

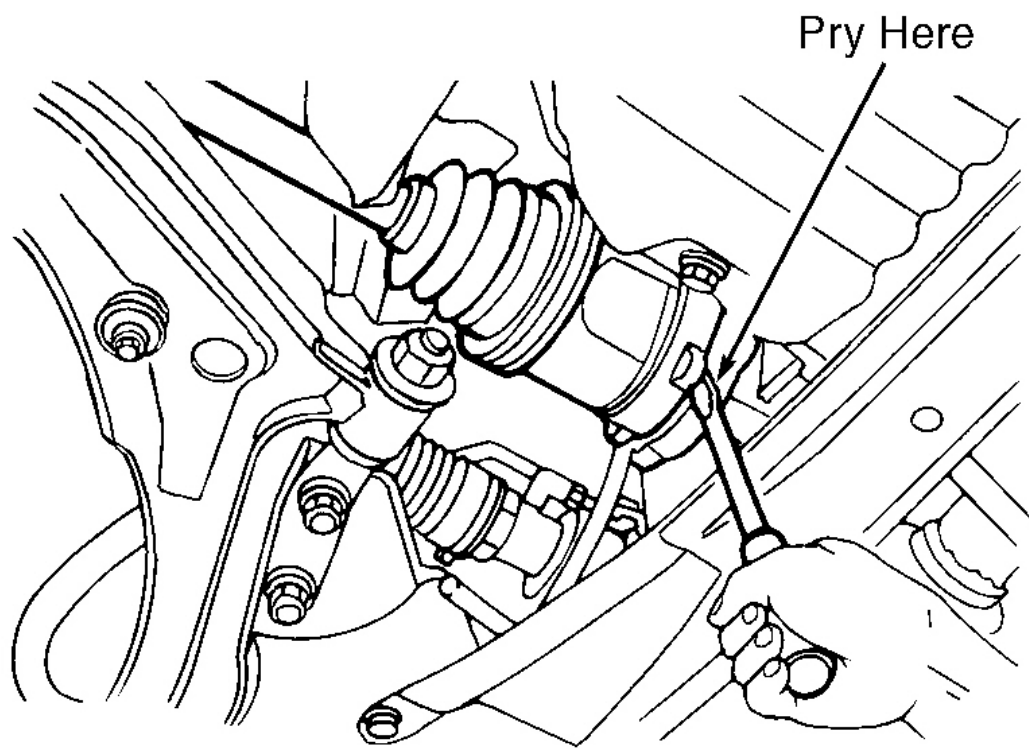
REMOVAL, DISASSEMBLY, REASSEMBLY & INSTALLATION

FWD AXLE SHAFT

NOTE: On A/T models, right axle shaft must be removed to remove left axle shaft. On all models, cover axle shaft boots with shop towel to prevent damaging boots. Always use NEW snap rings, circular clips and boot clamps during reassembly and installation. Replace axle shaft oil seal in differential before installing axle shaft.

Removal

1. Raise and support vehicle. Remove wheel. Remove wheel bearing lock nut from end of drive axle. Remove disc brake caliper and suspend out of way. **DO NOT** allow caliper to hang by hydraulic hose.
2. Separate tie rod end from steering knuckle. Remove axle shaft from steering knuckle hub using a soft mallet. On models with ball and cage type right axle shaft, remove support bearing retainer-to-block bolts. See **Fig. 4**.
3. On all models, pry right axle shaft from transaxle using screwdriver. See **Fig. 1**. On M/T models, pry left axle shaft from transaxle using screwdriver. On A/T models, insert screwdriver through right axle shaft hole in differential, and drive out left axle shaft. See **Fig. 2**.



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Fig. 1: Removing Axle Shaft (Except A/T Left Shaft)

Courtesy of NISSAN MOTOR CO., U.S.A.

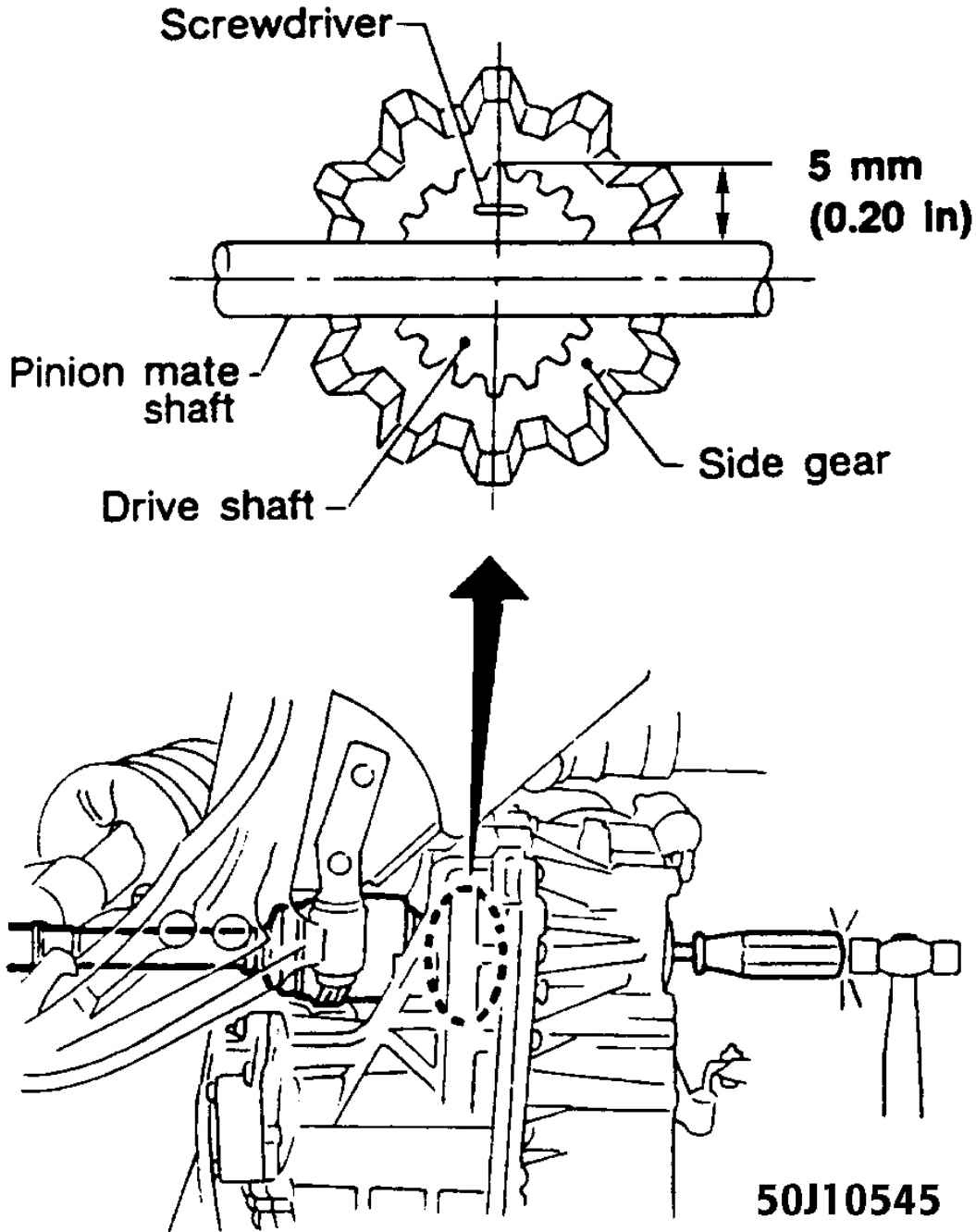


Fig. 2: Removing Axle Shaft (A/T Left Shaft)
Courtesy of NISSAN MOTOR CO., U.S.A.

Disassembly (Inner Joint Ball & Cage Type)

1. Place axle shaft in soft-jawed vise with inner joint facing up. Remove boot clamps. See **Fig. 4** . Mark slide joint housing and inner race in relation to axle shaft for reassembly reference.
2. Remove and discard snap ring "A". See **Fig. 3** and **Fig. 4** . Remove slide joint housing. Remove snap ring "C". Remove cage, inner race and balls as an assembly. Remove snap ring "B". Cover axle shaft splines with tape. Remove boot.
3. To disassemble support bearing and retainer assembly on right axle shaft, remove dust shield and snap ring "D". See **Fig. 4** . Press axle shaft out of support bearing and retainer assembly. Remove snap ring and dust shield from retainer. Using bearing driver and hammer, drive support bearing out of retainer.

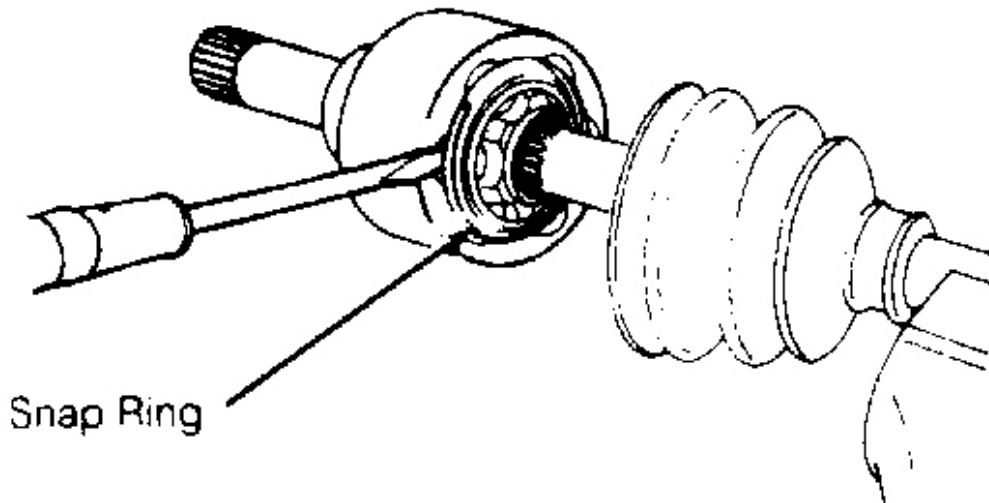
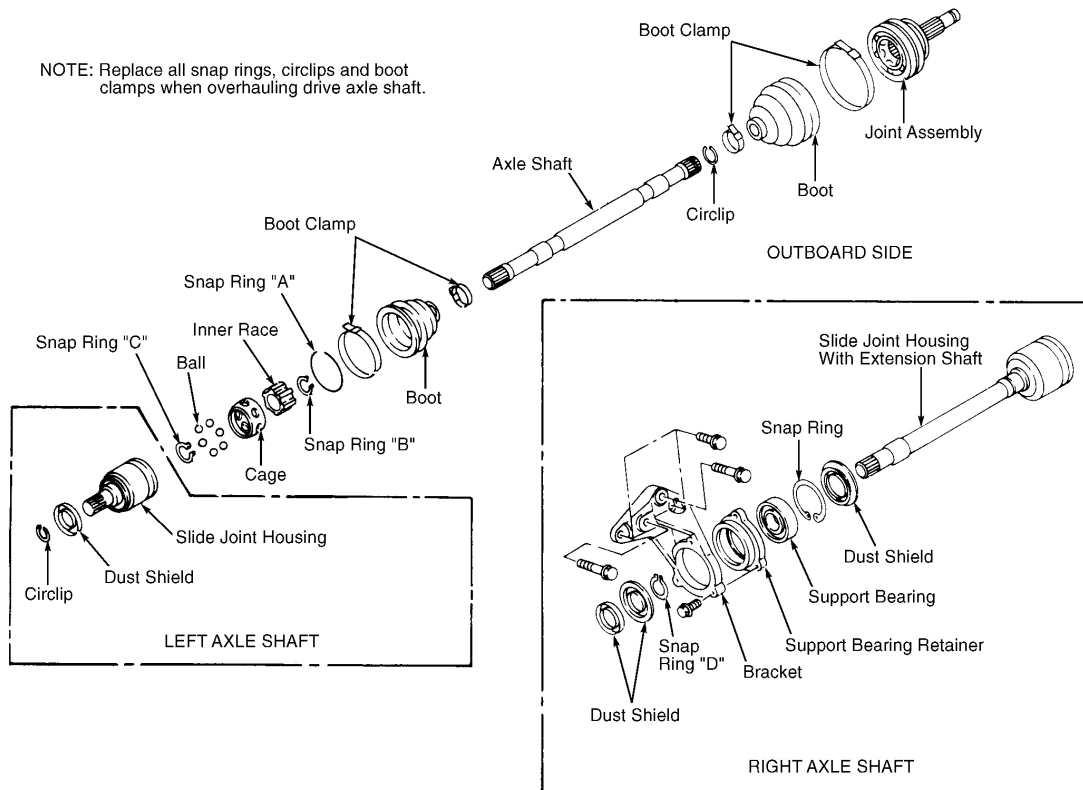


Fig. 3: Removing Snap Ring "A" (Inner Joint - Ball & Cage Type)

Courtesy of NISSAN MOTOR CO., U.S.A.



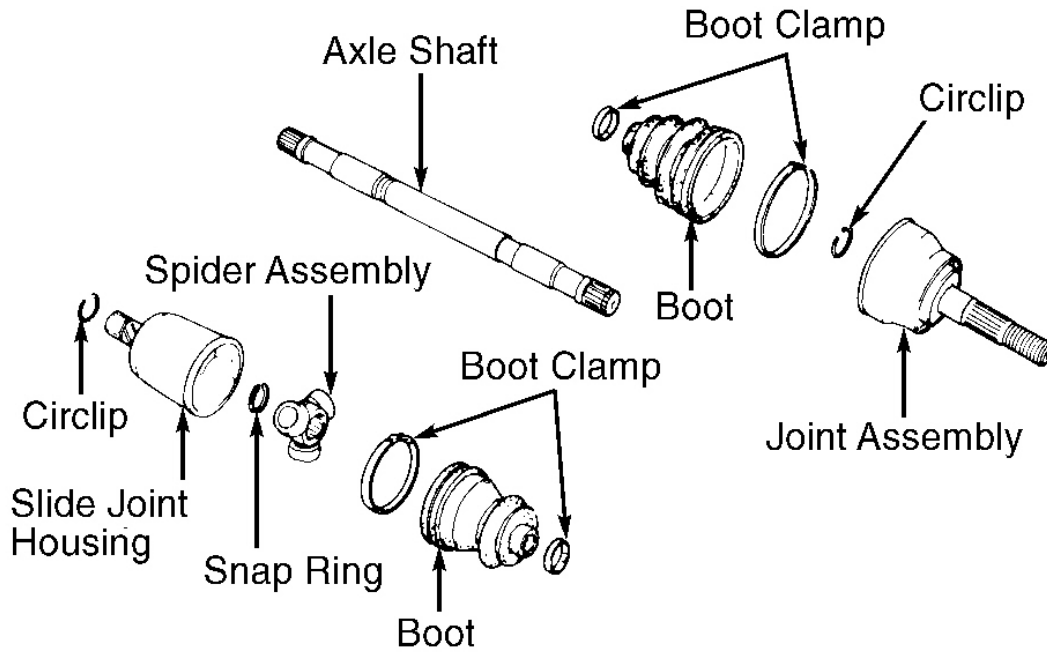
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Fig. 4: Exploded View Of Front Axle Shaft (Ball & Cage Type)

Courtesy of NISSAN MOTOR CO., U.S.A.

Disassembly (Inner Joint Spider Assembly Type)

1. Place axle shaft in soft-jawed vise with inner joint facing up. Remove boot clamps. See **Fig. 5** . Mark slide joint housing and spider assembly in relation to axle shaft for reassembly reference.
2. Remove slide joint housing. Remove snap ring. Remove spider assembly. **DO NOT** disassemble spider assembly. Cover axle shaft splines with tape. Remove boot.



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Fig. 5: Exploded View Of Front Axle Shaft (Spider Assembly Type)

Courtesy of NISSAN MOTOR CO., U.S.A.

NOTE: Outer joint can be removed from axle shaft but cannot be disassembled.

Disassembly (Outer Joint)

Place axle shaft in soft-jawed vise with outer joint facing up. Remove boot clamps. See **Fig. 4** and **Fig. 5**. Mark slide joint housing and inner race in relation to axle shaft for reassembly reference. Remove joint assembly from axle shaft using slide hammer. See **Fig. 6**.

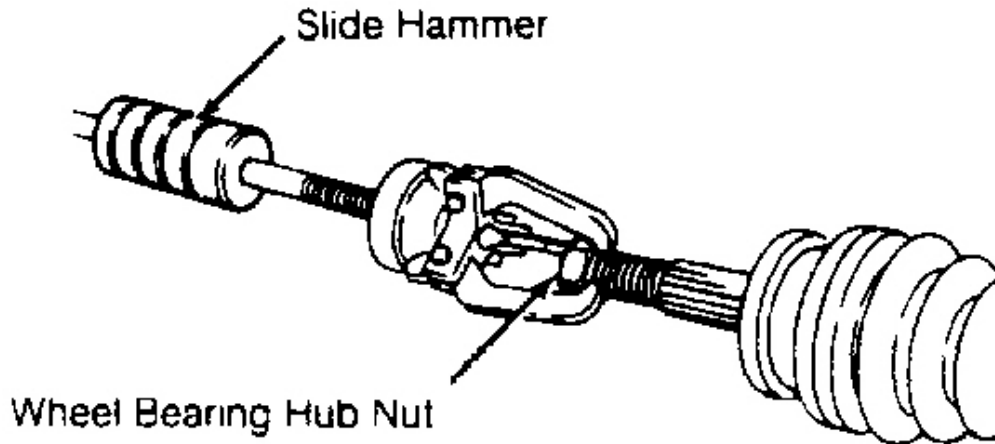


Fig. 6: Removing Outer Joint Assembly
Courtesy of NISSAN MOTOR CO., U.S.A.

Inspection

Replace axle shaft if twisted or cracked. Check boots for fatigue, cracks or wear. Replace joint components that are scorched, rusted, worn or loose. Check axle shaft splines for deformation. Inspect slide joint housing for damage. Ensure support bearing rolls freely and is not noisy, cracked, pitted or worn.

Reassembly (Inner Joint Ball & Cage Type)

1. Mount axle shaft in soft-jawed vise with inner joint facing up. Wrap tape around shaft splines. Install boot and clamp on shaft. Install snap ring "B". See **Fig. 4**.
2. Install ball cage, inner race and balls as an assembly, aligning marks made during disassembly. Install snap ring "C". Pack joint with grease. Install slide joint housing, aligning marks made during disassembly. Install snap ring "A".
3. Position boot to correct length. See **AXLE SHAFT BOOT LENGTH**. See **Fig. 7**. Lock boot clamps in place using hammer and punch. See **Fig. 8**.

AXLE SHAFT BOOT LENGTH

Model	Outboard Boot In. (mm)	Inboard Boot In. (mm)
Maxima	3.8-3.9 (97-99)	3.8-3.9 (97-99)

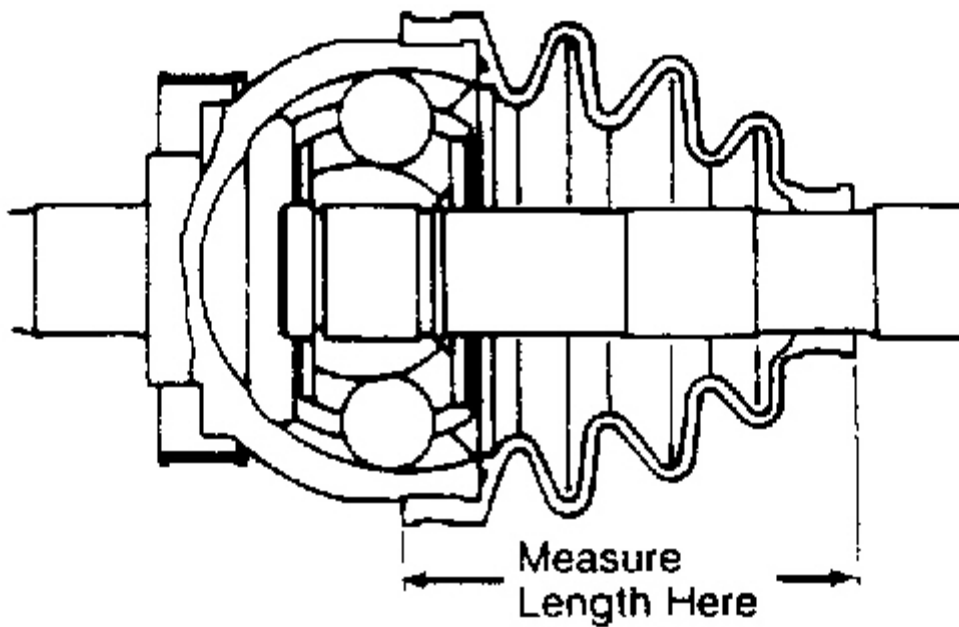
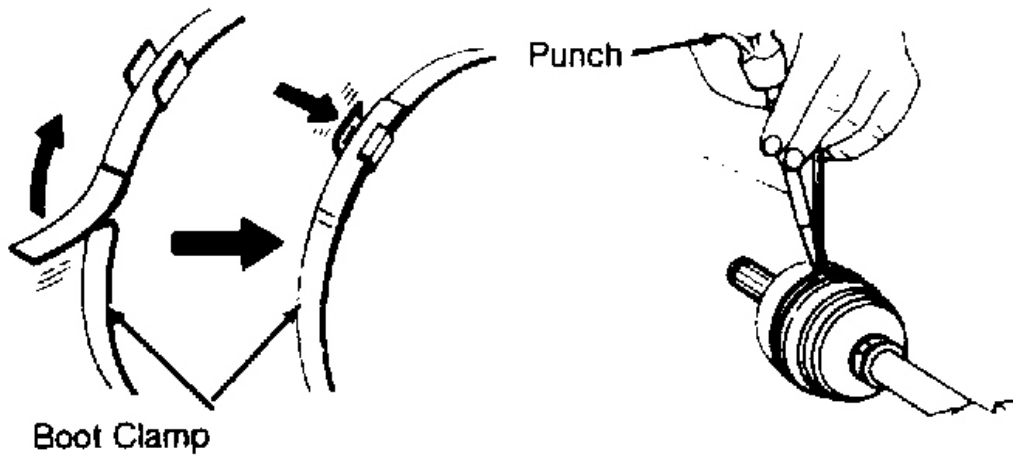


Fig. 7: Setting Boot Length (Typical)
Courtesy of NISSAN MOTOR CO., U.S.A.

**Fig. 8: Installing Boot Clamps**

Courtesy of NISSAN MOTOR CO., U.S.A.

Reassembly (Inner Joint Spider Assembly Type)

1. Mount axle shaft in soft-jawed vise with inner joint facing up. Wrap tape around shaft splines. Install boot and clamp on shaft. See [Fig. 5](#) . Install spider assembly, aligning marks made during disassembly. Install snap ring.
2. Pack joint with grease. Install slide joint housing, aligning marks made during disassembly. Position boot to correct length. Refer to the specifications in the [AXLE SHAFT BOOT LENGTH](#) . See [Fig. 7](#) . Lock boot clamps in place using a hammer and punch. See [Fig. 8](#) .

Reassembly (Outer Joint)

1. Mount axle shaft in soft-jawed vise with outer joint facing up. Wrap tape around shaft splines. Install boot and clamp on shaft. See [Fig. 4](#) and [Fig. 5](#) . Temporarily install wheel bearing hub nut on end of joint assembly stub shaft. Position joint assembly onto shaft, ensuring marks made during disassembly are aligned.
2. Drive the outer joint assembly onto the shaft by tapping on the nut with a hammer. Pack the joint with grease. Position the boot to correct length. See specifications in [AXLE SHAFT BOOT LENGTH](#) . See [Fig. 7](#) . Lock boot clamps in place using a hammer and punch. See [Fig. 8](#) .

Installation

Install NEW circlip on stub shaft of inner joint. Replace axle shaft oil seal in differential. Lubricate seal lip with transaxle oil. To install, reverse removal procedure. Try to pull slide joint housing out of differential by hand to ensure circlip is engaged. Tighten nuts and bolts to specification. See [TORQUE SPECIFICATIONS](#) . Check transaxle fluid level.