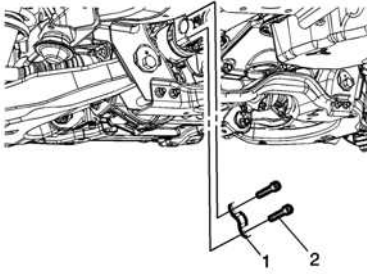


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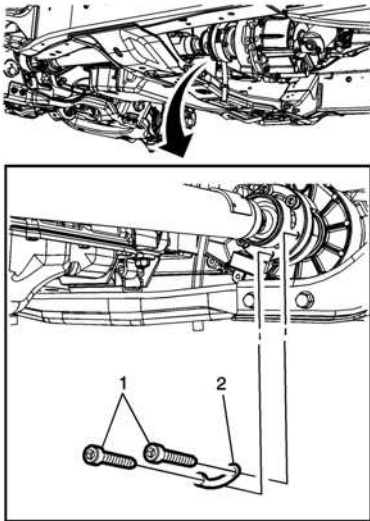
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

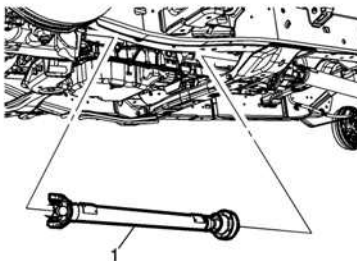
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.



2. Remove the 4 front propeller shaft bolts (2) and the 2 retaining straps (1).



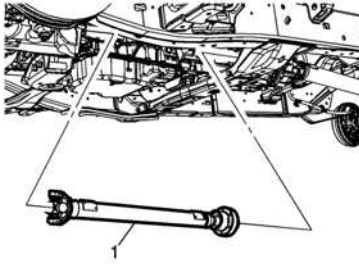
3. Remove the 6 front propeller shaft bolts (1) and the 3 washers (2).



Note: Use electrical tape and wrap the front universal joint bearing cups to keep them from falling off when handling the front propeller shaft.

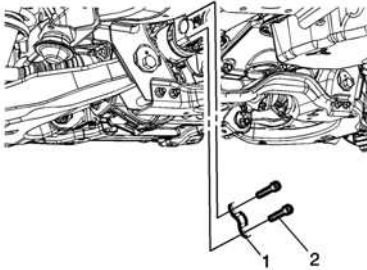
4. Remove the front propeller shaft (1) from the vehicle.

[Installation Procedure](#)



Note: Hand install two or three of the propeller shaft bolts and washers to hold the propeller shaft in place installing the front of the propeller shaft in the front axle pinion flange.

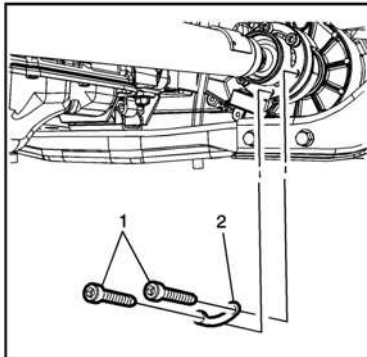
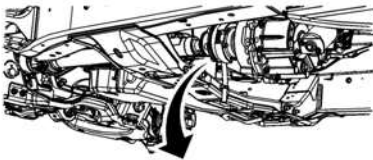
1. Install the front propeller shaft in the vehicle (1).
2. Install the front propeller shaft (1) in the drive pinion flange.



3. Install the front propeller shaft retaining strap (1) and bolts (2).

Caution: Refer to Fastener Caution.

4. Tighten the front propeller shaft bolts (2) to **28 Y (21 lb ft)**.

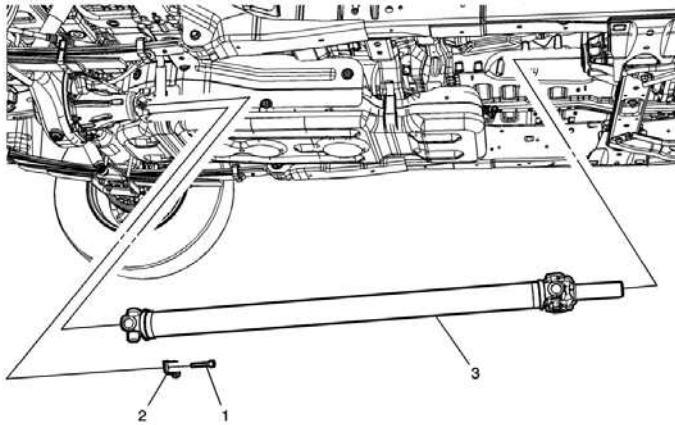


5. Install the remaining front propeller shaft washers (2) and bolts (1).
6. Tighten the bolts to **61 Y (45 lb ft)**.
7. Remove the supports and lower the vehicle.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:



One-Piece Propeller Shaft Replacement

Callout

Component Name

Preliminary Procedure

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

Propeller Shaft Bracket Strap Nuts (Qty: 4)

Caution: Refer to Lifting and Jacking the Vehicle.

1

Tighten

28 Y 21 lb ft)

2

Propeller Shaft Bracket Straps (Qty: 2)

Propeller shaft Assembly.

3

Procedure

Using a clean shop towel, cover the end of the transmission or transfer to prevent any fluid leaks.

2013 Chevrolet Colorado

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

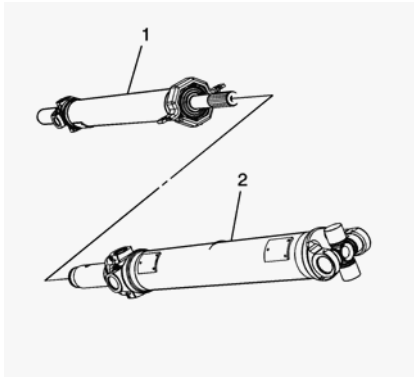
Special Tools

- DT 22912-B Rear Pinion and Axle Bearing Remover
- DT 39441 5th/6th Drive Gear Installer

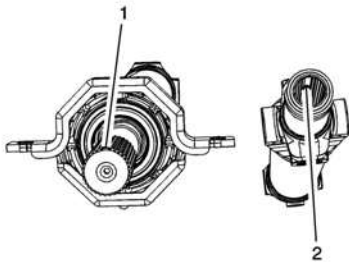
For regional equivalent tools, refer to Special Tools

Removal Procedure

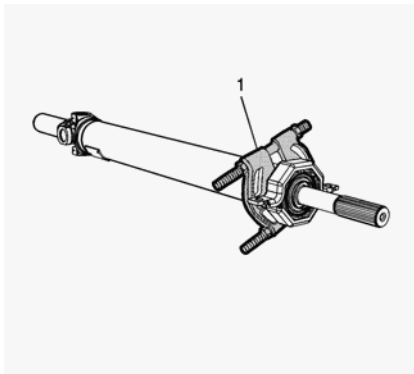
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Remove the propeller shaft assembly from the vehicle. Refer to Two-Piece Rear Propeller Shaft Replacement.



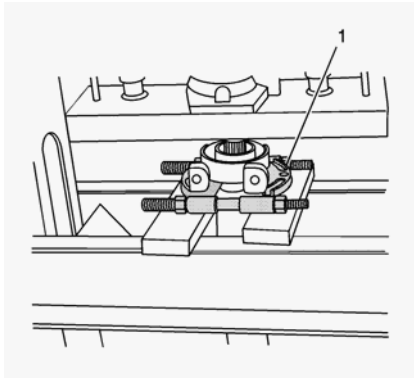
3. Separate the front propeller shaft (1) and the rear propeller shaft (2).



4. When separating the front and rear propeller shafts, note the position of the master spline (1) on the front and (2) on the rear propeller shaft.

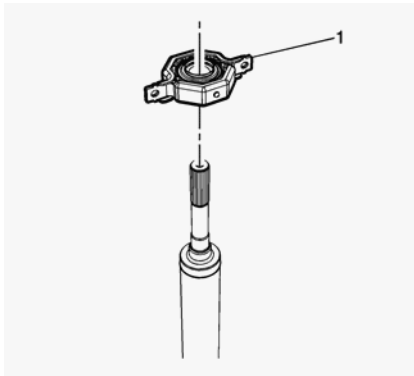


5. Position the DT 22912-B remover (1) on the propeller shaft.

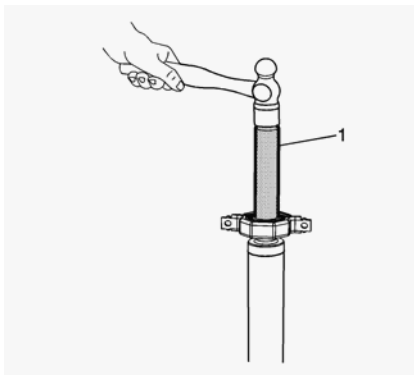


6. Position the propeller shaft (1) in a hydraulic press.
7. Using the hydraulic press and the *DT 22912-B* remover , remove the center support bearing (1).

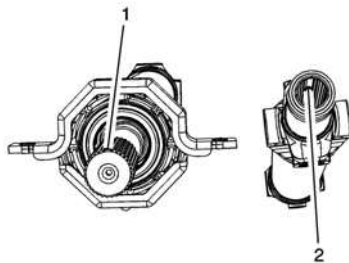
[Installation](#)



1. Position the center support bearing (1) on the propeller shaft.

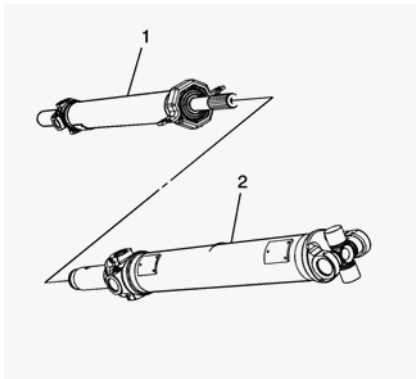


2. Install the appropriate tool (1) on the center support bearing.
3. Using the hammer and the *DT 39441* installer (1), install the center support bearing (2).



4. Align the master splines (1) and (2) on the front and rear propeller shafts.

Propeller Shaft Center Support Bearing Replacement



5. Reconnect the front propeller shaft (1) and the rear propeller shaft (2).
6. Install the propeller shaft assembly in the vehicle. Refer to Two-Piece Rear Propeller Shaft Replacement.
7. Remove the supports and lower the vehicle.

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

The propeller shaft is a tube with universal joints at both ends which do not require periodic maintenance, that transmit power from the transfer case or transmission output shaft to the differential.

[Front Propeller Shaft Description](#)

The front propeller shaft transmits rotating force from the transfer case to the front differential when the transfer case is engaged. The front propeller shaft connects to the transfer case using a splined slip joint.

[One Piece Propeller Shaft Description](#)

A 1 piece propeller shaft uses a splined slip joint to connect the driveline to the transmission or transfer case.

[Two Piece Propeller Shaft Description](#)

There are 3 universal joints used on the two piece propeller shaft, A center bearing assembly is used to support the propeller shaft connection point, and help isolate the vehicle from vibration.

[Propeller Shaft Phasing Description](#)

The propeller shaft is designed and built with the yoke lugs (ears) in line with each other. This produces the smoothest running shaft possible. A propeller shaft designed with built in yoke lugs in line is known as in - phase. An out of phase propeller shaft often causes vibration. The propeller shaft generates vibration from speeding up and slowing down each time the universal joint goes around. The vibration is the same as a person snapping a rope and watching the wave reaction flow to the end. An in phase propeller shaft is similar to 2 persons snapping a rope at the same time and watching the waves meet and cancel each other out. A total cancellation of vibration produces a smooth flow of power in the drive line. All splined shaft slip yokes are keyed in order to ensure proper phasing.

[Universal Joint Description](#)

The universal joint is connected to the propeller shaft. The universal consist of 4 caps with needle bearings and grease seals mounted on the trunnions of a cross or spider. These bearings and caps are greased at the factory and no periodic maintenance is required. There are 2 universal joints used in a one piece propeller shaft and 3 used in two piece propeller shaft. The bearings and caps are pressed into the yokes and held in place with snap rings, except for 2 bearings on some models witch are strapped onto the pinion flange of the differential. Universal joints are designed to handle the effects of various loads and rear axle windup conditions during acceleration and braking. The universal joint operates efficiently and safely within the designed angle variations. when the design angles are exceeded, the operational life of the joint decreases.

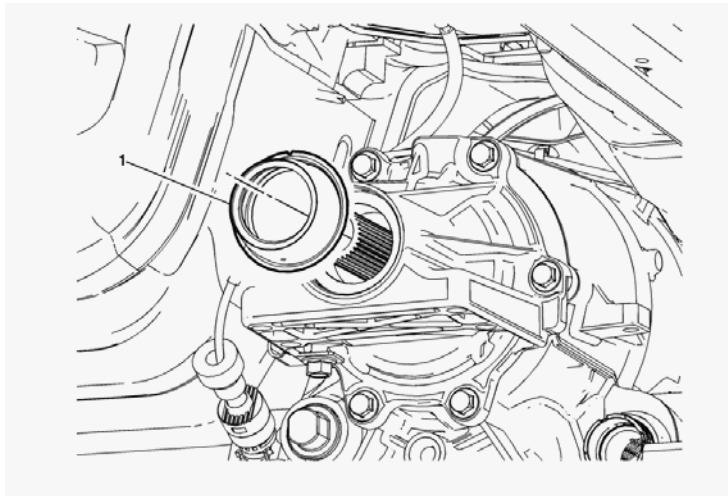
[Center Bearing Description](#)

Center bearings support the driveline when using 2 or more propeller shafts. The center bearing is a ball bearing mounted in a rubber cushion that attaches to a frame crossmember. The manufacturer prelubricates and seals the bearing. The cushion allows vertical motion at the driveline and helps isolate the vehicle from vibration.

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Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:



Propeller Shaft Front Slip Yoke Oil Seal Replacement

Callout

Component Name

Preliminary Procedure

Remove the rear propeller shaft. Refer to One-Piece Propeller Shaft Replacement.

Propeller Shaft Front Slip Yoke Oil Seal

1

Procedure

Using a suitable seal puller, remove the seal.

2013 Chevrolet Colorado

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

[One Piece Propeller Shaft Phasing Correction](#)

An out of phase single-piece propeller shaft is very unusual. If the phasing inspection procedure revealed that prop shaft is not phased correctly, the welded yokes are in the wrong position, or the shaft is damaged due to twisting and the propeller shaft requires replacement to restore proper cancellation of the U-joints.

[Multiple-Piece Propeller Shaft Phasing Correction](#)

1. If the phasing inspection procedure revealed that a prop shaft is not phased correctly to the mating slip yoke, the end yoke is welded on in the wrong position, the slip yoke is mis-aligned to the stub shaft, or the shaft is damaged due to twisting.
2. If the shaft is visibly damaged, it requires replacement.
3. If the shaft exhibits no visual physical defects or damage, perform the following:
 1. Remove the slip yoke from the stub shaft to determine if it is possible to reinstall the slip yoke in a different position on the stub shaft.
 2. If the stub shaft is keyed to ensure proper alignment of the stub shaft and the slip yoke, then the propeller shafts require replacement to restore proper cancellation of the U-joints.
 3. If the stub shaft is not keyed, attempt to re-align the front shaft and slip yoke to each other. Repeat the inspection procedure to confirm the results.
 4. If proper phasing cannot be obtained, the propeller shaft requires replacement to restore proper cancellation of the U-joints.

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

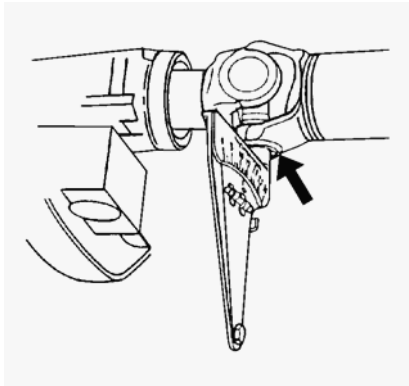
Special Tools

J-23498-A Driveshaft Inclinator , or equivalent

Note: This inspection procedure is intended to inspect propeller shaft systems with 2 or 3 U-joints only.

Correct phasing of a propeller shaft refers to the relative alignment of the U-joint yoke flanges to each other to provide proper cancellation of the U-joints. The yokes should be directly aligned to within the range specified in this procedure.

1. Raise and support the vehicle. On vehicles with solid axles, ensure that the drive axle is supported at ride height—vehicle body supported by suspension components. Ensure the wheels are free to rotate. Refer to Lifting and Jacking the Vehicle.
2. Place the transmission in NEUTRAL.
3. Clean any corrosion or foreign material from the U-joint bearing caps.
4. Remove any of the U-joint bearing cap snap rings that may interfere with the correct placement of the J-23498-A Driveshaft Inclinator , or equivalent.



5. Inspect the prop shaft for proper phasing.
 1. Rotate the prop shaft or shafts to align the shaft yoke flanges vertically.
 2. Install the J-23498-A Driveshaft Inclinator , or equivalent to the lower U-joint bearing cap of the rear U-joint of the shaft. The J-23498-A Driveshaft Inclinator , or equivalent should be aligned perpendicular to the propeller shaft.
 3. Set the indicator line on the J-23498-A Driveshaft Inclinator , or equivalent to 15, the horizontal reference.
 4. Rotate the propeller shaft slightly to center the bubble to the indicator. The U-joint is now vertical.
 5. Without disturbing the setting on the J-23498-A Driveshaft Inclinator , or equivalent, remove the J-23498-A Driveshaft Inclinator , or equivalent from the rear U-joint bearing cap.
 6. Install the J-23498-A Driveshaft Inclinator , or equivalent to the lower U-joint bearing cap of the front U-joint of the same shaft.
 7. Observe and record the reading of the front U-joint with the J-23498-A Driveshaft Inclinator , or equivalent still set to 15, the horizontal reference.
6. For prop systems with 3 U-joints, rotate the shafts 1/4 turn and repeat steps 5.1–5.7 for the other prop shaft.
7. If the difference between the front and rear U-joints of a welded yoke propeller shaft is 3 degrees or less, the propeller shaft is properly phased.
8. If the difference between the front and rear U-joints of a welded-yoke propeller shaft is greater than 3 degrees, the propeller shaft is either constructed improperly, or damaged from twisting. Refer to Propeller Shaft Phasing Correction.
9. If the difference between the welded yoke and slip yoke of a propeller shaft is 1.5 degrees or less, the prop shaft is properly phased.
10. If the difference between the welded yoke and slip yoke of a propeller shaft is greater than 1.5 degrees, the propeller shaft is either constructed improperly, or damaged from twisting. Refer to Propeller Shaft Phasing Correction.

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Submodel: | Engine Type: | Liters:
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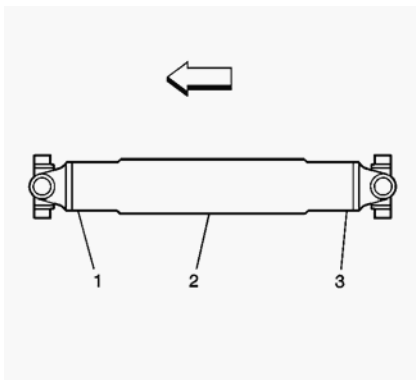
Special Tools

- GE-7872 Magnetic Base Dial Indicator Set , or equivalent
- GE-8001 Dial Indicator Set , or equivalent

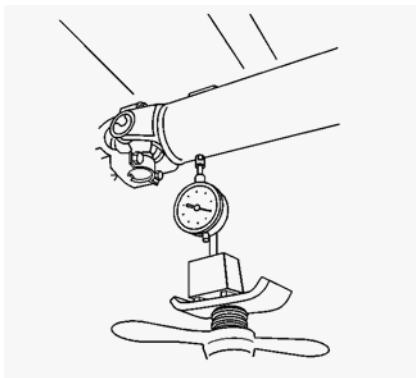
For equivalent regional tools, refer to Special Tools and Equipment.

Note:

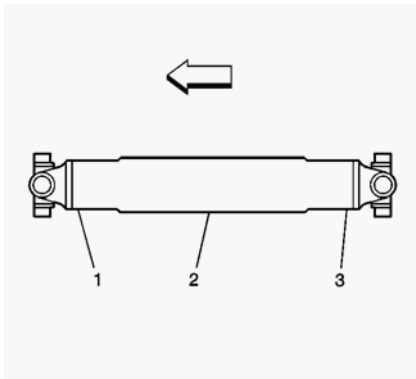
- This measurement procedure is intended to measure propeller shaft runout for prop shaft systems with 2 or 3 U-joints only. This is not for prop systems with only 1 U-joint, or with only constant velocity (CV) joints, and/or coupler assemblies.
- When measuring runout of propeller shafts, do not include fluctuations on the dial indicator due to welds or surface irregularities.
- Always inspect the runout of any replacement propeller shaft.



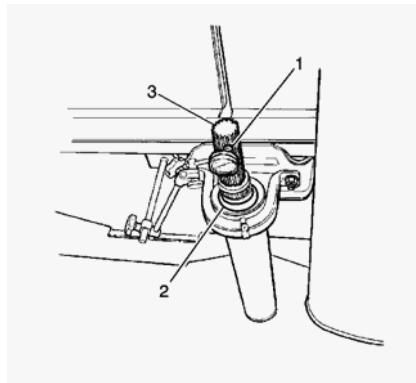
1. Raise and support the vehicle. On vehicles with solid axles, ensure that the drive axle is supported at ride height – vehicle body supported by suspension components. Ensure the wheels are free to rotate. Refer to Lifting and Jacking the Vehicle.
2. Place the transmission in NEUTRAL.
3. Clean the circumference of the propeller shaft or shafts of any debris and/or undercoating along the front (1), center (2), and rear (3) positions.
4. Inspect the propeller shaft or shafts for dents, damage, and/or missing weights. Any propeller shaft that is dented or damaged requires replacement.



5. For 1-piece and 2-piece prop systems, mount the GE-7872 Magnetic Base Dial Indicator Set , or equivalent, or the GE-8001 Dial Indicator Set , or equivalent, to the vehicle underbody or to a service stand positioned just clear of the U-joint yoke weld on the prop shaft.



6. Rotate the drive axle pinion flange, torque tube input flange, transmission output, or transfer case output flange by hand while taking runout measurements of the prop shaft or shafts. The prop shaft will rotate more easily in one direction than in the other. If necessary, the tire and wheel assemblies and even the brake caliper assemblies can be positioned and supported aside, or the brake drums can be removed from the drive axle to provide easier rotation of the prop shaft or shafts.
7. For all prop systems, measure and record the runout at each U-joint welded yoke location (1, 3) and at the center (2) of each prop shaft.
8. For 1-piece prop systems, proceed to step 10.



9. For 2-piece prop systems, perform the following inspections and measurement of the stub shaft:
 1. Mark the mating position for each end of the prop shaft containing the slip yoke, then remove the shaft.
 2. Inspect the prop shaft support bearing assembly (2) for damaged rubber components, worn bearing or bearings, or a damaged/cracked bracket which could be affecting the runout of the propeller shafts.
 3. If the support bearing assembly exhibited any of these conditions, it requires replacement before proceeding.
 4. Inspect the support bearing assembly (2) for loose or missing shims/washers if equipped. Reinstall correctly or replace any shims/washers as necessary to ensure proper alignment of the support bearing assembly.
 5. Position the GE-7872 Magnetic Base Dial Indicator Set , or equivalent (1), or the GE-8001 Dial Indicator Set , or equivalent (1), approximately 13 mm (½ in) from the end of the stub shaft (3).
 6. Record the runout measurement at the stub shaft splines.
10. Compare the prop shaft runout measurements recorded to the runout tolerance specifications. Refer to Propeller Shaft Runout Specifications.
11. If the prop system has a U-joint at the transmission or transfer case output flange, and if the prop shaft runout measurements exceed runout tolerance specifications for that prop shaft at that location, or at the stub shaft if part of the front shaft, perform the following:
 1. Inspect the deflection of the transmission or transfer case output shaft for indications of a worn or damaged bushing which could be affecting the runout of the prop shaft.
A leaking transmission or transfer case output shaft seal may be an indication of an output shaft bushing concern.
 2. If the transmission or transfer case output shaft bushing is found to be worn or damaged, the bushing must be replaced before proceeding.
 3. If the transmission or transfer case output shaft bushing was replaced; re-measure and record the runout of the prop shaft at the same locations measured previously.
 4. Compare the prop shaft runout re-measurements recorded to the runout tolerance specifications.
 5. If the prop shaft runout re-measurements still exceed runout tolerances at the same location or at the stub shaft, if part of the front shaft, the prop shaft requires replacement before proceeding. Check the runout of the replacement prop shaft.
 6. If the transmission or transfer case output shaft bushing was not found to be worn or damaged, the prop shaft requires replacement before proceeding. Check the runout of the replacement prop shaft.
12. If the prop system has a U-joint at the drive axle pinion or torque tube input flange, and if the prop shaft runout measurements exceed runout tolerance specifications for that prop shaft at that location, or at the stub shaft if part of the rear shaft, perform the following:
 1. Mark the mating position for each end of the prop shaft, then remove the shaft from the pinion input, or torque tube input flange.
 2. Rotate the shaft 180 degrees from its original position.
 3. Reinstall the shaft to the pinion or torque tube input flange.
 4. Re-measure and record the runout of the shaft at the same locations measured previously.
 5. Compare the prop shaft re-measurements recorded to the runout tolerance specifications.
 6. If any of the runout re-measurements still exceed runout tolerances, perform the following:
 1. Inspect the pinion or torque tube input flange runout to determine if it is affecting the runout of the prop shaft. Refer to the appropriate procedure: Torque Tube Input Flange Runout Measurement, Pinion Flange Runout Measurement, or Differential Pinion Input Shaft Runout Measurement.

Propeller Shaft Runout Measurement

2. If the pinion or torque tube input flange runout exceeds runout tolerances, the flange must be re-indexed or replaced to bring the runout within tolerances before proceeding.
 3. If the pinion or torque tube input flange was re-indexed or replaced, return the prop shaft to its original relationship when reinstalling the shaft to the flange.
 4. If the first measurement of pinion or torque tube input flange runout was within tolerances, the prop shaft requires replacement. Check the runout of the replacement prop shaft.
 5. If the pinion or torque tube input flange was re-indexed or replaced, re-measure and record the runout of the shaft at the same locations measured previously.
 6. Compare the shaft runout re-measurements recorded to the runout tolerance specifications.
 7. If any of the runout re-measurements still exceed the runout tolerances, remove and rotate the shaft 180 degrees from its original position to the pinion or torque tube input flange that has been re-indexed or replaced.
 8. Reinstall the shaft then re-measure and record the runout of the shaft at the same locations measured previously.
 9. Compare the shaft runout re-measurements recorded to the runout tolerance specifications.
 10. If any of the shaft runout re-measurements still exceed the runout tolerances, the shaft requires replacement. Check the runout of the replacement prop shaft.
13. For 2-piece prop systems; if the prop shaft runout measurements at the welded yoke mating to the slip yoke exceed runout tolerance specifications for that prop shaft at that location, perform the following:
 1. If the stub shaft is keyed to ensure proper alignment of the slip yoke, then the prop shaft requires replacement.
 2. If the stub shaft is not keyed, mark the mating position for each end of the prop shaft, then remove the slip yoke from the stub shaft.
 3. Rotate the shaft 180 degrees from its original position.
 4. Reinstall the slip yoke to the stub shaft.
 5. Re-measure and record the runout of the shaft at the welded yoke to slip yoke location.
 6. Compare the shaft runout re-measurements recorded to the runout tolerance specifications.
 7. If the prop shaft runout re-measurements still exceed runout tolerances at the welded yoke mating to slip yoke location, the prop shaft requires replacement. Check the runout of the replacement prop shaft.

2013 Chevrolet Colorado

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

Propeller Shaft Runout Specifications								
Application	Front Runout		Center Runout		Rear Runout		Stub Shaft Runout	
	Metric	English	Metric	English	Metric	English	Metric	English
1 Piece Propeller Shaft – Guideline	1.17 mm	0.046 in	1.27 mm	0.050 in	1.40 mm	0.055 in	—	—
1 Piece Aluminum Graphite Propeller Shaft – Guideline	1.17 mm	0.046 in	—	—	1.40 mm	0.055 in	—	—
2 Piece System Front Propeller Shaft with Slip Yoke – Guideline	0.76 mm	0.030 in	0.76 mm	0.030 in	0.71 mm	0.028 in	—	—
2 Piece System Front Propeller Shaft with Stub Shaft – Guideline	0.76 mm	0.030 in	0.76 mm	0.030 in	—	—	0.13 mm	0.005 in
2 Piece System Rear Propeller Shaft with Slip Yoke – Guideline	0.71 mm	0.028 in	0.76 mm	0.030 in	0.89 mm	0.035 in	—	—
2 Piece System Rear Propeller Shaft with Stub Shaft – Guideline	—	—	0.76 mm	0.030 in	0.89 mm	0.035 in	0.13 mm	0.005 in

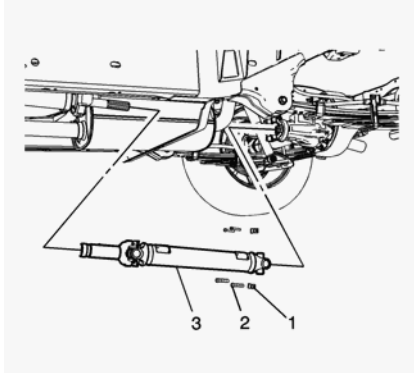
These guidelines apply only to propeller systems with 2 or 3 U-joints.

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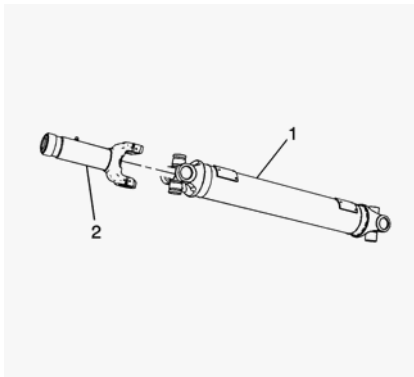
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

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

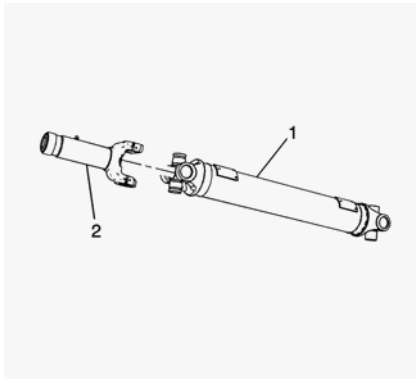


2. Remove the 2 retainers (1) and the 4 bolts (2).
3. Remove the rear propeller shaft (3).
4. Position the propeller shaft in a suitable clamping device.
5. Remove the universal joint from the slip joint. Refer to Universal Joint Replacement.

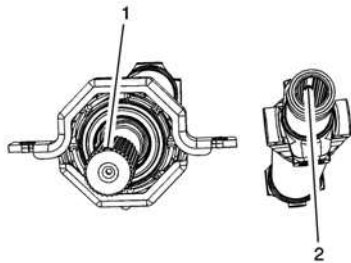


6. Remove the slip joint (2) from the propeller shaft (1).

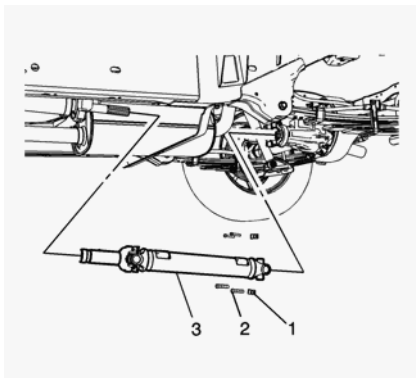
[Installation Procedure](#)



1. Position the slip joint (2) on the propeller shaft (1).
2. Install the universal joint on the slip joint. Refer to Universal Joint Replacement.



3. Before installing the rear propeller shaft to the front propeller shaft, ensure that the master splines (1) and (2) in both propeller shaft are aligned.



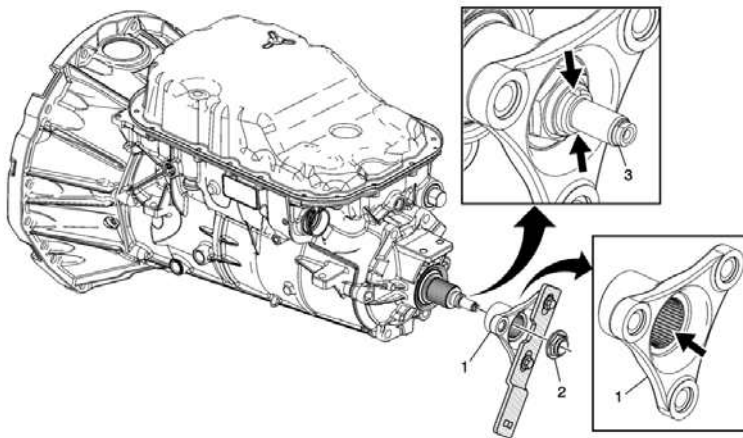
4. Apply a small amount of the proper lubricant on the slip joint.
5. Install the rear propeller shaft (3).
6. Install the 2 retainers (1) and the 4 bolts (2).

Caution: Refer to Fastener Caution.

7. Tighten the bolts (4) to **28 Y (21 lb ft)**.
8. Remove the supports and lower the vehicle.

2013 Chevrolet Colorado

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



Propeller Shaft Transmission Flange Installation

Callout

Component Name

Prop Shaft Trans Flange

Procedure

1. The output shaft splines must be thoroughly clean and dry before installing the flange.

Note:

1.
 - When repairing low speed and garage shift clunk – except for moving the vehicle from the hoist, do not operate the vehicle above 5 mph at light throttle for 24 hours to allow the adhesive to cure.
 - If the replacement flange contains a pre-applied adhesive patch, then liquid adhesive is not required and the 24 hour cure time is not necessary.
2. Apply GM P/N 89021297 (Canadian P/N 10953488) across the width of the flange splines, install. However, if the replacement flange contains a pre-applied adhesive patch, then liquid adhesive is not required and the 24 hour cure time is not necessary.
3. Sufficient application of adhesive to every tooth on the flange will leave excess adhesive on the output shaft after installation. If no excess is observed, reapply adhesive.

NEW Front Prop Shaft Flange Nut

Caution: Refer to Fastener Caution.

Procedure

1. The output shaft threads must be thoroughly clean and dry before installing the nut.
2. Apply liquid adhesive across the width of the nut threads, prior to tightening and staking. Refer to Adhesives, Fluids, Lubricants, and Sealers. However, if the replacement nut contains a pre-applied adhesive patch, then liquid adhesive is not required.

Tighten

55 Y (41 lb ft)

Special Tools

DT 45012 Holding Fixture

For equivalent regional tools, refer to Special Tools.

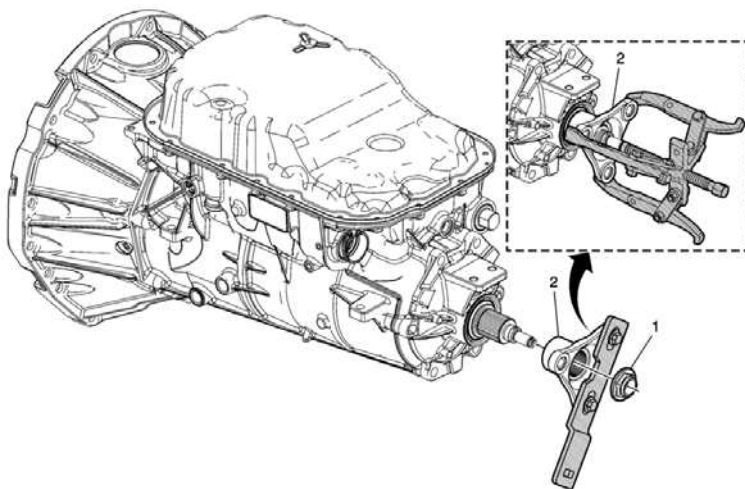
Output Shaft

3. **Caution:** Stake the flange nut onto the output shaft. Use the two staking grooves on the shaft to locate the staking points. Failure to stake the flange nut may result in damage to the transmission.

2013 Chevrolet Colorado

Submodel: | Engine Type: | Liters:

Fuel Delivery: | Fuel:



Propeller Shaft Transmission Flange Removal

Callout

Component Name

Front Prop Shaft Flange Nut

Caution: Do not reuse the flange nut. Reusing the flange nut may cause damage to the transmission.

Tip: If the prop shaft transmission flange is not easily removed with *J 45012* holding fixture use *DT 38416-B* harmonic balancer remover to remove the flange.

1

Special Tool

- *DT 38416-B* Harmonic Balancer Remover
- *J 45012* Holding Fixture

For equivalent regional tools, refer to Special Tools.

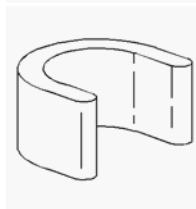
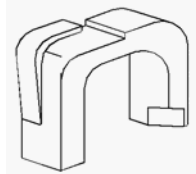
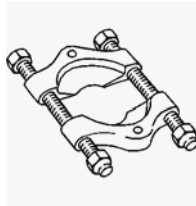
2

Prop Shaft Trans Flange

2013 Chevrolet Colorado

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

Illustration



Tool Number/ Description

DT-22912-B

DT-307

J-22805-B

J-22912-B

Rear Pinion and Axle Bearing Remover

DT-39441

DT-39441-10

DT-39441-20

DT-39441-30

J-39441-10

5th/6th Drive Gear Installer

DT-50488

Input Shaft Bearing Cover Seal Installer

J-9522-3

U Joint Bearing Separator

J-9522-5

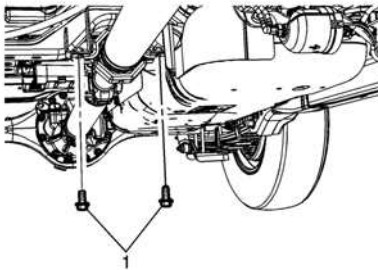
U Joint Bearing Spacer Remover (Use with J 9522-3)

2013 Chevrolet Colorado

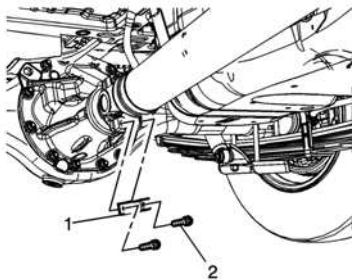
Submodel: | Engine Type: | Liters:
Fuel Delivery: | Fuel:

[Removal Procedure](#)

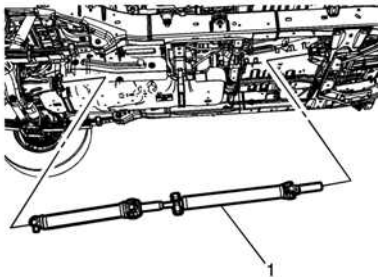
1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle.
2. Support the propeller shaft with the proper jackstand.



3. Remove the propeller shaft center support bearing bolts (1).
4. Support the rear propeller shaft with the proper jack stand.



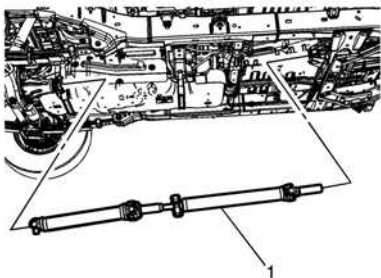
5. Remove the propeller shaft strap bolts (2) and the straps (1).
6. With the aid of an assistant, remove the jack stand from the propeller shaft.



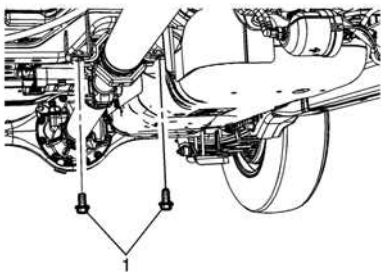
7. With the aid of an assistant, remove the propeller shaft from the vehicle.

[Installation Procedure](#)

Two-Piece Rear Propeller Shaft Replacement



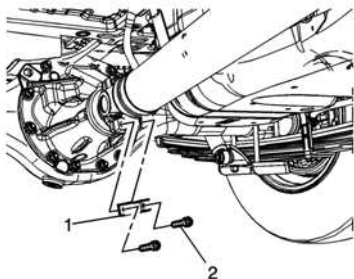
1. Install the propeller shaft (1) in the transmission.
2. With the aid of an assistant, position the propeller shaft center support bearing on the mounting bracket.
3. Install the proper jack stand to support the rear propeller shaft.



4. Hand start the propeller shaft center support bearing bolts (1).

Caution: Refer to Fastener Caution.

5. Tighten the propeller shaft center bearing support bolts to **70 Y (52 lb ft)**.
6. Position the rear propeller shaft in the rear axle pinion flange.



7. Install the rear propeller shaft straps (1).
8. Hand start the propeller shaft strap bolts (2).
9. Remove the jack stand from the rear propeller shaft.
10. Tighten the propeller shaft strap bolts (2) to **28 Y (21 lb ft)**.
11. Remove the supports and lower the vehicle.

2013 Chevrolet Colorado

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

Special Tools

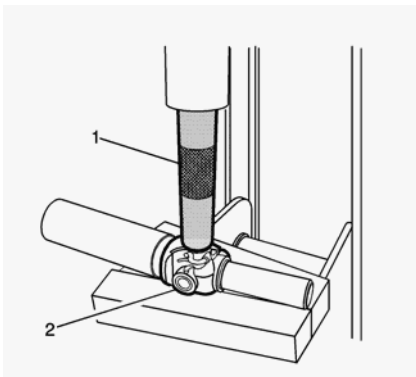
- DT-50458 Input Shaft Bearing Cover Seal Installer
- J-9522-3 U-Joint Bearing Separator
- J-9522-5 U-Joint Bearing Spacer Remover

For regional equivalent tools, refer to Special Tools.

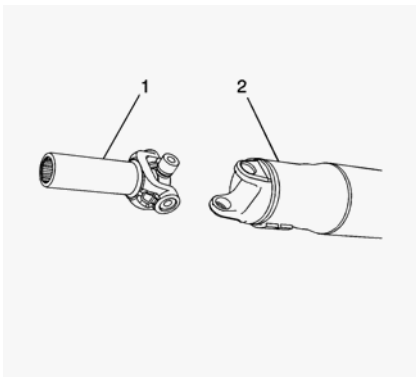
Removal Procedure

Caution: Never clamp propeller shaft tubing in a vise. Clamping propeller shaft tubing in a vise could dent or deform the tube causing an imbalance or unsafe condition. Always clamp on one of the yokes and support the shaft horizontally. Avoid damaging the slip yoke sealing surface. Nicks may damage the bushing or cut the lip seal.

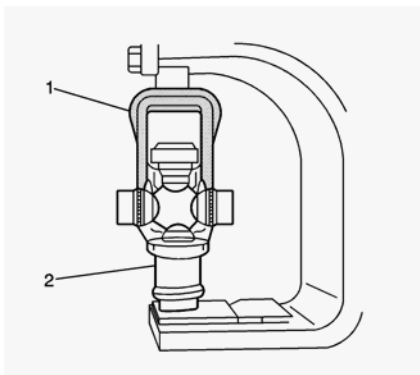
1. Remove the propeller shaft from the vehicle.
- For vehicles equipped with a one piece propeller shaft, refer to One-Piece Propeller Shaft Replacement.
 - For vehicle equipped with a two piece propeller shaft, refer to Two-Piece Rear Propeller Shaft Replacement.



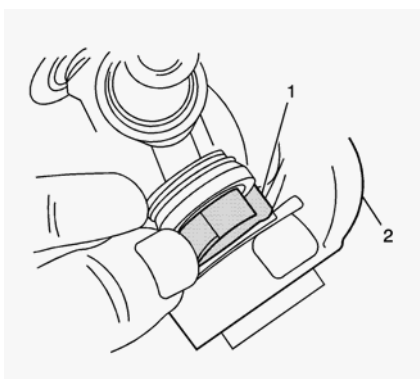
- Position the propeller shaft (2) in the hydraulic press so that the propeller shaft ears are supported.
- With the aid of an assistant, support the propeller shaft so that it is level with the press.
- Using the hydraulic press and the DT-50458 installer (1), remove the universal joint cup from the propeller shaft flange.
- Rotate the propeller shaft and repeat the procedure for the opposite universal joint cup.
- If serving the two piece drive shaft, mark the relationship of the slip yoke to the propeller shaft.



- Remove the slip yoke (1) from the propeller shaft (2).

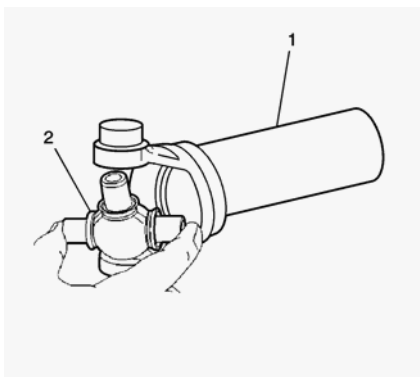


- Using the appropriate size socket (2), support the universal joint opposite of the J-9522-3 separator.
- Using the J-9522-3 separator (1) and the press, remove the universal bearing from the yoke.
- If you are unable to completely remove the universal bearing with the J-9522-3 separator, proceed to steps 11 and 12.



Note: If the slip yoke is found to be damaged, replace the slip yoke and use a NEW universal joint. DO NOT re-use the old universal joint.

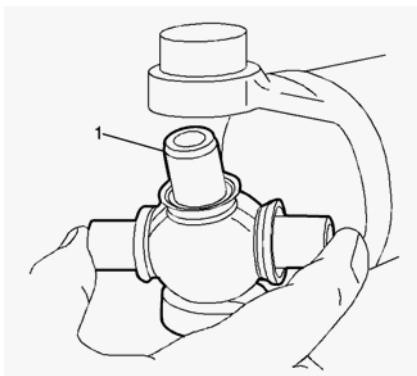
- Position the J-9522-5 remover (1) on the universal joint.
- Using the J-9522-3 separator, J-9522-5 remover and a press, remove the universal bearing from the yoke.
- Rotate the propeller shaft and repeat steps 1–8 to remove the opposite universal joint.



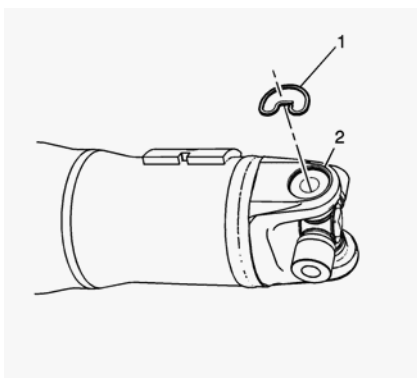
- Remove the spider (2) from the slip yoke (1).
- Thoroughly clean the slip yoke and the propeller shaft yoke of any contaminants that could prevent the retaining rings or the bearing cups from being properly installed.
- Rotate the propeller shaft and repeat steps 1–8 to remove the spider.

Installation Procedure

Note: If replacing the propeller shaft slip yoke, proceed to step 8.

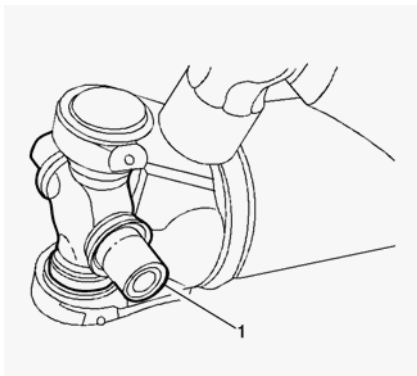


1. Position the universal bearings in either side of the yoke on the propeller shaft.
2. Install the universal joint spider (1) until it is seated in the universal bearing.
3. Press the universal joint spider until the bearing is even with the yoke.

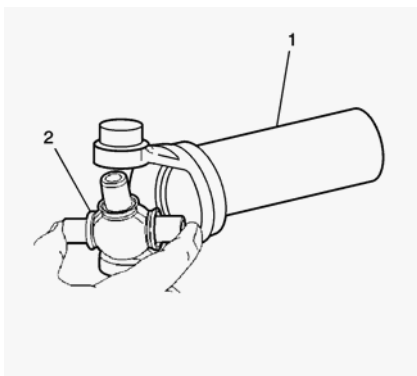


Note: Use NEW retaining rings only.

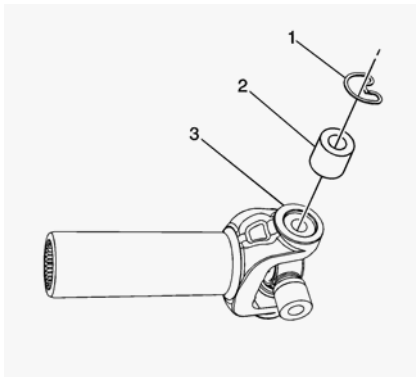
4. Install the NEW retaining ring (1) in the yoke (2).
5. Rotate the propeller shaft and repeat steps 1–4 for the opposite universal bearing.



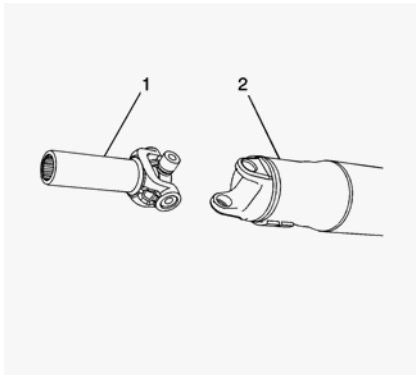
6. Rotate the universal joint (1) to ensure that the universal joint (1) moves freely. If not, use a hammer and lightly tap the yoke to seat the universal bearing against the retaining ring.
7. Install the other two universal bearings and wrap them with electrical tape or equivalent to hold the bearing in place until the propeller shaft is installed in the vehicle.



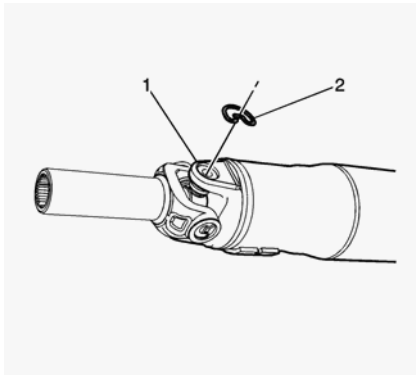
8. Position the universal spider (2) in the slip yoke (1).



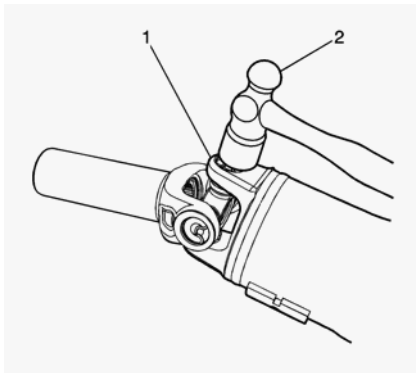
9. Install the universal bearings (2) in either side of the slip yoke (3).
10. Fully seat one of the universal spiders in the universal bearing.
11. Press the universal bearings (2) into the slip yoke (3) until it is even with the yoke.
12. Install the retaining ring (1) in the slip yoke (3).
13. Rotate the slip yoke and repeat steps 3–5 for the opposite universal bearing.



14. Position the slip yoke (1) in the propeller shaft (2).
15. Position the universal bearing in the yoke of the propeller shaft (2).
16. Center the universal spider in the universal bearing.
17. Press the universal bearing into the yoke.



18. Install the retaining ring (2) in the propeller shaft yoke (1).
19. Rotate the propeller shaft and repeat steps 8–11 on the opposite universal bearing.



20. Rotate the universal joint to ensure that the universal joint moves freely. If not, use a hammer (2) and lightly tap each of the yokes (1) to seat the universal bearing against the retaining ring.