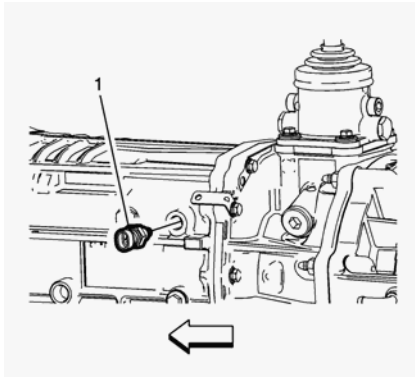


2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

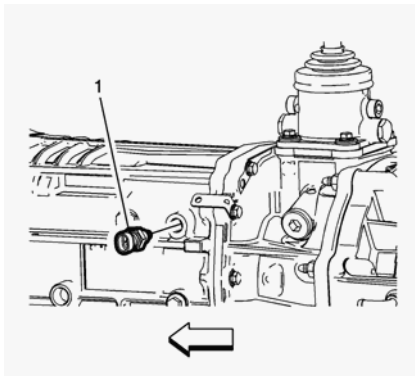
[Removal Procedure](#)

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Remove the electrical connector from the backup switch.



3. Remove the backup switch (1) from the transmission.

[Installation Procedure](#)



Caution: Refer to Component Fastener Tightening Caution.

1. Install the backup switch (1) to the transmission.
2. Install the electrical connector to the speed sensor.
3. Lower the vehicle. Refer to Lifting and Jacking the Vehicle.

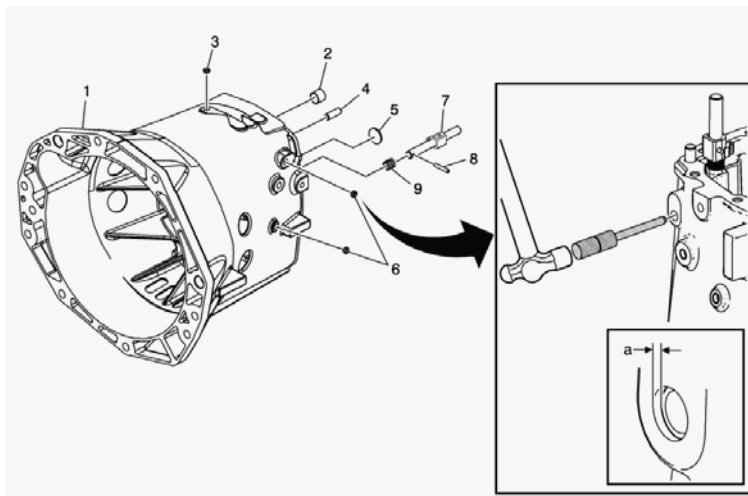
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Table 1: [Clutch Housing](#)

Table 2: [Shift Shaft Interlocking Balls and Pin Cleaning and Inspection](#)

[Clutch Housing](#)



Clutch Housing

Callout

Component Name

Preliminary Procedure

Warning: Wear safety glasses to avoid injury when using compressed air or any cleaning solvent. Bodily injury may occur if fumes are inhaled or if skin is exposed to chemicals.

Clean the clutch housing (1) parts with a suitable solvent. Air dry all the parts.

Clutch Housing

Procedure

1. Inspect the clutch housing for the following conditions:

- Cracks

Replace the clutch housing part if cracks are found.

- 1
 - Scratches
 - Burrs
 - Nicked mounting surfaces
 - Damaged sealing surfaces
 - Damaged bearing bores
 - Inspect the machined mating surfaces for flatness. Check the mating surfaces with a straight edge.
 - Use a fine mill file to dress minor scratches or burrs.
 - If scratches, or grooves, or scoring, cannot be removed by hand with a soft stone or crocus cloth, replace the component.

Transmission Bushing – Shift Shaft

2

Procedure

Inspect the bushing for excessive wear. Replace worn bushings.

3

Clutch Housing Hole Plug

4

Transmission Locating Pin

5

Clutch Housing Hole Plug

Clutch Housing Hole Plug

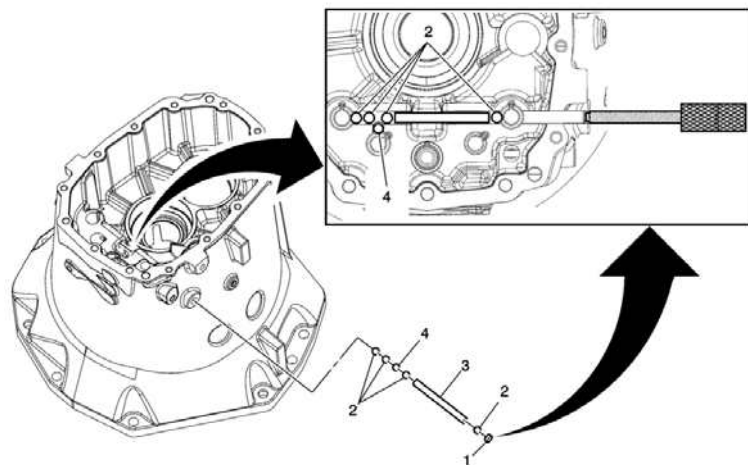
6

Special Tools

DT 50851 Front Housing Expansion Plug Installer

Callout	Component Name
	For equivalent regional tools, refer to Special Tools.
7	Reverse Interlock Shaft
8	Reverse Interlock Shaft Detent Pin
9	Reverse Interlock Shaft Detent Spring

[Shift Shaft Interlocking Balls and Pin Cleaning and Inspection](#)

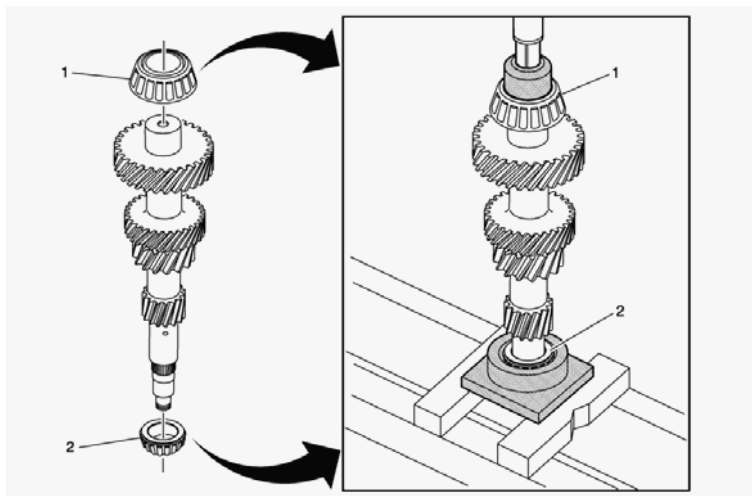


Shift Shaft Interlocking Balls and Pin Cleaning and Inspection

Callout	Component Name
	Clutch Housing Hole Plug
	Note: When installing use a NEW plug.
1	Special Tools <i>DT 50851 Front Housing Expansion Plug Installer</i> For equivalent regional tools, refer to Special Tools. Shift Shaft Interlock Ball – 9.5 mm (Qty: 4) Note:
2	• Three balls – 9.5 mm align with the 3rd/4th yoke bar bore, and one 9.5 mm ball is located on the 5th/reverse yoke bar bore. • Be careful when removing the yoke bars. Interlock balls may drop into the bar bores. Keep a close watch on the interlock balls and their locations when disassembling and assembling. • Use the appropriate lubricant to hold balls in their bores in the proper location. Shift Shaft Interlock Pin
3	Procedure 1. Push the interlock pin to the opposite side in order the interlock balls drop from their bores. 2. Displace the interlock pin towards the removed plug hole and remove the pin through the housing hole. Shift Shaft Interlock Ball – 8.0 mm (Qty: 1) Note:
4	• This ball is located on the 1st/2nd yoke bar bore. The larger balls will not install into the smallest interlock bore. • Be careful when removing the yoke bars. Interlock balls may drop into the bar bores. Keep a close watch on the interlock balls and their locations when disassembling and assembling. • Use the appropriate lubricant to hold balls in their bores in the proper location.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Counter Gear Shaft Assemble

Callout

Component Name

Counter Gear Bearing Cone Assembly

Procedure

1. Using *DT 50857* countershaft bearing cone installer, place the countershaft in the press, using the inner races of those two bearings as a base.
2. Press both bearings until they rest against the shaft stops.

Special Tools

DT 50857 Countershaft Bearing Cone Installer

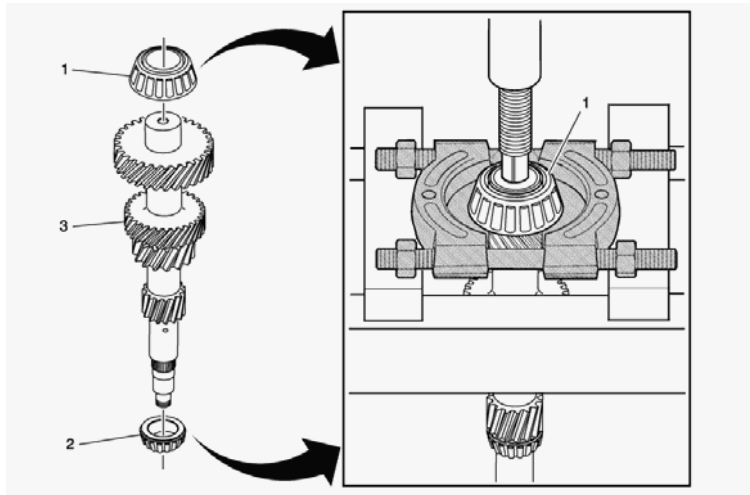
For equivalent regional tools, refer to Special Tools.

2. Counter Gear Rear Bearing Cone Assembly

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:



Counter Gear Shaft Disassemble

Callout

Component Name

Counter Gear Bearing Cone Assembly

Special Tools

1

DT 22912-B Split Plate Bearing Puller

For equivalent regional tools, refer to Special Tools.

Counter Gear Rear Bearing Cone Assembly

Special Tools

2

DT 22912-B Split Plate Bearing Puller

For equivalent regional tools, refer to Special Tools.

3

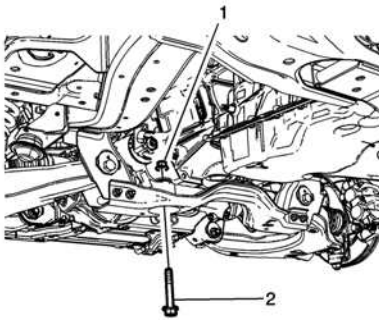
Counter Gear Shaft

2013 Chevrolet Colorado

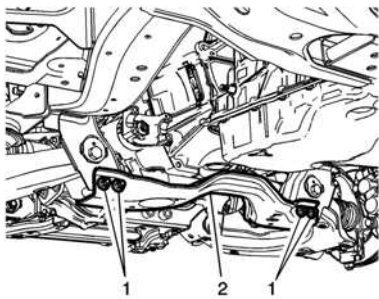
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Remove the engine protection shield. Refer to Engine Protection Shield Replacement.
3. Support the front differential with a transmission jack stand.

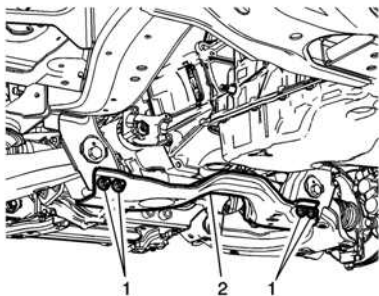


4. Remove the bolt (2) and nut (1) from the crossmember to the front differential.



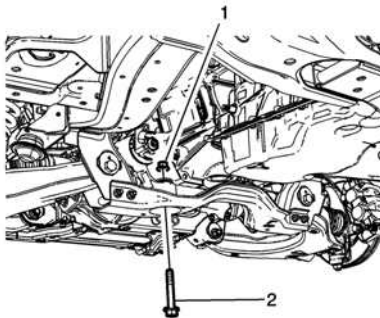
5. Remove the 4 bolts and nuts (1) from the frame.
6. Remove the front crossmember (2).

[Installation Procedure](#)



1. Install the front crossmember (2).
- Caution:** Refer to Fastener Caution.
2. Install 4 bolts and nuts (1) in the frame but do not tighten.

Drivetrain and Front Suspension Frame Front Crossmember Replacement (4WD Manual Transmission)



3. Install the bolt (2) and nut (1) in the crossmember to the front differential but do not tighten.
4. Tighten the 4 bolts to **56 Y (41 lb ft)** in the frame.
5. Remove the transmission jack stand from the front differential.
6. Tighten the bolt to **160 Y (118 lb ft)**.
7. Install the engine protection shield. Refer to Engine Protection Shield Replacement.
8. Remove the supports and lower the vehicle.

2013 Chevrolet Colorado

Submodel: | **Engine Type:** | **Liters:**
Fuel Delivery: | **Fuel:**

[Cleaning Procedure](#)

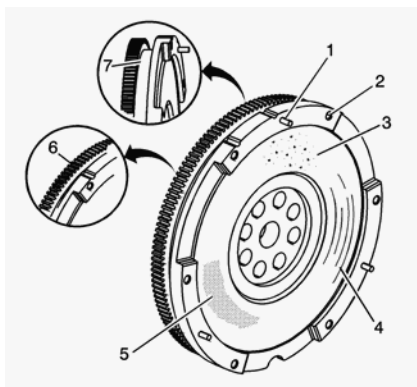
Note: In order to maintain the proper component balance, contact surface taper and heat transfer, manual transmission flywheels are NOT to be machined.

1. Clean the engine flywheel in solvent.

Warning: Refer to Safety Glasses Warning.

2. Dry the engine flywheel with compressed air.

[Inspection Procedure](#)



1. Inspect the manual transmission engine flywheel for the following conditions:

- Missing and/or damaged alignment pins (1)
- Damaged threaded holes (2)
- Pitted surface (3)
- Scoring or grooves (4)
- Rust or other surface damaged (5)
- Damaged ring gear teeth (6)
- Loose or improperly positioned ring gear

The ring gear has an interference fit onto the engine flywheel and should be positioned completely against the flange of the engine flywheel (7).

- Replace the engine flywheel as necessary.

2013 Chevrolet Colorado

Submodel: | **Engine Type:** | **Liters:**
Fuel Delivery: | **Fuel:**

Special Tools

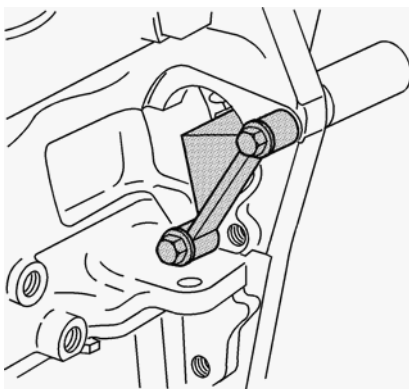
- *EN 46106* Flywheel Holding Tool
- *J 33169* Clutch Alignment Arbor

For equivalent regional tools, refer to Special Tools.

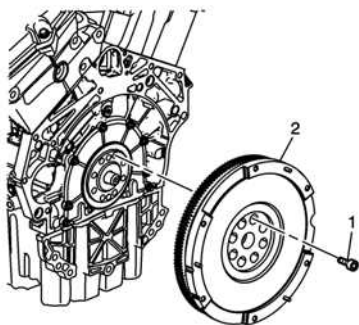
1. Place the engine flywheel in position on the crankshaft.

Caution: This vehicle is equipped with torque-to-yield or single use fasteners. Install a NEW torque-to-yield or single use fastener when installing this component. Failure to replace the torque-to-yield or single use fastener could cause damage to the vehicle or component.

2. Install 2 NEW bolts in location at the top and bottom of the engine flywheel bolt pattern allowing the engine flywheel to hang in position.

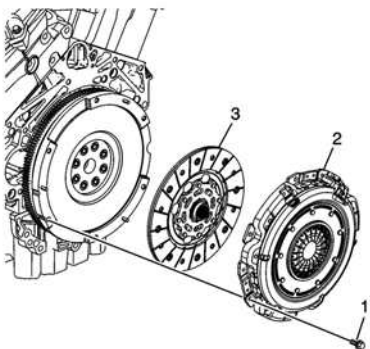


3. Install the EN 46106 tool.

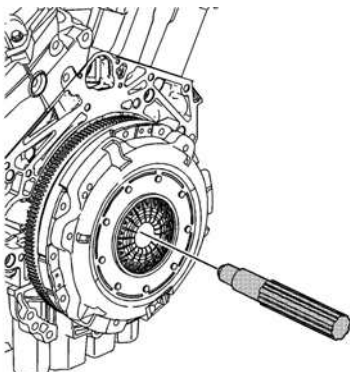


Caution: Refer to Fastener Caution.

4. Install the remaining NEW engine flywheel bolts and tighten the NEW engine flywheel bolts to 67 Y (49 lb ft).

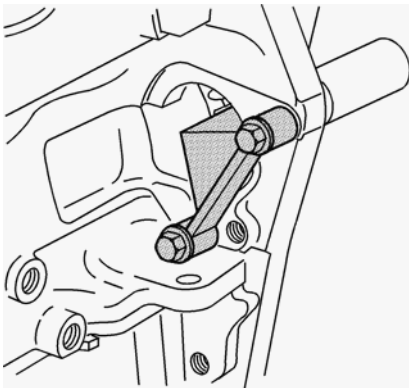


5. Install the clutch driven plate disc and the clutch pressure plate to the engine flywheel. Ensure to align the clutch pressure plate to the pins in the engine flywheel.
6. Loosely install the clutch pressure plate bolts.



Engine Flywheel Installation (Manual Transmission)

7. Install the *J 33169* arbor through the clutch driven plate disc and into the end of the crankshaft in order to align the clutch driven plate disc.
8. Tighten the clutch pressure plate bolts to **30 Y (22 lb ft)**.
9. Remove the *J 33169* arbor.



10. Remove the *EN 46106* tool.

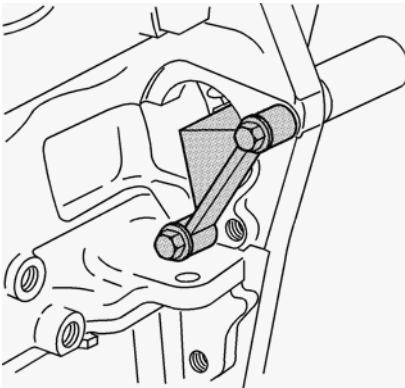
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

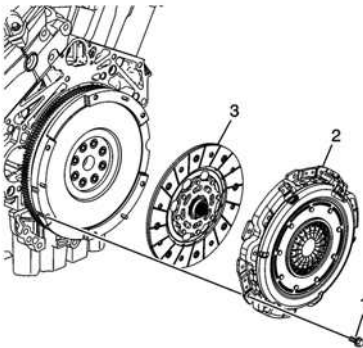
Special Tools

EN 46106 Flywheel Holding Tool

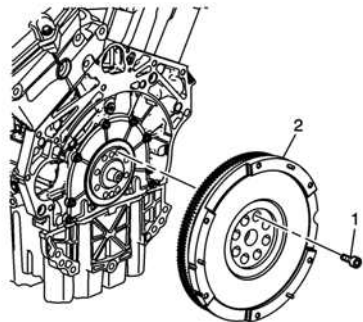
For equivalent regional tools, refer to Special Tools.



1. Install the EN 46106 tool through the starter mounting hole.

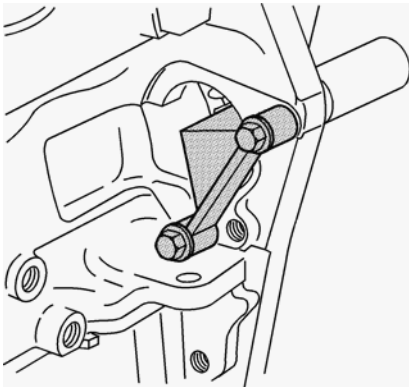


2. Remove the clutch pressure plate bolts (1).
3. Remove the clutch pressure plate (2) and the clutch driven plate disc (3).



4. Remove the engine flywheel bolts (1) and discard.
5. Remove the engine flywheel (2) from the crankshaft.

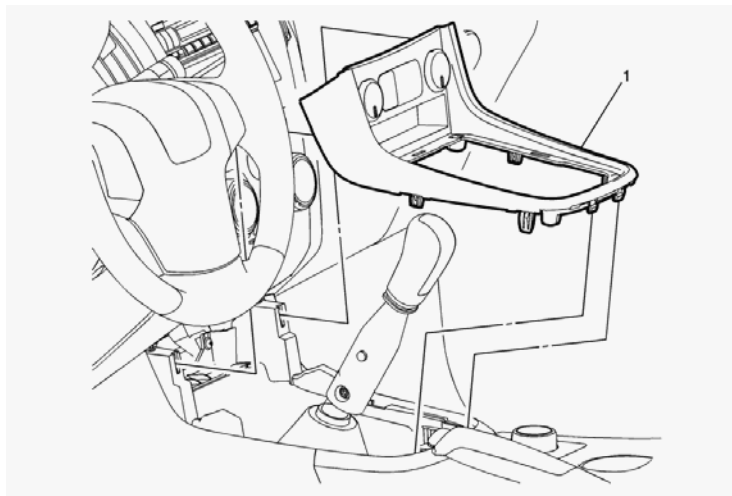
Engine Flywheel Removal (Manual Transmission)



6. Remove the *EN 46106* tool.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Front Floor Console Transmission Shift Opening Bezel Replacement

Callout

Component Name

Preliminary Procedure

Remove the transmission control lever boot. Refer to Transmission Control Lever Boot Replacement.

Front Floor Console Transmission Shift Opening Bezel

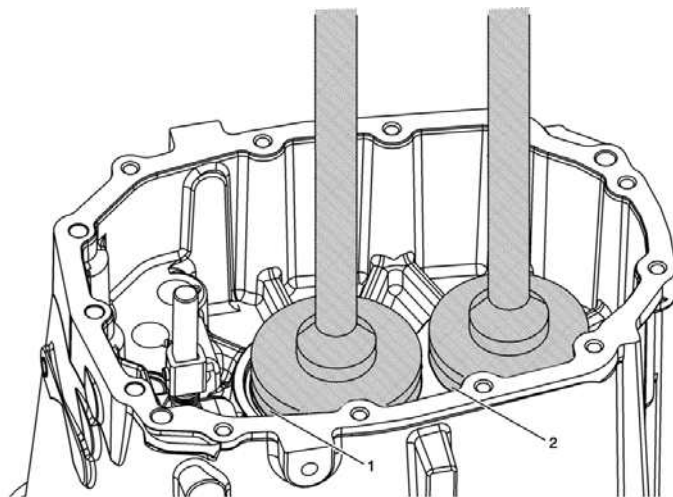
Procedure

1

1. Use a flat bladed plastic trim tool in order to release the 8 retainers securing the front floor console transmission shift opening bezel to the front floor console assembly.
2. Disconnect the electrical connections.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Input Shaft and Counter Gear Shaft Bearing Race Installation

Callout

Component Name

Preliminary Procedure

Prior to installing the bearing races, carefully clean bearing race and bore.

Input Shaft Bearing Race

Special Tools

1

- DT 50850 Driver Handle
- DT 50852 Front Housing Bearing Race Installer

For equivalent regional tools, refer to Special Tools.

Counter Gear Bearing Race

Special Tools

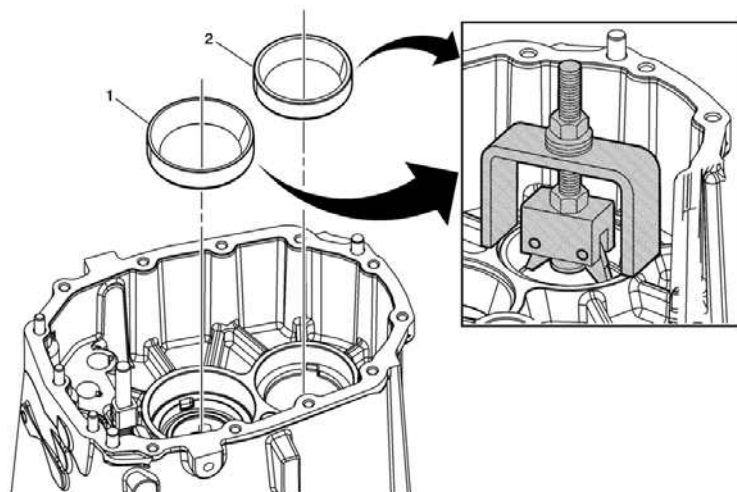
2

- DT 50850 Driver Handle
- DT 50856 Countershaft Bearing Race Installer

For equivalent regional tools, refer to Special Tools.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Input Shaft and Counter Gear Shaft Bearing Race Removal

Callout

Component Name

Input Shaft Bearing Race

Special Tools

1

DT 50862 Front Housing Bearing Race Puller

For equivalent regional tools, refer to Special Tools.

Counter Gear Bearing Race

Special Tools

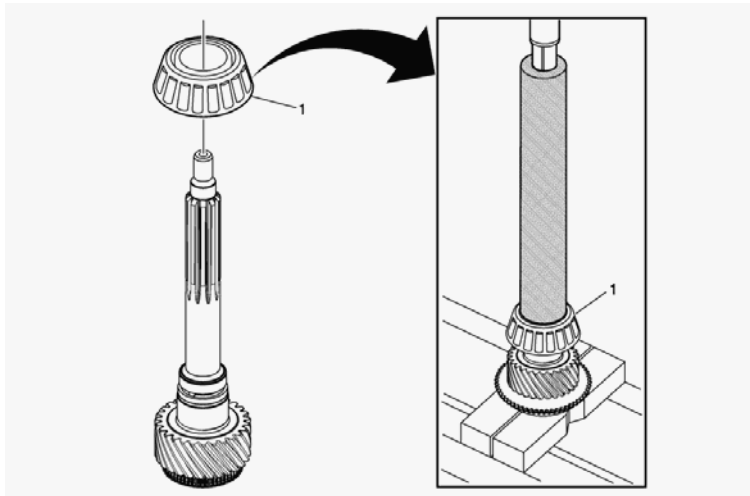
2

DT 50862 Front Housing Bearing Race Puller

For equivalent regional tools, refer to Special Tools.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Input Shaft Assemble

Callout

Component Name

Input Shaft Bearing Cone Assembly

Procedure

1

1. With the synchronizer side down, place the input shaft on a base. Be careful not to damage the synchronizer cone.
2. Using the bearing inner race as a base, press the bearing assembly using *DT 50861* bearing cone installer , until the race shoulder rests against the shaft face.

Special Tools

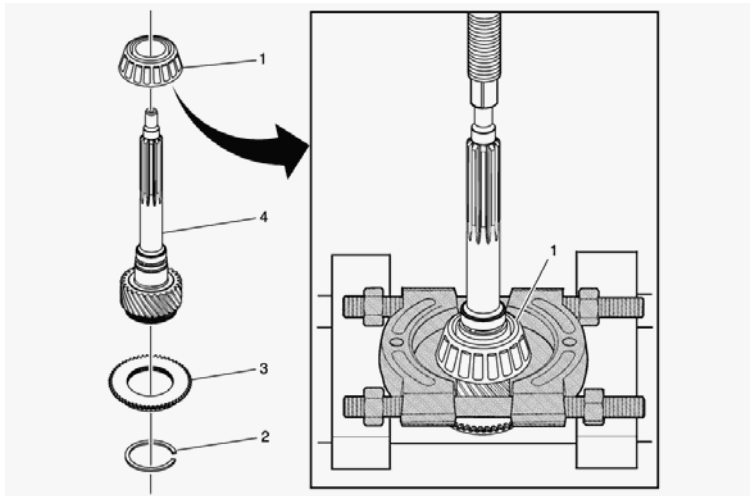
DT 50861 Bearing Cone Installer

For equivalent regional tools, refer to Special Tools.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:



Input Shaft Disassemble

Callout

Component Name

Input Shaft Bearing Cone Assembly

Special Tools

1

DT 22912-B Split Plate Bearing Puller

For equivalent regional tools, refer to Special Tools.

2

3rd and 4th Gear Synchronizer Retaining Ring

3

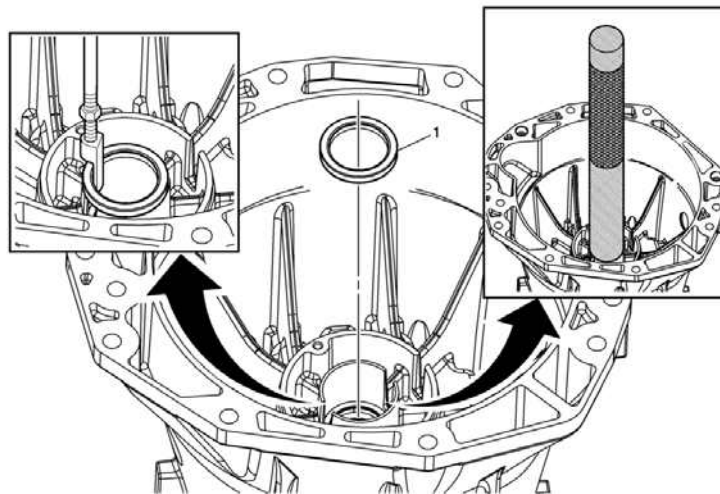
4th Gear Synchronizer Cone

4

Input Shaft

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Input Shaft Seal Replacement

Callout

Input Shaft Seal

Note:

1

1. To remove use appropriate pry tool.
2. Install using *DT 50848* bearing cone installer

Special Tools

DT 50848 Bearing Cone Installer

For equivalent regional tools, refer to Special Tools.

Component Name

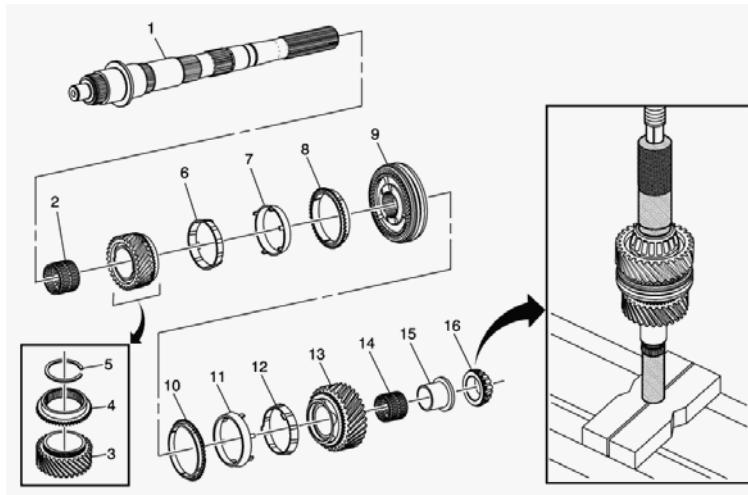
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Table 1: [1st and 2nd Gear Installation](#)

Table 2: [3rd Gear Installation](#)

[1st and 2nd Gear Installation](#)



1st and 2nd Gear Installation

Callout

Component Name

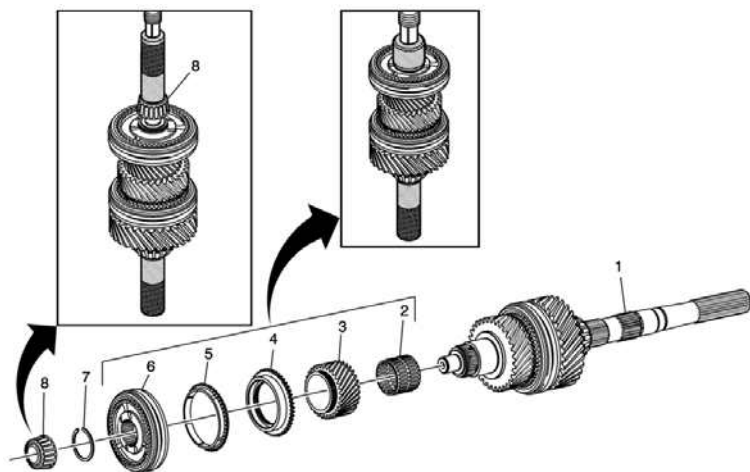
- | | |
|----|---|
| 1 | Mainshaft Assembly – 2WD |
| 2 | 2nd Gear Bearing Assembly |
| 3 | 2nd Gear |
| 4 | 2nd Gear Synchronizer Ring |
| 5 | 2nd Gear Synchronizer Ring Retaining Ring |
| 6 | 1st Gear Synchronizer Inner Cone |
| 7 | 1st Gear Synchronizer Outer Cone |
| 8 | 1st and 2nd Gear Blocking Ring Assembly |
| 9 | 1st and 2nd Gear Synchronizer Hub and Sleeve
Tip: Make sure chamfer on sleeve is facing up. |
| 10 | 1st and 2nd Gear Blocking Ring Assembly |
| 11 | 1st Gear Synchronizer Outer Cone |
| 12 | 1st Gear Synchronizer Inner Cone |
| 13 | 1st Gear |
| 14 | 1st Gear Bearing Assembly |
| 15 | 1st Gear Bushing |
| | Mainshaft Bearing Cone Assembly |
| | Tip: Verify the pressing procedure was successful: Disengage the synchronizer and position it between the 3rd and 4th speed gears. In this condition, the gears should run free. |
| 16 | Special Tools <ul style="list-style-type: none"> • DT 50860 Bearing Cone Installer • DT 50861 Bearing Cone Installer |

Callout

Component Name

For equivalent regional tools, refer to Special Tools.

3rd Gear Installation



3rd Gear Installation

Callout

Component Name

- | | |
|---|--|
| 1 | Mainshaft Assembly – 2WD |
| 2 | 3rd Gear Bearing Assembly |
| 3 | 3rd Gear |
| 4 | 3rd Gear Synchronizer Cone |
| 5 | 3rd Gear Synchronizer Ring |
| 6 | 3rd and 4th Gear Synchronizer Hub and Sleeve |

Procedure

- | | |
|---|---|
| | 1. Install synchronizer chamfer side down. |
| | 2. Make sure to align the inserts over blocking ring tabs |
| 6 | 3. Using DT 47928-1 rear seal installer |

Special Tools

DT 47928-1 Rear Seal Installer

For equivalent regional tools, refer to Special Tools.

- | | |
|---|--|
| 7 | 3rd and 4th Gear Synchronizer Retaining Ring |
| | Mainshaft Front Bearing Cone Assembly |

Tip: Verify the pressing procedure was successful: Disengage the synchronizer and position it between the 3rd and 4th speed gears. In this condition, the gears should run free.

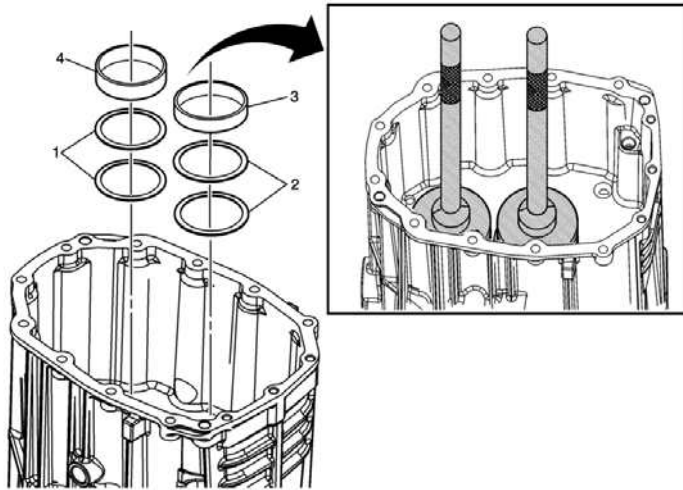
- | | |
|---|----------------------|
| 8 | Special Tools |
|---|----------------------|

- DT 50860 Bearing Cone Installer
- DT 50861 Bearing Cone Installer

For equivalent regional tools, refer to Special Tools.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

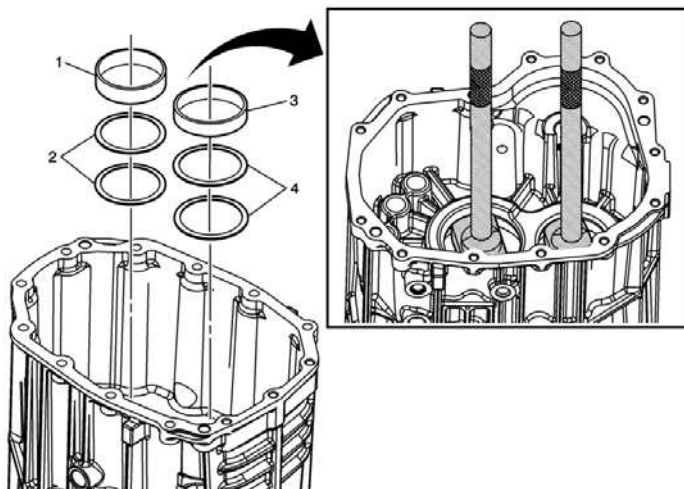


Main Shaft Bearing Race and Counter Gear Bearing Race Installation

Callout	Component Name
Preliminary Procedures	
1.	Prior to installing the bearing race, carefully clean both bearing bore and race.
2.	Prior to installing bearing shims perform the Main Shaft Bearing Shim and Counter Gear Bearing Shim Measurement procedure to determine correct shim.
	Counter Gear Bearing Shim (Qty: 2)
1	Note: Prior to installing bearing shims perform the Main Shaft Bearing Shim and Counter Gear Bearing Shim Measurement procedure to determine correct shim.
	Main Shaft Bearing Shim (Qty: 2)
2	Note: Prior to installing bearing shims perform the Main Shaft Bearing Shim and Counter Gear Bearing Shim Measurement procedure to determine correct shim.
	Main Shaft Bearing Race
	Procedure
	Install the bearing race without any shim before adjusting the transmission end play.
3	Special Tools
	- DT 50850 Driver Handle - DT 50855 Mainshaft Bearing Race Installer
	For equivalent regional tools, refer to Special Tools
	Counter Gear Rear Bearing Race
	Procedure
	Install the bearing race without any shim before adjusting the transmission end play.
4	Special Tools
	- DT 50850 Driver Handle - DT 50856 Countershaft Bearing Race Installer
	For equivalent regional tools, refer to Special Tools

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Main Shaft Bearing Race and Counter Gear Bearing Race Removal

Callout

Component Name

Counter Gear Rear Bearing Race

Special Tools

1

- DT 50850 Driver Handle
- DT 50854 Countershaft Bearing Race Puller

For equivalent regional tools, refer to Special Tools.

2

Counter Gear Bearing Shim (Qty: 2)

Mainshaft Bearing Race

Special Tools

3

- DT 50850 Driver Handle
- DT 50853 Mainshaft Bearing Race Puller

For equivalent regional tools, refer to Special Tools.

4

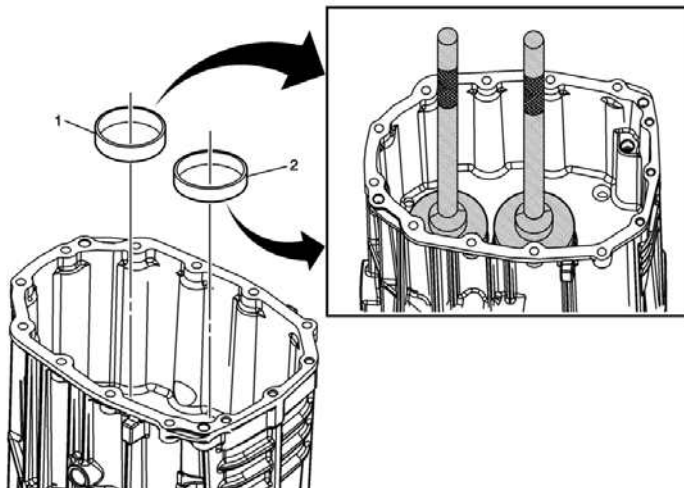
Mainshaft Bearing Shim (Qty: 2)

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

- Table 1: [Shim Measurement](#)
Table 2: [Install Mainshaft and Counter Shaft Assemblies](#)
Table 3: [Intermediate Case Installation](#)
Table 4: [Measure End Play to Determine Correct Shim](#)

[Shim Measurement](#)



Shim Measurement

Callout

Component Name

Preliminary Procedure

Do not install the shims – only the bearing races.

Mainshaft Bearing Race

Special Tools

- 1
- DT 50850 Driver Handle
 - DT 50855 Mainshaft Bearing Race Installer

For equivalent regional tools, refer to Special Tools.

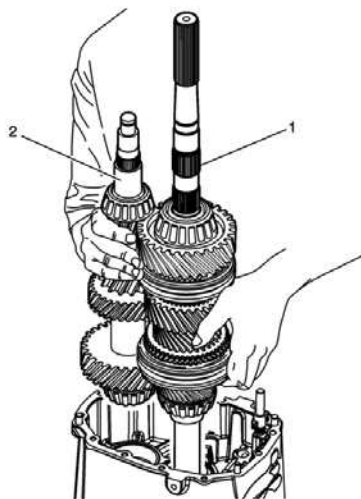
Counter Gear Rear Bearing Race

Special Tools

- 2
- DT 50850 Driver Handle
 - DT 50855 Mainshaft Bearing Race Installer

For equivalent regional tools, refer to Special Tools.

[Install Mainshaft and Counter Shaft Assemblies](#)



Install Mainshaft and Counter Shaft Assemblies

Callout

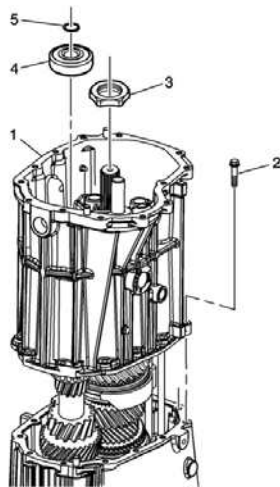
Component Name

Preliminary Procedure

Install the mainshaft and counter gear shaft assemblies as one unit.

- | | |
|---|-----------------------------|
| 1 | Mainshaft Assembly |
| 2 | Counter Gear Shaft Assembly |

[Intermediate Case Installation](#)



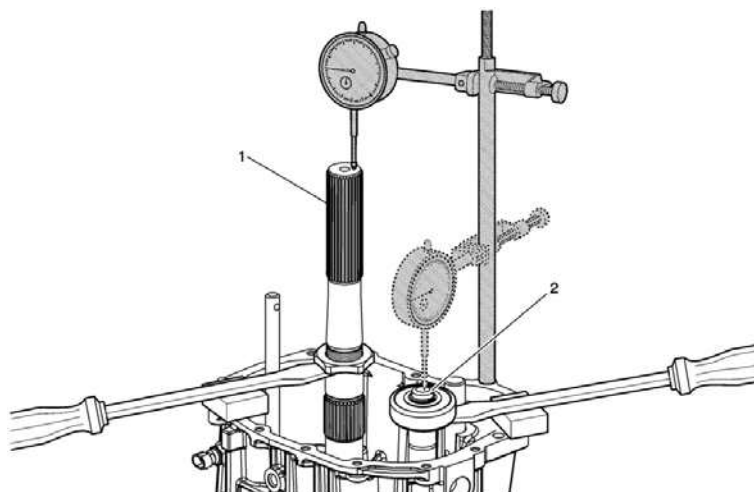
Intermediate Case Installation

Callout

Component Name

- | | |
|---|---|
| 1 | Transmission Intermediate Case |
| | Transmission Rear Case Bolt (Qty: 10) |
| 2 | Tighten
Tighten bolt to 22.5 Y (16.6 lb ft) |
| | Mainshaft Nut |
| 3 | Procedure
Only install the nut onto the shaft 2 or 3 threads. |
| 4 | Front Counter Gear Rear Bearing |
| 5 | Front Counter Gear Rear Bearing Retaining Ring. |

[Measure End Play to Determine Correct Shim](#)



Measure End Play to Determine Correct Shim

Callout

Component Name

Preliminary Procedure

Rotate the mainshaft and counter gear shaft several times in both directions to ensure the bearings are seated into the bearing races.

Mainshaft

Procedure

1. Set up *GE 8001* dial indicator with *GE 25025-B* post and guide set, and zero out on top of the mainshaft.
2. Place a block of wood between the case and a pry bar.
3. Pry straight up on the mainshaft nut and record the measurement. Select appropriate shims to achieve the following specification.

1

Specification

0.060 mm–0.110 mm (0.002–0.004 in)

Special Tools

- *GE 25025-B* Dial Indicator Post and Guide Pin Set
- *GE 8001* Dial Indicator

For equivalent regional tools, refer to Special Tools.

Counter Gear Shaft

Procedure

1. Set up *GE 8001* dial indicator with *GE 25025-B* post and guide set, and zero out on top of the mainshaft.
2. Place a block of wood between the case and a pry bar.
3. Pry straight up on the front counter gear rear bearing and record the measurement. Select appropriate shims to achieve the following specification.

2

Specification

0.060 mm–0.110 mm (0.002–0.004 in)

4. Remove the mainshaft, counter gear shaft and intermediate case.
5. Install the specified shims, refer to *Mainshaft Bearing and Counter Gear Bearing Race Installation*.

Special Tools

- *GE 25025-B* Dial Indicator Post and Guide Pin Set
- *GE 8001* Dial Indicator

For equivalent regional tools, refer to Special Tools.

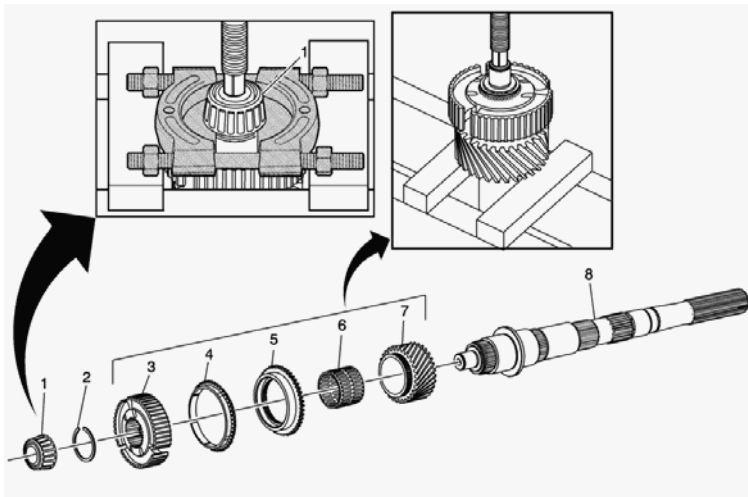
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Table 1: [Mainshaft Disassemble \(1 of 2\)](#)

Table 2: [Mainshaft Disassemble \(2 of 2\)](#)

[Mainshaft Disassemble \(1 of 2\)](#)



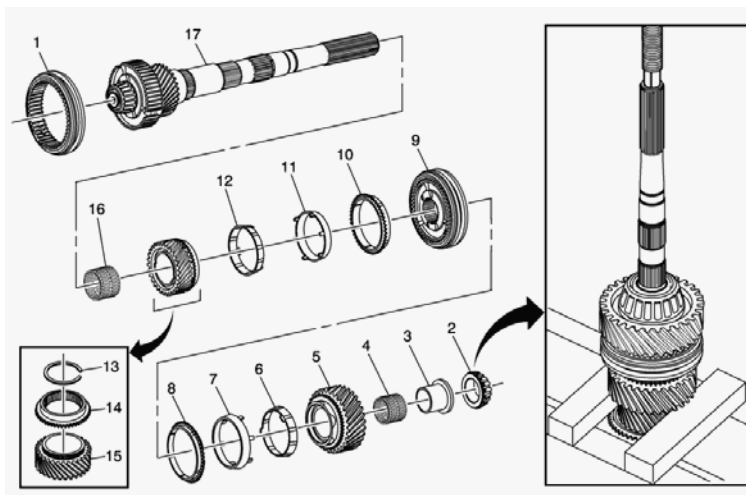
Mainshaft Disassemble (1 of 2)

Callout

Component Name

- | | |
|---|--|
| | Mainshaft Front Bearing Cone Assembly |
| | Special Tools |
| 1 | <i>DT 22912-B Split Plate Bearing Puller</i> |
| | For equivalent regional tools, refer to Special Tools. |
| 2 | 3rd and 4th Gear Synchronizer Retaining Ring |
| 3 | 3rd and 4th Gear Synchronizer Hub |
| 4 | 3rd Gear Synchronizer Ring |
| 5 | 3rd Gear Synchronizer Cone |
| 6 | 3rd Gear Bearing Assembly |
| 7 | 3rd Gear |
| 8 | Mainshaft Assembly – 2WD |
| | Tip: Use the same tools and procedure for the 4WD models. |

[Mainshaft Disassemble \(2 of 2\)](#)



Mainshaft Disassemble (2 of 2)

Callout

Component Name

- | | |
|----|---|
| 1 | 3rd and 4th Gear Synchronizer Sleeve
Tip: Spring and Insert may come out with the sleeve. |
| 2 | Mainshaft Bearing Cone Assembly |
| 3 | 1st Gear Bushing |
| 4 | 1st Gear Bearing Assembly |
| 5 | 1st Gear |
| 6 | 1st Gear Synchronizer Inner Cone |
| 7 | 1st Gear Synchronizer Outer Cone |
| 8 | 1st and 2nd Gear Blocking Ring Assembly |
| 9 | 1st and 2nd Gear Synchronizer Assembly
Tip: Try to keep the sleeve and hub together to avoid loosening inserts. |
| 10 | 1st and 2nd Gear Blocking Ring Assembly |
| 11 | 1st Gear Synchronizer Outer Cone |
| 12 | 1st Gear Synchronizer Inner Cone |
| 13 | 2nd Gear Synchronizer Ring Retaining Ring |
| 14 | 2nd Gear Synchronizer Ring |
| 15 | 2nd Gear |
| 16 | 2nd Gear Bearing Assembly |
| 17 | Input Shaft Assembly |

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:

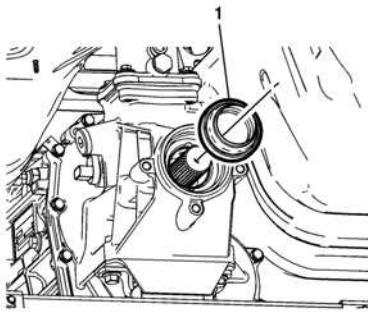
Special Tools

DT-47928 Rear Seal Installer

For equivalent regional tools, refer to Special Tools.

Removal Procedure

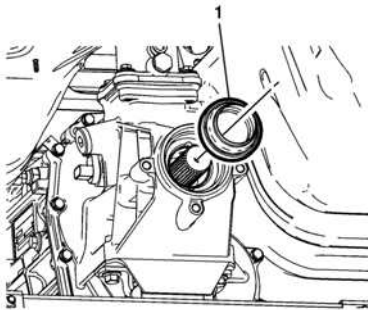
1. Remove the rear propeller shaft. Refer to One-Piece Propeller Shaft Replacement or Two-Piece Rear Propeller Shaft Replacement.



2. Using a suitable tool, remove the rear transmission housing oil seal (1) from the transmission housing.

Installation Procedure

1. Coat the NEW seal lip with the recommended fluid.



2. Using the DT-47928 Rear Seal Installer and a hammer, install the NEW rear transmission housing oil seal (1).
3. Check the transmission fluid level. Add if necessary. Refer to Transmission Fluid Level Inspection.
4. Install the rear propeller shaft. Refer to One-Piece Propeller Shaft Replacement or Two-Piece Rear Propeller Shaft Replacement.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:

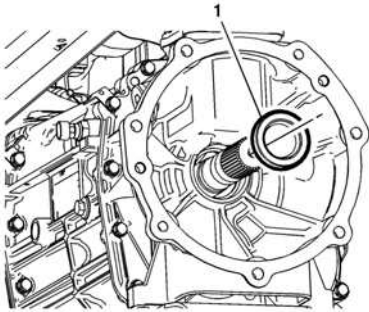
Special Tools

DT 50861 Bearing Cone Installer

For equivalent regional tools, refer to Special Tools.

[Removal Procedure](#)

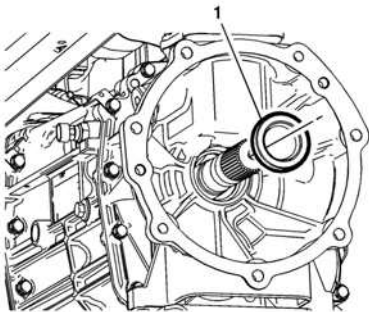
1. Remove the transfer case assembly. Refer to Transfer Case Replacement.



2. Install two self-tapping screws 180 degrees apart into the old seal, using pliers or an equivalent, remove the rear transmission housing oil seal (1) from the transmission housing.

[Installation Procedure](#)

1. Coat the NEW seal lip with the recommended fluid.

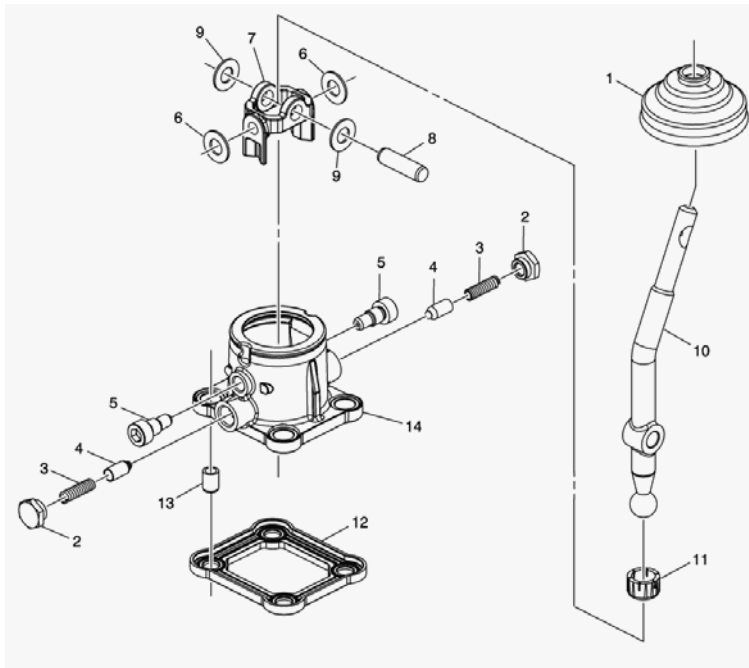


2. Using the DT 50861 installer and a hammer, install the NEW rear transmission housing oil seal (1).
3. Check the transmission fluid level. Add if necessary. Refer to Transmission Fluid Level Inspection.
4. Install the transfer case assembly. Refer to Transfer Case Replacement.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Control Lever Housing Cleaning and Inspection](#)

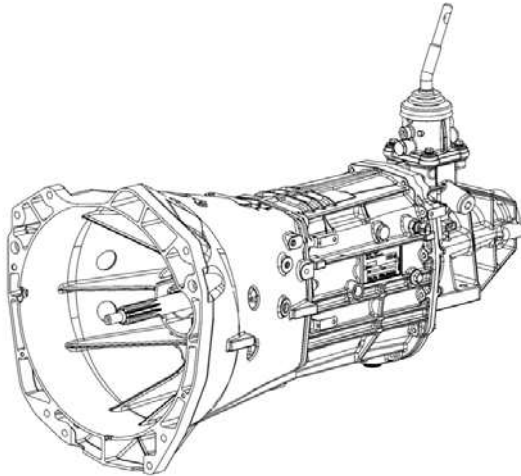


Control Lever Housing Cleaning and Inspection

Callout	Component Name
1	M/Trans Control Lever Lower Boot
2	Shift Control Housing Plug
3	Shift Lever Spring
4	Shift Control Housing Locator Pin
5	M/Trans Control Lever Pin
6	Shift Control Housing Washer
7	Center Support
8	Select Lever Pivot Pin
9	Shift Control Housing Washer
10	M/Trans Control Lower Lever Assembly
11	M/Trans Control Lever Pivot Pin Bushing
12	M/Trans Control Lever Housing Gasket
13	M/Trans Control Base Bushing (Qty: 4)
14	M/Trans Control Lever Housing

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Manual transmissions are identified by the number of forward gears and the measured distance between the centerline of the output shaft and the counter gear.

The 5-speed manual transmission RPO: MYF, MYG, MYL< MYN incorporates the following features:

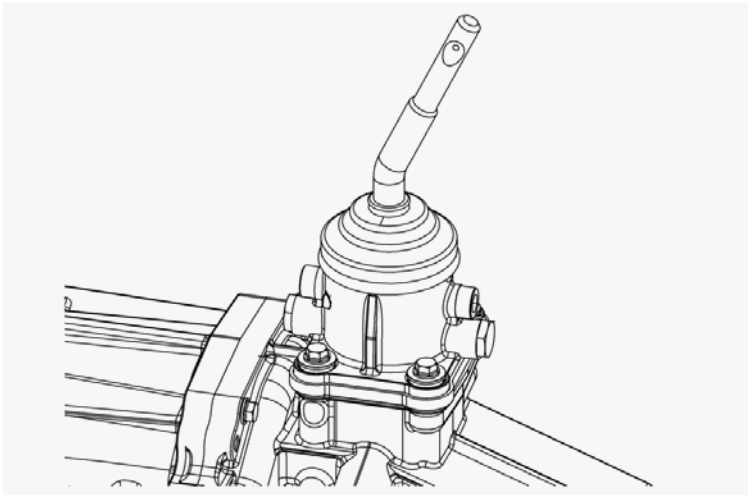
- An aluminum case
- Fully synchronized gearing with an enhanced synchronizer cone arrangement:
 - Triple-cone: FIRST, SECOND
 - Single-cone: THIRD, FOURTH, FIFTH, REVERSE
- An internal shift rail mechanism
- A direct transmission shift control mounted rearward of the transmission
- Tapered roller and sealed ball bearings supporting the mainshaft and countershaft
- Caged roller bearings under all speed gears

These features combine to yield a rugged, reliable system capable of handling input torques of 440 Y (324 lb ft).

The gear ratios are as follows:

Gear	MYF Ratio (:1)	MYL/MYN Ratio (:1)	MYG Ratio (:1)
FIRST	4.079	4.079	4.473
SECOND	2.289	2.289	2.458
THIRD	1.472	1.472	1.472
FOURTH	1.00	1.00	1.00
FIFTH	0.809	0.725	0.822
REVERSE	3.795	3.795	3.795

[Shift Control Assembly](#)



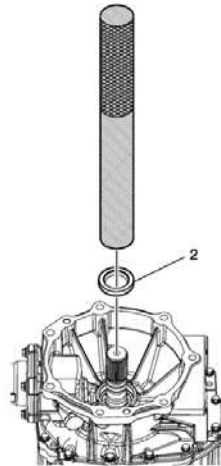
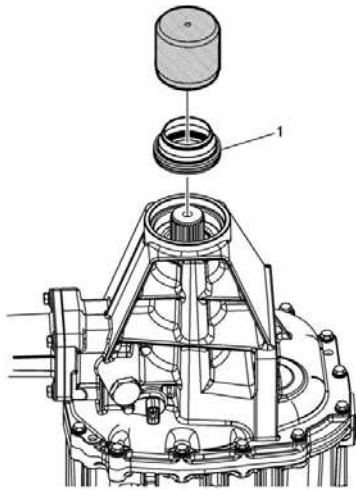
The shift control lever assembly is mounted to the rear case with a rubber isolation gasket. The cockpit of the vehicle is isolated from the driveline through the use of a shift control closeout boot which seals off the shift control and the driveline tunnel shift control opening.

Reverse Lockout

This transmission is equipped with a lock-out mechanism, which prohibits mis-shift from fifth gear to reverse gear.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Output Shaft Seal Installation

Callout

Component Name

Output Shaft Seal (2x2)

Procedure

1. Replace with NEW oil seal.
2. Coat the NEW seal lips with the recommended lubricant.
3. Using DT 47928-1 rear seal installer , install the seal.

Special Tools

DT 47928-1 Rear Seal Installer

For equivalent regional tools, refer to Special Tools.

Output Shaft Seal (4x4)

Procedure

2. Replace with a NEW oil seal.
2. Coat the NEW seal lips with the recommended lubricant.
3. Using DT 50861 bearing cone installer , install the seal.

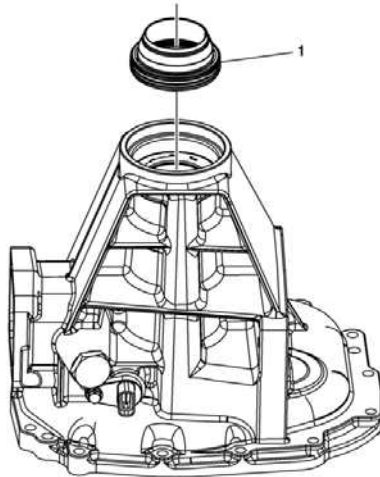
Special Tools

DT 50861 Bearing Cone Installer

For equivalent regional tools, refer to Special Tools.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Output Shaft Seal Removal

Callout

1

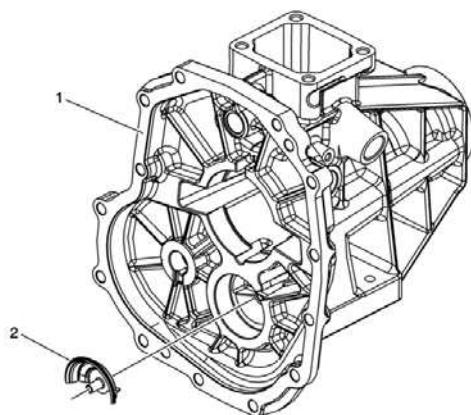
Output Shaft Seal

Component Name

Tip: Use pry bar or screwdriver to remove the oil seal and discard. The seal is not reusable.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:



Rear Case Cleaning and Inspection

Callout

Component Name

Preliminary Procedure

Warning: Wear safety glasses to avoid injury when using compressed air or any cleaning solvent. Bodily injury may occur if fumes are inhaled or if skin is exposed to chemicals.

Clean the transmission rear case assembly (1) with a suitable solvent. Air dry all the parts.

Transmission Rear Case Assembly

1. Inspect the rear case for the following conditions:

- Cracks

Replace the rear case if cracks are found.

- Scratches
- Burrs
- Nicked mounting surfaces
- Damaged sealing surfaces
- Damaged bearing bores

- Inspect the machined mating surfaces for flatness. Check the mating surfaces with a straight edge.
- Inspect the bushing for excessive wear. Replace worn bushings.
- Use a fine mill file to dress minor scratches or burrs.
- If scratches, or grooves or scoring cannot be removed by hand with a soft stone or crocus cloth, replace the component.

2

M/Trans Oil Trough

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

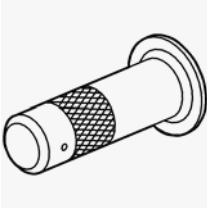
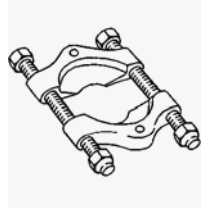
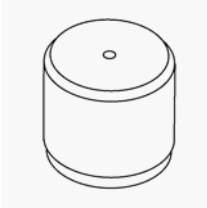
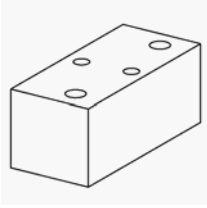
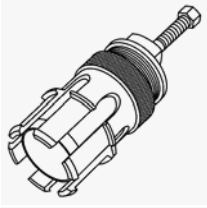
Illustration	Tool Number/Description
	DT-0307994 Driver-Automatic Transmission Torque Converter Seal
	DT-22912-B J-22912-B 6-9604356 Split Plate Bearing Puller
	DT-47928-1 Rear Seal Installer
	DT-50315 Puller Hardware Kit
	DT-50461 Mainshaft Lock Wrench Mounting Block
	DT-50575 Extension Housing Bushing Remover/Installer
	DT-50848 Input Shaft Bearing Cone Installer

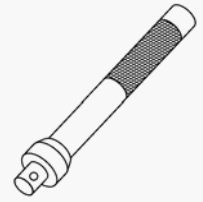
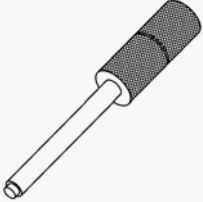
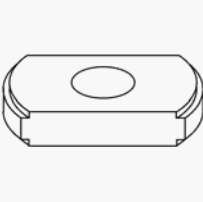
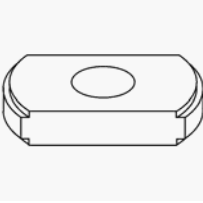
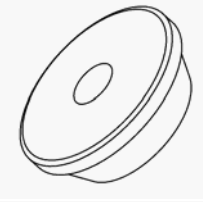
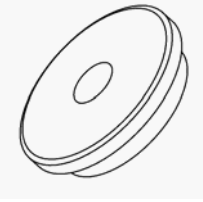
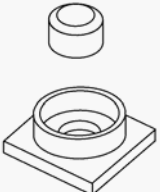
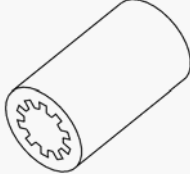
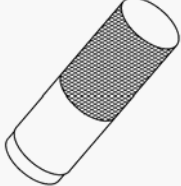
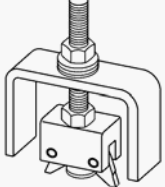
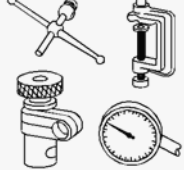
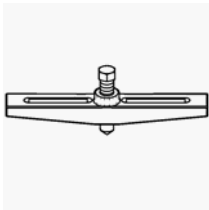
Illustration	Tool Number/Description
	DT-50849 3-0207891 Permaglide Bushing Installer
	DT-50850 M-840911-A Driver Handle
	DT-50851 Front Housing Expansion Plug Installer
	DT-50852 Front Housing Bearing Race Installer
	DT-50853 Mainshaft Bearing Race Puller
	DT-50854 Countershaft Bearing Race Puller
	DT-50855 3-0207887 Mainshaft Bearing Race Installer
	DT-50856 3-0207886 Countershaft Bearing Race Installer

Illustration	Tool Number/Description
	DT-50857 Countershaft Bearing Cone Installer
	DT-50858 54mm Special Wrench
	DT-50859 Input Shaft Spline Socket
	DT-50860 Bearing Cone Installer
	DT-50861 3-0207944 Bearing Cone Installer
	DT-50862 T-9907690 Front Housing Bearing Race Puller
	EN-28467-700 EN-47649 X-0206951 Engine Bridge Tool
	GE-8001 J-8001 Dial Indicator Set

Illustration



Tool Number/Description

GE-8433-1

J-8433-1

Puller Bar

GE-25025-B

DT-25025-B

J-25025-B

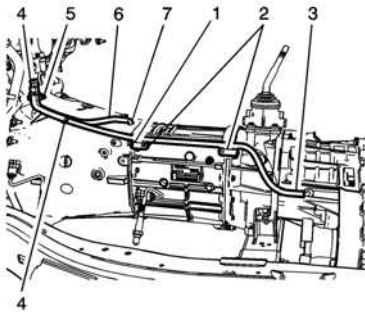
Dial Indicator Post and Guide Pin Set

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

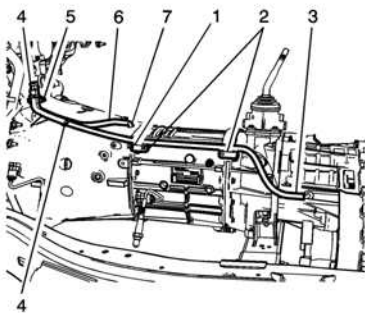
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.



2. Disconnect the transfer case vent hose assembly (1) from the following:

- The transmission retainers (2)
- The transfer case vent pipe (3)
- The engine compartment bracket (5)
- Cut the wire ties (4).
- Remove the transfer case vent hose (1) from the vehicle.

[Installation Procedure](#)



Important: Ensure the vent hoses are free of kinks and routed clear of sharp objects.

1. Install the wire ties (4) to attach the transfer case vent hose (1) to the transmission vent hose (6).
2. Connect the transfer case vent hose assembly (1) to the following:

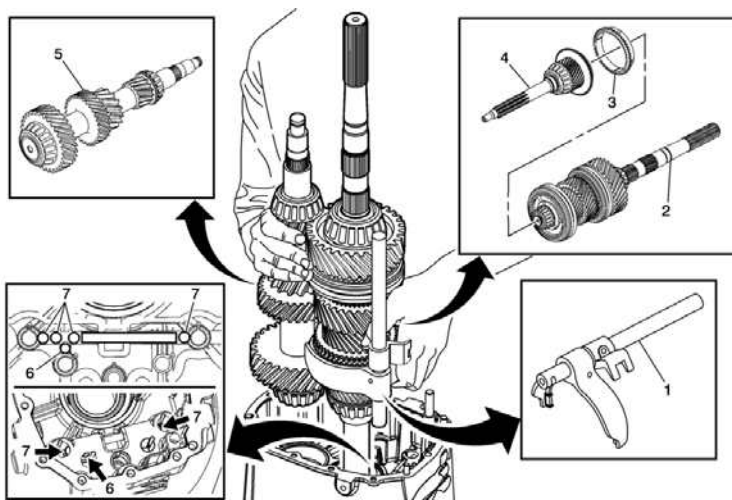
- The transmission retainers (2)
- The transfer case vent pipe (3)
- The engine compartment bracket (5)
- Lower the vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Table 1:	Mainshaft, Input Shaft and Counter Gear Shaft Installation
Table 2:	Shift Shafts and Forks Installation
Table 3:	Intermediate Case Installation
Table 4:	5th Gear, and 5th Counter Gear Installation
Table 5:	5th and Reverse Shift Fork Installation
Table 6:	Reverse Gear, 5th Gear Synchronizer and Reverse Gear Assembly, and Reverse Idler Gear Installation
Table 7:	Mainshaft Nut and Front Counter Gear Rear Bearing Installation
Table 8:	Output Shaft Sleeve Installation
Table 9:	Rear Case and Shift Lever Housing Installation
Table 10:	Drain and Fill Plug Installation

[Mainshaft, Input Shaft and Counter Gear Shaft Installation](#)



Mainshaft, Input Shaft and Counter Gear Shaft Installation

Callout

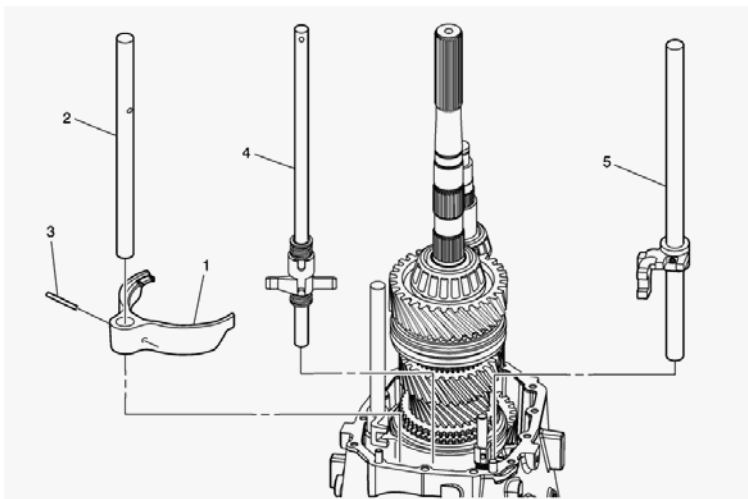
Component Name

Preliminary Procedure

All the following components must be installed at the same time.

- | | |
|---|---|
| 1 | 3rd and 4th Shift Shaft and Fork Assembly |
| 2 | Mainshaft Assembly |
| 3 | 4th Gear Synchronizer Ring |
| 4 | Input Shaft Assembly |
| 5 | Counter Gear Shaft Assembly |
| | Shift Shaft Interlocking Ball – 8.0 mm (Qty: 1) |
| 6 | Tip: <ul style="list-style-type: none"> This 8.0 mm ball is located on the 1st/2nd yoke bar bore. Use the appropriate lubricant to hold ball in the proper location. |
| | Shift Shaft Interlocking Balls – 9.5 mm (Qty: 4) |
| 7 | Tip: <ul style="list-style-type: none"> See locations of the four 9.5 mm balls shown above. Use the appropriate lubricant to hold ball in the proper location. |

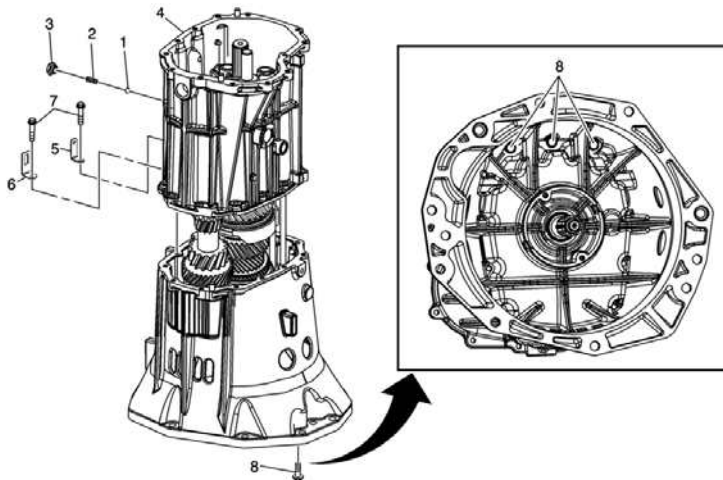
[Shift Shafts and Forks Installation](#)



Shift Shafts and Forks Installation

Callout	Component Name
1	1st and 2nd Shift Fork
2	1st and 2nd Shift Shaft
3	Shift Fork Retaining Pin
4	Shift Shaft Assembly
5	5th and Reverse Shift Rail Assembly

Intermediate Case Installation

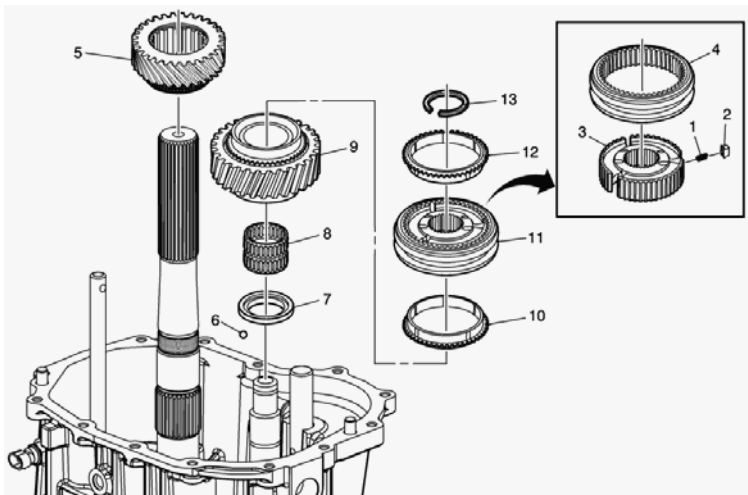


Intermediate Case Installation

Callout	Component Name
1	Shift Shaft Detent Ball
2	Shift Detent Ball Spring
	Shift Shaft Detent Plug
3	Caution: Refer to Fastener Caution. Tighten 13 Y (115 lb in)
4	Transmission Intermediate Case
5	Transmission Wiring Harness Bracket Assembly
6	Transmission Bracket

Callout	Component Name
	Transmission Case Bolt (Qty: 10)
7	Tighten 22.5 Y (16.6 lb ft)
	Transmission Intermediate Case Bolt (Qty: 3)
8	Tighten 22.5 Y (16.6 lb ft)

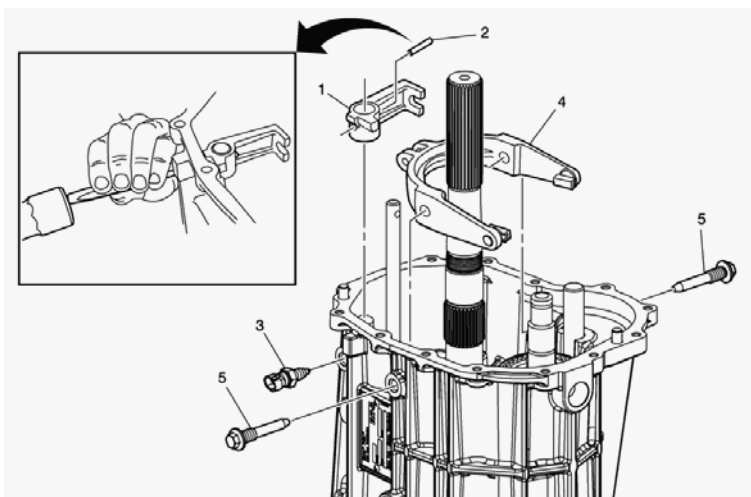
5th Gear, and 5th Counter Gear Installation



5th Gear, and 5th Counter Gear Installation

Callout	Component Name
1	5th and Reverse Gear Synchronizer Spring
2	5th and Reverse Gear Synchronizer Insert
3	5th and Reverse Gear Synchronizer Hub
4	5th and Reverse Gear Synchronizer Sleeve
5	5th Gear
6	5th Gear Thrust Washer Anti-Rotation Bail
7	Counter Gear Thrust Washer
8	Counter Gear Thrust Bearing Assembly
9	5th Counter Gear
10	5th Gear Blocking Ring
11	5th and Reverse Gear Synchronizer Hub and Sleeve
12	Reverse Gear Blocking Ring
13	5th and Reverse Gear Synchronizer Retaining Ring

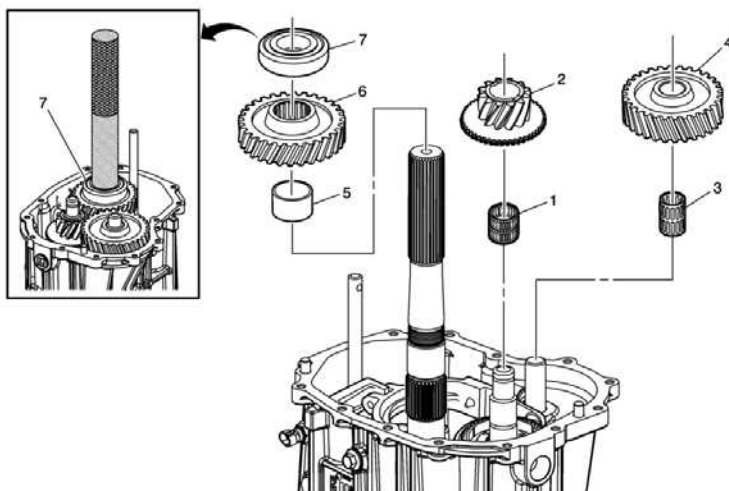
5th and Reverse Shift Fork Installation



5th and Reverse Shift Fork Installation

Callout	Component Name
1	5th and Reverse Shift Link Lever
2	5th and Reverse Shift Fork Pin Tip: Use a punch to install.
3	Park/Neutral Position and Backup Lamp Switch Assembly Tighten 17 Y (12.5 lb ft)
4	5th and Reverse Shift Fork
5	Shift Fork Bolt (Qty: 2) Tighten 22.5 Y (16.6 lb ft)

Reverse Gear, 5th Gear Synchronizer and Reverse Gear Assembly, and Reverse Idler Gear Installation

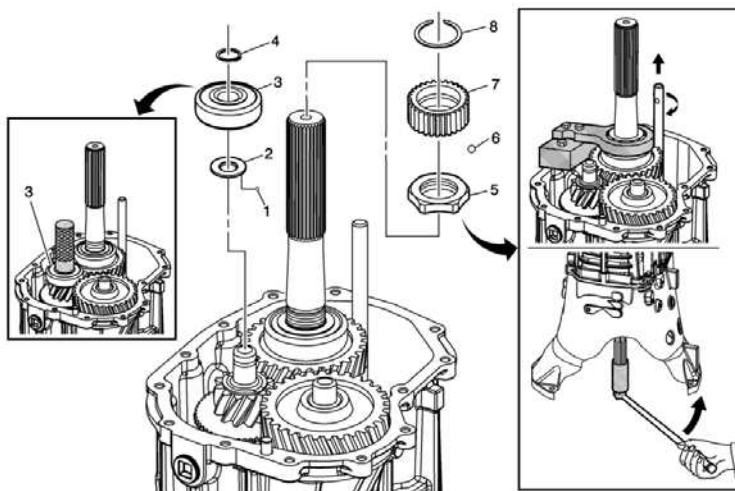


Reverse Gear, 5th Gear Synchronizer and Reverse Gear Assembly, and Reverse Idler Gear Installation

Callout	Component Name
1	Reverse Gear Bearing Assembly
2	5th Gear Synchronizer and Reverse Gear Assembly
3	Reverse Idler Gear Thrust Bearing Assembly
4	Reverse Idler Gear
5	Mainshaft Bushing

Callout	Component Name
6	Reverse Gear
	Mainshaft Bearing Assembly
	Special Tools
7	<i>DT 50861</i> Bearing Cone Installer
	For equivalent regional tools, refer to Special Tools.

Mainshaft Nut and Front Counter Gear Rear Bearing Installation



Mainshaft Nut and Front Counter Gear Rear Bearing Installation

Callout	Component Name
1	Reverse Gear Thrust Washer Locating Ball
2	Reverse Gear Thrust Washer
	Front Counter Gear Rear Bearing Assembly
	Special Tools
3	<i>DT 50860</i> Bearing Cone Installer
	For equivalent regional tools, refer to Special Tools.
4	Front Counter Gear Rear Bearing Retaining Ring
	Mainshaft Nut

Procedure

1. Attach *DT 50461* mainshaft lock wrench mounting block and *DT 50858* 54 mm special wrench to the intermediate case.
2. Place the transmission in first gear by rotating the shift shaft clockwise and towards the rear of the transmission.
3. Using *DT 50859* input shaft spline socket rotate the input shaft counterclockwise to tighten the mainshaft nut to the correct specification.
4. Use a punch to peen the mainshaft nut to the machine groove on the output shaft.

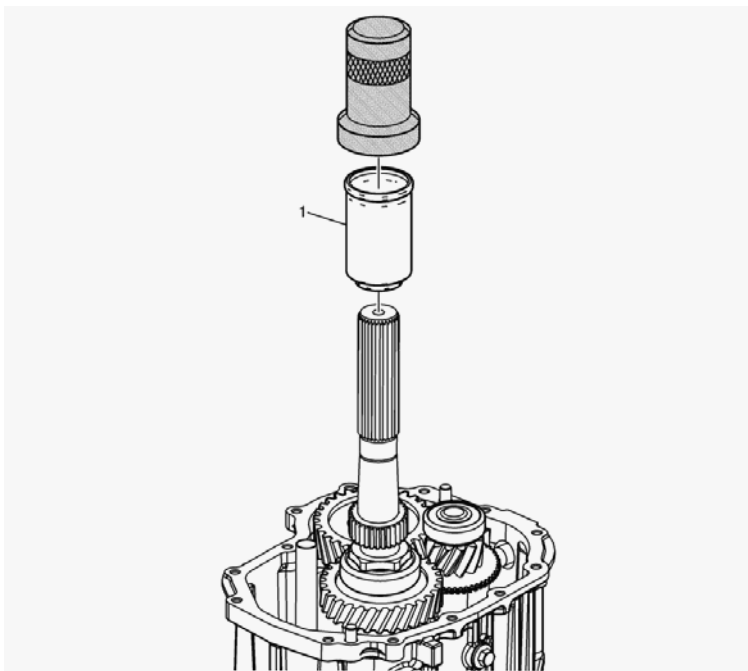
Special Tools

- *DT 50858* 54 mm Special Wrench
- *DT 50859* Input Shaft Spline Socket
- *DT 50461* Mainshaft Lock Wrench Mounting Block

For equivalent regional tools, refer to Special Tools.

6	Anti-Rotation Ball
7	Speed Sensor Rotor – 2WD
8	Mainshaft Retaining Ring – Speed Sensor Rotor – 2WD

Output Shaft Sleeve Installation



Output Shaft Sleeve Installation

Callout

Component Name

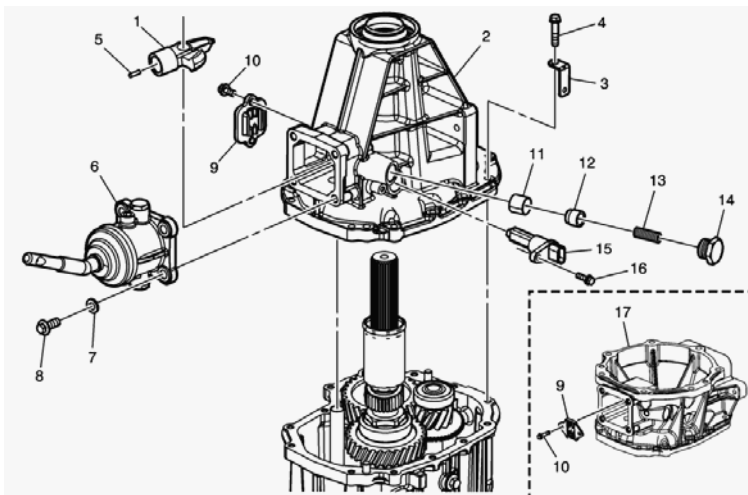
Output Shaft Sleeve

Special Tools

1

DT-0307994 Output Shaft Sleeve Installer

For equivalent regional tools, refer to Special Tools.

[Rear Case and Shift Lever Housing Installation](#)

Rear Case and Shift Lever Housing Installation

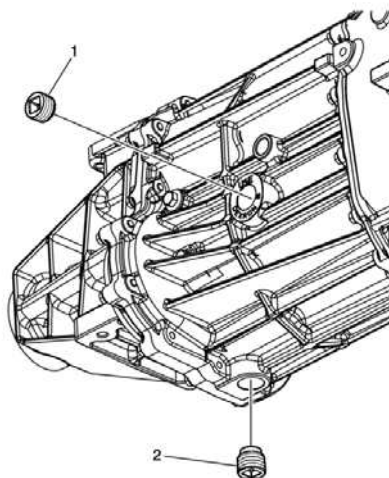
Callout

Component Name

- | | |
|---|---|
| 1 | Shift Shaft Detent Lever |
| 2 | Transmission Rear Case Assembly – 2WD |
| 3 | Transmission Wiring Harness Bracket Assembly |
| 4 | Transmission Case Bolt |
| 5 | Shift Shaft Detent Pin Assembly |
| 6 | M/Trans Control Lever Housing Assembly |
| 7 | M/Trans Control Lever Housing Washer (Qty: 4) |

Callout	Component Name
8	M/Trans Control Lever Housing Bolt (Qty: 4)
9	Shift Guide Detent Plate
10	Transmission Bolt
11	Shift Shaft Detent
12	Shift Shaft Detent Cam
13	Manual Shift Detent Lever Spring
14	Transmission Case Plug
15	Vehicle Speed Sensor
16	Transmission Case Bolt
17	Transmission Rear Case Assembly – 4WD

[Drain and Fill Plug Installation](#)



Drain and Fill Plug Installation

Callout	Component Name
1	Transmission Oil Fill Plug
2	Transmission Oil Drain Plug

2013 Chevrolet Colorado

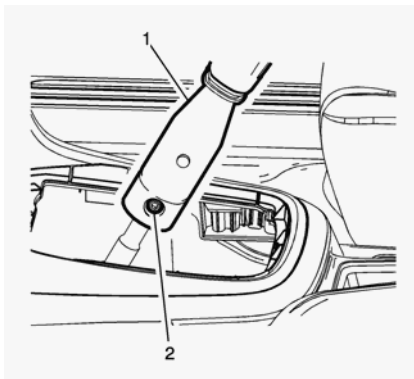
Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:

[Removal Procedure](#)



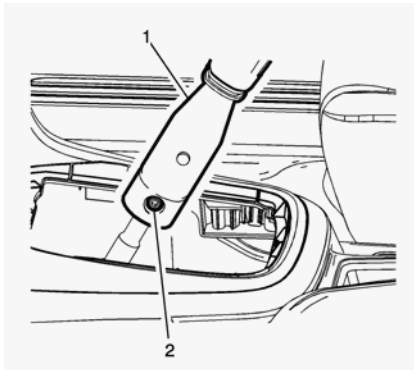
1. Using a flat bladed trim tool, carefully release the four retaining tabs on each side of the boot (1) in order to disengage the boot retainers (2) from the floor console (3).
2. Pull the boot upward to access the control lever set screw.



3. Remove the set screw (2) from the shift lever (1).
4. Remove the shift lever assembly from the transmission control lever.
5. Remove the shift lever boot from the control lever.

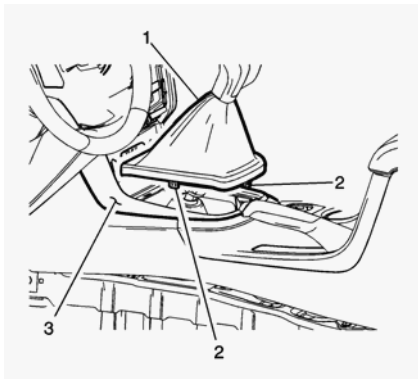
[Installation Procedure](#)

1. Install the shift lever boot to the control lever.



2. Install the control lever and boot assembly to the transmission control lever, aligning the set screw (2) threaded hole with the flat on the transmission control lever.
 3. Apply threadlock to the shift lever set screw threads. Refer to Adhesives, Fluids, Lubricants, and Sealers.
- Caution:** Refer to Fastener Caution.
4. Install the shift lever set screw and tighten to **25 Y (18 lb ft)**.

Transmission Control Lever Boot Replacement (With Console)

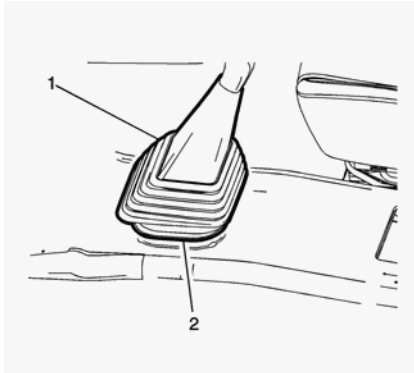


5. Position the boot tabs (2) flat on the console opening.
6. Push downward on all four sides of the boot (1) in order to engage the boot retainers (2) with the floor console (3).

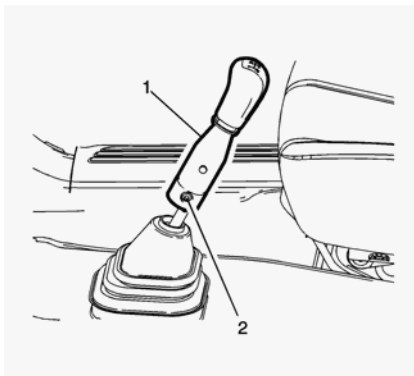
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)



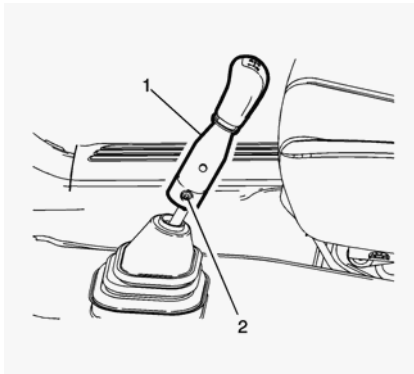
1. Carefully pull the shift boot (1) sideways, then upward to release the boot from the floor panel retaining flange (2).
2. Pull the boot upward to access the control lever set screw.



3. Remove the set screw (2) from the shift lever (1).
4. Remove the shift lever assembly from the transmission control lever.
5. If necessary, remove the shift lever boot from the control lever.

[Installation Procedure](#)

1. If removed, install the shift lever boot to the control lever.

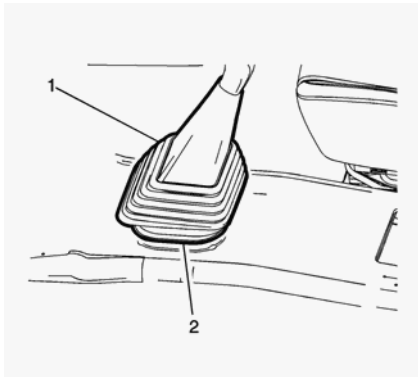


2. Install the control lever and boot assembly to the transmission control lever, aligning the set screw (2) threaded hole with the flat on the transmission control lever.
3. Apply threadlock to the shift lever set screw threads. Refer to Adhesives, Fluids, Lubricants, and Sealers.

Caution: Refer to Fastener Caution.

4. Install the shift lever set screw and tighten to **25 Y (18 lb ft)**.

Transmission Control Lever Boot Replacement (Without Console)



5. Carefully pull the shift boot (1) sideways, then downward to secure the boot to the floor panel retaining flange (2).

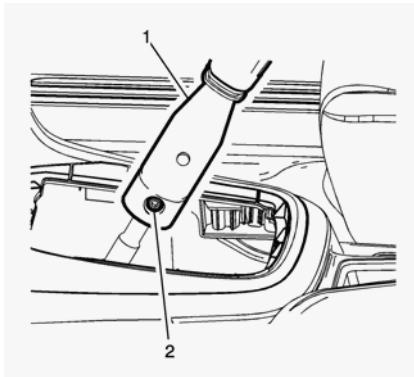
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)



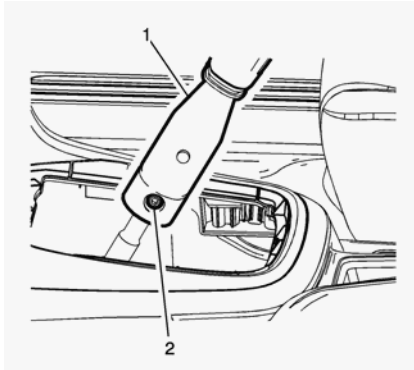
1. Using a flat bladed trim tool, carefully release the four retaining tabs on each side of the boot (1) in order to disengage the boot retainers (2) from the floor console (3).
2. Pull the boot upward to access the control lever set screw.



3. Remove the set screw (2) from the shift lever (1).
4. Remove the shift lever assembly from the transmission control lever.
5. If necessary, remove the shift lever boot from the control lever.

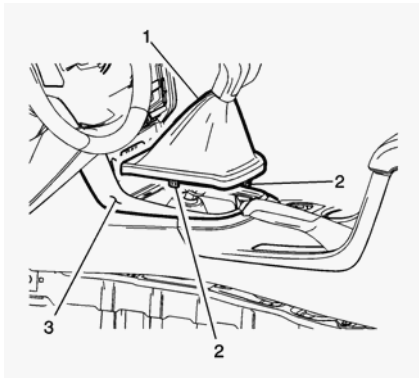
[Installation Procedure](#)

1. If removed, install the shift lever boot to the control lever.



2. Install the control lever and boot assembly to the transmission control lever, aligning the set screw (2) threaded hole with the flat on the transmission control lever.
 3. Apply threadlock to the shift lever set screw threads. Refer to Adhesives, Fluids, Lubricants, and Sealers.
- Caution:** Refer to Fastener Caution.
4. Install the shift lever set screw and tighten to **25 Y (18 lb ft)**.

Transmission Control Lever Replacement (With Console)

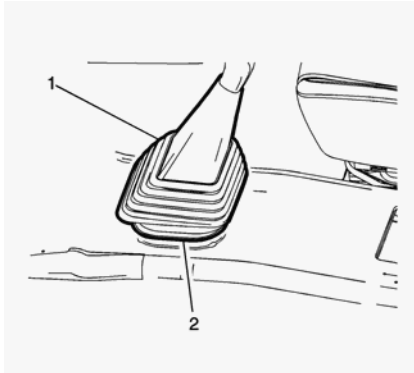


5. Position the boot tabs (2) flat on the console opening.
6. Push downward on all four sides of the boot (1) in order to engage the boot retainers (2) with the floor console (3).

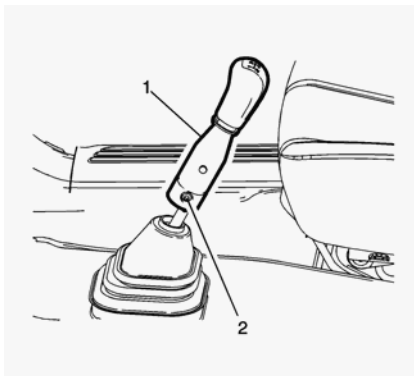
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)



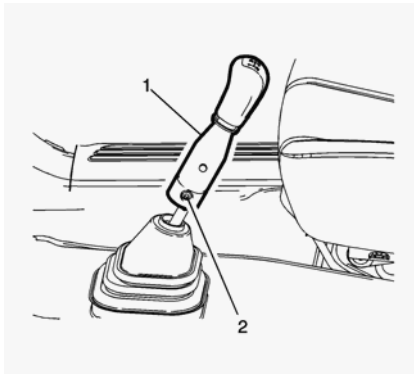
1. Carefully pull the shift boot (1) sideways, then upward to release the boot from the floor panel retaining flange (2).
2. Pull the boot upward to access the control lever set screw.



3. Remove the set screw (2) from the shift lever (1).
4. Remove the shift lever assembly from the transmission control lever.
5. If necessary, remove the shift lever boot from the control lever.

[Installation Procedure](#)

1. If removed, install the shift lever boot to the control lever.

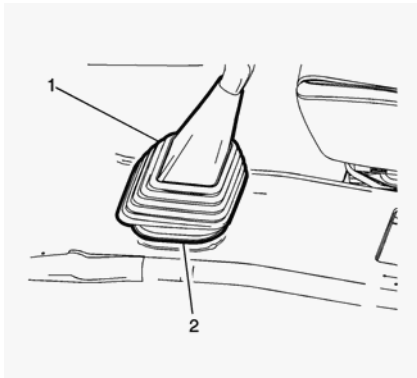


2. Install the control lever and boot assembly to the transmission control lever, aligning the set screw (2) threaded hole with the flat on the transmission control lever.
3. Apply threadlock to the shift lever set screw threads. Refer to Adhesives, Fluids, Lubricants, and Sealers.

Caution: Refer to Fastener Caution.

4. Install the shift lever set screw and tighten to **25 Y (18 lb ft)**.

Transmission Control Lever Replacement (Without Console)



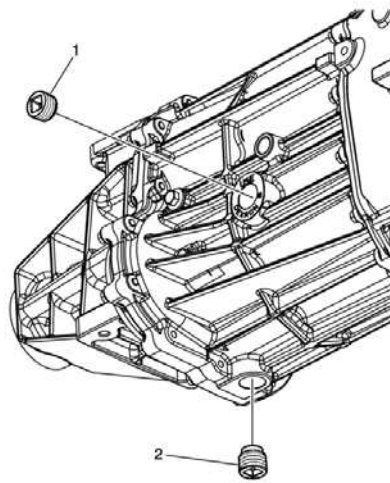
5. Carefully pull the shift boot (1) sideways, then downward to secure the boot to the floor panel retaining flange (2).

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Table 1:	Drain Fluids and Mount to Holding Fixture
Table 2:	Rear Case and Shift Lever Housing Removal
Table 3:	Output Shaft Sleeve Removal
Table 4:	Mainshaft Nut and Front Counter Gear Rear Bearing Removal
Table 5:	Reverse Gear, 5th Gear Synchronizer and Reverse Gear Assembly, and Reverse Idler Gear Removal
Table 6:	5th and Reverse Shift Fork Removal
Table 7:	5th Gear, and 5th Counter Gear Removal
Table 8:	Intermediate Case Removal
Table 9:	Shift Shafts and Forks Removal
Table 10:	Mainshaft, Input Shaft and Counter Gear Shaft Removal

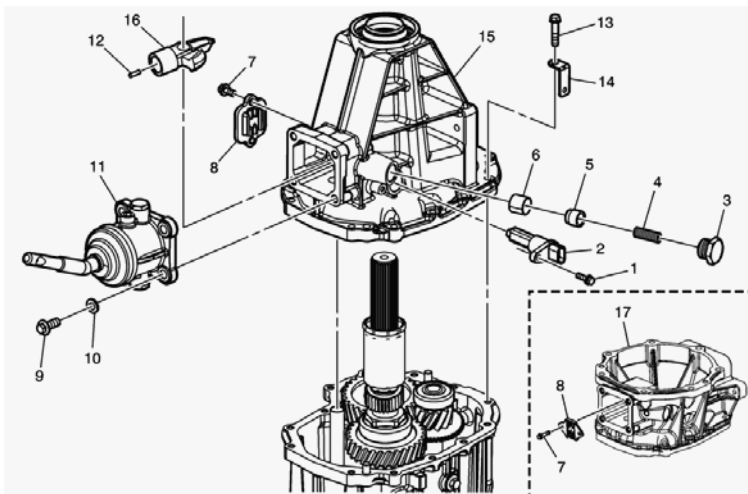
[Drain Fluids and Mount to Holding Fixture](#)



Drain Fluids and Mount to Holding Fixture

Callout	Component Name
1	Transmission Oil Fill Plug
2	Transmission Oil Drain Plug

[Rear Case and Shift Lever Housing Removal](#)



Rear Case and Shift Lever Housing Removal

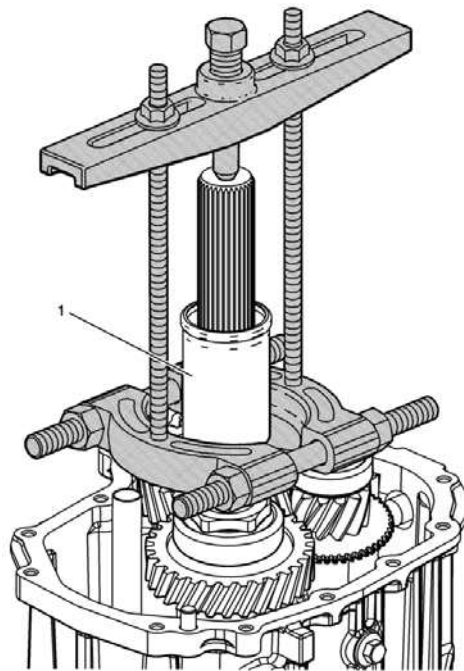
Callout

Component Name

Preliminary Procedure

Place shifter in 1st gear before you begin.

- | | |
|----|---|
| 1 | Transmission Case Bolt |
| 2 | Vehicle Speed Sensor |
| 3 | Transmission Case Plug |
| 4 | Manual Shift Detent Lever Spring |
| 5 | Shift Shaft Detent Cam |
| 6 | Shift Shaft Detent |
| 7 | Transmission Bolt |
| 8 | Shift Guide Detent Plate |
| 9 | M/Trans Control Lever Housing Bolt (Qty: 4) |
| 10 | M/Trans Control Lever Housing Washer (Qty: 4) |
| 11 | M/Trans Control Lever Housing Assembly |
| 12 | Shift Shaft Detent Pin Assembly |
| 13 | Transmission Case Bolt |
| 14 | Transmission Wiring Harness Bracket Assembly |
| 15 | Transmission Rear Case Assembly – 2WD |
| 16 | Shift Shaft Detent Lever |
| 17 | Transmission Rear Case Assembly – 4WD |

[Output Shaft Sleeve Removal](#)

Output Shaft Sleeve Removal

Callout

Component Name

Output Shaft Sleeve

1

Special Tools

- DT-22912-B Rear Pinion and Axle Bearing Remover

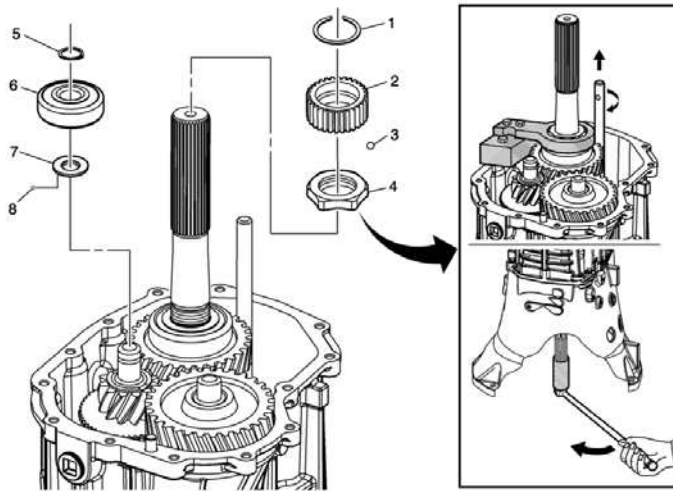
Callout

Component Name

- DT-50315 Hardware Kit
- GE-8433-1 Two Jaw Puller

For equivalent regional tools, refer to Special Tools.

Mainshaft Nut and Front Counter Gear Rear Bearing Removal



Mainshaft Nut and Front Counter Gear Rear Bearing Removal

Callout

Component Name

- | | |
|---|---|
| 1 | Mainshaft Retaining Ring – Speed Sensor Rotor – 2WD |
| 2 | Speed Sensor Rotor |
| 3 | Anti-Rotation Ball |
| | Mainshaft Nut |

Procedure

- | | |
|----|--|
| 1. | Attach DT 50461 mainshaft lock wrench mounting block and DT 50858 54 mm special wrench to the intermediate case. |
| 2. | Place the transmission in first gear by rotating the shift shaft clockwise and towards the rear of the transmission. |
| 3. | Using DT 50859 input shaft spline socket rotate the input shaft clockwise to loosen the mainshaft nut. |

4

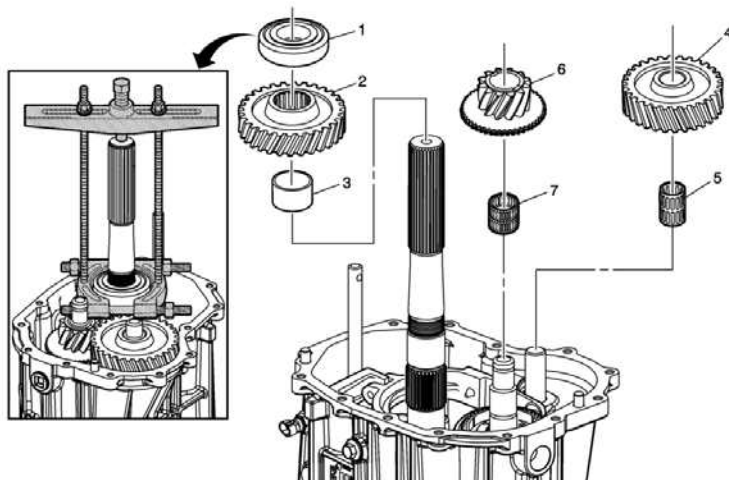
Special Tools

- DT 50461 Mainshaft Lock Wrench Mounting Block
- DT 50858 54 mm Special Wrench
- DT 50859 Input Shaft Spline Socket

For equivalent regional tools, refer to Special Tools.

- | | |
|---|--|
| 5 | Front Counter Gear Rear Bearing Retaining Ring |
| 6 | Front Counter Gear Rear Bearing Assembly |
| 7 | Reverse Gear Thrust Washer |
| 8 | Reverse Gear Thrust Washer Locating Ball |

Reverse Gear, 5th Gear Synchronizer and Reverse Gear Assembly, and Reverse Idler Gear Removal



Reverse Gear, 5th Gear Synchronizer and Reverse Gear Assembly, and Reverse Idler Gear Removal

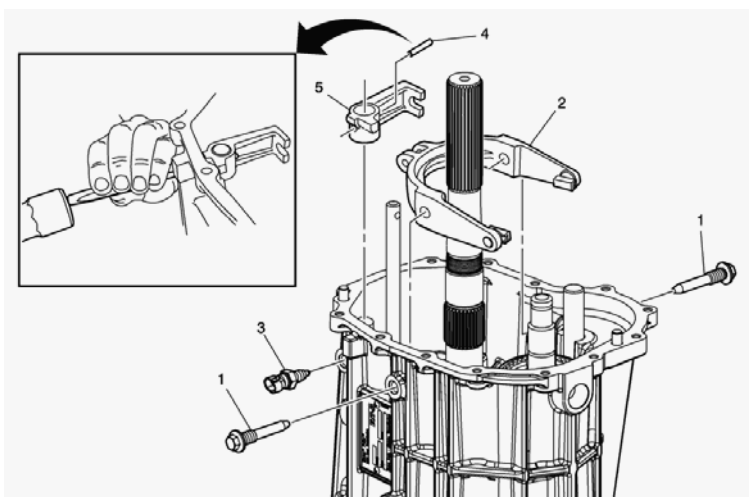
Callout

Component Name

Mainshaft Bearing Assembly

Special Tools

- | | |
|--|---|
| 1 | <ul style="list-style-type: none"> • DT 22912-B Split Plate Bearing Puller • DT 50315 Puller Hardware Kit • GE 8433-1 Puller Bar |
| For equivalent regional tools, refer to Special Tools. | |
| 2 | Reverse Gear |
| 3 | Mainshaft Bushing |
| 4 | Reverse Idler Gear |
| 5 | Reverse Idler Gear Thrust Bearing Assembly |
| 6 | 5th Gear Synchronizer and Reverse Gear Assembly |
| 7 | Reverse Gear Bearing Assembly |

[5th and Reverse Shift Fork Removal](#)

5th and Reverse Shift Fork Removal

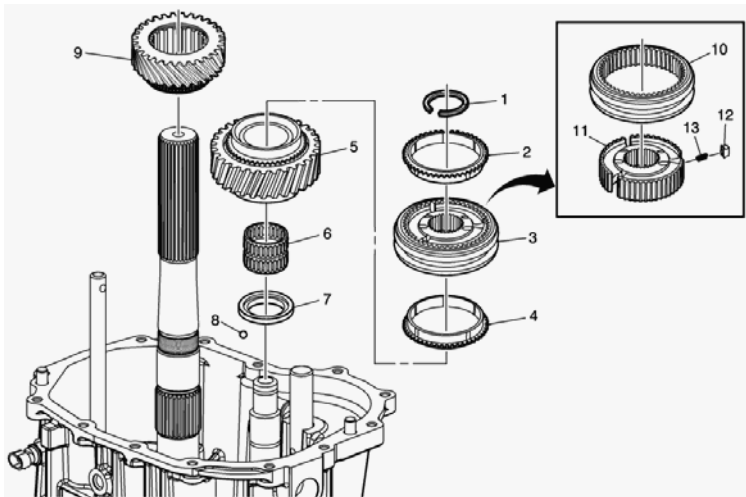
Callout

Component Name

- | | |
|---|---|
| 1 | Shift Fork Bolt |
| 2 | 5th and Reverse Shift Fork |
| 3 | Park/Neutral Position and Backup Lamp Switch Assembly |

Callout	Component Name
4	5th and Reverse Shift Fork Pin
5	5th and Reverse Shift Link Lever

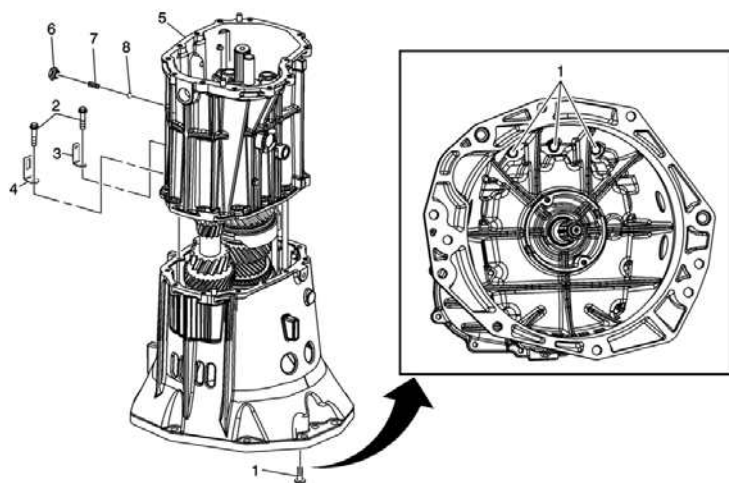
[5th Gear, and 5th Counter Gear Removal](#)



5th Gear, and 5th Counter Gear Removal

Callout	Component Name
1	5th and Reverse Gear Synchronizer Retaining Ring
2	Reverse Gear Blocking Ring
3	5th and Reverse Gear Synchronizer Hub and Sleeve
4	5th Gear Blocking Ring
5	5th Counter Gear
6	Counter Gear Thrust Bearing Assembly
7	Counter Gear Thrust Washer
8	5th Gear Thrust Washer Anti-Rotation Ball
9	5th Gear
10	5th and Reverse Gear Synchronizer Sleeve
11	5th and Reverse Gear Synchronizer Hub
12	5th and Reverse Gear Synchronizer Insert
13	5th and Reverse Gear Synchronizer Spring

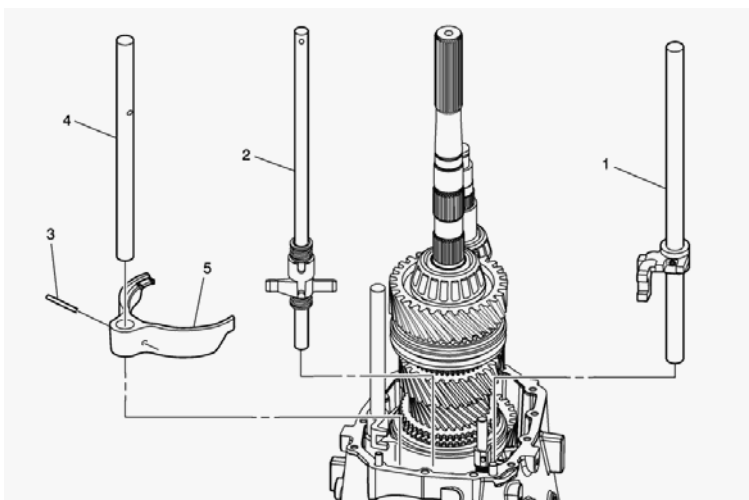
[Intermediate Case Removal](#)



Intermediate Case Removal

Callout	Component Name
1	Transmission Intermediate Case Bolt (Qty: 3)
2	Transmission Rear Case Bolt (Qty: 10)
3	Transmission Wiring Harness Bracket Assembly
4	Transmission Bracket
5	Transmission Intermediate Case
6	Shift Shaft Detent Plug
7	Shift Detent Ball Spring
8	Shift Shaft Detent Ball

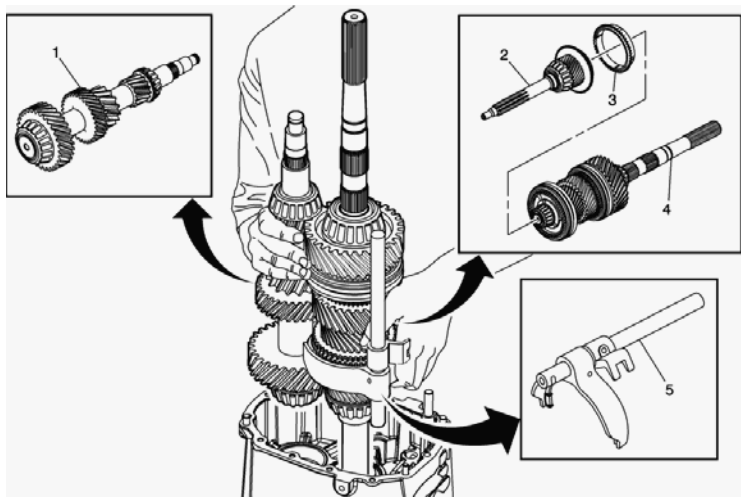
[Shift Shafts and Forks Removal](#)



Shift Shafts and Forks Removal

Callout	Component Name
1	5th and Reverse Shift Rail Assembly
2	Shift Shaft Assembly
3	Shift Fork Retaining Pin
4	1st and 2nd Shift Shaft
5	1st and 2nd Shift Fork

[Mainshaft, Input Shaft and Counter Gear Shaft Removal](#)



Mainshaft, Input Shaft and Counter Gear Shaft Removal

Callout

Component Name

Preliminary Procedure

All the following components must be removed at the same time.

- | | |
|---|---|
| 1 | Counter Gear Shaft Assembly |
| 2 | Input Shaft Assembly |
| 3 | 4th Gear Synchronizer Ring |
| 4 | Mainshaft Assembly |
| 5 | 3rd and 4th Shift Shaft and Fork Assembly |
- Tip:** Be careful when removing the yoke bars. Interlock balls may drop into the bar bores. Keep close watch on the interlock balls when disassembling and assembling the transmission.

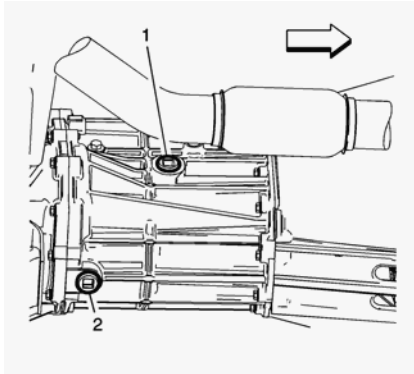
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:

[Draining Procedure](#)

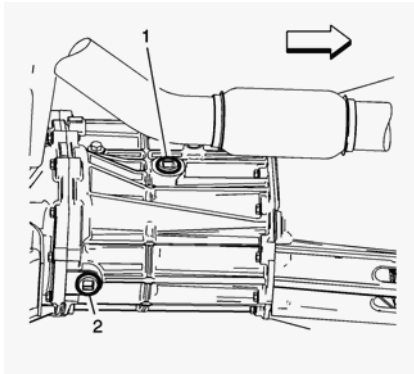
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Clean away all dirt and debris from the transmission fluid drain plug area.
3. Position an appropriate container under the transmission.



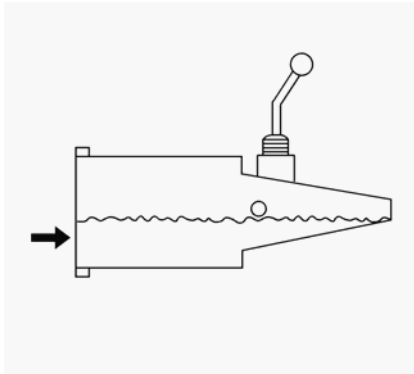
4. Remove the transmission fluid drain plug (2).
Allow the transmission fluid to drain into the container.
- Caution:** Refer to Component Fastener Tightening Caution.
5. Install the transmission fluid drain plug and tighten to **44 Y (32 lb ft)**.
 6. Remove the container used to catch the used transmission fluid from under the vehicle.

[Filling Procedure](#)

1. Clean away all dirt and debris from the transmission fluid fill plug area.



2. Remove the transmission fluid fill plug (1).

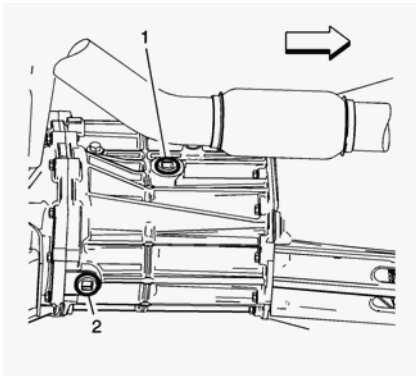


3. Fill the transmission to just below the bottom of the fill plug hole with the recommended fluid. Refer to Adhesives, Fluids, Lubricants, and Sealers.
4. Install the transmission fluid fill plug and tighten to **44 Y (32 lb ft)**.
5. Lower the vehicle.

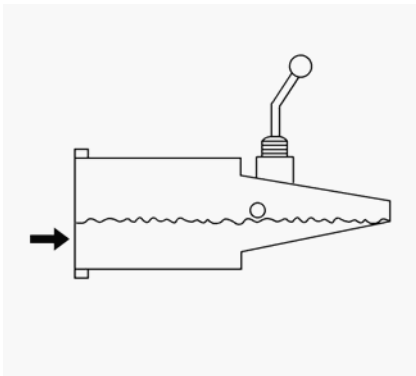
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Clean away all dirt and debris from the transmission fluid fill plug area.



3. Remove the transmission fluid fill plug (1).



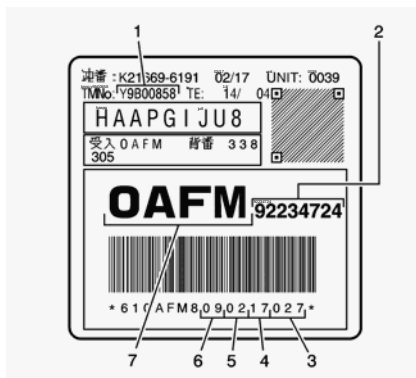
4. Fill the transmission to just below the bottom of the fill plug hole with the recommended fluid. Refer to Adhesives, Fluids, Lubricants, and Sealers.

Caution: Refer to Component Fastener Tightening Caution.

5. Install the transmission fluid fill plug and tighten to **44 Y (32 lb ft)**.
6. Lower the vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

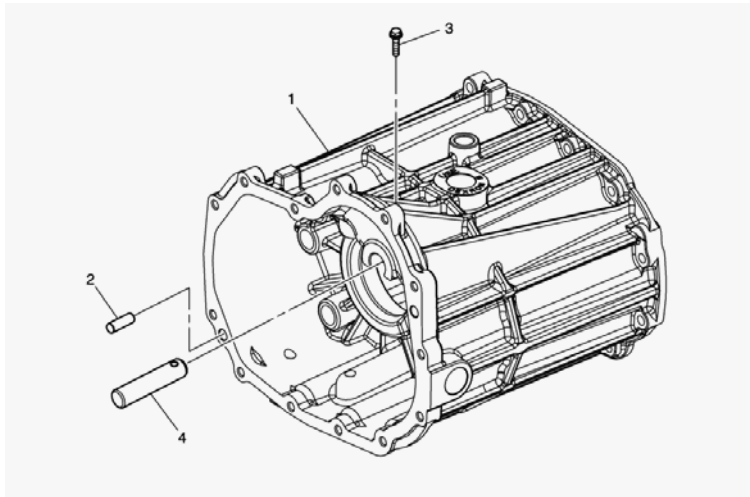


- (1) Internal Tracking Number
- (2) Transmission Assembly Number
- (3) Unit Built
- (4) Day
- (5) Month
- (6) Model Year
- (7) Broadcast Code

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:



Transmission Intermediate Case Cleaning and Inspection

Callout

Component Name

Preliminary Procedure

Warning: Wear safety glasses to avoid injury when using compressed air or any cleaning solvent. Bodily injury may occur if fumes are inhaled or if skin is exposed to chemicals.

Clean the intermediate case (1) parts with a suitable solvent. Air dry all the parts.

Intermediate Case

1. Inspect the intermediate case for the following conditions:

- Cracks

Replace the intermediate case if cracks are found.

- Scratches
- Burrs
- Nicked mounting surfaces
- Damaged sealing surfaces
- Damaged bearing bores

- Inspect the machined mating surfaces for flatness. Check the mating surfaces with a straight edge.
- Use a fine mill file to dress minor scratches or burrs.
- If scratches, or grooves or scoring cannot be removed by hand with a soft stone or crocus cloth, replace the component.

2 Transmission Intermediate Case Locating Pin

3 Reverse Idler Shaft Bolt

4 Reverse Idler Gear Shaft

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:

1. Raise the transmission/transaxle in order to remove the weight from the transmission/transaxle mount and create slight tension in the rubber.
2. Observe the transmission/transaxle mount while raising the transmission/transaxle. Replace the transmission/transaxle mount if the transmission/transaxle mount exhibits any of the following conditions:

Note: Black paint on the rubber will crack with time, this does not constitute a failure.

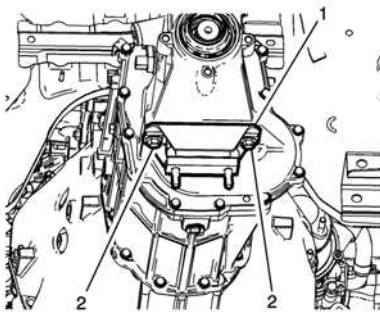
- The hard rubber surface is covered with heat check cracks.
 - The rubber is separated from the metal plate of the transmission/transaxle mount.
 - The rubber is split through the center of the transmission/transaxle mount.
- If there is movement between the metal plate of the transmission/transaxle mount and its attaching points, lower the transmission/transaxle on the transmission/transaxle mount. Tighten the bolts or nuts attaching the transmission/transaxle mount to the frame or transmission/transaxle mount bracket.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

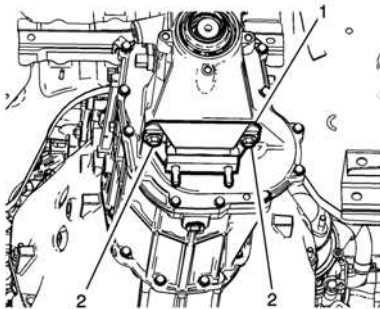
[Removal Procedure](#)

1. Remove the crossmember. Refer to Transmission Support Crossmember Replacement.



2. Remove the transmission mount bolts (2).
3. Remove the transmission mount (1) from the transmission.

[Installation Procedure](#)



1. Install the transmission mount (1) to the transmission.

Caution: Refer to Fastener Caution.

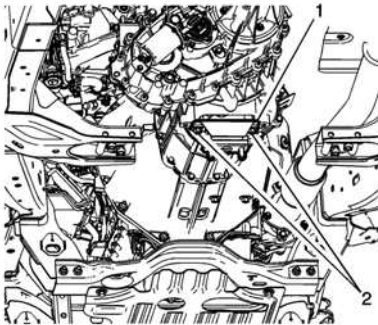
2. Install the bolts (2) and tighten to **70 Y (52 lb ft)**.
3. Install the crossmember. Refer to Transmission Support Crossmember Replacement.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

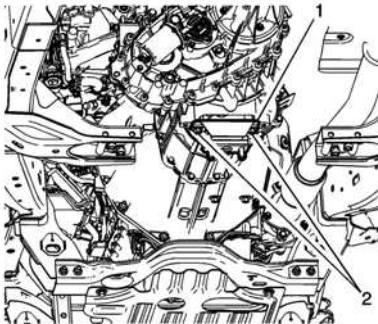
[Removal Procedure](#)

1. Remove the crossmember. Refer to Transmission Support Crossmember Replacement.



2. Remove the transmission mount bolts (2).
3. Remove the transmission mount (1) from the transmission.

[Installation Procedure](#)



1. Install the transmission mount (1) to the transmission.

Caution: Refer to Fastener Caution.

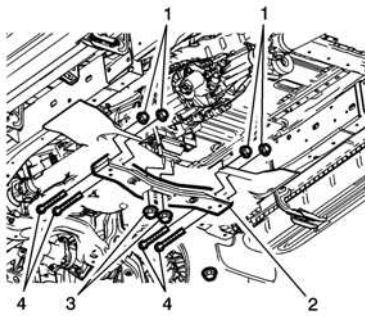
2. Install the bolts (2) and tighten to **70 Y (52 lb ft)**.
3. Install the crossmember. Refer to Transmission Support Crossmember Replacement.

2013 Chevrolet Colorado

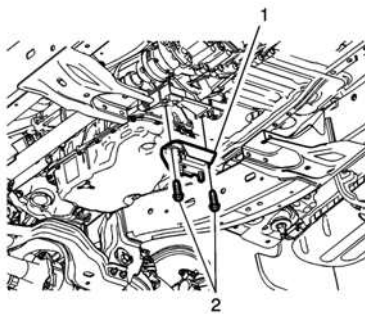
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Removal Procedure

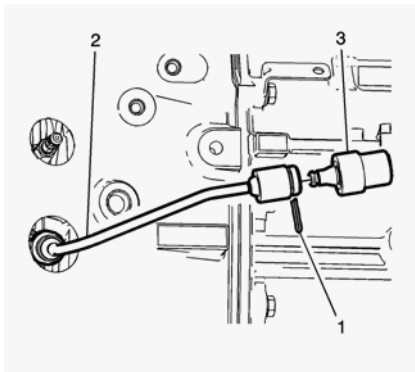
1. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.
2. Remove the transmission control lever. Refer to Transmission Control Lever Replacement.
3. Install the engine support fixture. Refer to the appropriate procedure:
 - Engine Support Fixture for the 2.4L engine
 - Engine Support Fixture for the 2.5L or 2.8L engine
 - Engine Support Fixture for the 3.6L engine
- Remove the exhaust pipe. Refer to Exhaust Pipe Replacement.
- Remove the crankshaft position sensor. Refer to Crankshaft Position Sensor Replacement.
- On 4 wheel drive vehicles, remove the transfer case. Refer to Transfer Case Replacement.
- On 2 wheel drive vehicles, remove the rear propeller shaft. Refer to Two-Piece Rear Propeller Shaft Replacement.
- Support the transmission with a transmission jack.



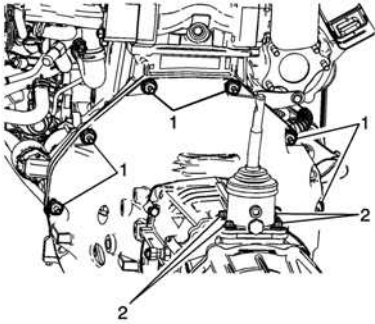
- Remove the transmission crossmember (2). Refer to Transmission Support Crossmember Replacement.



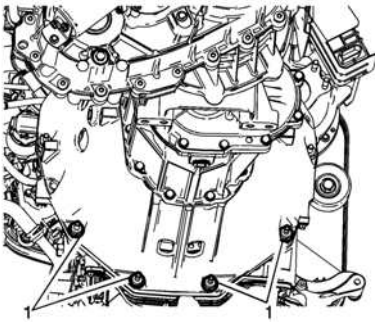
- Remove the transmission mount (1). Refer to Transmission Rear Mount Replacement.



- Remove the retaining clip (1) from the clutch actuator pipe (2).
- Disconnect the rear actuator pipe (3) from the front clutch actuator pipe (2).
- Remove the transmission vent tube. Refer to Transmission Vent Tube Replacement.
- Disconnect the transmission electrical connector from the transmission backup switch.
- Reposition the wire harness away from the transmission.
- Remove the air conditioning evaporator and blower module drain hose from the transmission clutch housing.
- Lower the transmission to gain access to the top and sides of the transmission and control lever housing fasteners.



- Remove the 4 fasteners (2) of the control lever housing.
- Remove the 6 upper fasteners (1) securing the transmission to the engine.

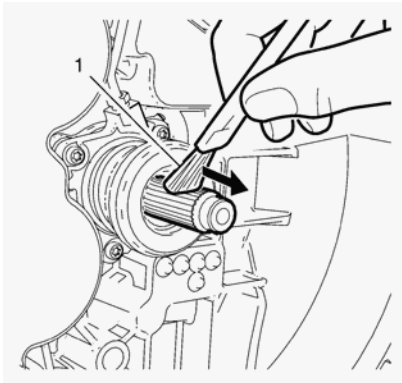


- Remove the 4 lower fasteners (1) securing the transmission to the engine.
- Pull the transmission straight back.

[Installation Procedure](#)

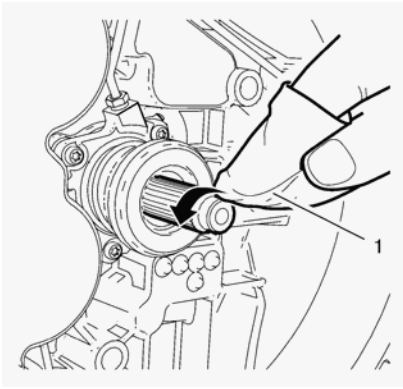
Warning: Use care when cleaning the clutch hub. The clutch hub may have sharp edges and can cause personal injury if contact is made. Wear protective gloves to avoid personal injury.

1. Clean the clutch hub and the input shaft from any debris and contaminants with a lint-free towel.



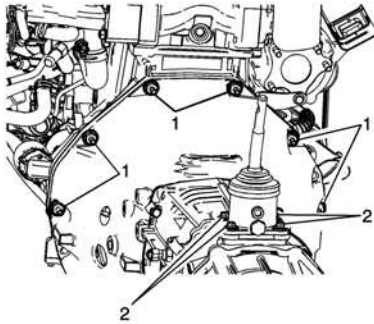
Caution: Applying too much or the wrong type of grease on the transmission input shaft may cause damage, clutch slippage or failure. Always apply the correct type of grease. Never apply more grease than is necessary to coat the transmission input shaft with a very thin film of grease.

2. Use a clean flat brush (1) to apply very light coating of multi-purpose grease to input shaft until the metal is only shiny. No visible clumps of grease are permissible regardless of size. Smear away from the transmission in direction of the shown arrow.



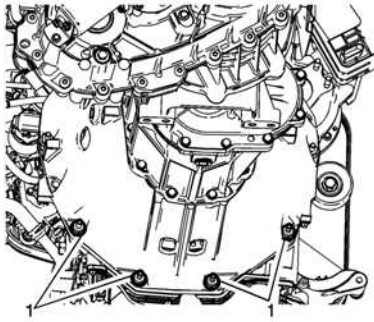
Caution: Ensure that no grease remains on the lead surface of the transmission input shaft. Clean the lead surface of the transmission input shaft prior to the assembly of the transmission to the engine. Failure to maintain a clean surface may cause clutch slippage or failure.

3. Clean the entire lead surface of the input shaft with a NEW, lint-free towel (1).
4. Raise the transmission into place.
5. Slide the transmission straight onto the locating pins.

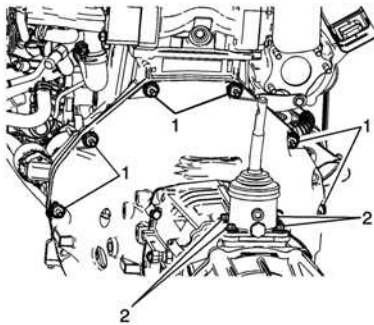


Caution: Refer to Fastener Caution.

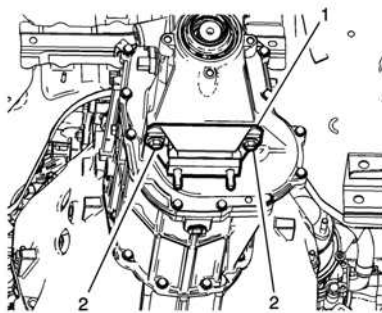
6. Install the 6 upper bolts (1) securing the transmission to the engine and tighten to **50 Y (37 lb ft)**.



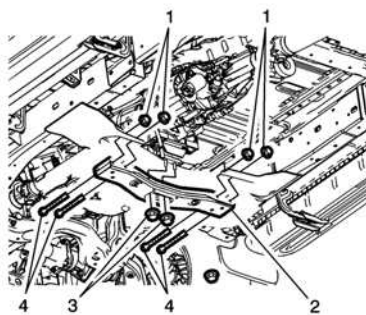
7. Install the 4 lower bolts (1) securing the transmission to the engine and tighten to **50 Y (37 lb ft)**.



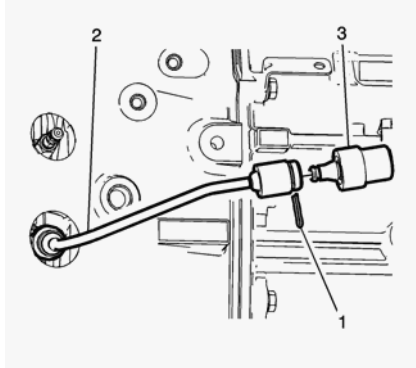
8. Install the transmission lever housing fasteners (2) and tighten to **18 Y (13 lb ft)**.



9. Install the transmission mount (1). Refer to Transmission Rear Mount Replacement.



10. Install the transmission crossmember (2). Refer to Transmission Support Crossmember Replacement.
11. Install the air conditioning evaporator and blower module drain hose to the transmission clutch housing.
12. Install the wire harness to the transmission.
13. Connect the transmission electrical connectors to the transmission.



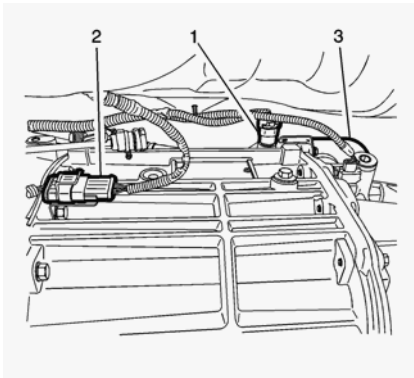
14. Connect the rear actuator pipe (3) to the front clutch actuator pipe (2).
15. Install the retaining clip (1) to the clutch actuator pipe (2).
16. Install the transmission vent tube. Refer to Transmission Vent Tube Replacement.
17. Remove the transmission jack.
18. On 4 wheel drive vehicles, install the transfer case. Refer to Transfer Case Replacement.
19. On 2 wheel drive vehicles, install the rear propeller shaft. Refer to Two-Piece Rear Propeller Shaft Replacement.
20. Install the crankshaft position sensor (1). Refer to Crankshaft Position Sensor Replacement.
21. Install the exhaust pipe. Refer to Exhaust Pipe Replacement.
22. Lower the vehicle.
23. Remove the engine support fixture.
24. Install the transmission control lever. Refer to Transmission Control Lever Replacement.
25. Connect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.
26. Bleed the hydraulic clutch system. Refer to Hydraulic Clutch System Bleeding.

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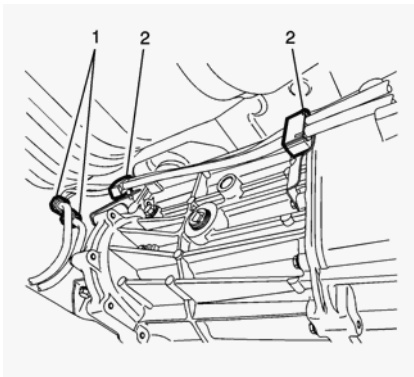
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

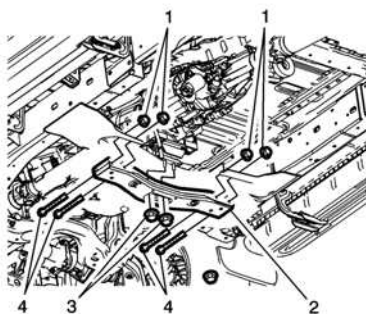
1. Disconnect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.
2. Remove the transmission control lever. Refer to Transmission Control Lever Replacement.
3. Install the engine support fixture. Refer to the appropriate procedure:
 - Engine Support Fixture for the 2.4L engine
 - Engine Support Fixture for the 2.5L or 2.8L engine
 - Engine Support Fixture for the 3.6L engine
- Remove the exhaust pipe. Refer to Exhaust Pipe Replacement.
- On 4 wheel drive vehicles, remove the transfer case. Refer to Transfer Case Replacement.
- On 2 wheel drive vehicles, remove the rear propeller shaft. Refer to Two-Piece Rear Propeller Shaft Replacement.
- Support the transmission with a transmission jack.



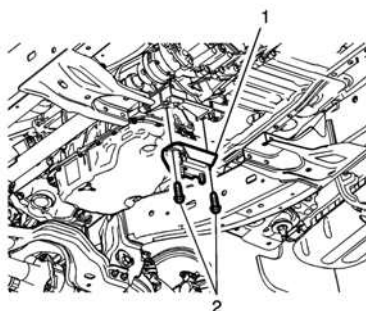
- Disconnect the following wiring electrical connectors:
 - Backup lamp switch (1)
 - Oxygen sensor (2)
 - Vehicle speed sensor (3)



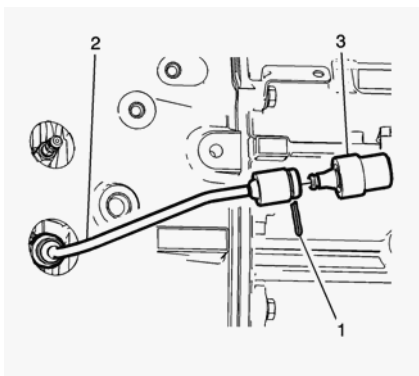
- Disconnect the feed fuel and evaporative quick connect fitting (1). Refer to Plastic Collar Quick Connect Fitting Service.
- Remove the fuel feed and evaporative pipe from the retainers (2).



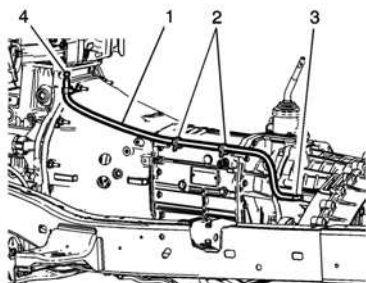
- Remove the transmission crossmember (2). Refer to Transmission Support Crossmember Replacement.



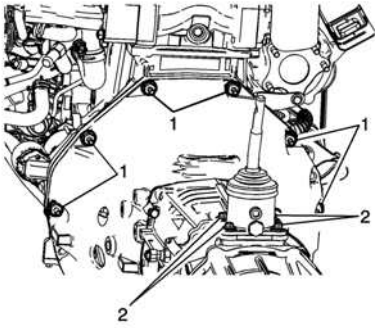
- Remove the transmission mount (1). Refer to Transmission Rear Mount Replacement.



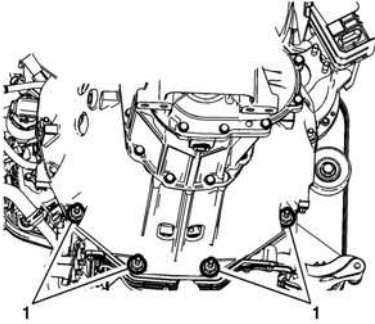
- Remove the retaining clip (1) from the clutch actuator pipe (2).
- Disconnect the rear actuator pipe (3) from the front clutch actuator pipe (2).



- Remove the transmission vent tube (1), if equipped.
- Disconnect the transmission electrical connector from the transmission backup switch.
- Reposition the wire harness away from the transmission.
- Remove the air conditioning evaporator and blower module drain hose from the transmission clutch housing.
- Lower the transmission to gain access to the top and sides of the transmission and control lever housing fasteners.



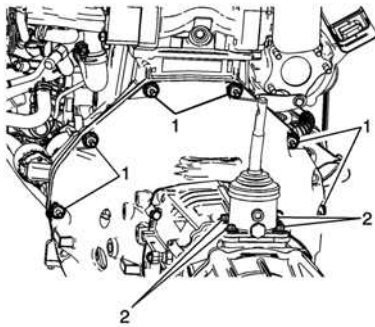
- Remove the 4 fasteners (2) of the control lever housing.
- Remove the 6 upper fasteners (1) securing the transmission to the engine.



- Remove the 4 lower fasteners (1) securing the transmission to the engine.
- Pull the transmission straight back.

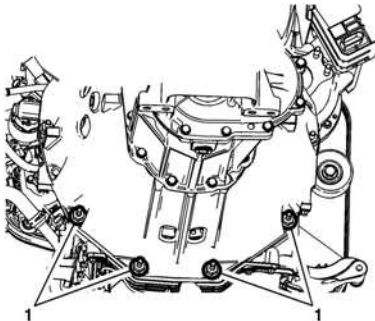
[Installation Procedure](#)

1. Raise the transmission into place.
2. Slide the transmission straight onto the locating pins.

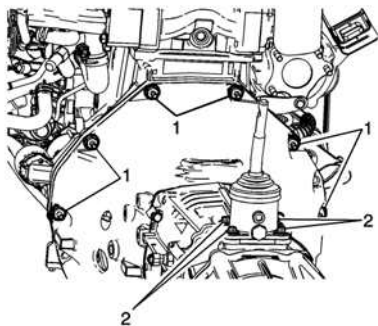


Caution: Refer to Fastener Caution.

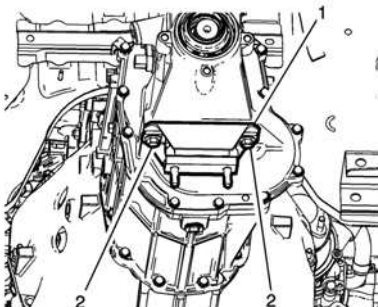
3. Install the 6 upper bolts (1) securing the transmission to the engine and tighten to **50 Y (37 lb ft)**.



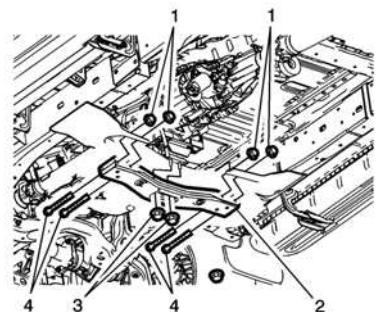
4. Install the 4 lower bolts (1) securing the transmission to the engine and tighten to **50 Y (37 lb ft)**.



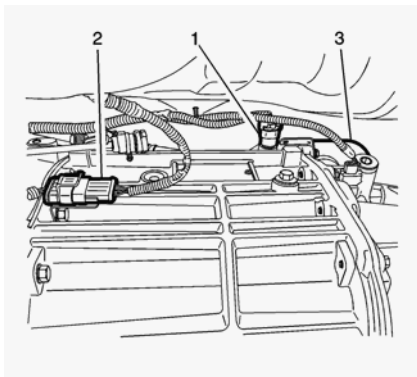
5. Install the transmission lever housing fasteners (2) and tighten to **18 Y (13 lb ft)**.



6. Install the transmission mount (1). Refer to Transmission Rear Mount Replacement.



7. Install the transmission crossmember (2). Refer to Transmission Support Crossmember Replacement.
8. Install the air conditioning evaporator and blower module drain hose to the transmission clutch housing.
9. Install the wire harness to the transmission.
10. Connect the feed fuel and evaporative quick connect fittings (1). Refer to Plastic Collar Quick Connect Fitting Service.
11. Install the fuel feed and evaporative pipe to the retainers (2).

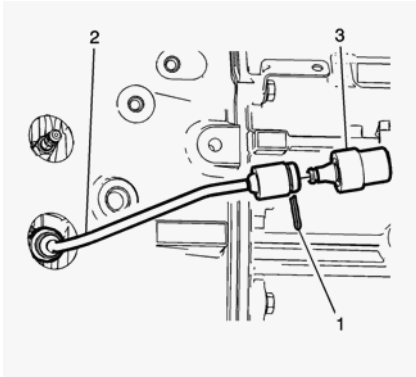


12. Connect the following wiring electrical connectors:

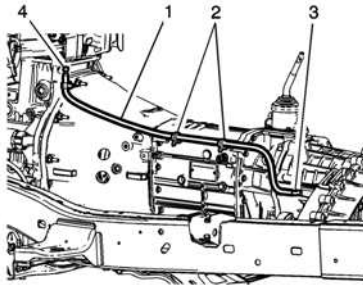
- Backup lamp switch (1)
- Oxygen sensor (2)

Transmission Replacement (LP8)

- Vehicle speed sensor (3)



- Connect the rear actuator pipe (3) to the front clutch actuator pipe (2).
- Install the retaining clip (1) to the clutch actuator pipe (2).



- Install the transmission vent tube (1), if equipped.
- Remove the transmission jack.
- On 4 wheel drive vehicles, install the transfer case. Refer to Transfer Case Replacement.
- On 2 wheel drive vehicles, install the rear propeller shaft. Refer to Two-Piece Rear Propeller Shaft Replacement.
- Install the exhaust pipe. Refer to Exhaust Pipe Replacement.
- Lower the vehicle.
- Remove the engine support fixture.
- Install the transmission control lever. Refer to Transmission Control Lever Replacement.
- Connect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.
- Bleed the hydraulic clutch system. Refer to Hydraulic Clutch System Bleeding.

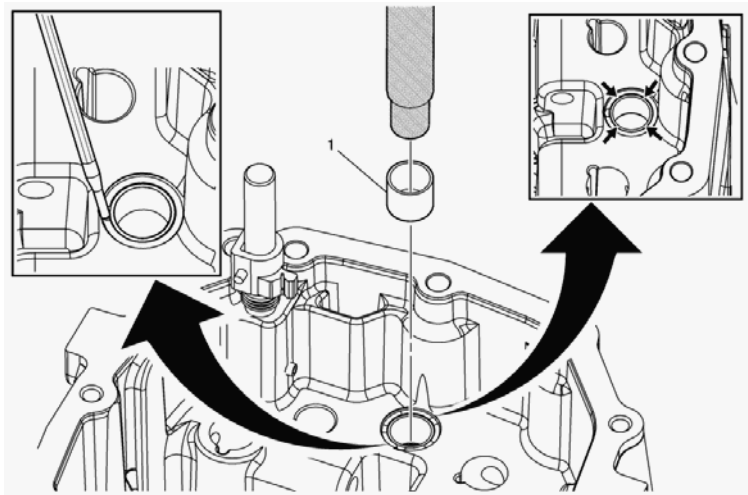
2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Table 1: [Clutch Housing](#)

Table 2: [Rear Case Housing](#)

[Clutch Housing](#)



Clutch Housing

Callout

Component Name

Transmission Bushing – Shift Shaft

Caution: When locking the bushing be careful not to damage the bushing itself.

Procedure

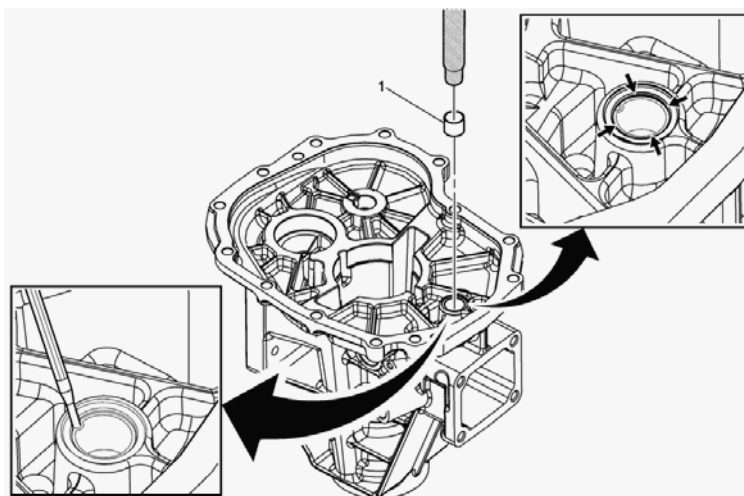
1. To remove, punch and deform the bushing as shown. Use pliers to pull the bushing out from the bushing bore.
2. To install, use a punch and stake the bushing by punching the housing material in four positions around the bushing bore.
3. Apply a thin coating of recommended grease to the bushing inner diameter.

Special Tools

DT 50849 Permaglide Bushing Installer

For equivalent regional tools, refer to Special Tools.

[Rear Case Housing](#)



Transmission Shift Shaft Bushing Replacement

Rear Case Housing

Callout

Component Name

Transmission Bushing – Shift Shaft

Caution: When staking the bushing be careful not to damage the bushing itself.

Procedure

1

1. To remove, punch and deform the bushing as shown. Use pliers to pull the bushing out from the bushing bore.
2. To install, use a punch and stake the bushing by punching the housing material in four positions around the bushing bore.
3. Apply a thin coating of recommended grease to the bushing inner diameter.

Special Tools

DT 50849 Permaglide Bushing Installer

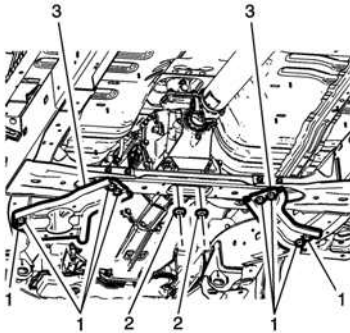
For equivalent regional tools, refer to Special Tools.

2013 Chevrolet Colorado

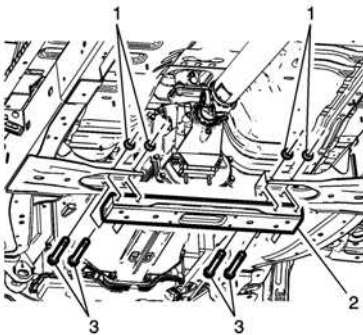
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Removal Procedure

1. Raise the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Support the transmission assembly with a suitable jack.
3. If equipped, remove the fuel feed pipe and emission pipe bracket from the crossmember.

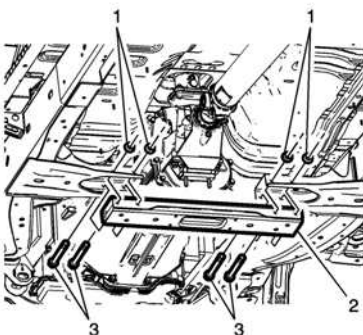


4. Remove the crossmember brace bolts (1).
- Note:** It is not necessary to remove the left crossmember brace from the vehicle.
5. Remove the right crossmember brace (3) from the vehicle.
 6. Remove the 2 left brace to crossmember bolts (1) leaving the left brace on the vehicle.
 7. Remove the transmission mount fasteners (2).



8. Remove the crossmember mounting nuts (1) and bolts (3).
9. Slide to the side the crossmember (2) from the vehicle.

Installation Procedure



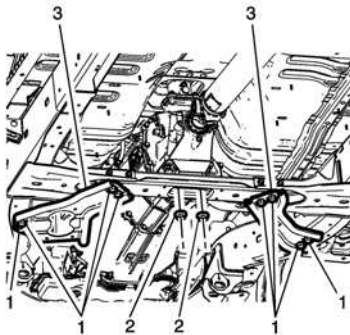
1. Install the crossmember (2) to the vehicle.
2. Perform the following procedure before installing the bolts (3).

Transmission Support Crossmember Replacement (2WD Manual Transmission)

1. Remove all traces of the original adhesive patch.
2. Clean the threads of the bolt with denatured alcohol or equivalent and allow to dry.
3. Apply threadlocker. Refer to Adhesives, Fluids, Lubricants, and Sealers.

Caution: Refer to Fastener Caution.

3. Install the bolts (3) and the nuts (1) and tighten to **67 Y (49 lb ft)**.



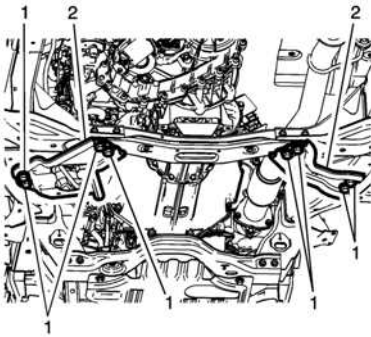
4. Install the right crossmember brace (3) to the vehicle.
5. Install the crossmember brace bolts (1) and tighten to **106 Y (78 lb ft)**.
6. Install the transmission mount lower fasteners (2) and tighten to **50 Y (37 lb ft) + 90 degrees**.
7. If equipped, install the fuel feed pipe and emission pipe bracket on the crossmember.
8. Lower the vehicle.

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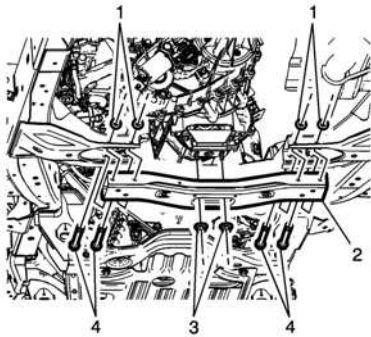
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

Removal Procedure

1. Raise the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Support the transmission assembly with a suitable jack.

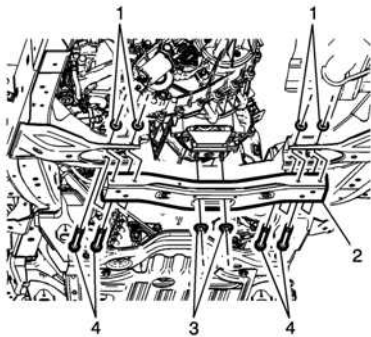


3. Loosen the crossmember brace bolts (1).



4. Remove the transmission mount fasteners (3).
5. Remove the crossmember mounting nuts (1) and bolts (4).
6. Remove the crossmember (2) from the vehicle.

Installation Procedure

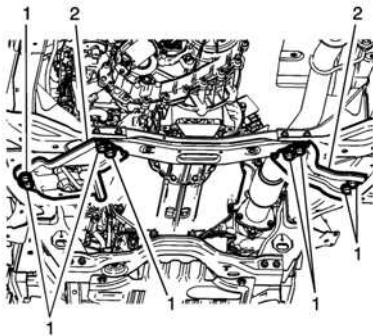


1. Install the crossmember (2) to the vehicle.
2. Perform the following procedure before installing the bolts (4).
 1. Remove all traces of the original adhesive patch.
 2. Clean the threads of the bolt with denatured alcohol or equivalent and allow to dry.
 3. Apply threadlocker. Refer to Adhesives, Fluids, Lubricants, and Sealers.

Caution: Refer to Fastener Caution.

Transmission Support Crossmember Replacement (4WD Manual Transmission)

3. Install the bolts (4) and the nuts (1) and tighten to **67 Y (49 lb ft)**.
4. Install the transmission mount lower fasteners (3) and tighten to **50 Y (37 lb ft) + 90 degrees**.



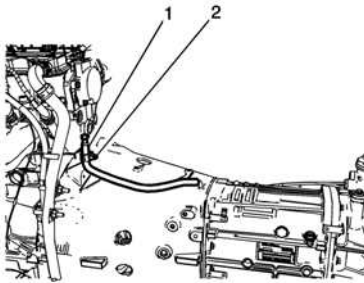
5. Tighten the crossmember brace bolts (1) to **106 Y (78 lb ft)**.
6. Install the transmission mount fasteners (3).
7. Lower the vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

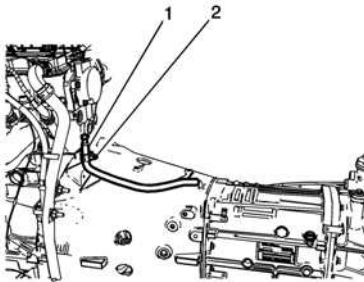
[Removal Procedure](#)

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.



2. Disconnect the transmission vent hose assembly (1) from the engine compartment bracket (2).
3. Disconnect the transmission vent hose assembly (1) from the transmission.
4. Remove the transmission vent hose assembly (1) from the vehicle.

[Installation Procedure](#)



Important: Ensure the vent hoses are free of kinks and routed clear of sharp objects.

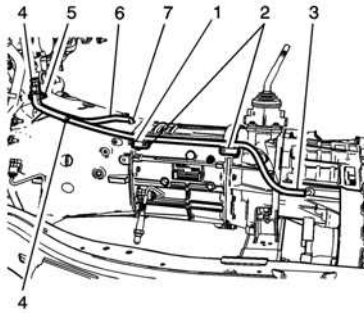
1. Connect the transmission vent hose assembly (1) to the engine compartment bracket (2).
2. Connect the transmission vent hose assembly (1) to the transmission.
3. Lower the vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

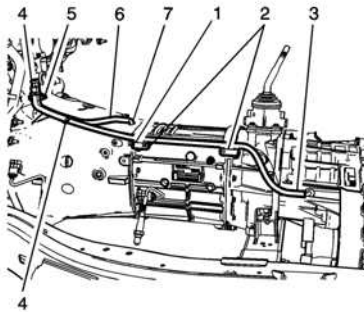
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.



2. Disconnect the transmission vent hose assembly (6) from the following:

- The engine compartment bracket (5)
- The transmission vent pipe (7)
- Cut the wire ties (4).
- Remove the transmission vent hose (6) from the vehicle.

[Installation Procedure](#)



Important: Ensure the vent hoses are free of kinks and routed clear of sharp objects.

1. Install the wire ties (4) to attach the transmission case vent hose (1) to the transfer case vent hose (7).
2. Connect the transfer case vent hose assembly (1) to the following:

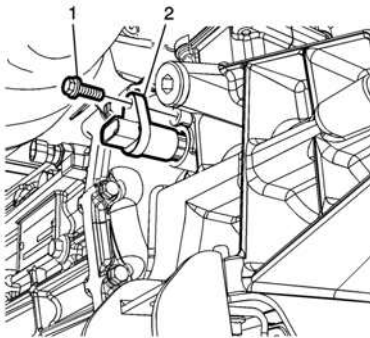
- The transmission vent pipe (7)
- The engine compartment bracket (5)
- Lower the vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

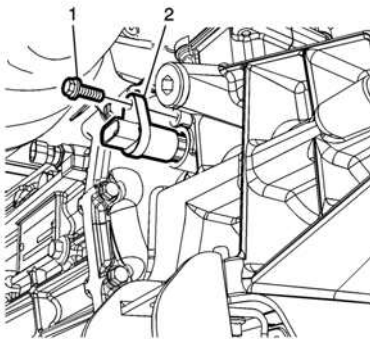
[Removal Procedure](#)

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Remove the electrical connector from the speed sensor.



3. Remove the speed sensor retaining fastener (1).
4. Remove the speed sensor (2) from the transmission case.

[Installation Procedure](#)



Caution: Refer to Fastener Caution.

1. Install the new speed sensor (2) into the transmission case. Tighten the speed sensor fastener to **12 Y (106 lb in)**.
2. Install the electrical connector to the speed sensor.
3. Lower the vehicle. Refer to Lifting and Jacking the Vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

To replace the speed sensor on 4 wheel drive models, refer to Transfer Case Rear Output Shaft Speed Sensor Replacement in the transfer case — AAM (NQV) section.