2004 DRIVELINE/AXLE

Wheel Drive Shafts - C/K SUV

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Hub Nut	240 N.m	177 lb ft
Inboard Flange Bolts	79 N.m	58 lb ft
Small Seal Retaining Clamp	136 N.m	100 lb ft
Wheel Lug Nuts	190 N.m	140 lb ft

COMPONENT LOCATOR

WHEEL DRIVE SHAFTS DISASSEMBLED VIEWS

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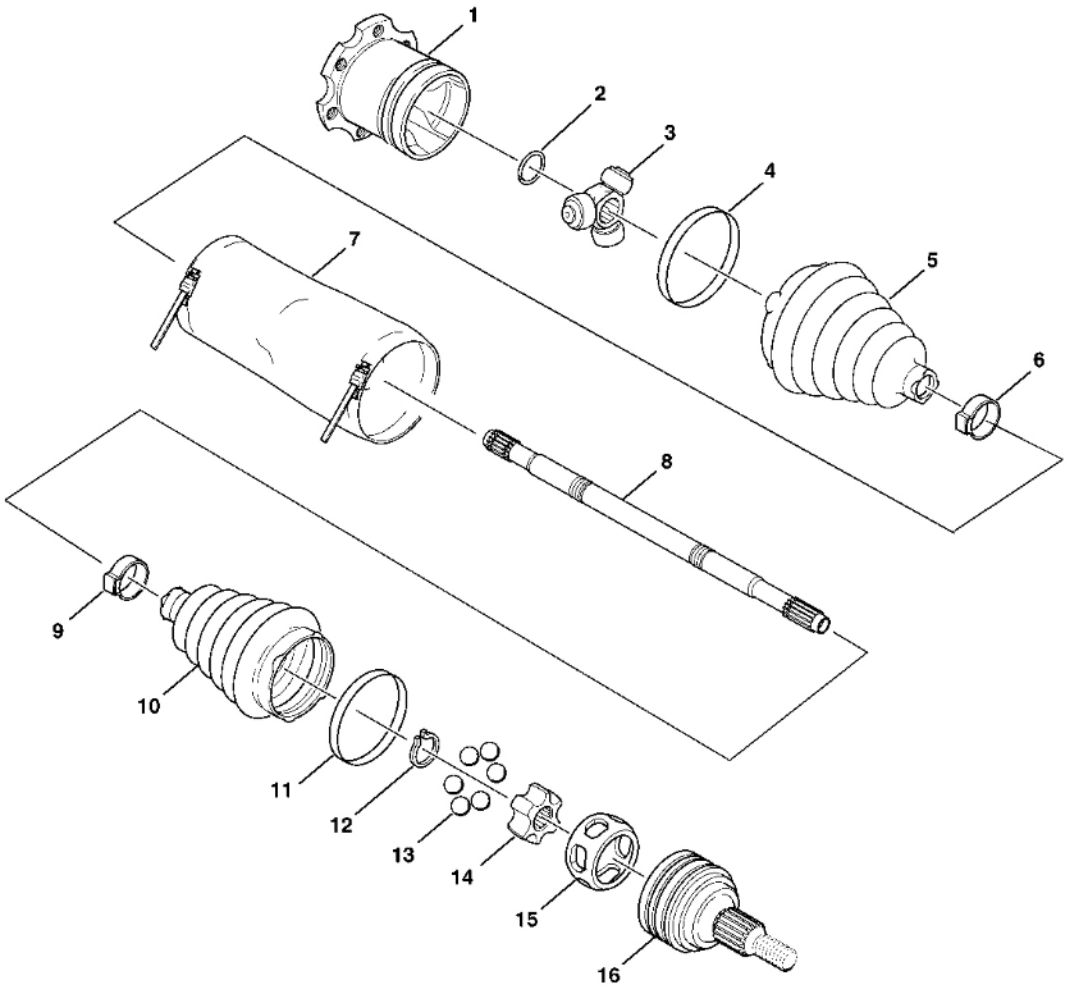

Fig. 1: Halfshaft Components Disassembled View
Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 1

Callout	Component Name
1	Tripot Housing Assembly
2	Spacer Ring
3	Tripot Joint Spider Assembly
4	Swage Ring
5	Tripot Joint Boot
6	Small Boot Retaining Clamp
7	Halfshaft Boot Cover (Optional)
8	Halfshaft Bar
9	Small Boot Retaining Clamp

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10	CV Joint Boot
11	Swage Ring
12	Race Retaining Ring
13	Ball
14	CV Joint Inner Race
15	CV Joint Cage
16	CV Joint Outer Race

DIAGNOSTIC INFORMATION AND PROCEDURES

DIAGNOSTIC STARTING POINT - WHEEL DRIVE SHAFTS

Begin the system diagnosis by reviewing the system Description and Operation. Reviewing the Description and Operation will help you to determine the correct symptom diagnostic procedure when a malfunction exist. Reviewing the Description and Operation information will also help you determine if the condition described by the customer is normal operation. Refer to **Symptoms - Wheel Drive Shafts** in order to identify the correct procedure for diagnosing the system and where the procedure is located.

SYMPTOMS - WHEEL DRIVE SHAFTS

Before beginning diagnosis, review the system description and operation in order to familiarize yourself with the system function. Refer to **Wheel Drive Shafts Description and Operation**.

Classifying the Symptom

Wheel Drive Shaft symptoms can usually be classified into the following categories:

- Noises
- Vibrations

Noise related concerns are diagnosed within the Wheel Drive Shafts section. For vibration related symptoms, refer to **Diagnostic Starting Point - Vibration Diagnosis and Correction** in Vibration Diagnosis and Correction for diagnosis.

Visual/Physical Inspection

- Inspect the system for aftermarket devices which could affect the operation of the Wheel Drive Shafts.
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- **Click Noise In Turns**

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- **Clunk When Accelerating from Coast**
- **Clunk Noise When Accelerating During Turns**

CLICK NOISE IN TURNS

Click Noise In Turns

Step	Action	Yes	No
DEFINITION: Clicking noise while turning in drive under load.			
1	Check for worn or damaged outer CV joints. Are the outer CV joints/seals worn?	Go to **Step 2**	System OK
2	Replace the outer CV joints/seals. Refer to **Wheel Drive Shaft Outer Joint and Seal Replacement**. Is the repair complete?	System OK	-

CLUNK WHEN ACCELERATING FROM COAST

Clunk When Accelerating from Coast

Step	Action	Value(s)	Yes	No
DEFINITION: A clunking noise present when accelerating from coast to drive under load.				
1	Check for a loose wheel drive shaft to hub assembly nut. Is the wheel drive shaft nut loose?	-	Go to **Step 2**	Go to **Step 3**
2	Tighten the wheel drive shaft to hub assembly nut to specification. Is the repair complete?	240 N.m (177 lb ft)	System OK	-
3	Check for a damaged inner CV joint. Is the inner CV joint damaged?	-	Go to **Step 4**	System OK
4	Replace the inner CV joint. Refer to **Wheel Drive Shaft Inner Joint and Seal Replacement**. Is the repair complete?	-	System OK	-

CLUNK NOISE WHEN ACCELERATING DURING TURNS

Clunk Noise When Accelerating During Turns

Step	Action	Yes	No
1	Check for worn or damaged outer CV joints and/or seals. Are the outer CV joints/seals worn?	Go to **Step 2**	System OK
2	Replace the outer CV joints/seals. Refer to **Wheel Drive Shaft Outer Joint and Seal Replacement**. Is the repair complete?	System OK	-

REPAIR INSTRUCTIONS

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WHEEL DRIVE SHAFT REPLACEMENT

Tools Required

J 45859 Axle Remover. See **Special Tools and Equipment**.

Removal Procedure

1. Raise the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the wheel and tire assembly. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
3. Remove the drive axle center cap, if equipped.

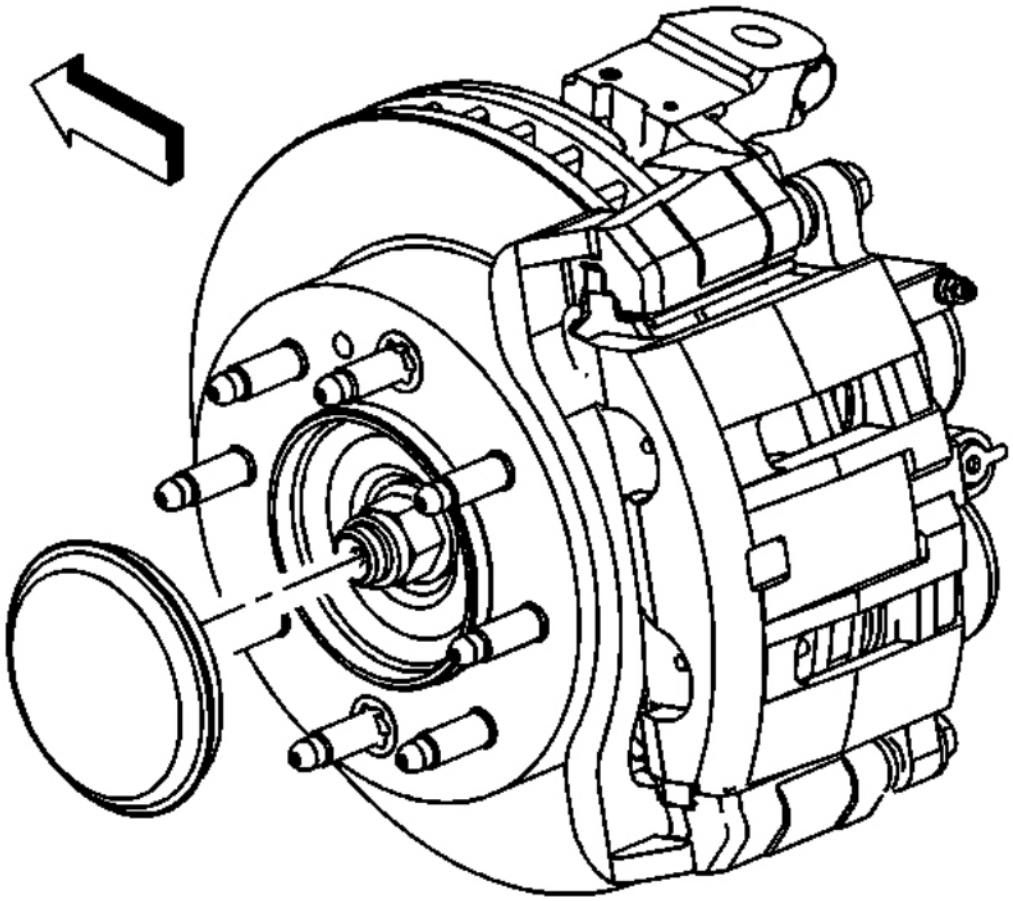

Fig. 2: View Of Drive Axle Center Cap

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Courtesy of GENERAL MOTORS CORP.

4. Insert a drift or a large screwdriver through the brake caliper into 1 of the brake rotor vanes in order to prevent the drive axle wheel drive shaft from turning.
5. Remove the nut and the washer from the hub. Do not reuse the nut. A new nut must be used when installing the wheel drive shaft.
6. Using the **J 45859** or equivalent, press the wheel drive shaft from the hub.

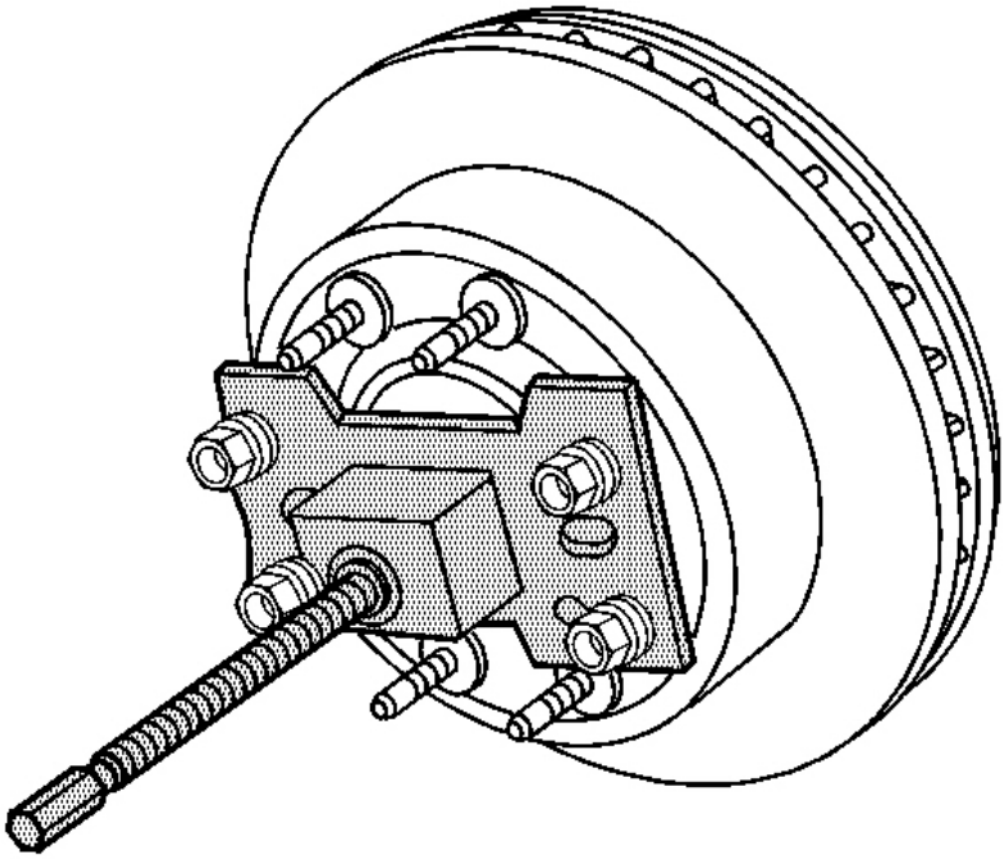

Fig. 3: View Of Wheel Drive Shaft & J 45859
Courtesy of GENERAL MOTORS CORP.

7. Remove the 6 bolts (1) securing the wheel drive shaft inboard flange to the output shaft flange.
8. Remove the drift from the rotor.

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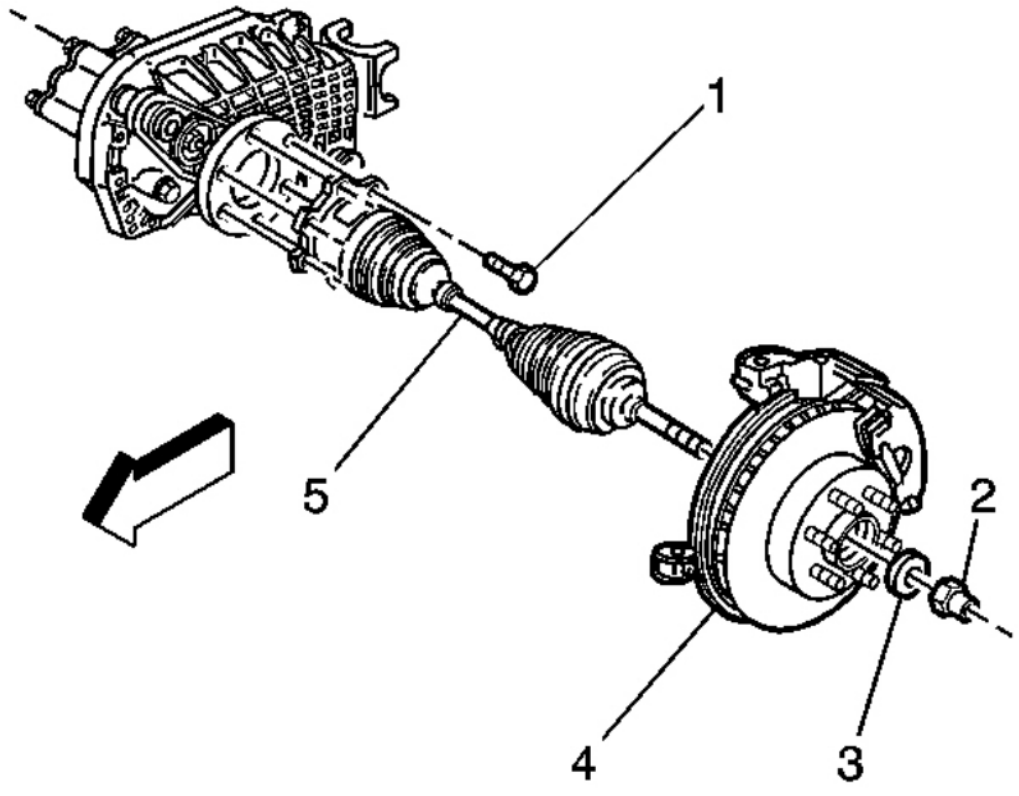

Fig. 4: View Of Wheel Drive Shaft & Components
Courtesy of GENERAL MOTORS CORP.

9. Remove the stabilizer shaft link from the lower control arm. Refer to **Stabilizer Shaft Replacement** in Front Suspension.
10. Wrap shop towels around both the inner and the outer wheel drive shaft boots in order to avoid damage to the boots during removal and installation.
11. Pull the wheel drive shaft through the lower control arm opening.

Installation Procedure

1. Wrap shop towels around both the inner and the outer wheel drive shaft boots in order to avoid damage to the boots during removal and installation.

IMPORTANT: Clean the steering knuckle and the wheel drive shaft splines and threads. These areas must be dry and free of grease, dirt, and contamination.

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2. Insert the wheel drive shaft splined shank into the knuckle hub.

NOTE: Use only a genuine GM front wheel drive shaft nut. Installation of anything but an OEM front wheel drive shaft nut could cause damage to the vehicle.

3. Install the washer (3) and the new hub nut (2) to the wheel drive shaft.

   Do not tighten the new hub nut at this time.

4. Attach the wheel drive shaft inboard flange to the output shaft flange using the inboard flange bolts (1).

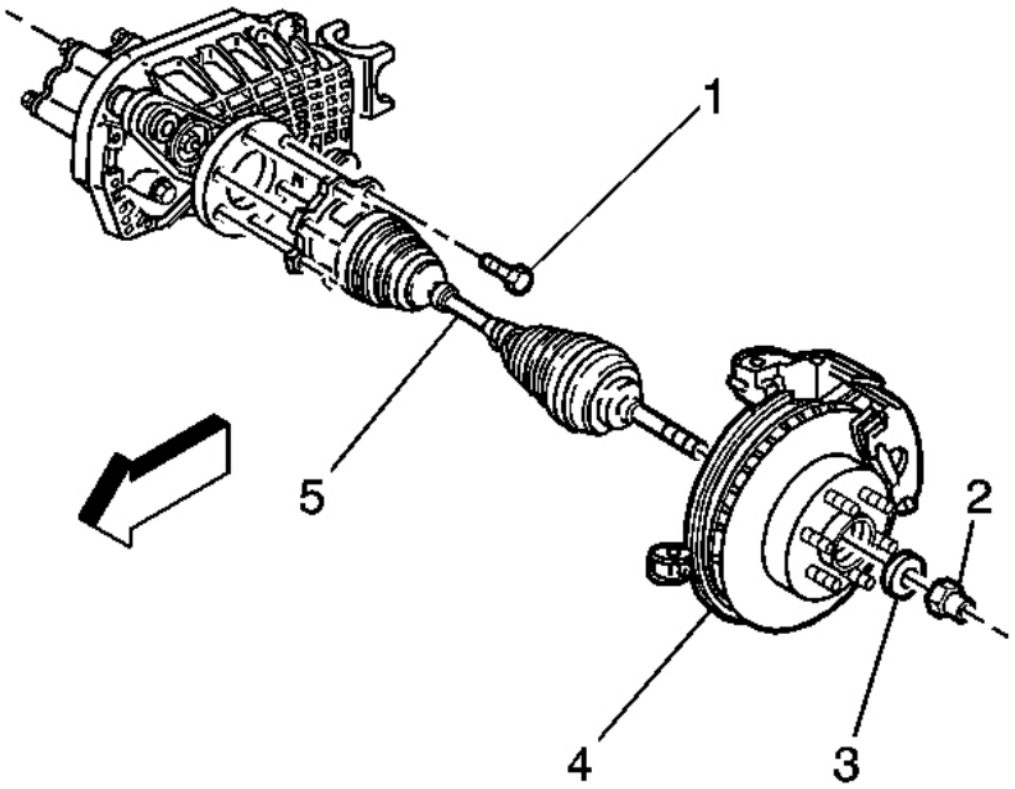

Fig. 5: View Of Wheel Drive Shaft & Components
Courtesy of GENERAL MOTORS CORP.

NOTE: Refer to Fastener Notice in Cautions and Notices.

5. Insert a drift or a large screwdriver through the brake caliper into 1 of the brake rotor vanes in order to

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prevent the wheel drive shaft from turning.

Tighten:

- Tighten the inboard flange bolts to 79 N.m (58 lb ft).
- Tighten the hub nut to 240 N.m (177 lb ft).

6. Remove the drift from the rotor.

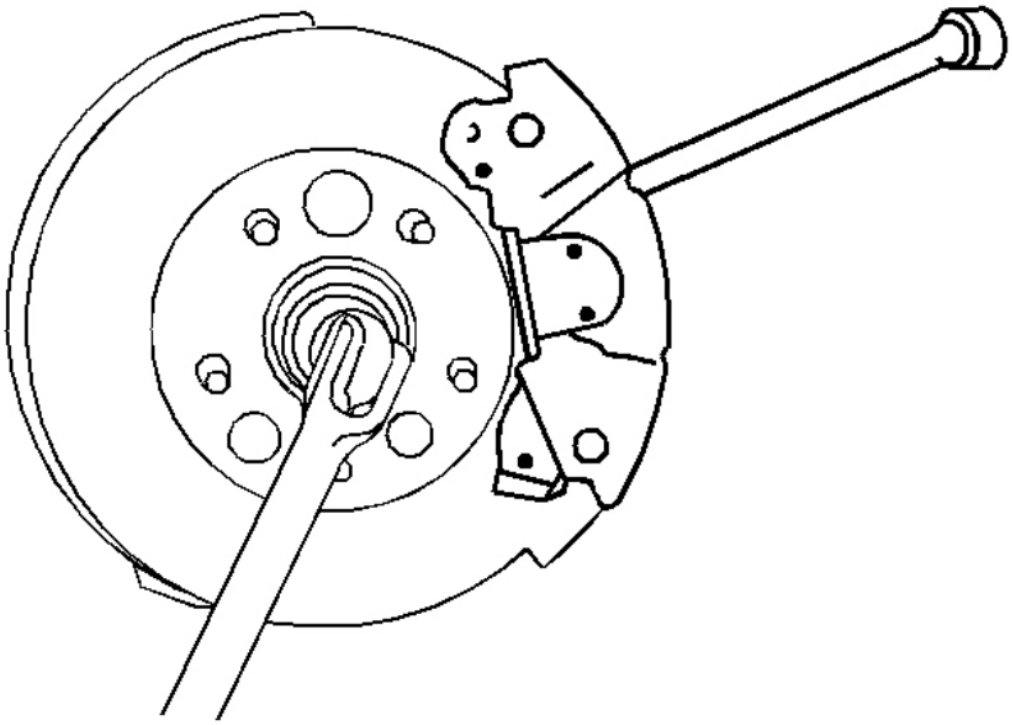

Fig. 6: Inserting Drift Into Brake Rotor Vane
Courtesy of GENERAL MOTORS CORP.

7. Install the drive axle center cap, if equipped.

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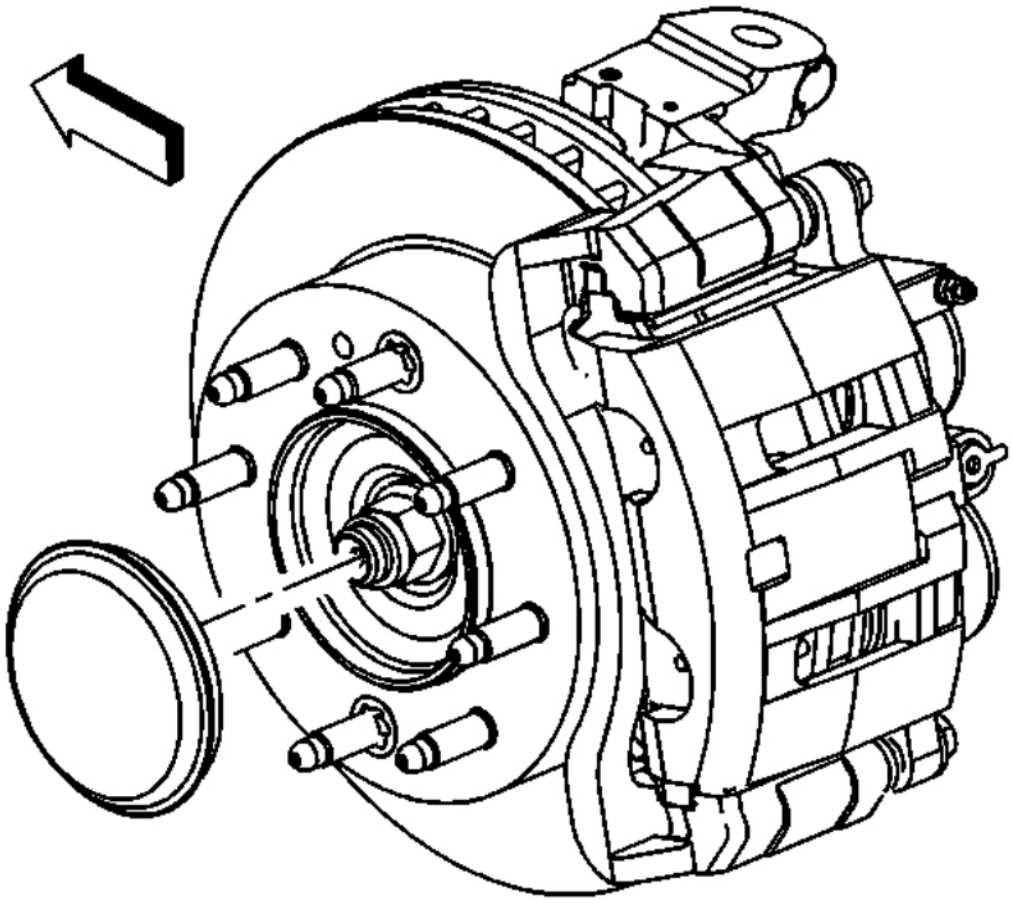

Fig. 7: View Of Drive Axle Center Cap
Courtesy of GENERAL MOTORS CORP.

8. Install the stabilizer shaft link. Refer to **Stabilizer Shaft Replacement** in Front Suspension.
9. Install the wheel and tire assembly. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
10. Lower the vehicle.

WHEEL DRIVE SHAFT SEAL COVER REPLACEMENT

Tools Required

J 41187 Band-it Type Tool. See **Special Tools and Equipment**.

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Disassembly Procedure

IMPORTANT: Be careful when removing the clamps to avoid damaging the halfshaft seal cover.

1. Use side cutters to cut the halfshaft seal cover clamps (2) and the nylon strap (1).

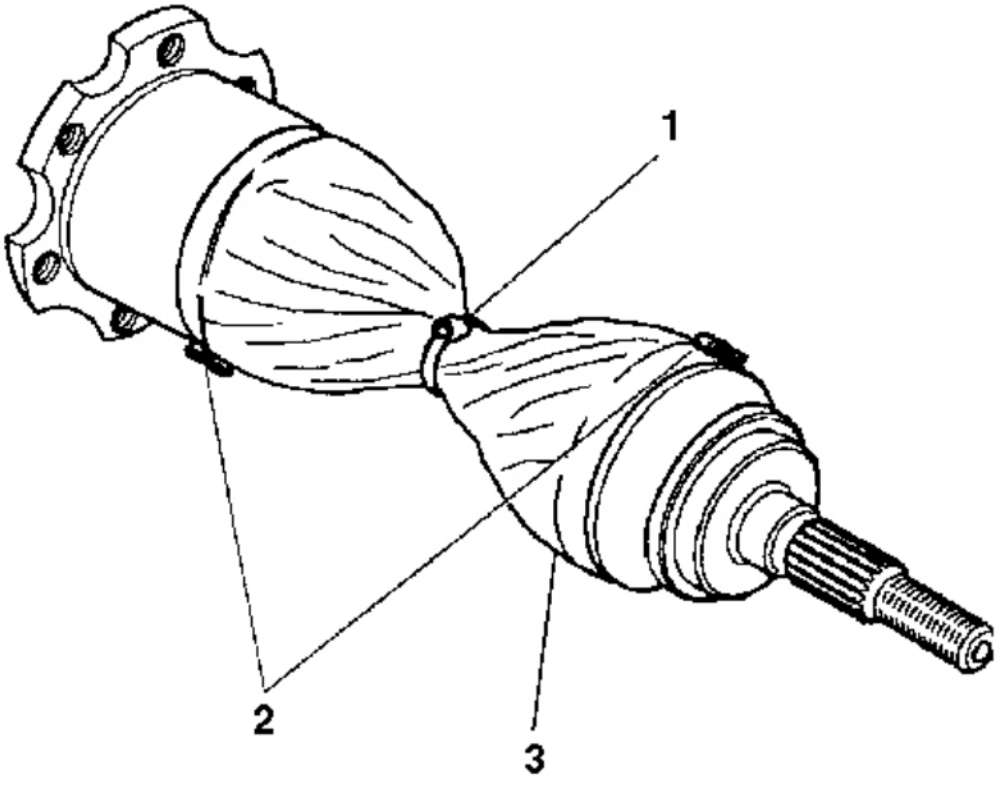

Fig. 8: View Of Halfshaft Seal Cover Clamps & Nylon Strap
Courtesy of GENERAL MOTORS CORP.

2. Slide the halfshaft seal cover (1) off of the halfshaft, over the CV joint end.
3. Check the halfshaft seal cover (1) for rips, tears, worn spots or other damage. Reuse the halfshaft seal cover (1) if there is no damage visible.

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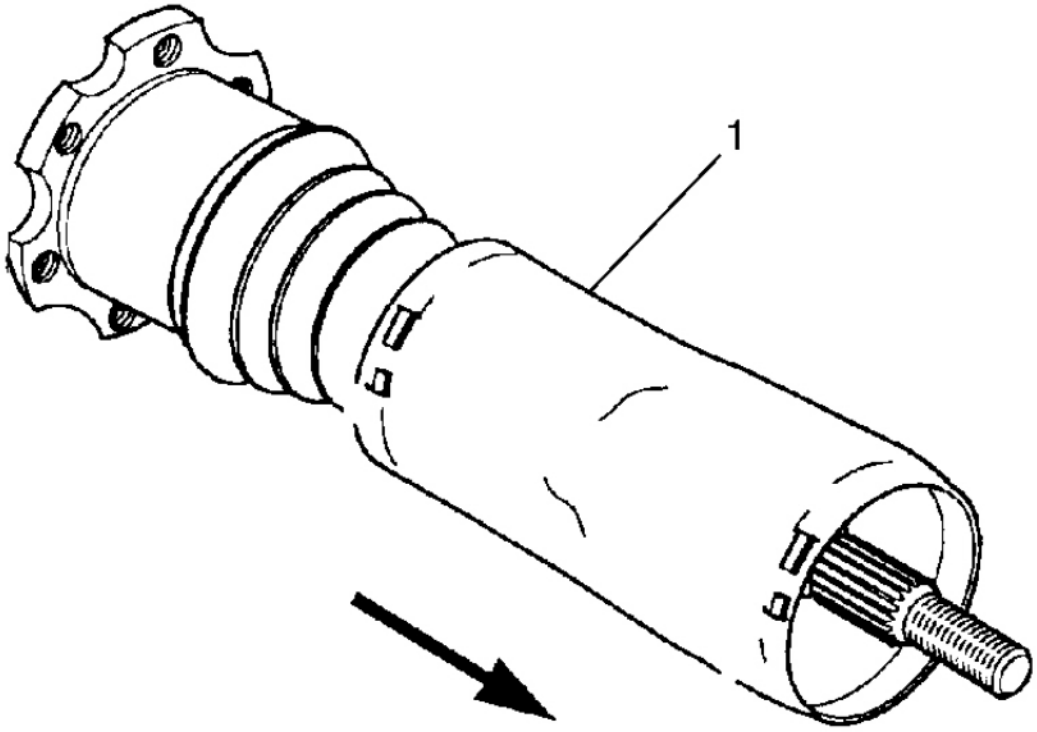

Fig. 9: View Of Halfshaft Seal Cover
Courtesy of GENERAL MOTORS CORP.

Assembly Procedure

1. Insert new clamps (3) into the original halfshaft seal cover (1) (if you are reusing the original halfshaft seal cover.
2. Slide the halfshaft seal cover (1) onto the halfshaft assembly (2), starting at the outboard (CV joint) end.

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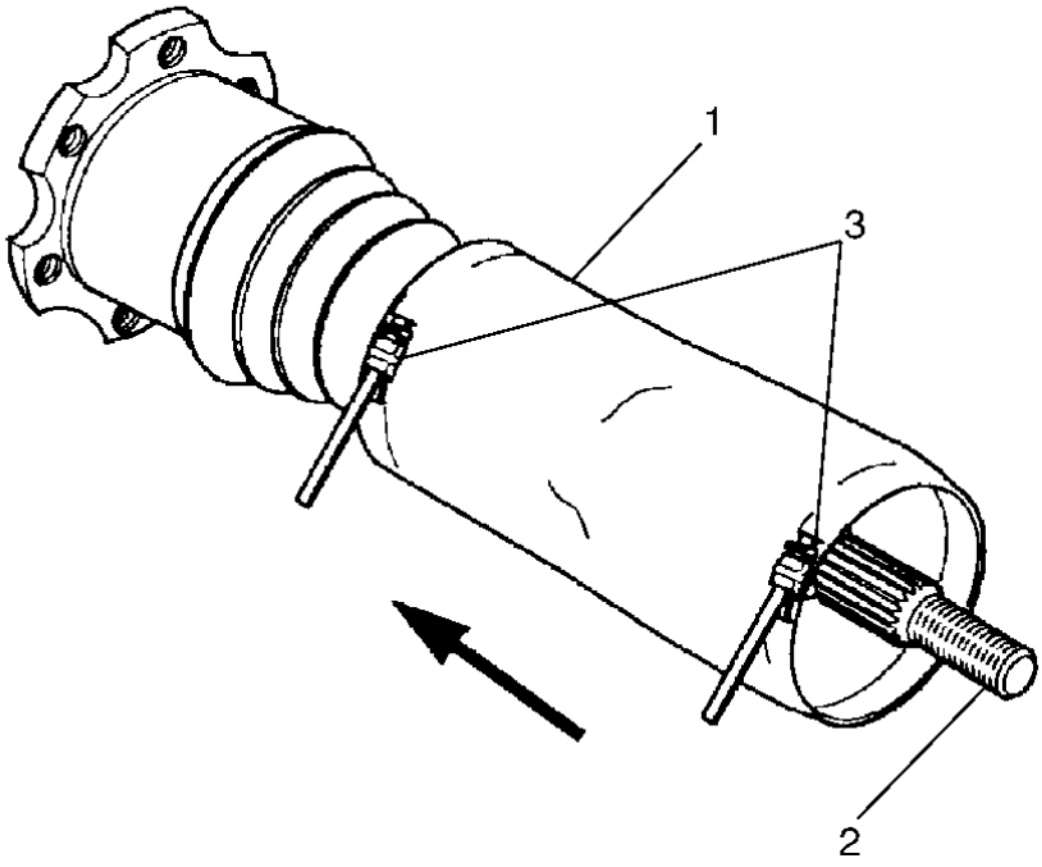

Fig. 10: Inserting Clamps Into Halfshaft Seal Cover
Courtesy of GENERAL MOTORS CORP.

3. Align the inboard clamp (2) on the inboard joint (1). Align the seal cover seam so the seam is straight.

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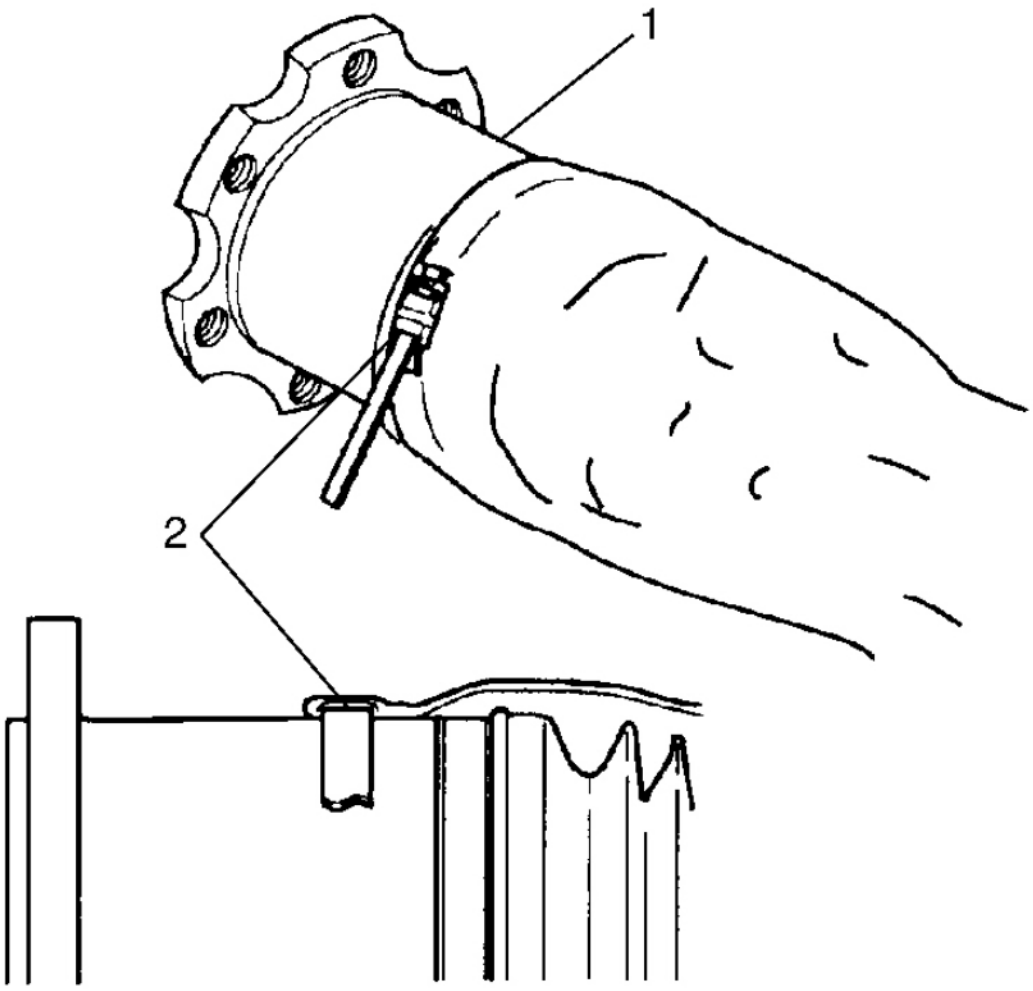

Fig. 11: Aligning Inboard Clamp On Inboard Joint
Courtesy of GENERAL MOTORS CORP.

IMPORTANT: Tighten the seal cover clamp (1) as tight as possible without deforming the retaining clip. Clamps that are not tight enough allow the cover to slide upon the joint. This causes shortened service life.

4. Use **J 41187** in order to tighten the inboard seal cover clamp (1).

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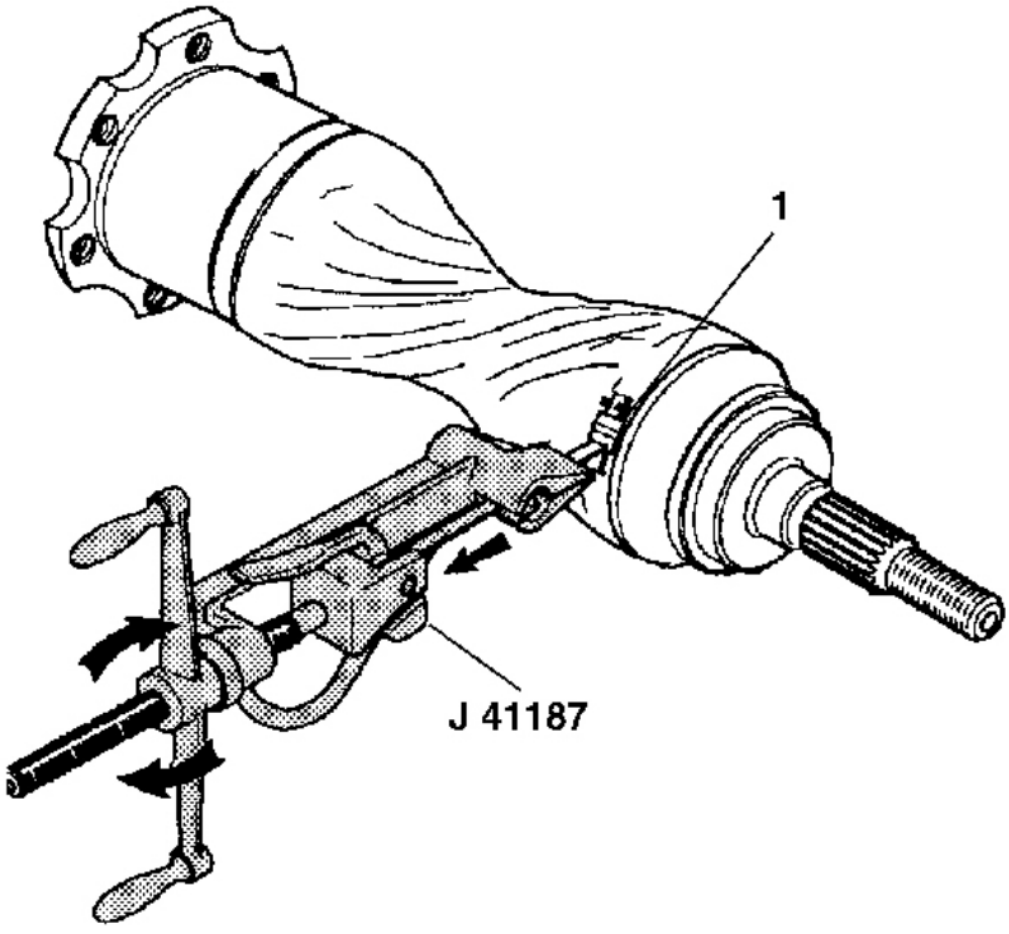

Fig. 12: Tightening Inboard Seal Cover Clamp Using J 41187
Courtesy of GENERAL MOTORS CORP.

5. Rotate **J 41187** toward the clip in order to bend the band onto the clip.
6. Pull on the tool's cutting handle in order to cut off the excess band.

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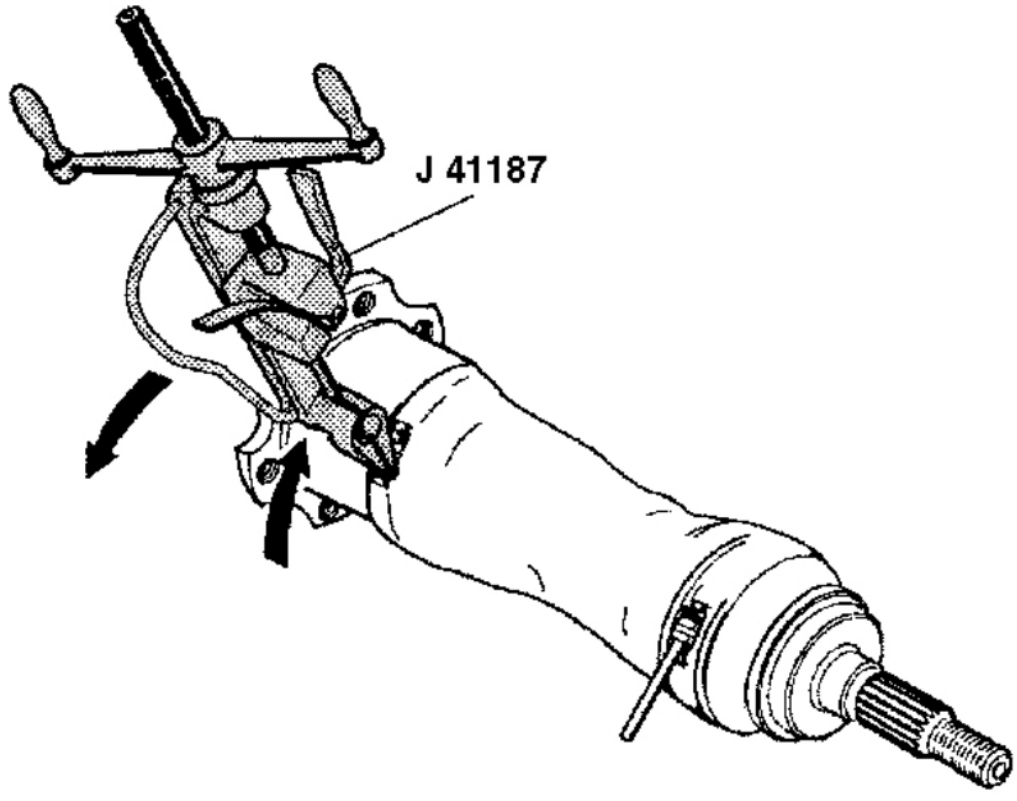

Fig. 13: Rotating J 41187 Toward Clip (Inboard Clamp)
Courtesy of GENERAL MOTORS CORP.

7. Pound the band flat between the latch tabs. Peen the latch tabs over in order to lock the band into position.

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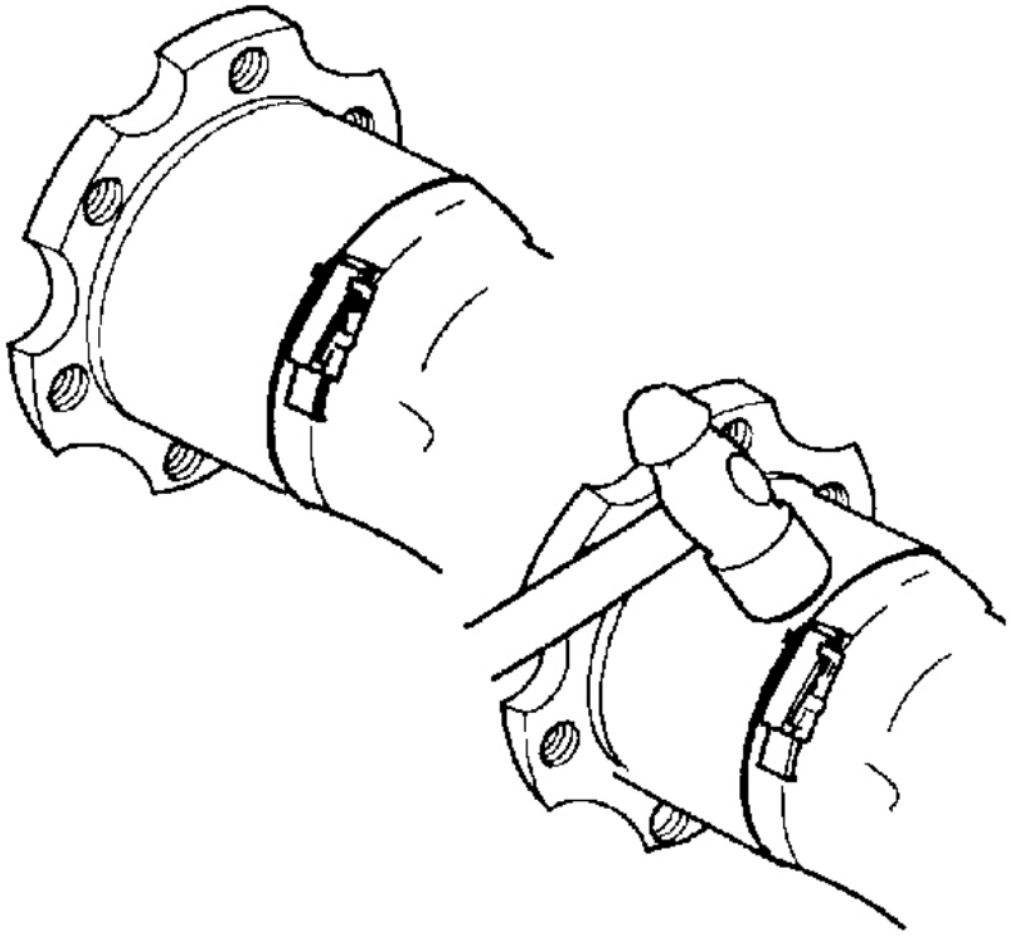

Fig. 14: Pounding Band Flat Between Latch Tabs (Inboard Clamp)
Courtesy of GENERAL MOTORS CORP.

8. Twist the halfshaft seal cover (1) until the middle of the cover fits loosely against the halfshaft bar.
9. Position the outboard end of the halfshaft seal cover (1) over the CV joint (2) flat.

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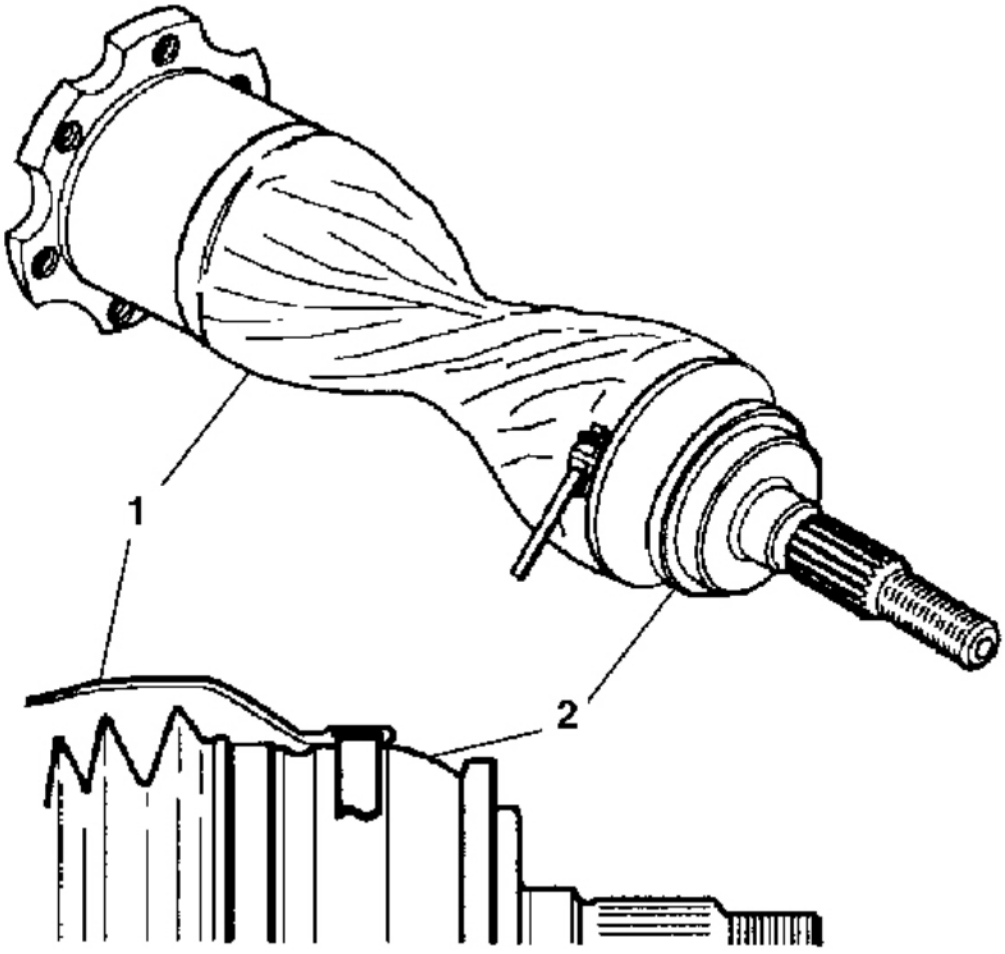

Fig. 15: Twisting Halfshaft Seal Cover
Courtesy of GENERAL MOTORS CORP.

IMPORTANT: Tighten the seal cover clamp (1) as tight as possible without deforming the retaining clip. Clamps that are not tight enough allow the cover to slide upon the joint. This causes shortened service life.

10. Use **J 41187** in order to tighten the outboard cover clamp (1).

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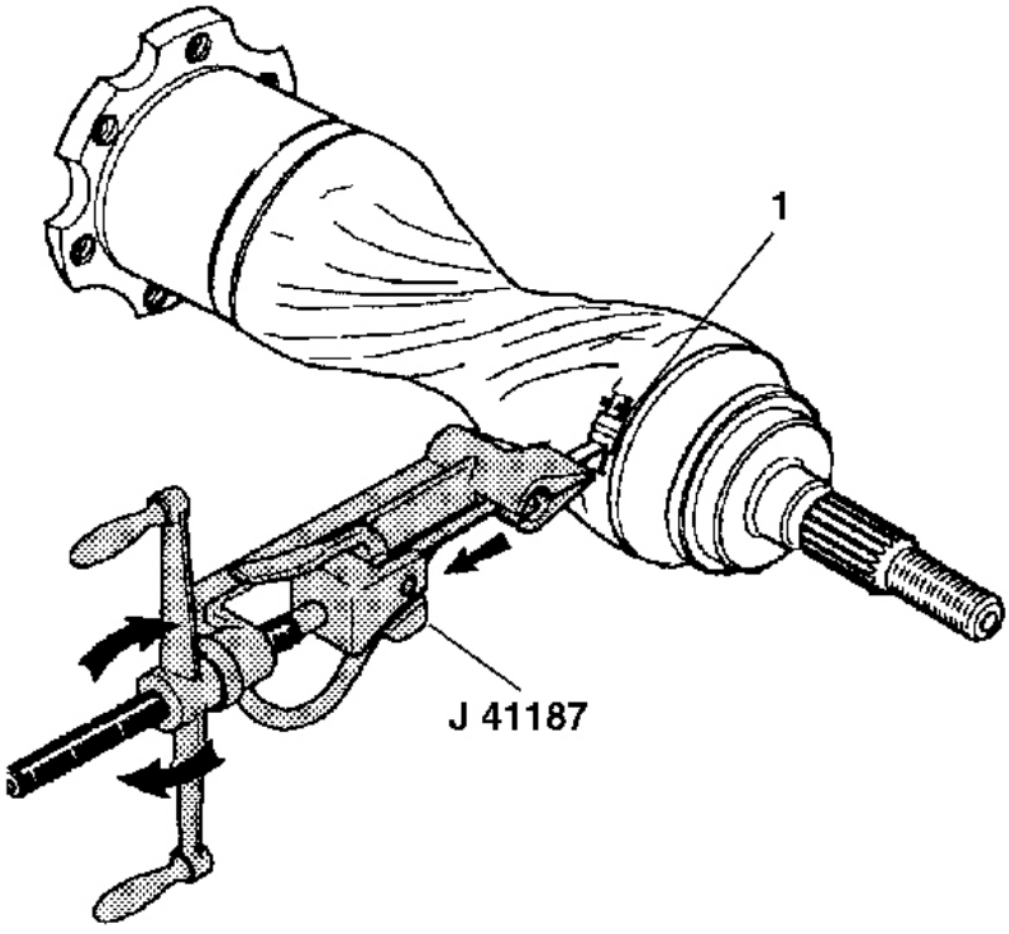

Fig. 16: Tightening Outboard Cover Clamp Using J 41187
Courtesy of GENERAL MOTORS CORP.

11. Rotate **J 41187** toward the clip in order to bend the band onto the clip.
12. Pull the tool's cutting handle in order to cut off the excess band.

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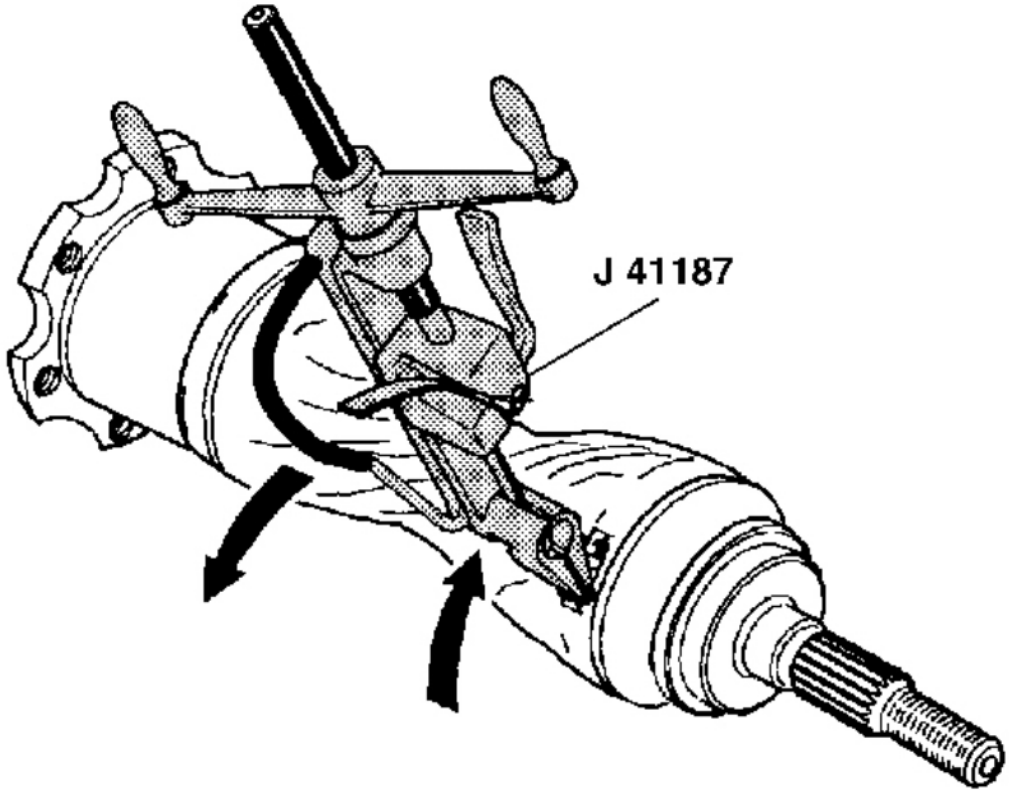

Fig. 17: Rotating J 41187 Toward Clip (Outboard Clamp)
Courtesy of GENERAL MOTORS CORP.

13. Pound the band flat between the latch tabs. Peen the latch tabs over in order to lock the band into position.

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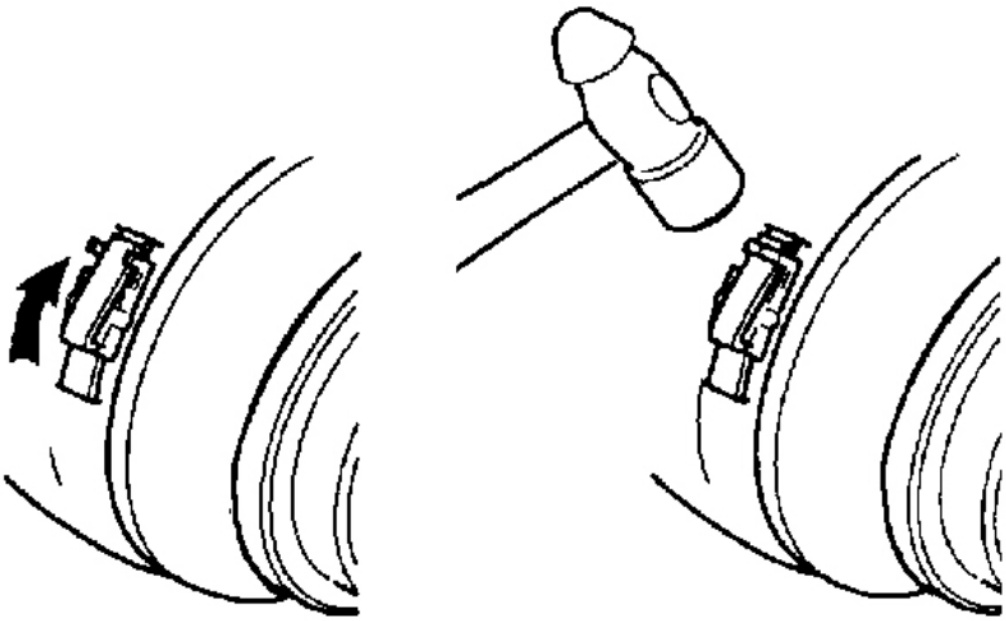

Fig. 18: Pounding Band Flat Between Latch Tabs (Outboard Clamp)
Courtesy of GENERAL MOTORS CORP.

14. Gather the halfshaft seal cover material at the center. Wrap the halfshaft seal cover (1) tightly with the nylon strap (2) provided in the kit.

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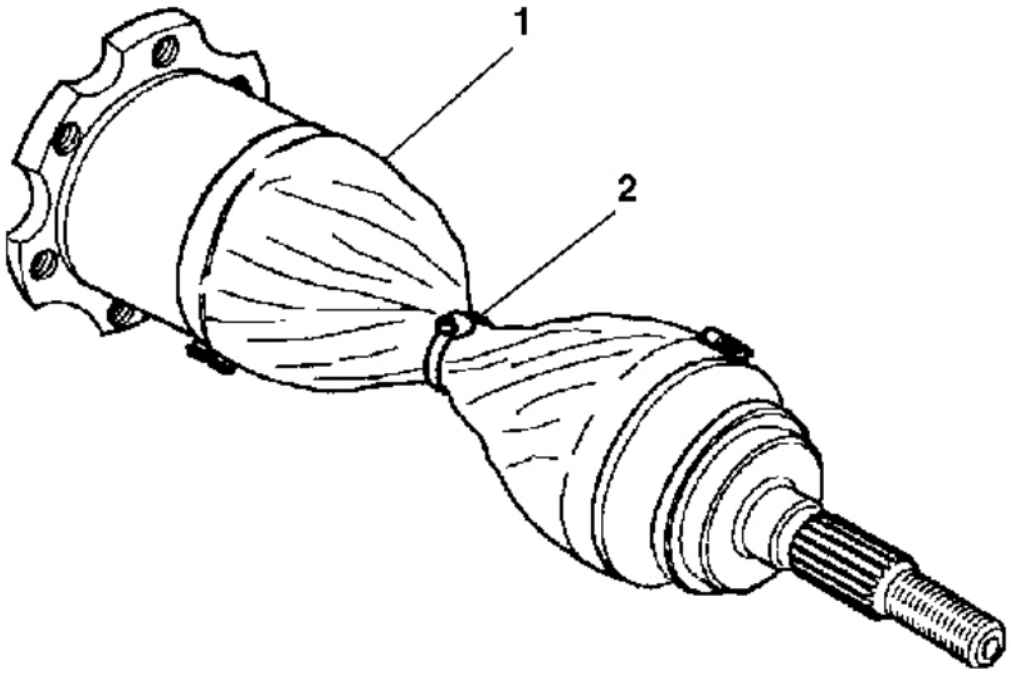

Fig. 19: Wrapping Halfshaft Seal Cover With Nylon Strap
Courtesy of GENERAL MOTORS CORP.

WHEEL DRIVE SHAFT INNER JOINT AND SEAL REPLACEMENT

Tools Required

- **J 35910** Seal Clamp Tool. See **Special Tools and Equipment**.
- **J 36652** Drive Axle Clamp Swage Tool
- **J 36652-98** Axle Swage Tool

Disassembly Procedure

IMPORTANT: Use caution when using the hand grinder by the tripot housing (1).

1. Use a hand grinder in order to cut through the swage ring (2).
2. Remove the tripot housing (1) from the halfshaft.
3. Wipe the grease off of the housing (1).
4. Thoroughly degrease the tripot housing (1).

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5. Allow the tripot housing (1) to dry prior to assembly.

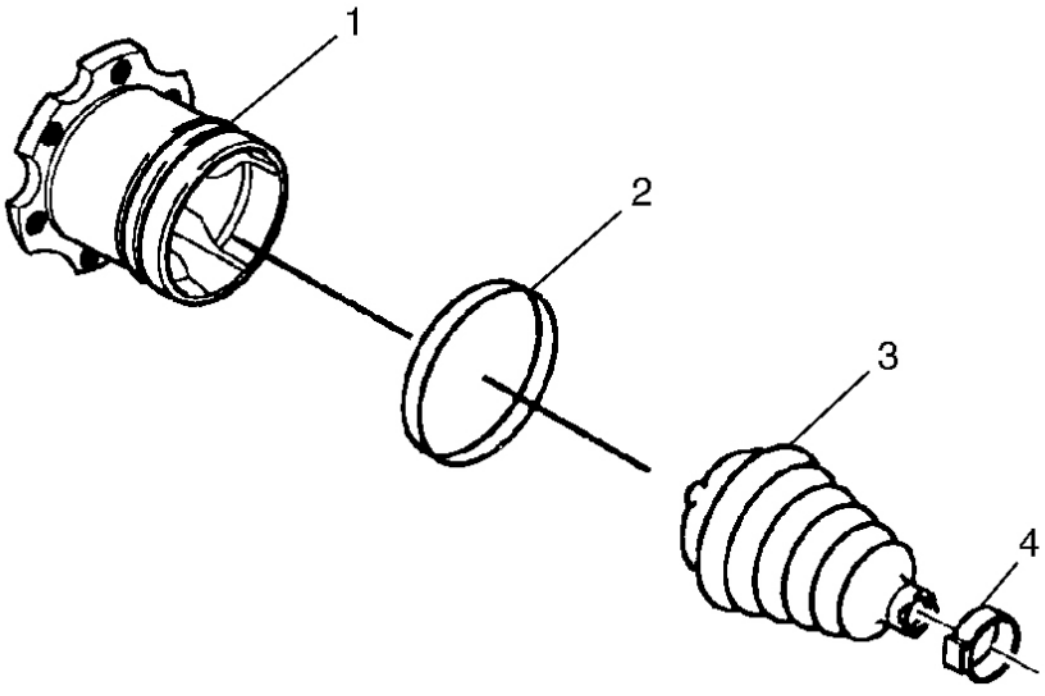

Fig. 20: Disassembled View Of Tripot Housing & Components
Courtesy of GENERAL MOTORS CORP.

6. Using side cutters, remove the small boot retaining clamp.
7. Remove the following items from the halfshaft bar:
    1. The spacer ring (1)
    2. The tripot spider assembly (2)
    3. The tripot boot (3)
8. Clean the halfshaft bar (4). Use a wire brush in order to remove any rust in the seal mounting area (grooves).

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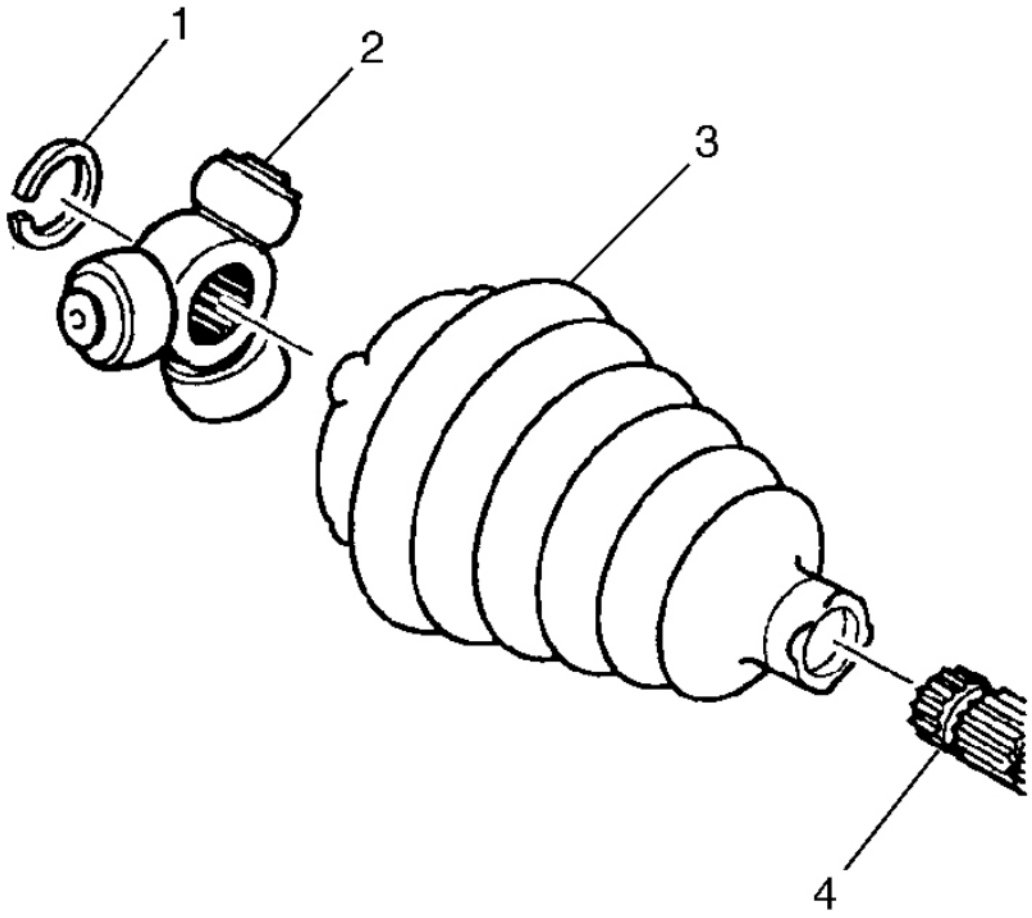

Fig. 21: Disassembled View Of Spacer Ring, Tripot Spider Assembly & Tripot Boot
Courtesy of GENERAL MOTORS CORP.

9. Inspect the needle rollers, needle bearings, and trunnion. Inspect the tripot housing for unusual wear, cracks, or other damage. Replace any damaged parts with the appropriate service kit.

Assembly Procedure

1. Place the new small seal clamp (2) onto the small end of the joint seal (1). Compress the joint seal (1) and small seal clamp (2) onto the halfshaft bar.
2. Position the small end of the joint seal (1) into the joint seal groove (3) on the halfshaft bar.

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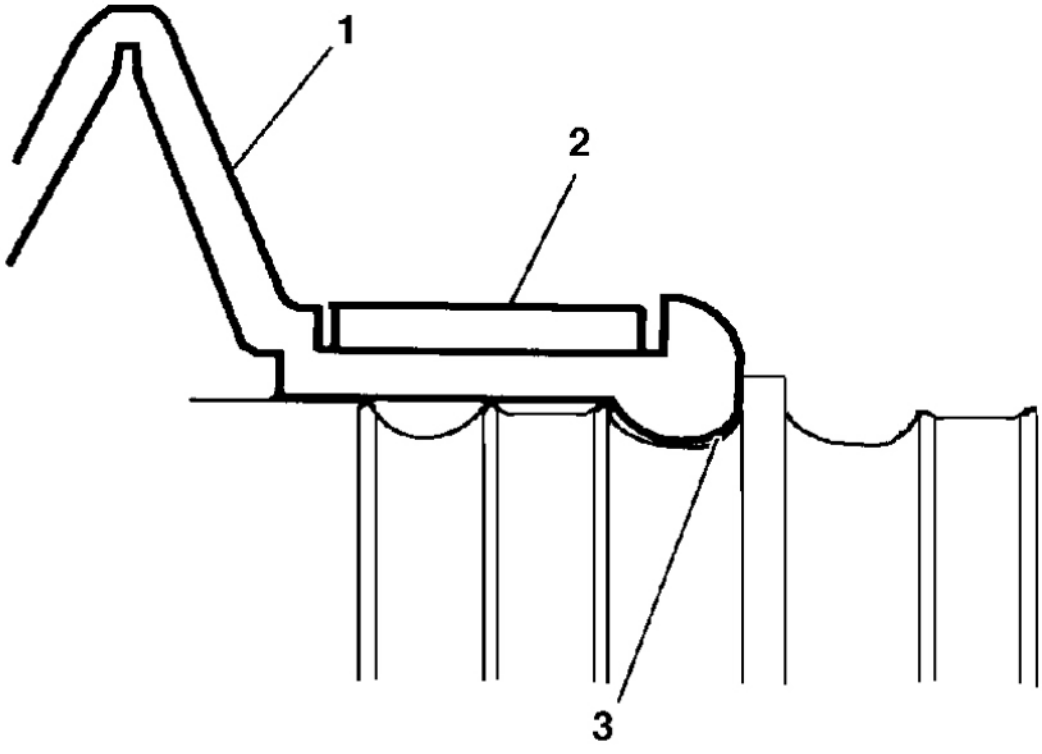

Fig. 22: Positionng Small End Of Joint Seal Into Joint Seal Groove
Courtesy of GENERAL MOTORS CORP.

NOTE: Refer to Fastener Notice in Cautions and Notices.

3. Secure the small seal clamp (1) with **J 35910** , or equivalent, a breaker bar, and a torque wrench.

   Tighten: Tighten the small seal clamp (1) to 136 N.m (100 lb ft).

4. Inspect the gap dimension on the clamp ear. Continue tightening until the gap dimension is reached.

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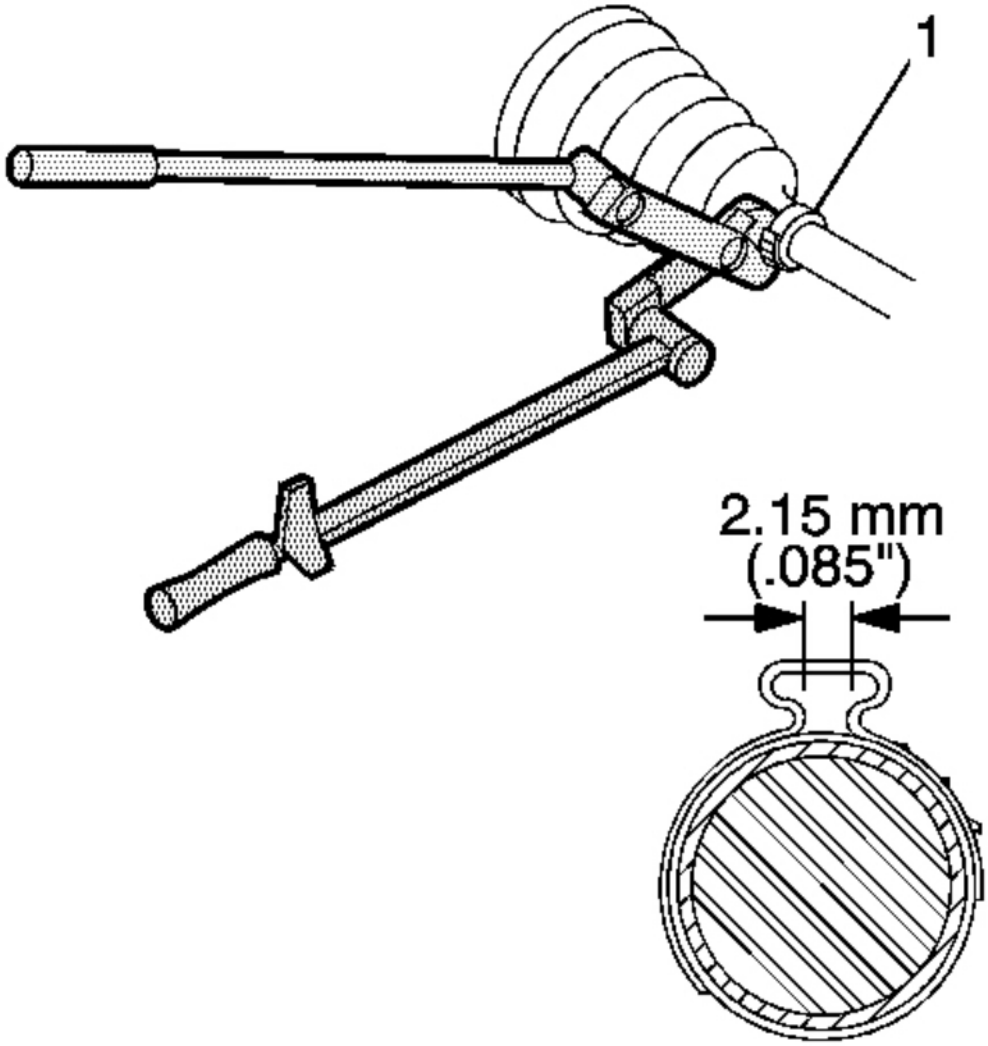

Fig. 23: View Of CV Joint Seal Retaining Clamp
Courtesy of GENERAL MOTORS CORP.

IMPORTANT: Assemble the tripot joint with the convolute retainer in the correct position, as illustrated.

5. Install the convolute retainer tool over the inboard joint seal, being sure to capture the following convolutions:
   - 2-5 for the 1500 model (except 1500 HD)

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- 2-4 for the 1500 HD, 2500, 3500, and Hummer H2 models.

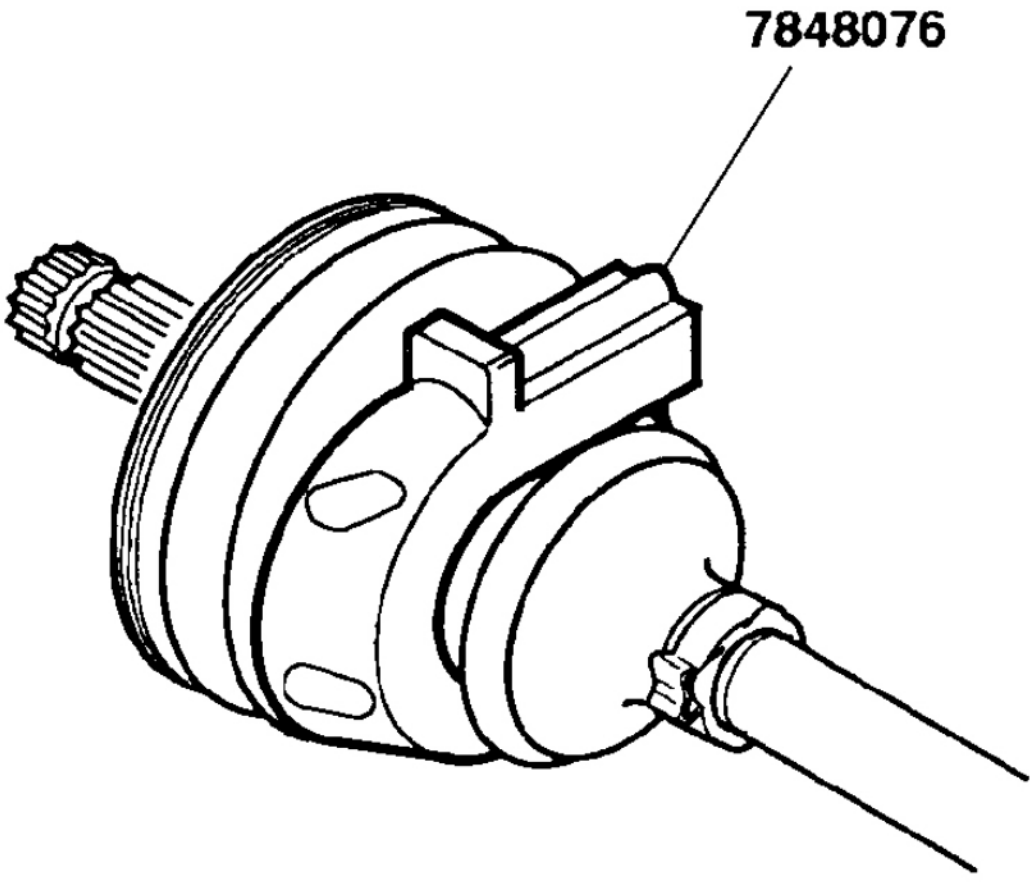

Fig. 24: Installing Convolute Retainer Tool Over Inboard Joint Seal
Courtesy of GENERAL MOTORS CORP.

6. Install the tripot spider assembly (3) onto the halfshaft bar (2).
7. Install the spacer ring (1) in the groove at the end of the halfshaft bar (2).

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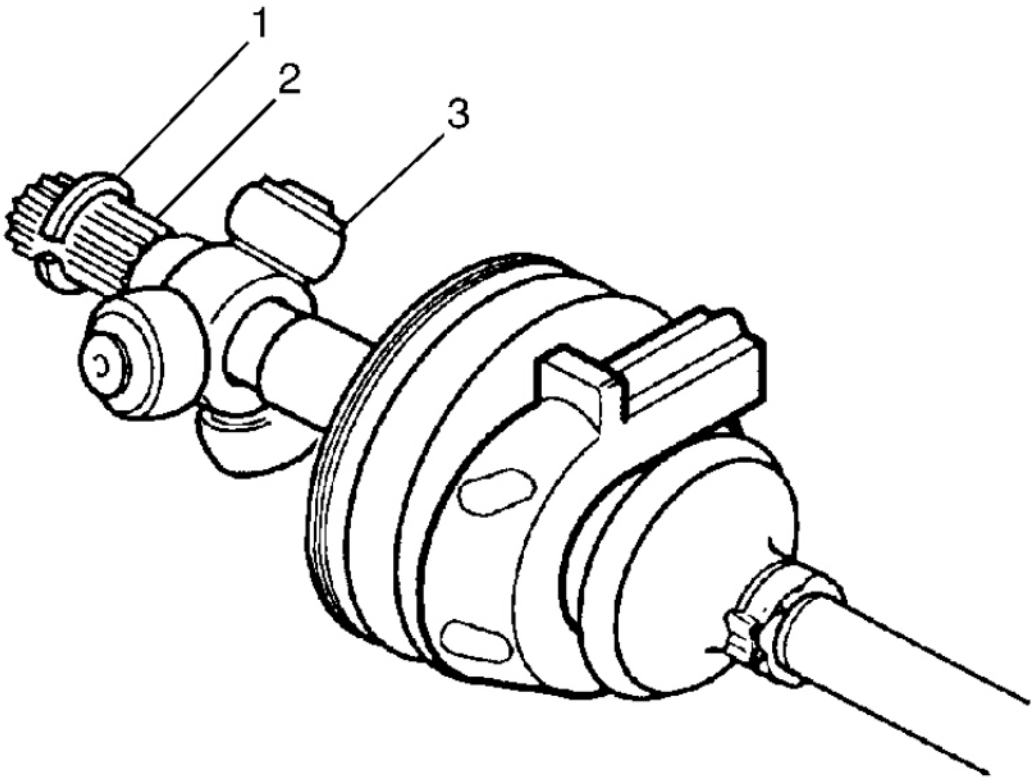

Fig. 25: Assembled View Of Tripot Spider Assembly & Spacer Ring On Halfshaft Bar
Courtesy of GENERAL MOTORS CORP.

8. Pack the tripot seal (4) and the tripot housing (1) with the grease supplied in the kit. The amount of grease supplied in this kit has been pre-measured for this application.

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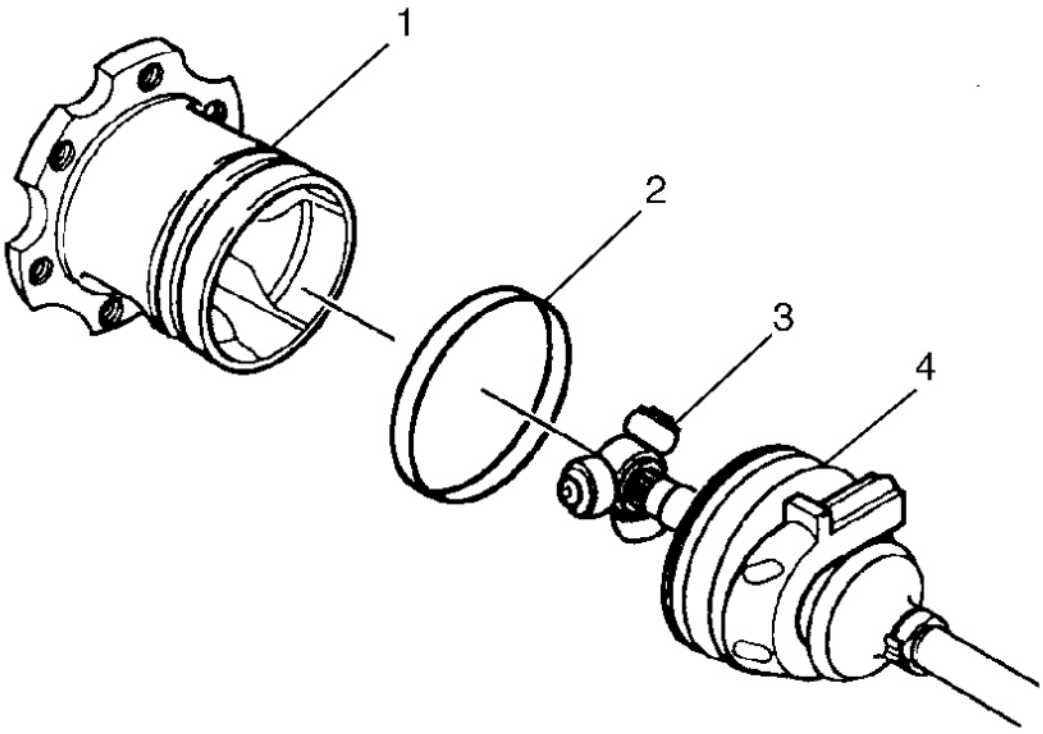

Fig. 26: View Of Tripot Seal & Housing
Courtesy of GENERAL MOTORS CORP.

9. Assemble the tripot housing and the tripot seal using the following procedure:
   A. Pinch the swage ring (2) slightly by hand in order to distort it into an oval shape.
   B. Slide the distorted swage ring (2) over the large diameter of the seal.
   C. Place the tripot housing over the spider assembly.
   D. Install the seal onto the tripot housing.
   E. Align the tripot seal (1), with the swage ring (2) in place, over the flat area on the tripot housing (3).

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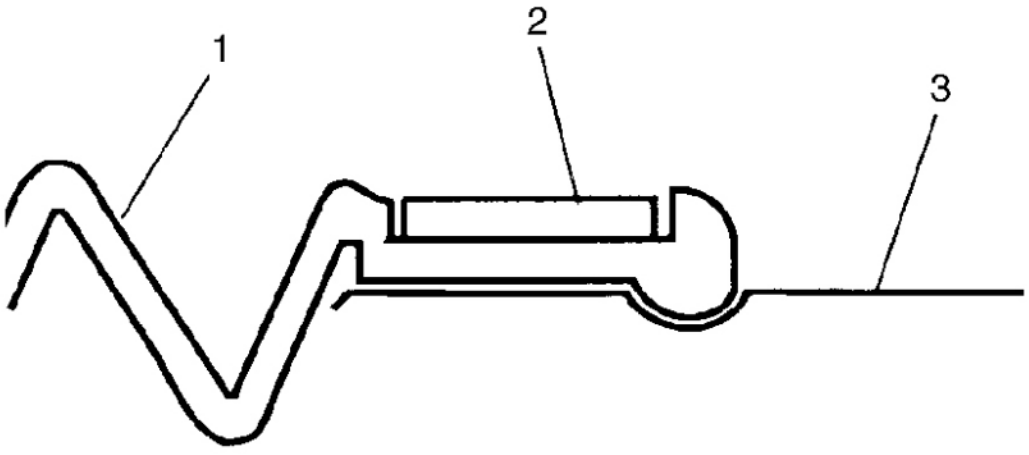

Fig. 27: Aligning Tripot Seal Over Flat Area Of Tripot Housing
Courtesy of GENERAL MOTORS CORP.

10. For the 1500 models (except 1500 HD), assemble the bolts and the support plate to the base of the J-36652-01 and secure the base in a vise.
11. For the 1500 HD, 2500, 3500, and HUMMER H2 models, assemble the bolts and the support plate to the base of the **J 36652-98** and secure the base in a vise.

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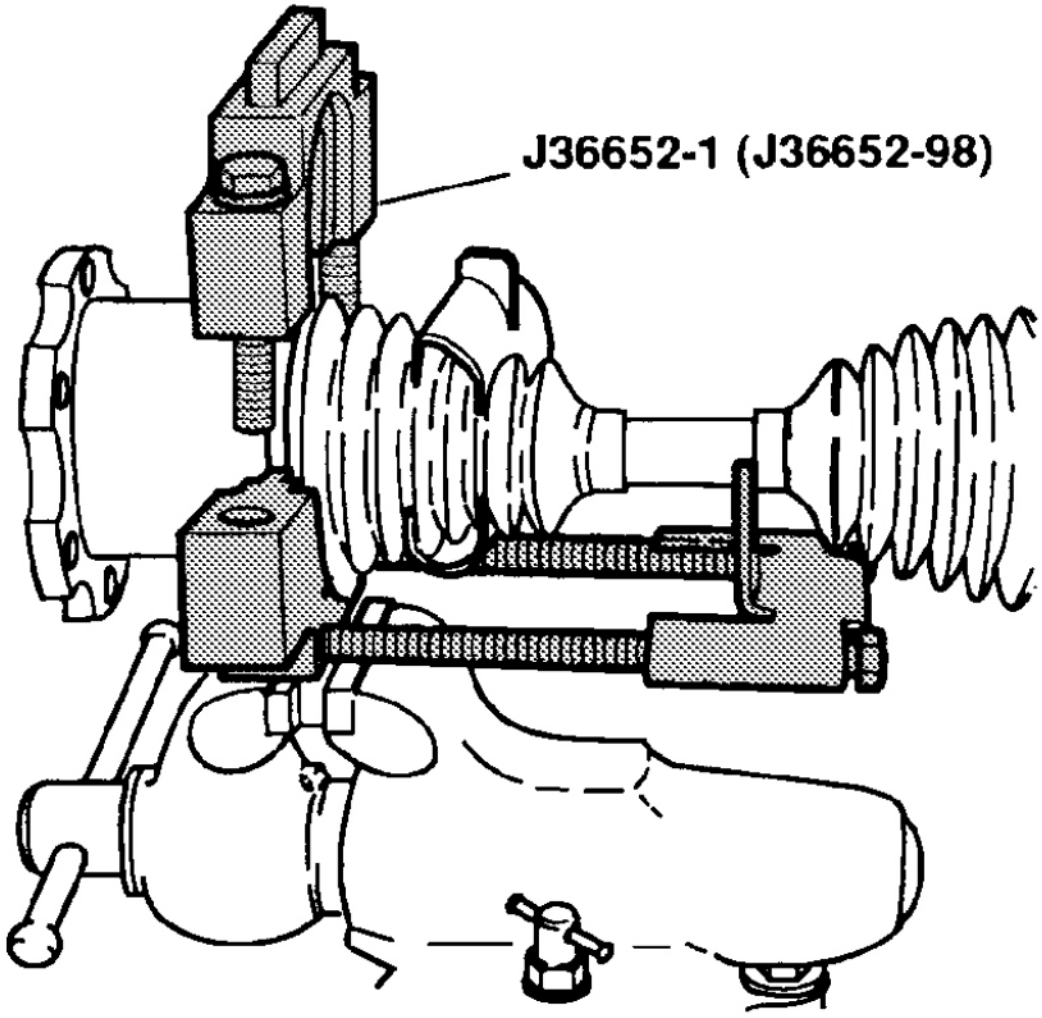

Fig. 28: Assembling J 36652-1 Or J 36652-98 Into Vise
Courtesy of GENERAL MOTORS CORP.

12. Position the inboard end (tripot end) of the halfshaft assembly into the base of the J-36652-01 for the 1500 models (except 1500 HD) or **J 36652-98** for the 1500 HD, 2500, 3500 and Hummer H2 models.
13. Install the top half of the J-36652-01 for the 1500 models (except 1500 HD) or **J 36652-98** for the 1500 HD, 2500, 3500 and HUMMER H2 models.
14. Align the swage ring (2) and the swage ring clamp.
15. Insert the bolts.

Tighten: Hand tighten the bolts until the bolts are snug.

16. Align the following during this procedure:

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- The tripot boot (3)
- The tripot housing (1)
- The swage ring (2)

  Tighten: Tighten each bolt 180 degrees at a time. Alternate between the bolts until both sides of the top half of the tool touch the bottom half.

- Loosen the bolts and remove the halfshaft assembly from the tool.

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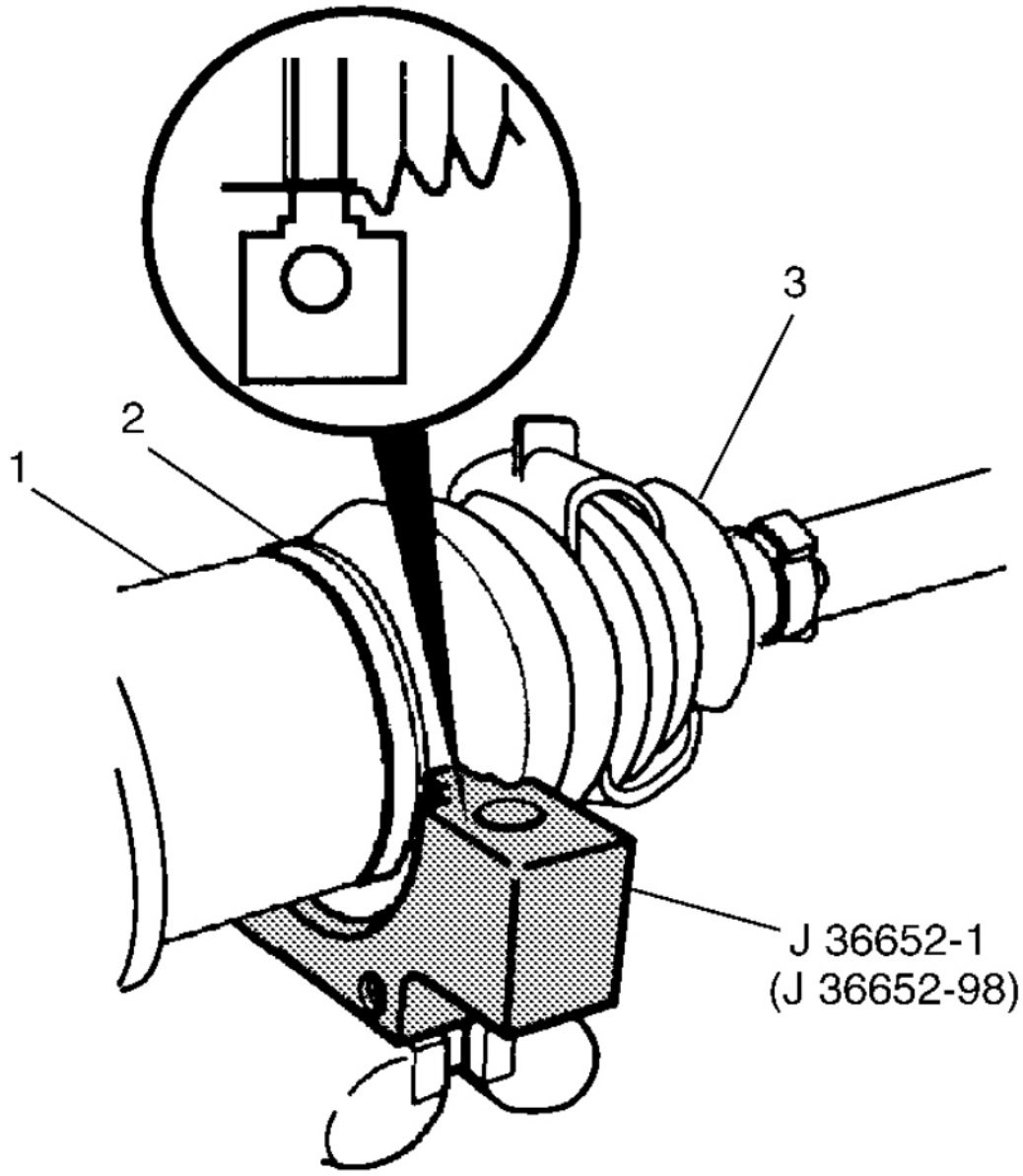

Fig. 29: Positioning Inboard End Of Halfshaft Assembly Into J 36652-1 Or J 36652-98
Courtesy of GENERAL MOTORS CORP.

17. Inspect the inboard stroke position.
    - Use measurement A for the 1500 models (except 1500 HD).
    - Use measurement B for the 1500 HD, 2500, 3500, and Hummer H2 models.

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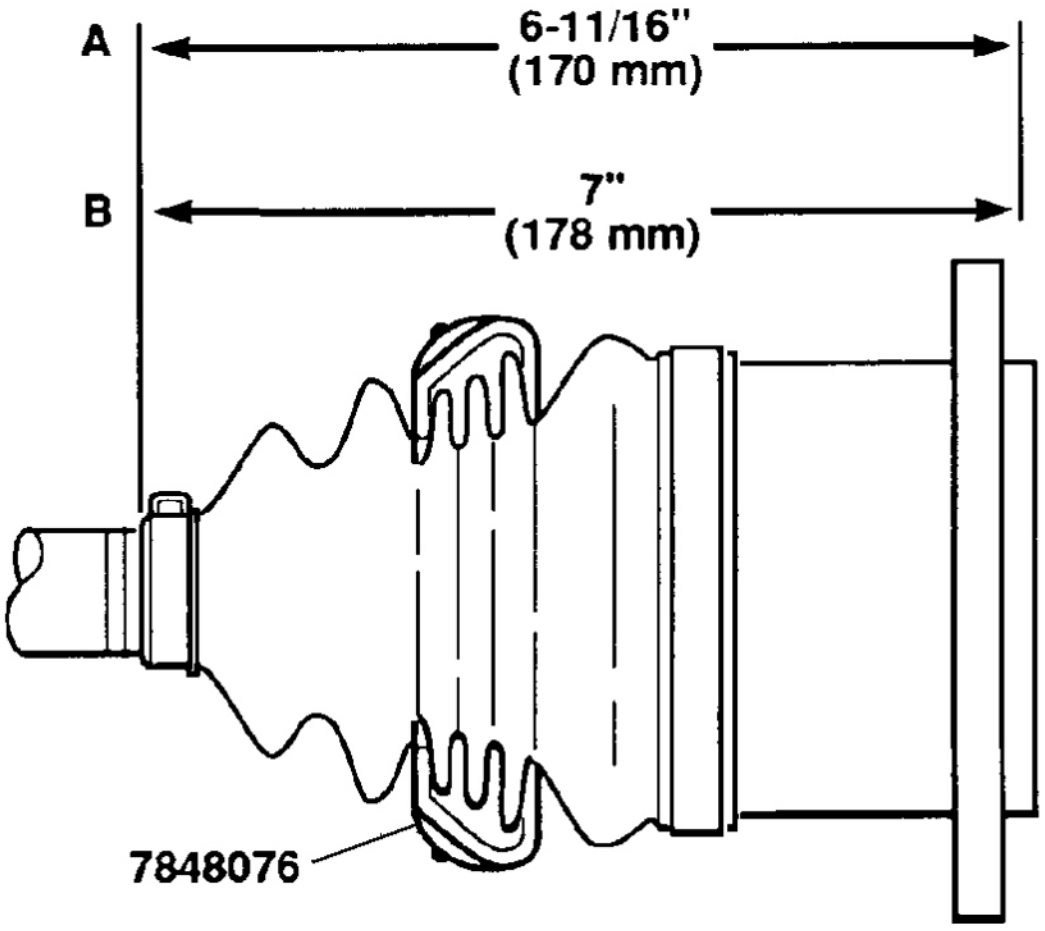

Fig. 30: Inspecting Inboard Stroke Position
Courtesy of GENERAL MOTORS CORP.

18. Remove the convolute retainer tool from the boot.

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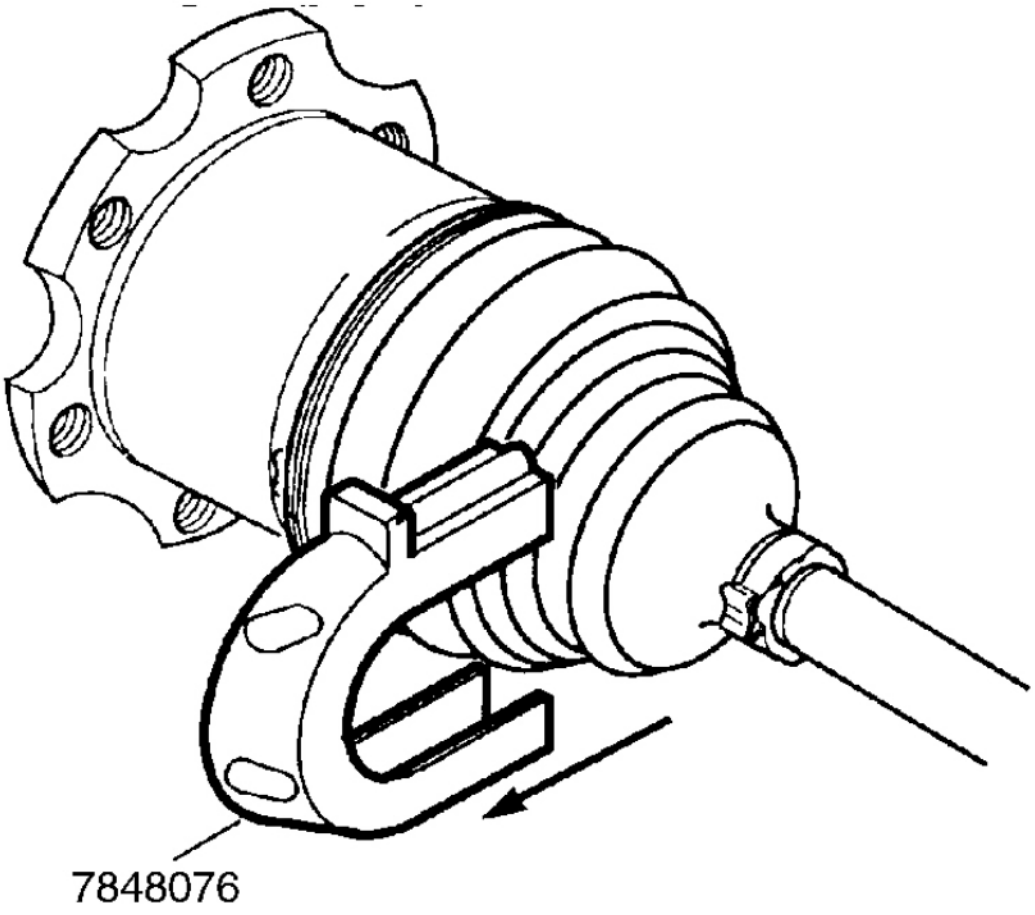

Fig. 31: Removing Convolute Retainer Tool From Boot
Courtesy of GENERAL MOTORS CORP.

WHEEL DRIVE SHAFT OUTER JOINT AND SEAL REPLACEMENT

Tools Required

- **J 8059** Snap Ring Pliers. See **Special Tools and Equipment**.
- **J 35910** Seal Clamp Tool
- **J 36652** Drive Axle Clamp Swage Tool

Disassembly Procedure

IMPORTANT: Use caution when using the hand grinder by the CV joint outer race (1).

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1. Use a hand grinder to cut through the swage ring (2).
2. Use side cutters to cut off the small boot clamp (4).

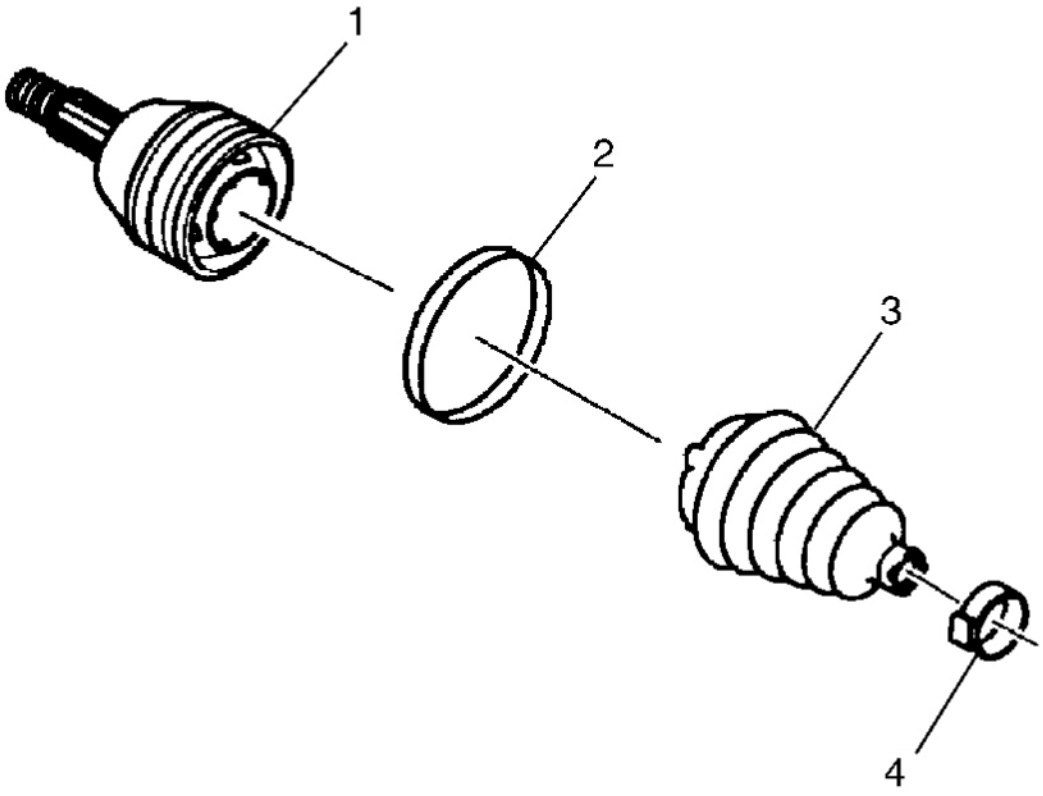

Fig. 32: View Of CV Joint Outer Race, Swage Ring, Boot & Boot Clamp
Courtesy of GENERAL MOTORS CORP.

3. Slide the boot (5) down the halfshaft bar (4) and away from the CV joint outer race (1).
4. Wipe all grease away from the face of the CV joint.
5. Find the halfshaft bar retaining snap ring (3), which is located in the inner race (2).
6. Spread the snap ring ears apart using **J 8059** (or equivalent).
7. Pull the CV joint (1) and the CV joint boot (5) from the halfshaft bar (4).
8. Discard the old CV joint boot (5).

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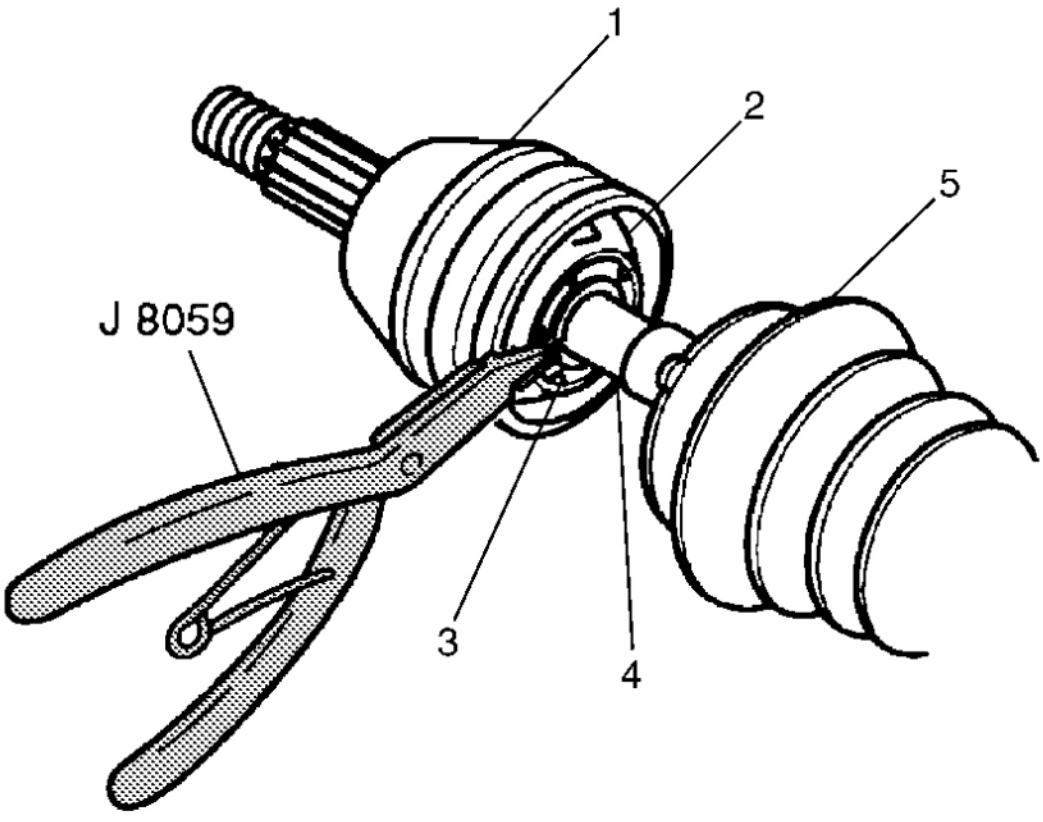

Fig. 33: Removing Halfshaft Bar Retaining Snap Ring Using J 8059
Courtesy of GENERAL MOTORS CORP.

9. Place a brass drift against the CV joint cage (1).
10. Tap gently on the brass drift with a hammer in order to tilt the cage (1).
11. Remove the first chrome alloy ball (2) when the CV joint cage (1) tilts.
12. Tilt the CV joint cage (1) in the opposite direction to remove the opposing chrome alloy ball (2).
13. Repeat this process to remove all six of the balls.

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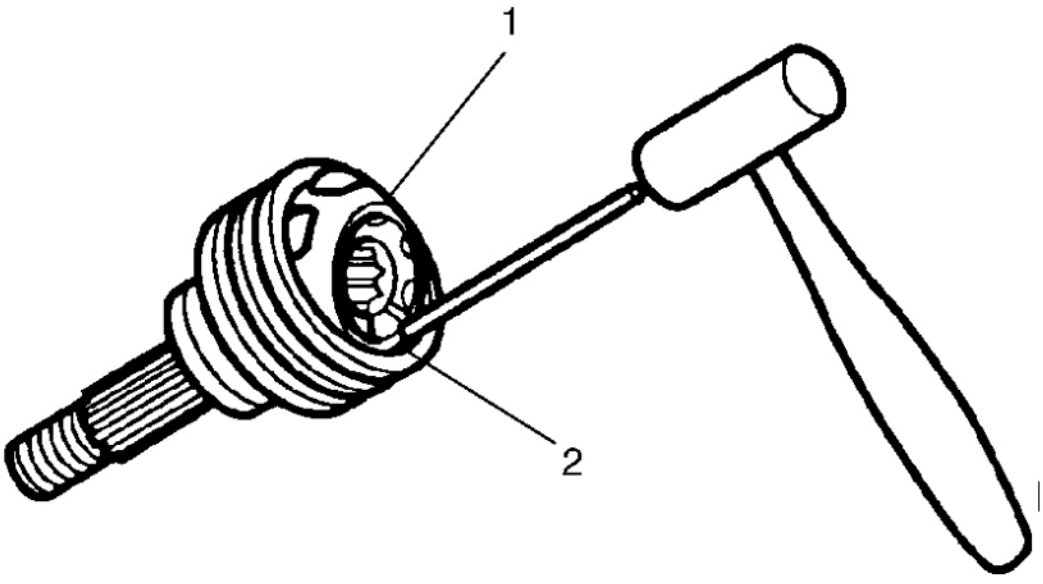

Fig. 34: Taping Gently On Brass Drift With A Hammer In Order To Tilt Cage
Courtesy of GENERAL MOTORS CORP.

14. Pivot the CV joint cage (4) and the inner race 90 degrees to the center line of the outer race (1). At the same time, align the cage windows (3) with the lands of the outer race (2).
15. Lift out the cage (4) and the inner race.

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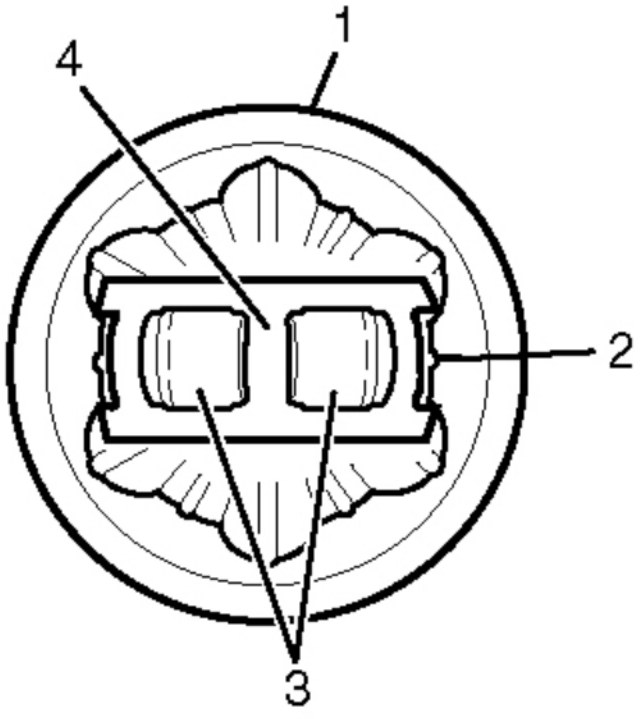

Fig. 35: View Of Outer Race, Inner Race, Cage Window & CV Joint Cage
Courtesy of GENERAL MOTORS CORP.

16. Remove the inner race (1) from the cage (2) by rotating the inner race (1) upward.

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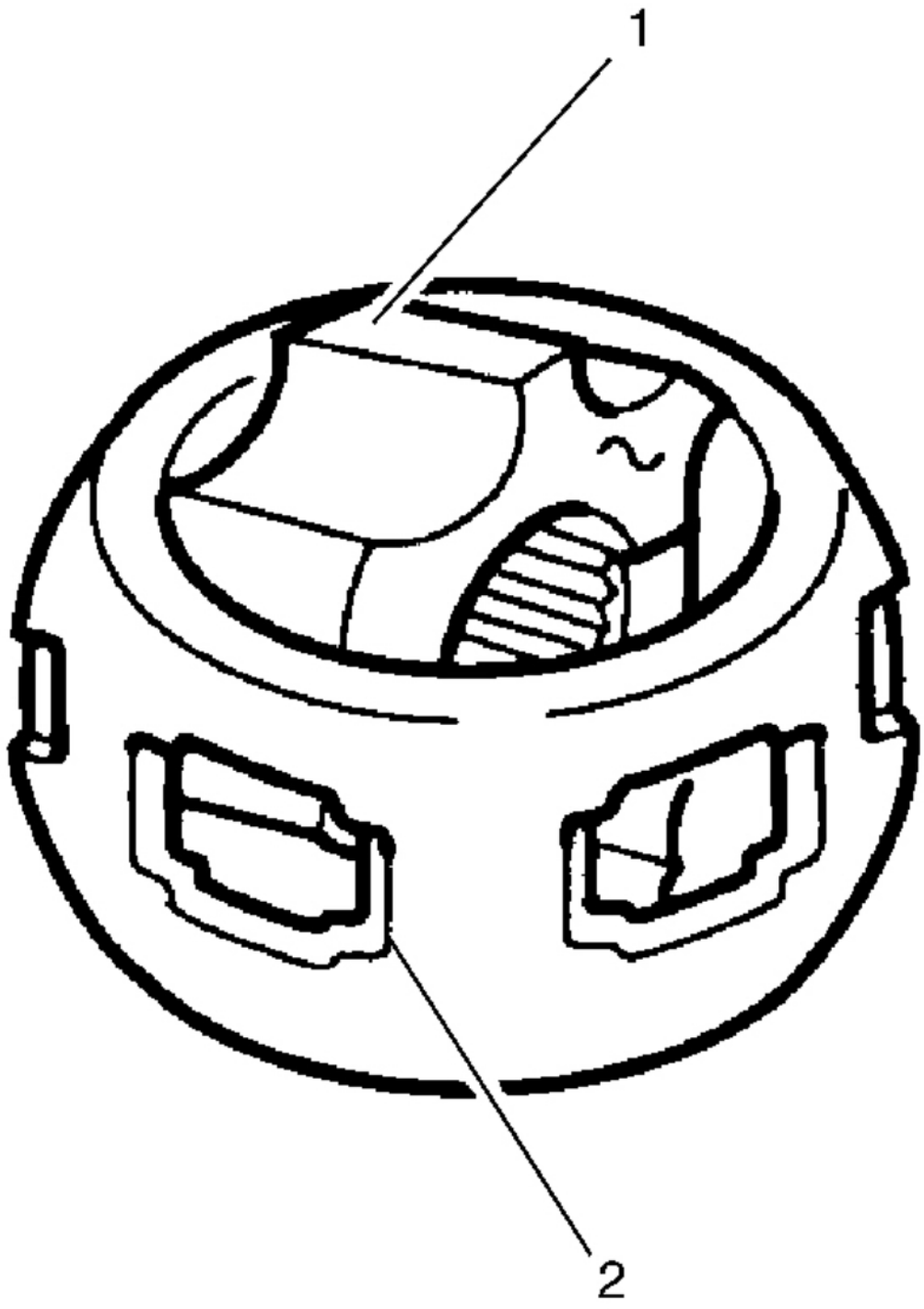

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Fig. 36: View Of Inner Race & Cage
Courtesy of GENERAL MOTORS CORP.

17. Clean the following items thoroughly with cleaning solvent. Remove all traces of old grease and any contaminates.
    1. The inner and outer race assemblies
    2. The CV joint cage
    3. The chrome alloy balls
18. Dry all the parts.
19. Check the CV joint assembly for unusual wear, cracks, or other damage.
20. Replace any damaged parts.
21. Clean the halfshaft bar. Use a wire brush to remove any rust in the seal mounting area (grooves).

Assembly Procedure

1. Inspect all of the parts for unusual wear, cracks, or other damage. Replace the CV joint assembly if necessary.
2. Put a light coat of the recommended grease on the inner (6) and the outer race (8) grooves.

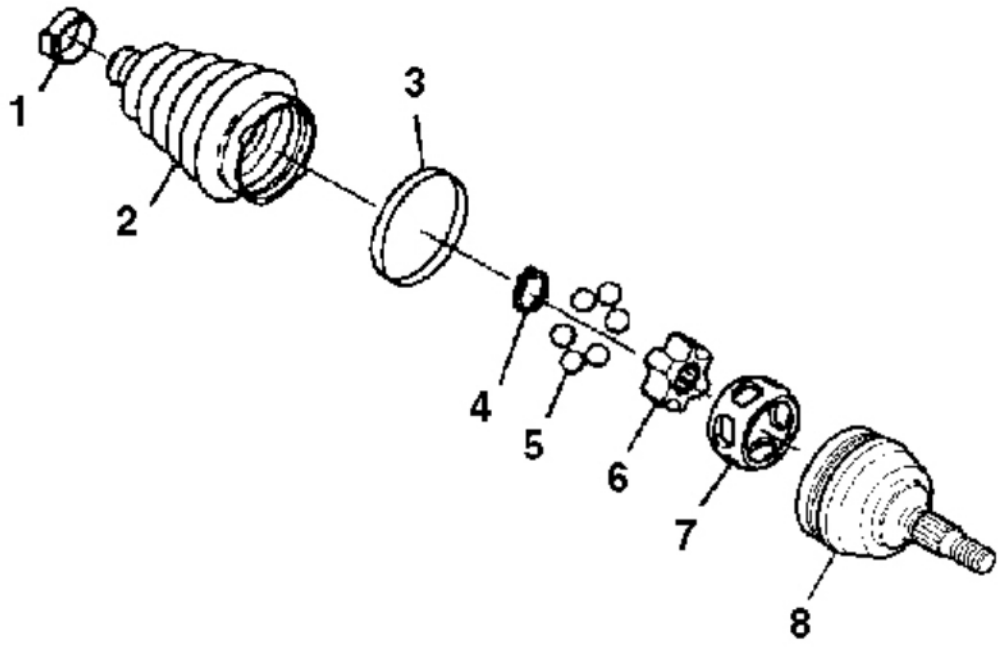

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Fig. 37: Disassembled View Of CV Joint Outer Race Components
Courtesy of GENERAL MOTORS CORP.

3. Hold the inner race (1) at 90 degrees to the centerline of the cage (2).
4. Align the lands of the inner race (1) with the windows of the cage (2).
5. Insert the inner race (1) into the cage (2), by rotating the inner race (1) downward.

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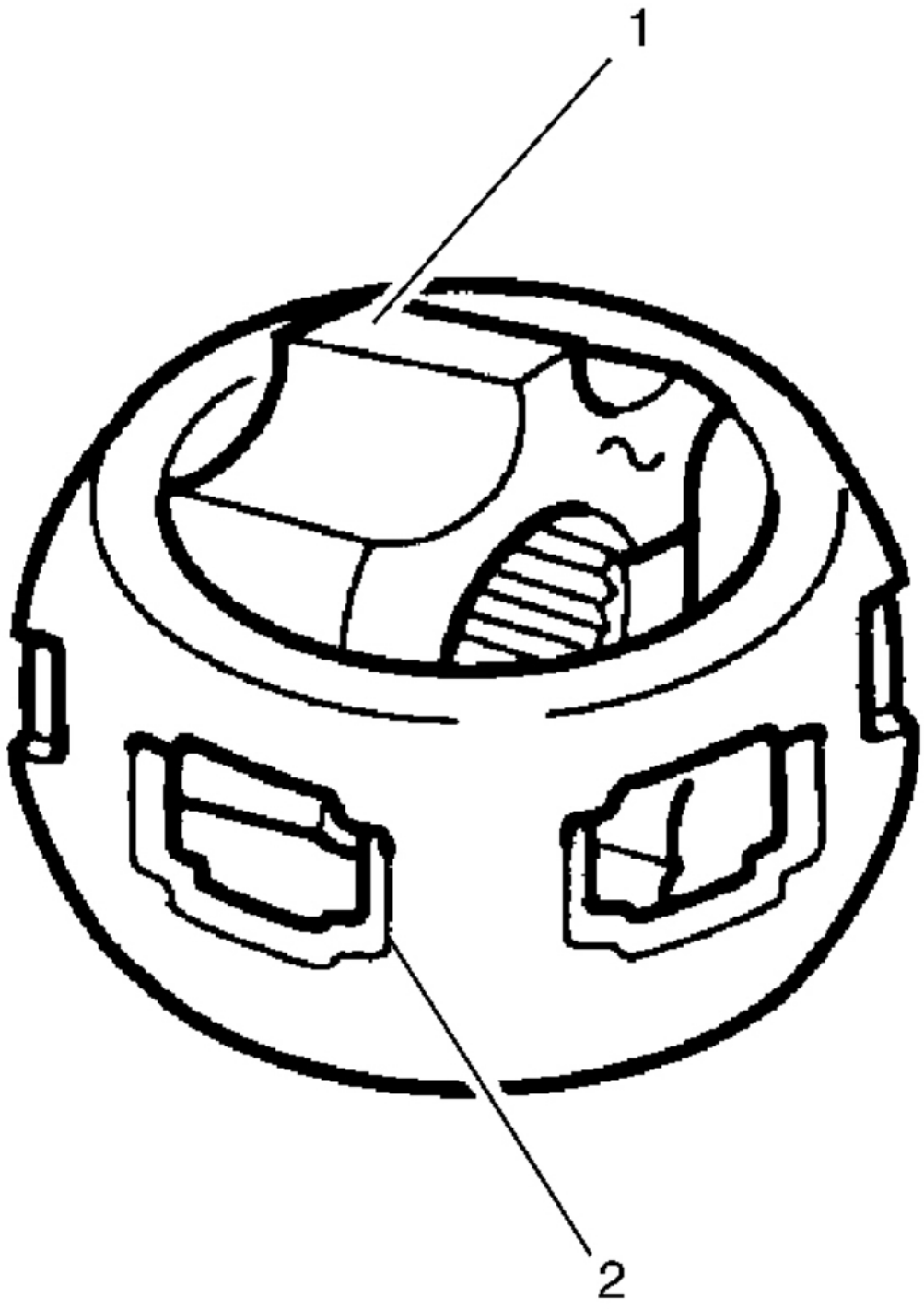

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Fig. 38: View Of Inner Race & Cage
Courtesy of GENERAL MOTORS CORP.

6. Insert the cage (4) and inner race into the outer race (1).

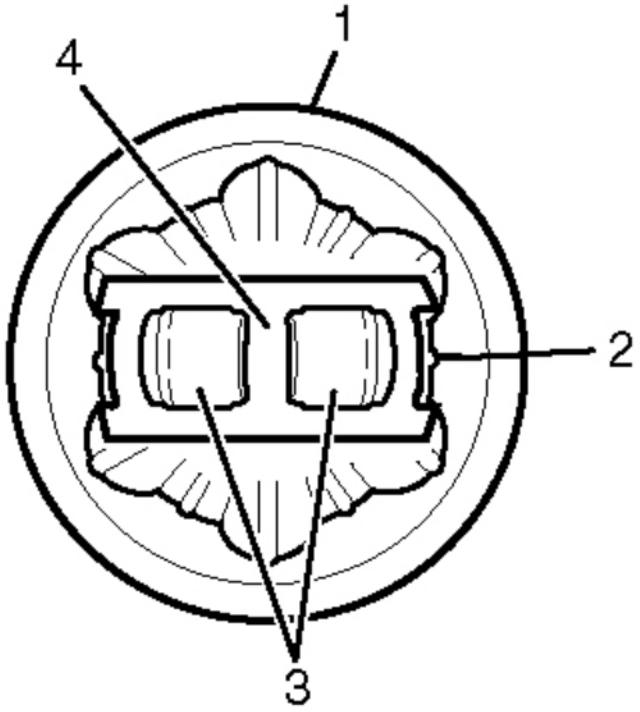

Fig. 39: View Of Outer Race, Inner Race, Cage Window & CV Joint Cage
Courtesy of GENERAL MOTORS CORP.

7. Place a brass drift against the CV joint cage (1).
8. Tap gently on the brass drift with a hammer in order to tilt the cage (1).
9. Install the first chrome alloy ball (2) when the CV joint cage (1) tilts.
10. Tilt the CV joint cage (1) in the opposite direction to install the opposing chrome alloy ball (2).
11. Repeat this process in order to install all six of the balls.

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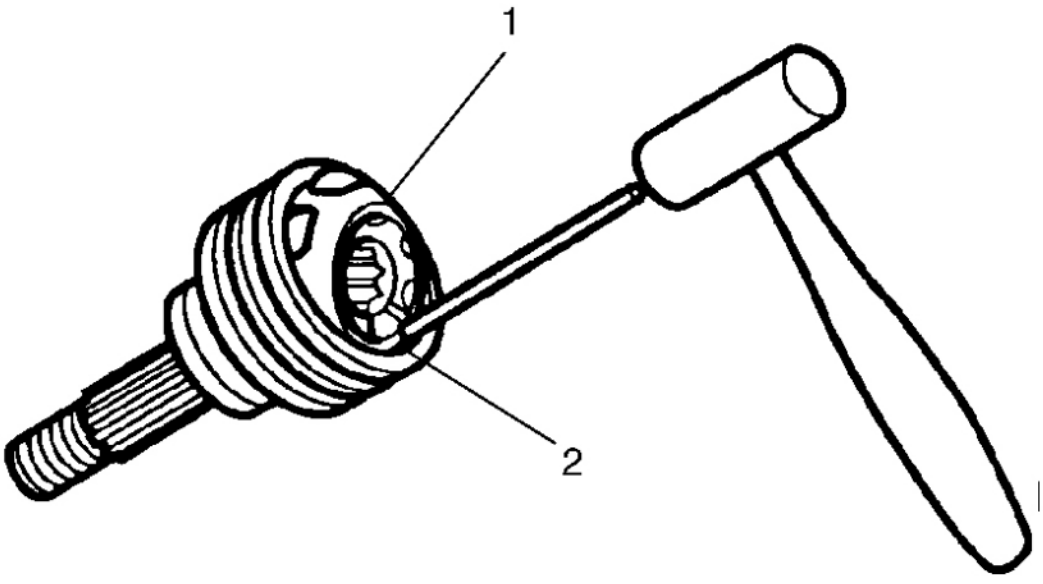

Fig. 40: Taping Gently On Brass Drift With A Hammer In Order To Tilt Cage
Courtesy of GENERAL MOTORS CORP.

12. Pack the CV joint boot (1) and the CV joint assembly with the grease supplied in the kit. The amount of grease supplied in this kit has been pre-measured for this application.
13. Place the new small boot clamp (2) onto the CV joint seal (1).
14. Slide the CV joint boot (1) onto the halfshaft bar.
15. Position the small end of the CV joint boot (1) into the joint boot groove (3) on the halfshaft bar.

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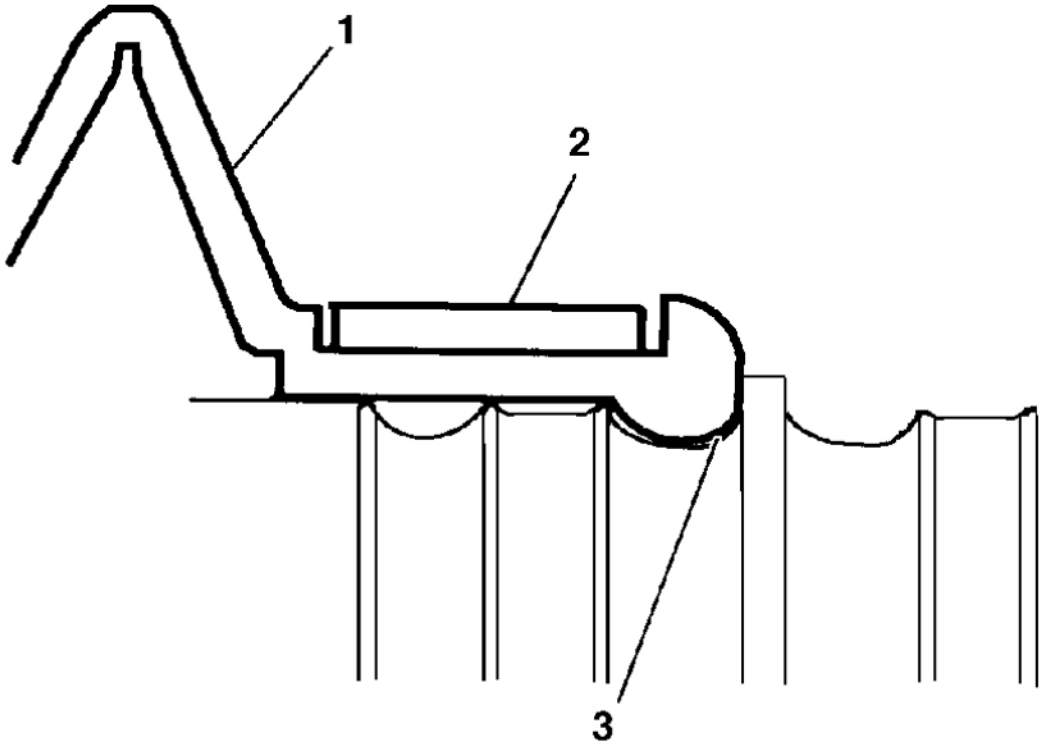

Fig. 41: Positionng Small End Of Joint Seal Into Joint Seal Groove
Courtesy of GENERAL MOTORS CORP.

16. Secure the small boot clamp (1) using **J 35910** (or equivalent), a breaker bar, and a torque wrench.

    Tighten: Tighten the small clamp (1) to 136 N.m (100 lb ft).

17. Check the gap dimension on the clamp ear. Continue tightening until the gap dimension is reached.

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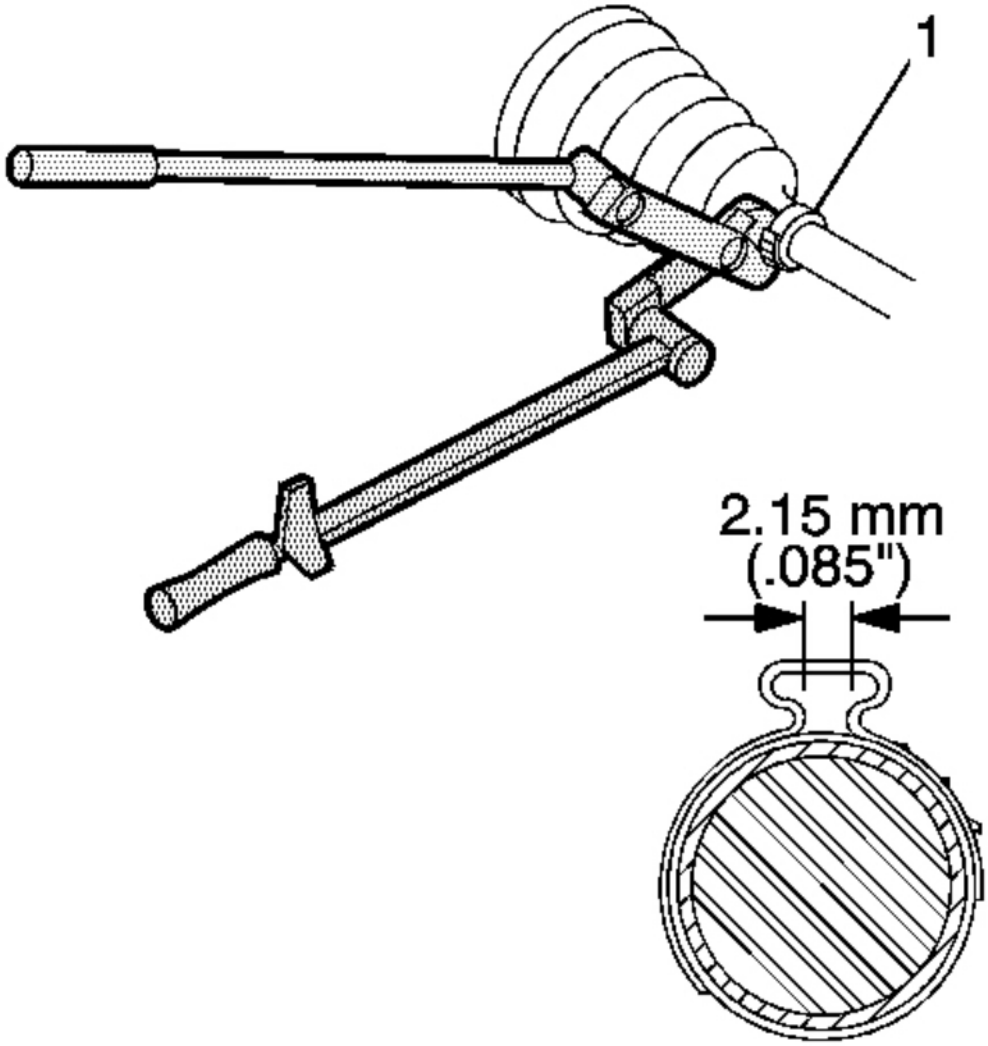

Fig. 42: View Of CV Joint Seal Retaining Clamp
Courtesy of GENERAL MOTORS CORP.

18. Pinch the new swage ring (2) slightly by hand to distort it into an oval shape.
19. Slide the distorted swage ring (2) over the large diameter of the boot (1).

IMPORTANT: Be sure that the retaining ring side of the CV joint inner race faces the halfshaft bar (3) before installation.
Slide the CV joint (4) onto the halfshaft bar (3). The retaining snap ring

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inside of the inner race engages in the halfshaft bar groove with a click when the CV joint (4) is in the proper position.

20. Pull on the CV joint (4) to verify engagement.
21. Slide the large diameter of the CV joint boot (1), with the large swage ring (2) in place, over the outside edge of the CV joint outer race (4).

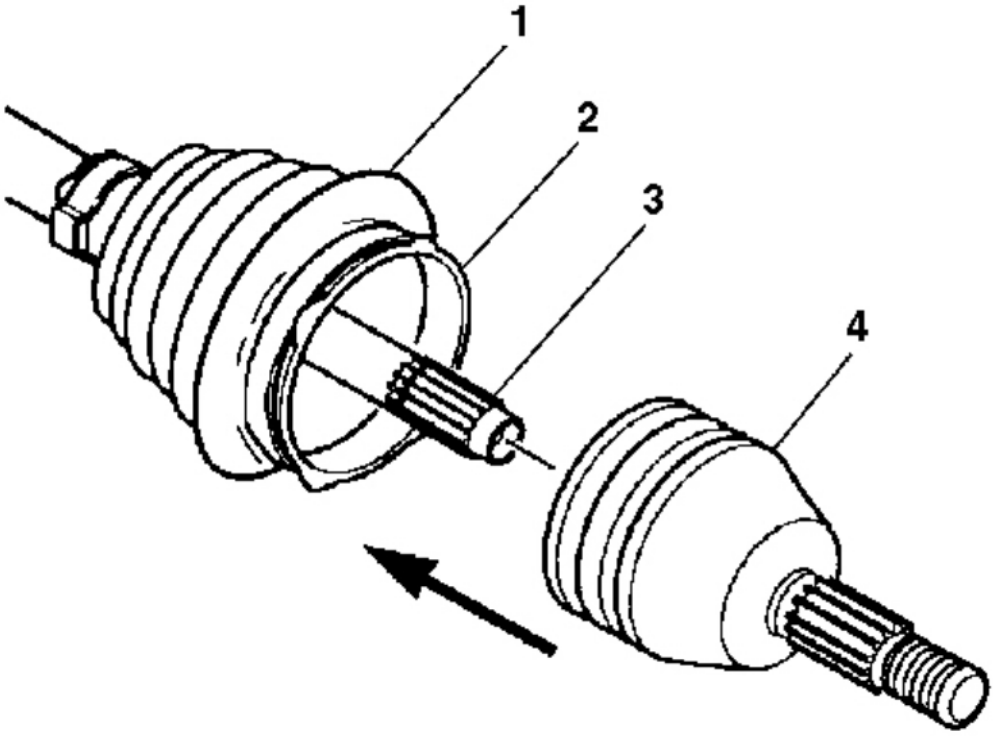

Fig. 43: Sliding CV Joint Boot & Swage Ring Over CV Joint Outer Race
Courtesy of GENERAL MOTORS CORP.

22. Clamp the CV joint boot (2) tightly to the CV joint outer race (1) with the large swage ring (4), using the following procedure:
23. Mount the base of **J 36652** in a vise.
24. Position the CV joint end (outboard end) of the halfshaft assembly in the bottom half of **J 36652** .

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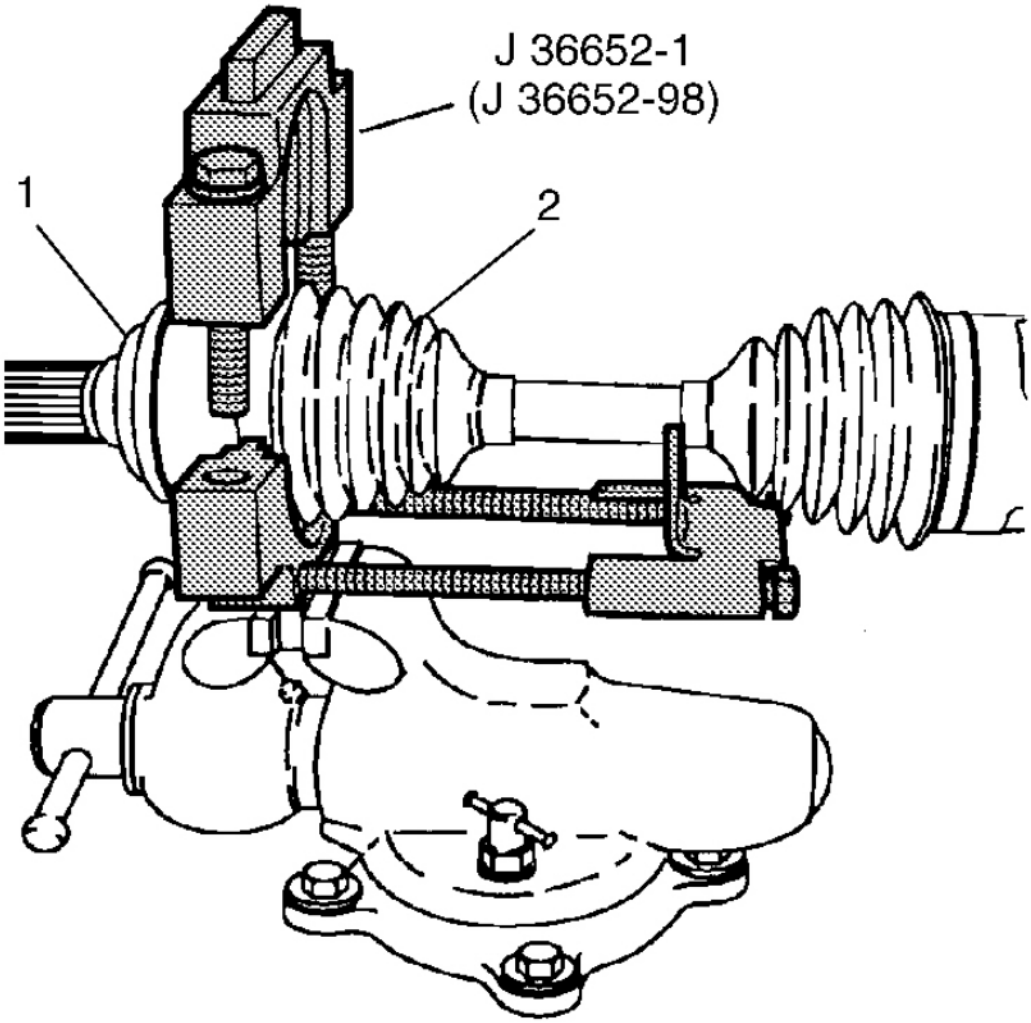

Fig. 44: Positioning CV Joint End Of Halfshaft Assembly In J 36652
Courtesy of GENERAL MOTORS CORP.

25. Align the following during this procedure:
    - The CV joint boot (3)
    - The CV joint assembly (1)
    - The swage ring (2)
26. Install the top half of **J 36652** onto the lower half of the tool, over the CV joint boot (3) and the CV joint assembly (1).
27. Align the swage ring (2) and the swage ring clamp.
28. Insert the bolts into **J 36652** . Hand tighten the bolts until the bolts are snug.

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Tighten: Tighten each bolt 180 degrees at a time. Alternate between the bolts until both sides of the top half of **J 36652** touch the bottom half of the tool.

29. Loosen the bolts and remove the halfshaft assembly from **J 36652** .

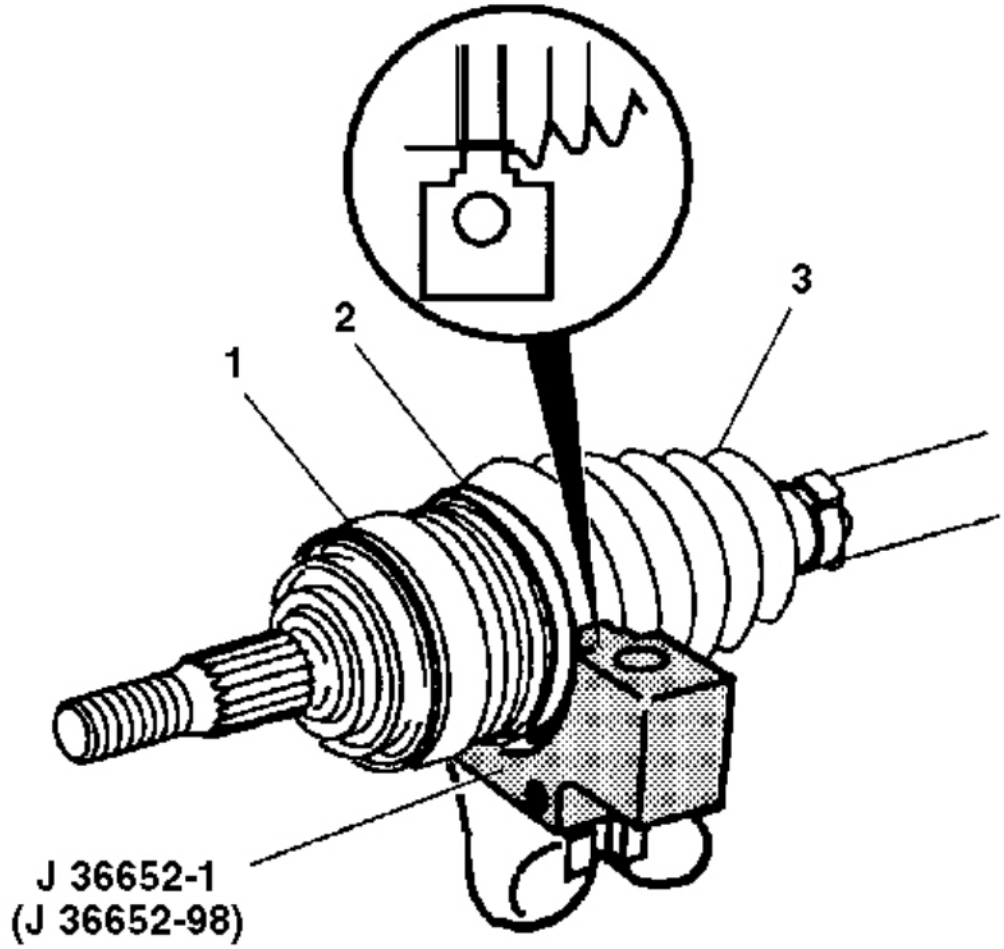

Fig. 45: Installing Top Half Of J 36652 Onto Lower Half Over CV Joint Boot & Assembly
Courtesy of GENERAL MOTORS CORP.

DESCRIPTION AND OPERATION

WHEEL DRIVE SHAFTS DESCRIPTION AND OPERATION

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Front Wheel Drive Shafts are flexible assemblies which consist of the following components:

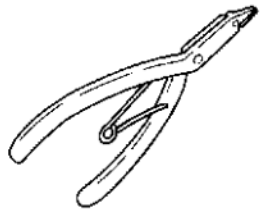
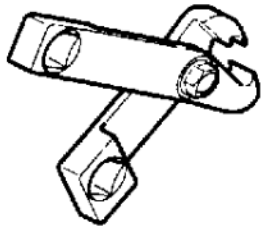
- Front wheel drive shaft constant velocity joint outer joint.
- Front wheel drive shaft tri-pot joint inner joint.
- The front wheel drive shaft connects the front wheel drive shaft tri-pot joint and the front wheel drive shaft constant velocity joint.
- Wheel Drive Shaft Seal Cover 15 Series
- The front wheel drive shaft tri-pot joint is completely flexible, and moves with an in and out motion.
- The front wheel drive shaft constant velocity joint is flexible but can not move in and out.

The Wheel Drive Shaft is a balanced shaft that transmits rotational force from the front differential to the front wheels when the transfer case is engaged. The wheel drive shaft is mounted to the front differential by bolting the flange of the wheel drive shaft to the flange on the inner output shaft of the front differential. The other end of the wheel drive shaft is splined to fit into and drive the hub assembly when the transfer case is engaged. The tri-pot joint and constant velocity joint on the wheel drive shaft allows the shaft to be flexible to move with the suspension travel of the vehicle.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Special Tools

Illustration	Tool Number/ Description
	J 8059 Snap Ring Pliers
	J 35910 Seal Clamp Tool

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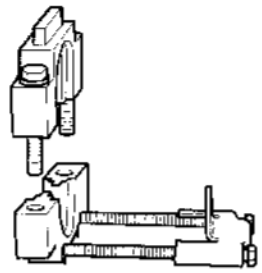
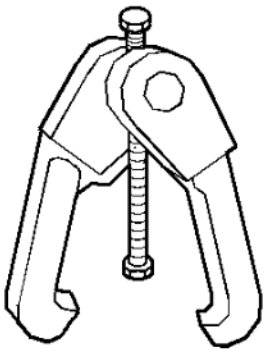
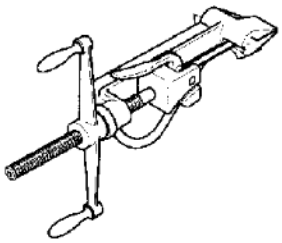
	J 36652 Drive Axle Clamp Swage Tool
	J 36652-98 Axle Swage Tool
	J 41187 Band-it Type Tool
	J 45859 Axle Remover

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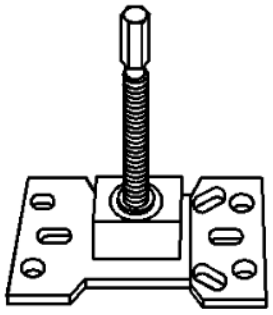

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