



Service Bulletin

PRELIMINARY INFORMATION

Subject: 2014 Chevrolet Spark New Product Information for Jatco CVT Automatic Transmission

Models: 2014 Chevrolet Spark
Equipped With Jatco CVT Automatic Transmission

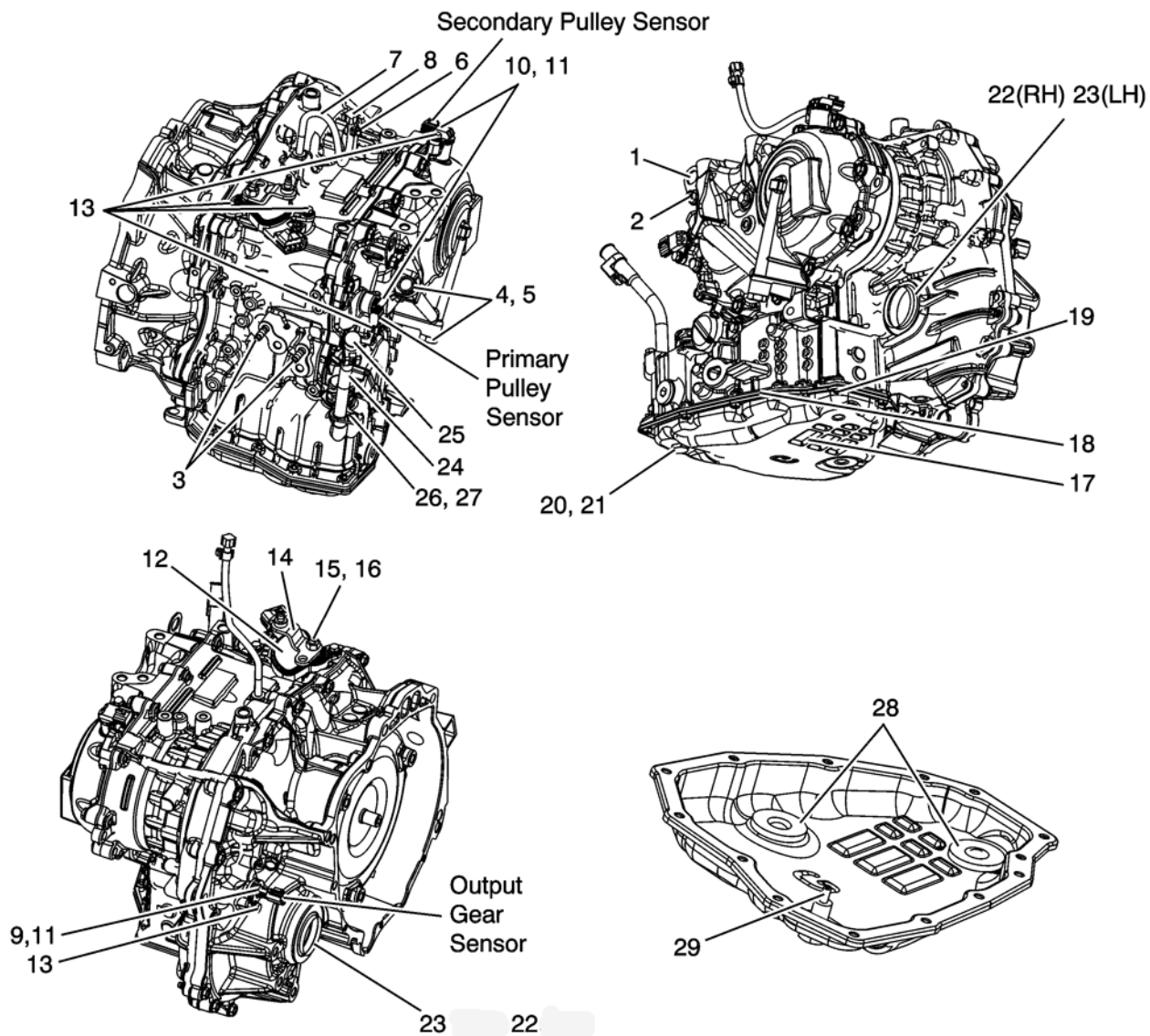
This PI has been revised to update the Transmission Fluid Cooler Flushing and Flow Test section. Please discard PI1024.

Transmission General Description

The JATCO CVT Transmission is a continuous variable transmission with a pair of variable pulleys, a steel belt and a shifting ratio planetary gear set designed to improve the overall performance of the transmission. Each pulley set has one fixed sheave and one moving sheave which determine the transmission ratio in each range. This transmission has an overall ratio spread of 7.3:1

For detailed information and component pictures regarding this transmission refer to SI. Go to > 2014 Chevrolet Spark (US/Canada) > Service Manual/Bulletins > Transmission > Automatic Transmission - Jatco CVT > Description and Operation > Transmission Component and System Description

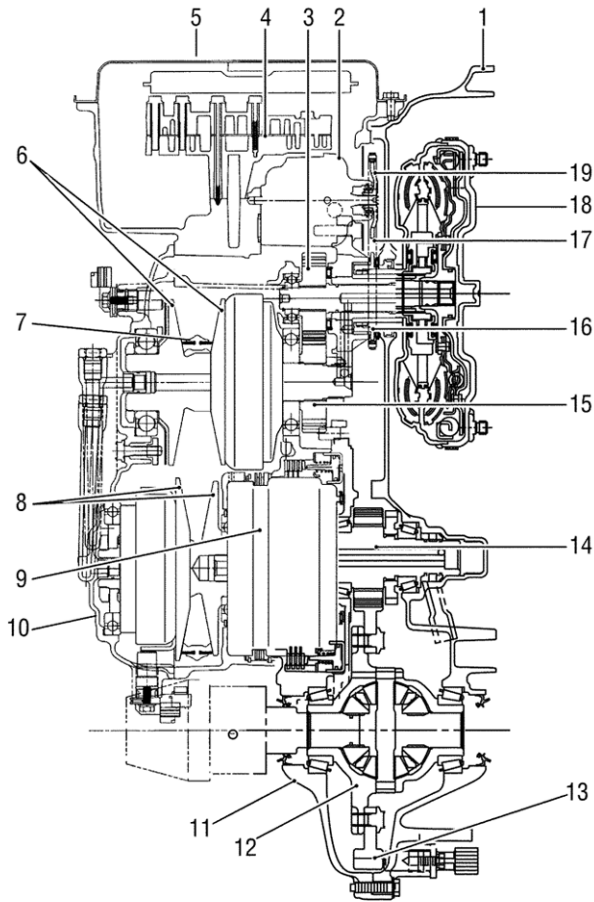
Transmission Component View



1. Engine Lift Bracket
2. Engine Lift Bracket Bolt/Screw
3. Transmission Case Bolts/Studs
4. Transmission Case Plug Seal (O Ring)
5. Transmission Case Plug
6. Transmission Vent Pipe
7. Transmission Vent Hose
8. Transmission Vent Hose Clip
9. Transmission Output Speed Sensor
10. Transmission Input Speed Sensor
11. Vehicle Speed Sensor Seal (O Ring)
12. Manual Shift Detent Assembly Lever (With Shift Position Switch)
13. Transmission Speed Sensor Bolt/Screw
14. Transmission Range Selector Lever Assembly
15. Transmission Range Selector Lever Washer
16. Transmission Range Selector Lever Nut
17. Transmission Fluid Pan Assembly

18. Transmission Fluid Pan Gasket
19. Transmission Fluid Pan Bolt/Screw
20. Transmission Fluid Pan Drain Plug
21. Transmission Fluid Pan Drain Plug Gasket
22. Font Wheel Drive Shaft Oil Seal Assembly (RHS)
23. Font Wheel Drive Shaft Oil Seal Assembly (LHS)
24. Transmission Fluid Fill Tube
25. Transmission Fluid Fill Tube Plug Assembly
26. Transmission Fluid Fill Tube Bolt/Screw
27. Transmission Fluid Fill Tube Seal (O Ring)
28. Transmission Fluid Pan Magnet
29. Transmission Fluid Drain Plug and Overflow Tube

Transmission Cross-Sectional View



1. Converter Housing
2. Oil Pump
3. Counter Drive Gear
4. Control Valve
5. Oil Pan
6. Primary Pulley
7. Steel Belt
8. Secondary Pulley

9. Planetary Gear (Auxiliary Gearbox)
10. Side Cover
11. Transmission Case
12. Differential Case
13. Final Gear
14. Reduction Gear
15. Counter Driven Gear
16. Drive Sprocket
17. Oil Pump Chain
18. Torque Converter
19. Driven Sprocket

Transmission Fluid



- In the United States use: ACDelco CVT Fluid P/N 19260800 (Shown)
- In Canada use: ACDelco CVT Fluid P/N 19299096

The Jatco CVT automatic transmission uses a transmission fluid which is green in color. This fluid is **DIFFERENT** from the Saturn CVT green automatic transmission fluid.

DO NOT use the Saturn CVT green automatic transmission fluid or DEXRON® VI, as these fluids **ARE NOT** compatible with the Jatco CVT automatic transmission.

Transmission Fluid Level and Condition Check

Caution: Use the correct transmission fluid as identified in this PI. Failure to do so may result in internal transmission damage.

1. The vehicle must be on a flat surface.

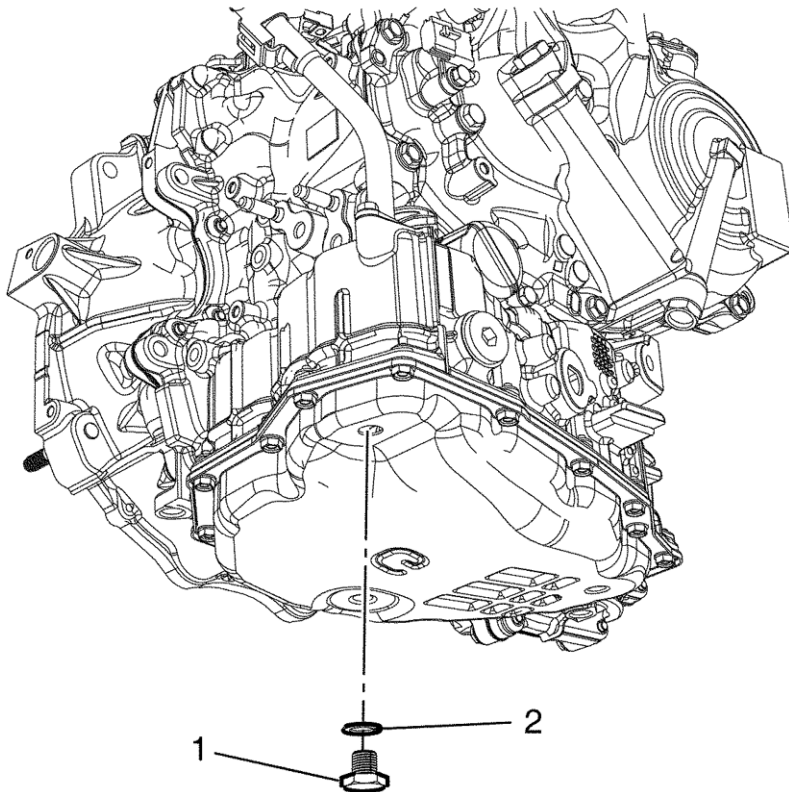
2. Move the selector lever into the Park (P) position and then completely engage the parking brake.
3. Start and idle the engine.

Notice: The CVT fluid is largely affected by temperature, therefore be sure to use the diagnostic tool to check the fluid temperature while adjusting.

4. Wait until the transmission fluid temperature reaches **122°F (50°C)**.
5. Move through the selector lever positions with the foot brake depressed. Switch the selector lever from position **P** to **L** and then back to **P**. Hold each position for at least 5 seconds.
6. Verify that there are not any transmission fluid leaks.

Notice: Continue to perform this work with the engine idling.

7. Check the transmission fluid temperature with the diagnostic tool.
8. When the transmission fluid temperature has reached approximately **122–176°F (50–80°C)**, raise the vehicle.



9. Remove the drain plug (1). Remove and DISCARD the drain plug gasket (2).
 - ⇒ If the fluid is flowing as a steady stream, wait until the fluid begins to drip. If no fluid comes out, add fluid until it drips out.

Notice: Do not re-use drain plug gasket, replace with a NEW gasket.

10. When the fluid drips out from the overflow tube, install the drain plug (1) with a NEW gasket (2) and tighten to **34 Y (25 lb ft)**.
11. Lower the vehicle.

Transmission Fluid Cooler Flushing and Flow Test (JATCO CVT)

Notice: Refer to SI for the complete transmission fluid cooler flushing and flow test procedure. Go to > 2014 Chevrolet Spark (US/Canada) > Service Manual/Bulletins > Transmission > Transmission Cooling > Diagnostic Information and Procedures > Transmission Fluid Cooler Flushing and Flow Test (JATCO CVT)

GM studies indicate that plugged or restricted transmission oil coolers and pipes cause insufficient transmission lubrication and elevated operating temperatures which can lead to premature transmission failure. Many repeat repair/replacement cases could have been prevented by following published procedures for transmission oil cooler flushing and flow checking. The procedure includes flow checking and flushing the auxiliary transmission oil cooler.

The 2014 Spark ONLY USES GM transmission fluid ACDelco CVT Fluid. When performing the oil cooler flushing and flow test on the Jatco CVT, refer to SI for the proper process to clean up the residual DEXRON® VI fluid left in the oil cooler and lines from the process.

Cooler Flow Check and Flushing Steps

Time allowance for performing the cooler flow checking and flushing procedure has been included in the appropriate labor time guide operation. The service procedure steps for oil cooler flushing and flow testing are as follows:

1. Machine Set-up
2. Determine Minimum Flow Rate
3. Back Flush
4. Forward Flush
5. Flow Test
6. Code Recording Procedure
7. Clean-up of the DEXRON® VI left in the oil cooler and lines.

Special Tools

For equivalent regional tools, refer to Special Tools in SI.

- DT-45096 Transmission Oil Cooling System Flush and Flow Test Tool
- DT-45096-50 Transmission Cooler Flush Adapter
- DT-51175 Range Switch Tool
- DT-51323 Seal Installer
- Shop air supply with water/oil filters, regulator and pressure gauge – minimum 90 psi
- Eye Protection
- Rubber Gloves

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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