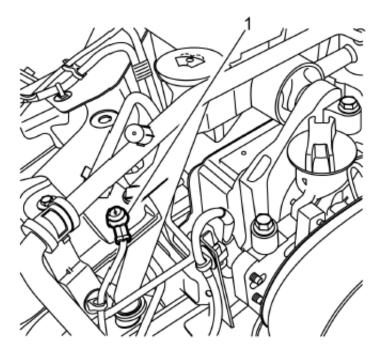


- 73. Install the lower noise shield (3) with fasteners (1, 2). Refer to Engine Compartment Lower Noise Shield Replacement in SI.
- 74. Lower the vehicle.
- 75. Connect the evaporative emission canister hose at the engine intake manifold throttle body.
- 76. Connect the brake booster vacuum hose at the rear of the engine intake manifold. Refer to Power Brake Booster Vacuum Hose Replacement in SI.
- 77. Connect the Range Selector Lever Cable at the transmission. Refer to *Range Selector Lever Cable Replacement* in SI.
- 78. Connect the fuel feed tube at the engine. Refer to *Fuel Injection Fuel Rail Assembly Replacement* in SI.
- 79. Connect the heater core inlet and outlet hoses to the engine.



- 81. Connect the radiator inlet hose (5) to the radiator. Refer to *Radiator Inlet Hose Replacement* in SI.
- 82. Install the radiator surge tank (3).

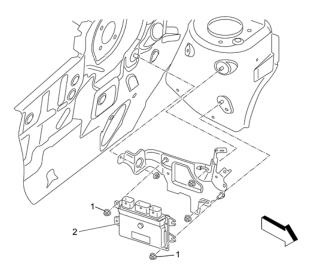
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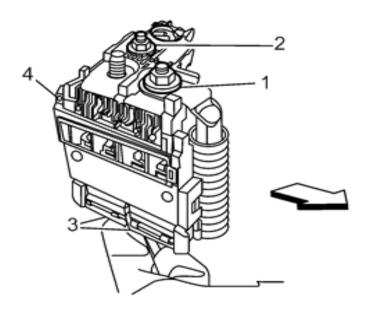
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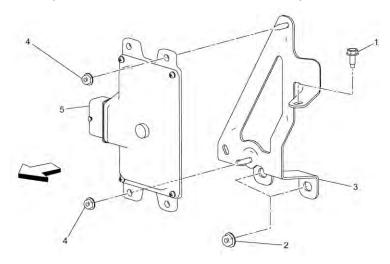
- 83. Install the engine ground strap (1) located forward of the radiator surge tank.
- 84. Install the battery tray, and attach the wiring harness. Refer to *Battery Tray Replacement* in SI.



85. Install the ECM engine control module (2) to the mounting bracket. Refer to *Engine Control Module Replacement* in SI.



86. Connect the electrical connectors (3) to the battery positive cable junction block (4). Refer to *Battery Positive Cable Junction Block Replacement* in SI.



- 87. Install the TCM transmission control module (5) to the mounting bracket (3). Refer to *Transmission Control Module Replacement* in SI.
- 88. Install the battery. Refer to *Battery Replacement* in SI.
- 89. Install the air cleaner assembly. Refer to Air Cleaner Assembly Replacement in SI.
- 90. Fill the cooling system. Refer to Cooling System Draining and Filling in SI.
- 91. Check the transmission fluid, and fill if needed. Refer to *Transmission Fluid Drain and Fill (Repair)* in SI. Use only approved CVT fluid.
- 92. Recharge the A/C system. Refer to Refrigerant Recovery and Recharging in SI.
- 93. Check the vehicle for codes. Refer to *Diagnostic System Check Vehicle* in SI.

**Note**: The replacement transmission includes a CD to update the TCM after the CVT installation. If no CD is available, contact TCSC. Refer to *Control Solenoid Valve and Transmission Control Module Assembly Programming and Setup* in SI.

- 94. Reprogram the Transmission Control Module. Refer to *Control Solenoid Valve and Transmission Control Module Assembly Programming and Setup* in SI.
- 95. Check and set vehicle alignment. Refer to Wheel Alignment Specifications in SI.

### WARRANTY TRANSACTION INFORMATION

Submit a transaction using the table below. All transactions should be submitted as a ZFAT transaction type, unless noted otherwise.

Labor	Description	Labor	Net
Code		Time	Item
9101237	Transmission Replacement	14.0*	**

- Labor time shown includes recover/recharge of A/C system, flush CVT cooler, wheel alignment, and reprogramming of TCM
- \*\* Submit for the actual cost of the 2 cotter pins needed to perform the required repairs, not to exceed \$0.25 USD.

# **DEALER PROGRAM RESPONSIBILITY**

Whenever a vehicle subject to this service update enters your vehicle inventory, or is in your facility for service in the future, and the vehicle is still covered under the New Vehicle Limited Warranty, you must take the steps necessary to be sure the service update correction has been made before selling or releasing the vehicle.