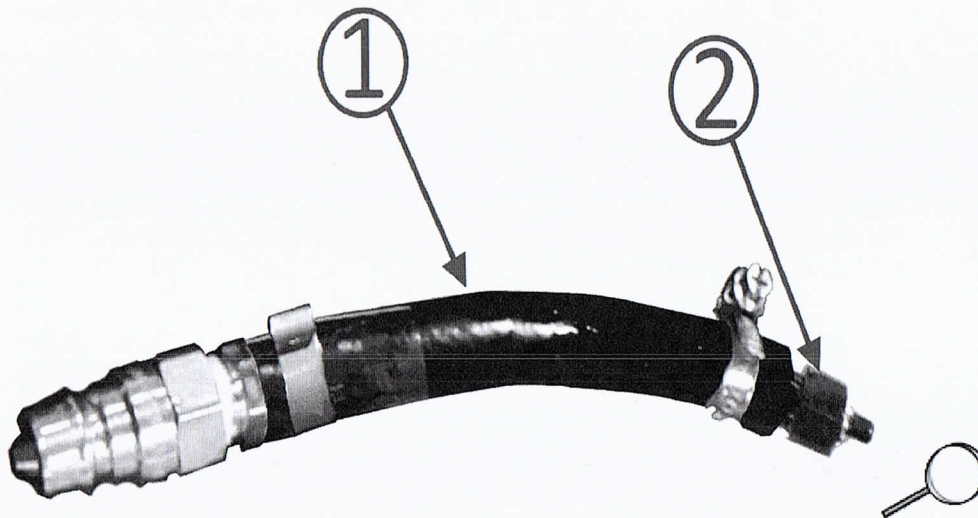
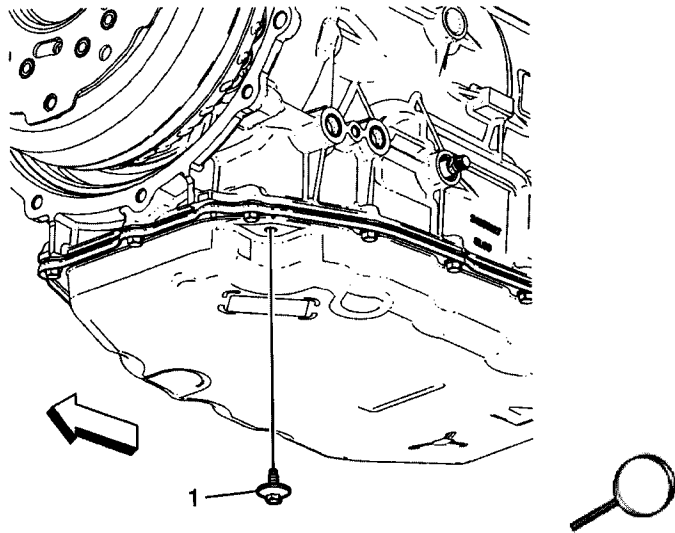


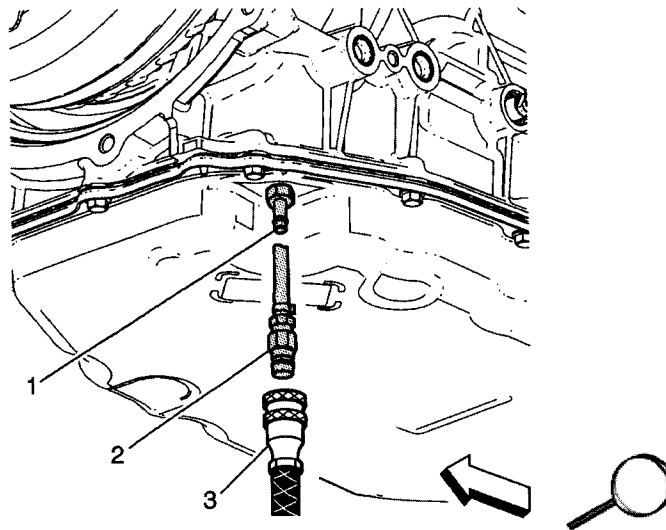
4. Install end of the DT-52263-5 Radiator Cooler Drain Adapter (1) to the DT-52263-1 Block Assembly.
5. Install the DT-52263-5 Radiator Cooler Drain Adapter into the upper transmission oil cooler line port of the transmission oil cooler.
6. Install the DT-45096-31 adapter (3) over the removed transmission oil cooler line (2) to prevent any fluid spillage.
7. Place the hose in the GE-47716-2 Graduated Measuring Bucket, utilizing a Spring Clamp to retain the hose.
8. Raise the vehicle.



9. Install the DT-45096-31 adapter (1) to the DT-51190 fluid fill adapter (2).



10. Remove the level set plug (1) from the transmission oil pan.

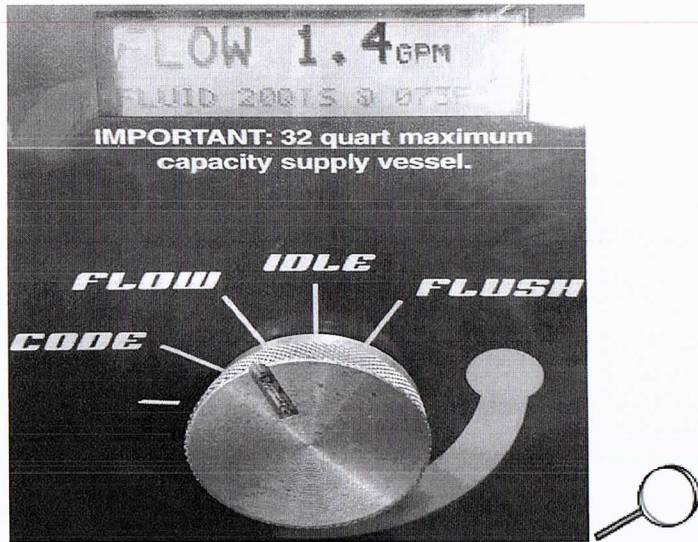


- Important: DO NOT overtighten the DT-51190 as it can be damaged by excessive torque. Do not exceed 9N•m (80 lb in).**
11. Install the DT-51190/DT-45096-31 assembly and hand tighten.
 12. Connect the TransFlow fluid feed (supply) line (3) to the DT-45096-31 adapter (2).
 13. Lower the vehicle.

Caution: DO NOT REMOVE MORE THAN 3 QTS OF FLUID AS IT COULD CAUSE FLUID PUMP CAVITATION AND POSSIBLY DAMAGE THE TRANSMISSION.

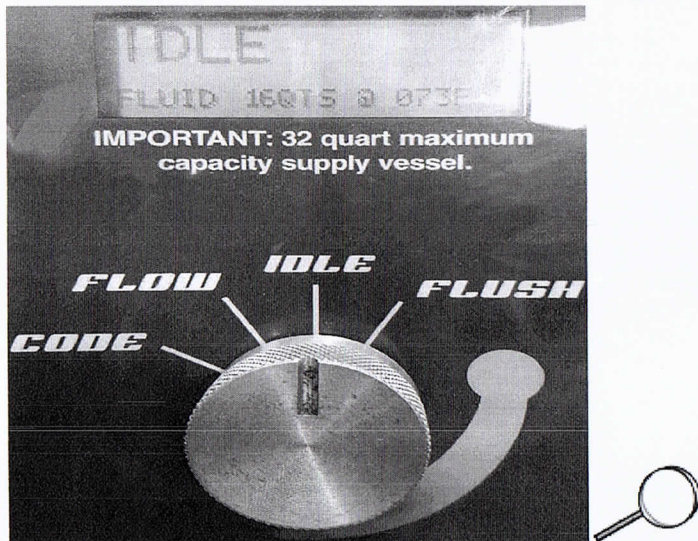
14. Utilizing the graduated bucket, start the engine and run 30-45 seconds until 3 quarts of fluid is expelled.
15. Shut the engine off immediately.

16. Connect the DT-45096 to the vehicle battery 12 volts and connect shop air to the air connection.



Important: ADDING TOO MUCH FLUID TO THE TRANSMISSION MAY CAUSE FLUID TO BE EXPELLED FROM THE VENT SYSTEM. DO NOT OVERFILL THE TRANSMISSION.

17. Switch the DT-45096 TransFlow to Flow and add 4 quarts of HP to the transmission.



18. Set the TransFlow switch to idle (Reducing fluid level in the TransFlow from 20 – 16).
19. Switch the TransFlow DT-45096 to Flow and start the engine:
- 19.1. Add a maximum of 4 quarts of HP Fluid to the transmission, turn the TransFlow switch to idle once 4 quarts have been added, while allowing 4 additional quarts of oil to fill the DT-graduated cylinder (Reducing fluid level in the TransFlow from 16 – 12).

Note: DO NOT add additional transmission fluid until the 4 quarts of oil have been removed from the transmission (Reducing fluid level in the TransFlow from 12 – 8).

19.2. Repeat step 19.1.

19.3. Add a maximum of 5 quarts of HP Fluid to the transmission while allowing 5 additional quarts of oil to fill the DT-graduated bucket (Reducing fluid level in the TransFlow from 8 – 3).



19.4. Shut the engine off once 16 quarts of oil have been collected.

19.5. Properly dispose of the collected transmission fluid.

20. Remove the DT-52263-5 Radiator Cooler Drain Adapter and DT-52263-1 Block Adapter from the transmission oil cooler.

21. Remove the DT-45096-31 from the transmission oil cooler line and install the transmission oil cooler line using a new retaining clip.

22. Install the engine upper air filter box back into position.

23. Partially raise the vehicle.

24. Start the engine.

25. Using care, shift the transmission through all forward ranges and Reverse.

26. Shift the transmission into Park.

27. Perform the Transmission Fluid Level and Condition Check outlined below in this procedure:

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- 27.1. Get the transmission fluid temperature to the proper temperature.
- 27.2. Raise the vehicle and remove the DT-51190/DT-45096-31 assembly.
- 27.3. Install the level set plug.

Tighten

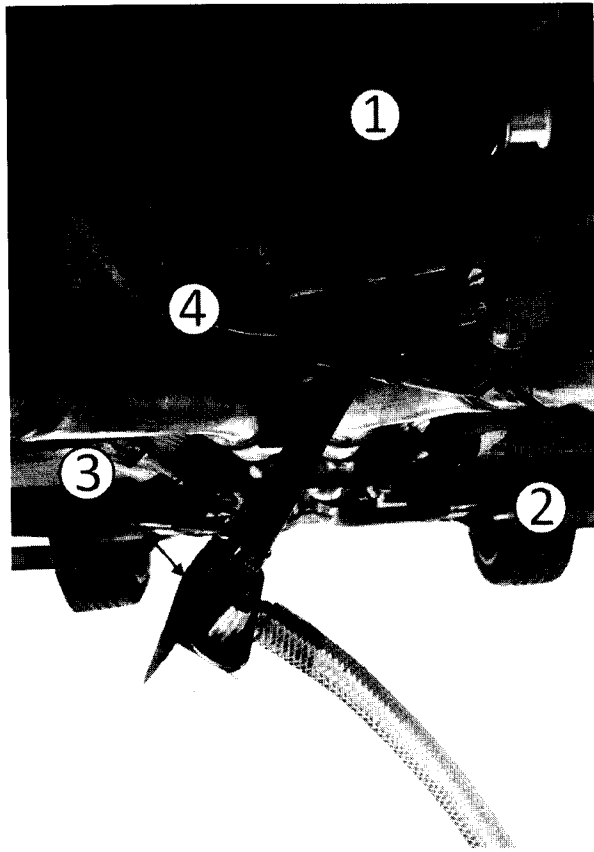
Tighten the plug to 9N•m (80 lb in).

The TCC shudder condition should be directional improved immediately after the fluid exchange procedure. It may take up to 200 mi (320 km) for the TCC shudder condition to be eliminated.

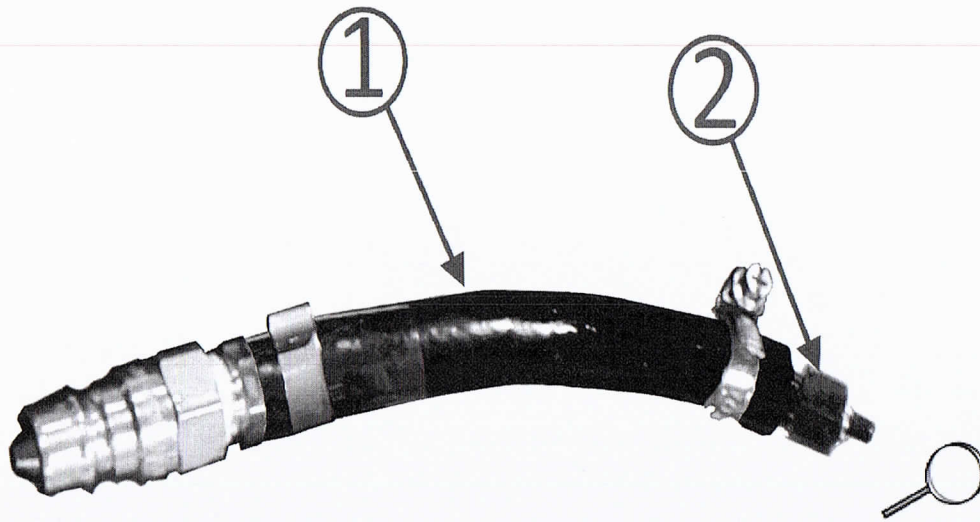
Fluid Exchange Procedure - Camaro, CTS and ATS Equipped with a Rear Differential Cooler

Important: This procedure must be followed as published. The exchange process is required to obtain proper level of new blue label Mobile 1 Synthetic LV ATF HP fluid. Intermixing of other types of transmission fluid or aftermarket additive packages will result in a low concentration level of new fluid and will not provide satisfactory results.

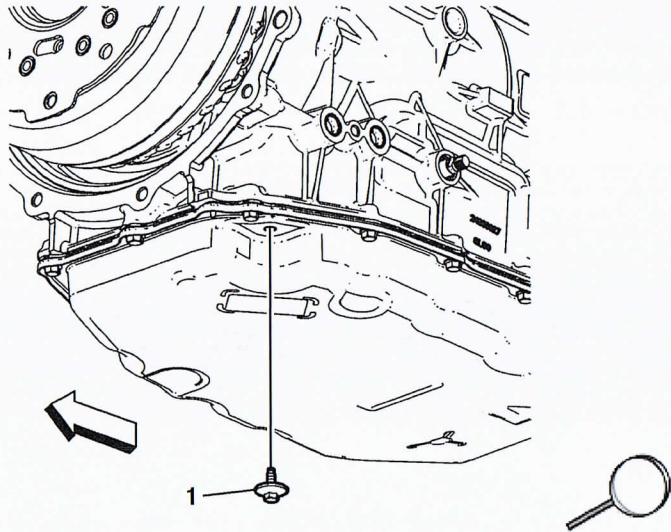
1. Fill the DT-45096 with 20 quarts of HP fluid.
2. Raise the vehicle on a hoist.



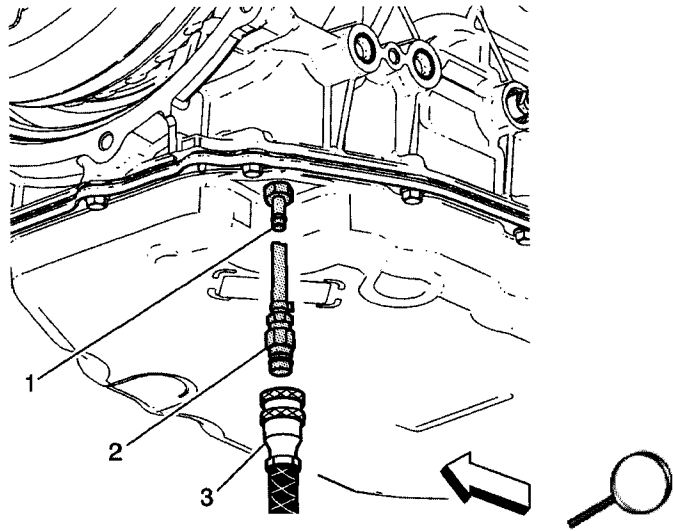
3. Remove the lower/front transmission oil cooler line (2) at the rear differential.
4. Install the DT-52263-2 Cooler Line Plug (1) into the rear differential to prevent fluid loss.
5. Install one end of the DT-52263-4 hose (4) to the open port of the DT-52263-1 Block Assembly (3).
6. Install the other end of the DT-52263-4 hose to the transmission oil cooler line.
7. Place the hose in the GE-47716-2 Graduated Measuring Bucket, utilizing a Spring Clamp to retain the hose.



8. Install the DT-45096-31 adapter (1) to the DT-51190 fluid fill adapter (2).



9. Remove the level set plug (1) from the transmission oil pan.

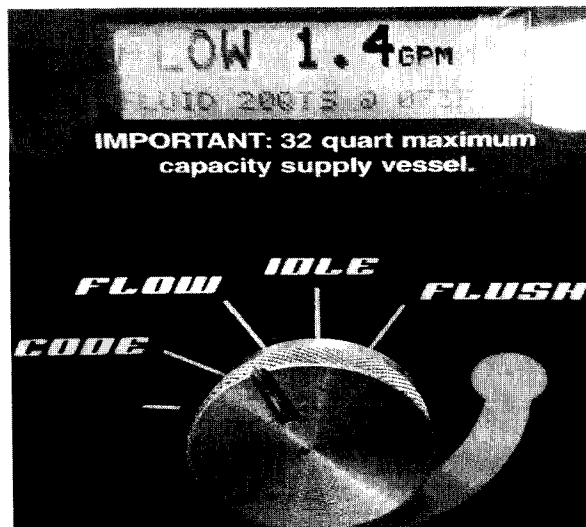


Important: DO NOT over tighten the DT-51190 as it can be damaged by excessive torque. Do not exceed 9 N·m (80 lb in).

10. Install the DT-51190/DT-45096-31 assembly and hand tighten.
11. Connect the TransFlow fluid feed (supply) line (3) to the DT-45096-31 adapter (2).
12. Lower the vehicle.

Caution: DO NOT REMOVE MORE THAN 3 QTS OF FLUID AS IT COULD CAUSE FLUID PUMP CAVITATION AND POSSIBLY DAMAGE THE TRANSMISSION.

13. Utilizing the graduated bucket, start the engine and run 30-45 seconds until 3 quarts of fluid is expelled.
14. Shut the engine off immediately.
15. Connect the DT-45096 to the vehicle battery 12 volts and connect shop air to the air connection.



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16. Switch the TransFlow DT-45096 to Flow and start the engine:

16.1. Add a maximum of 4 quarts of HP Fluid to the transmission, turn the TransFlow switch to idle once 4 quarts have been added, while allowing 4 additional quarts of oil to fill the DT-graduated bucket (Reducing fluid level in the TransFlow from 16 – 12).

Note: DO NOT add additional transmission fluid until the 4 quarts of oil have been removed from the transmission (Reducing fluid level in the TransFlow from 12 – 8).

16.2. Repeat step 16.1.

16.3. Add a maximum of 5 quarts of HP Fluid to the transmission while allowing 5 additional quarts of oil to fill the DT-graduated bucket (Reducing fluid level in the TransFlow from 8 – 3).



16.4. Shut the engine off once 16 quarts of fluid have been collected.

16.5. Properly dispose of the collected transmission fluid.

17. Raise the vehicle.

18. Remove the DT-52263-2 Cooler Line Plug from rear differential and install the transmission oil cooler line using a new retainer clip.

19. Remove the DT-52263-4 from the transmission oil cooler line.

20. Install the transmission oil cooler line using a new retainer clip.

21. Partially lower the vehicle.

22. Using care, shift the transmission through all forward ranges and Reverse.
 - 22.1. Get the transmission fluid temperature to the proper temperature.
 - 22.2. Raise the vehicle and remove the DT-51190/DT-45096-31 assembly.
 - 22.3. Install the level set plug.

Tighten

Tighten the plug to 9N•m (80 lb in).

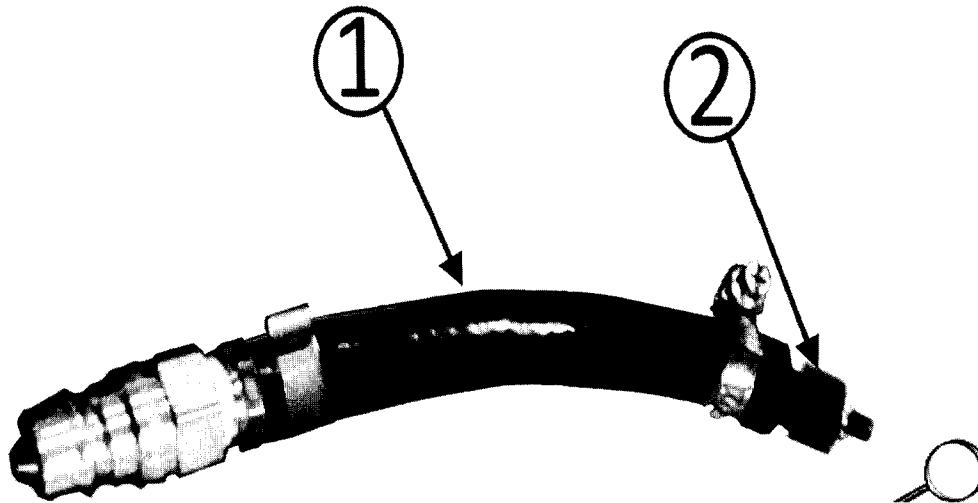
The TCC shudder condition should be directionally improved immediately after the fluid exchange procedure. It may take up to 200 mi (320 km) for the TCC shudder condition to be eliminated.

Fluid Exchange Procedure - Corvette and CT6

Important: The Drain and Fill Procedure Will Need to be Performed Three Times.

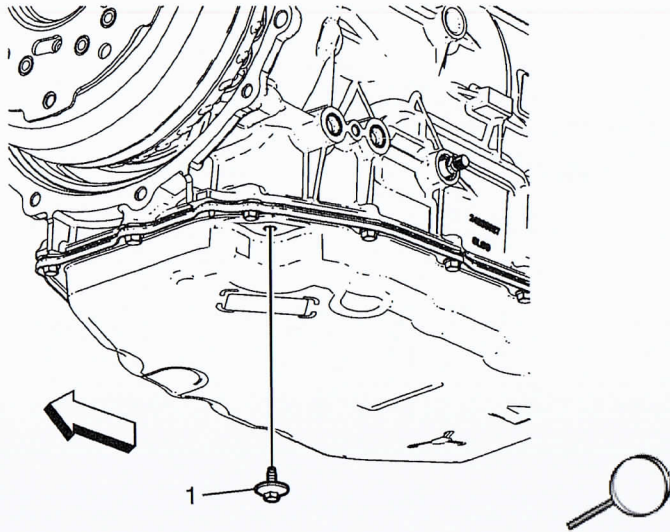
Important: This procedure must be followed as published. The exchange process is required to obtain proper level of new blue label Mobil 1 Synthetic LV ATF HP fluid. Inter-mixing of other types of transmission fluid or aftermarket additive packages will result in a low concentration level of new fluid and will not provide satisfactory results.

1. Fill the DT-45096 with 24 quarts of HP fluid.
2. N•m
N•m
Raise the vehicle.
3. Using care, remove the transmission oil pan and drain the transmission fluid.
4. Install the transmission oil pan.

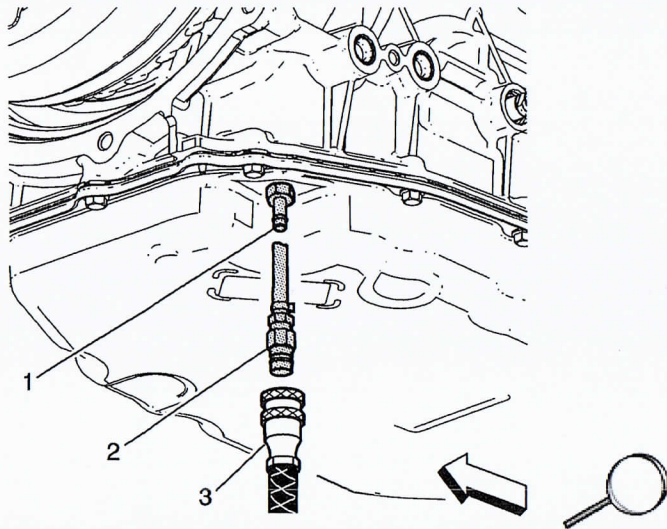


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5. Install the DT-45096-31 adapter (1) to the DT-51190 fluid fill adapter (2).



6. Remove the level set plug (1) from the transmission oil pan.



Important: DO NOT over tighten the DT-51190 as it can be damaged by excessive torque. Do not exceed 9N·m (80 lb in).

7. Install the DT-51190/DT-45096-31 assembly and hand tighten.
8. Connect the TransFlow fluid feed (supply) line (3) to the DT-45096-31 adapter (2).
9. Connect the DT-45096 TransFlow to the vehicle battery 12 volts and connect shop air to the air connection.
10. Switch the DT-45096 TransFlow to Flow and fill the transmission with 8 quarts of transmission fluid.
 - 10.1. Switch the DT-45096 TransFlow to idle.

11. Partially lower the vehicle and run the transmission through all 8 forward gears, Reverse and Neutral.
12. Repeat steps 2-4 and 9-10 for 2nd drain and fill.
13. Repeat step 2-3, clean the transmission oil pan and magnet, repeat step 4 and step 10-11.
14. Perform the Transmission Fluid Level and Condition Check outlined below in this procedure:
 - 14.1. Get the transmission fluid temperature to the proper temperature.
 - 14.2. Raise the vehicle and remove the DT-51190/DT-45096-31 assembly.
 - 14.3. Install the level set plug.

Tighten

Tighten the plug to 9N·m (80 lb in).

The TCC shudder condition should be directional improved immediately after the fluid exchange procedure. It may take up to 200 mi (320 km) for the TCC shudder condition to be eliminated.

Transmission Fluid Level and Condition Check

This procedure checks both the transmission fluid level, as well as the condition of the fluid itself. Because the transmission on this vehicle is not equipped with a fill tube and dipstick, a tube in the bottom pan is used to set the fluid level.

Warning: The transmission fluid level must be checked when the transmission fluid temperature (TFT) is between 35–45°C (95–113°F). If the TFT is not within this range, either idle or brake torque the vehicle to raise the fluid temperature, or shut off the vehicle to allow the fluid to cool as required. Setting the fluid level with a TFT outside this range will result in either an under or over-filled transmission. TFT > 45°C = under-filled, TFT < 35°C = over-filled. An under-filled transmission will cause premature component wear or damage. An over-filled transmission will cause fluid to discharge out the vent tube, possibly causing a fire that may result in serious bodily injury or severe vehicle damage, fluid foaming, or pump cavitation.

Note: Silverado, Sierra, Yukon and Escalade Models equipped with a thermal bypass valve, the transmission fluid level should be checked only after the TFT has reached or exceeded an operating temperature of 90°C (194°F). Once the TFT has reached or exceeded 90°C (194°F), then turn OFF the vehicle and allow the TFT to cool back down to 35-45°C (95-113°F) before checking the fluid level as required. Reaching or exceeding an operating temperature of 90°C (194°F) opens the bypass valve and allows the cooler to fill up with fluid, which will result in a more accurate fluid level check.

1. Observe the TFT using the driver information center (DIC) or a scan tool.
2. Start and idle the engine.
3. Depress the brake pedal and move the shift lever through each gear range.
 - 3.1. Pause for at least 3 seconds in each range.
 - 3.2. Move the shift lever back to PARK.
 - 3.3. Ensure the engine RPM is low (500–800 RPM).
4. Allow the engine to idle for a minimum time of 1 minute.

Caution: THE ENGINE MUST BE RUNNING when the trans oil level check plug is removed or excessive fluid loss will occur, resulting in an under-filled condition. An under-filled transmission will cause premature component wear or damage.

⇒ The vehicle must be level, with the engine running and the shift lever in the PARK range.

Note: Continue to monitor the TFT. If the TFT is not within the specified values, reinstall the trans oil level check plug and repeat the previous steps.

6. Remove the transmission oil level check plug (1) from the transmission fluid pan.

7. Allow any fluid to drain.

- If the fluid is flowing as a steady stream, wait until the fluid begins to drip.
- If no fluid comes out, add fluid until fluid drips out. Refer to *Transmission Fluid Fill Procedure* in SI.

8. Reinstall the transmission oil level check plug.

Tighten

Tighten the plug to 9N•m (80 lb in).

9. Inspect for external leaks. Refer to *Fluid Leak Diagnosis* in SI.

Parts Information

Causal Part	Description	Part Number	Qty
X	Mobil 1 Synthetic LV ATF HP (Available only through Local GM Oil Distributors)	19417577 (US)	20 qts
			24 qts (CT6, Corvette)
N/A		Note: Fluid production will start in drums and will switch to quarts. Drums will not be available long term. Drum 55 gallon 19417904 (US)	1

Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
8480818*	Diagnostic Testing and Fluid Exchange	1.4 hrs
Add	CT6 AWD Triple Drain and Fill	1.0 hr
Add	CT6 RWD Triple Drain and Fill	1.6 hrs
Add	Corvette RWD Triple Drain and Fill	1.6 hrs

Labor Operation	Description	Labor Time
Add	DT-45096 Prep (Not required unless the fluid is not Mobil 1 Synthetic LV ATF HP)	0.1 hr
*This is a unique Labor Operation for Bulletin use only.		

Version	1
Modified	Released January 17, 2019

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