

REMOVAL & INSTALLATION

CENTER BEARING SUPPORT ASSEMBLY

Removal

1. With transmission in neutral and parking brake off, raise vehicle. Scribe alignment marks on all flange/yokes and slip joints to be disassembled or disconnected. Remove drive shaft from pinion flange/yoke.
2. Slide rear drive shaft slip joint from front drive shaft splines. See **Fig. 10** . Support drive shaft(s) while removing center bearing support bracket mounting bolts. Pull to remove front drive shaft slip joint from transmission extension housing shaft.

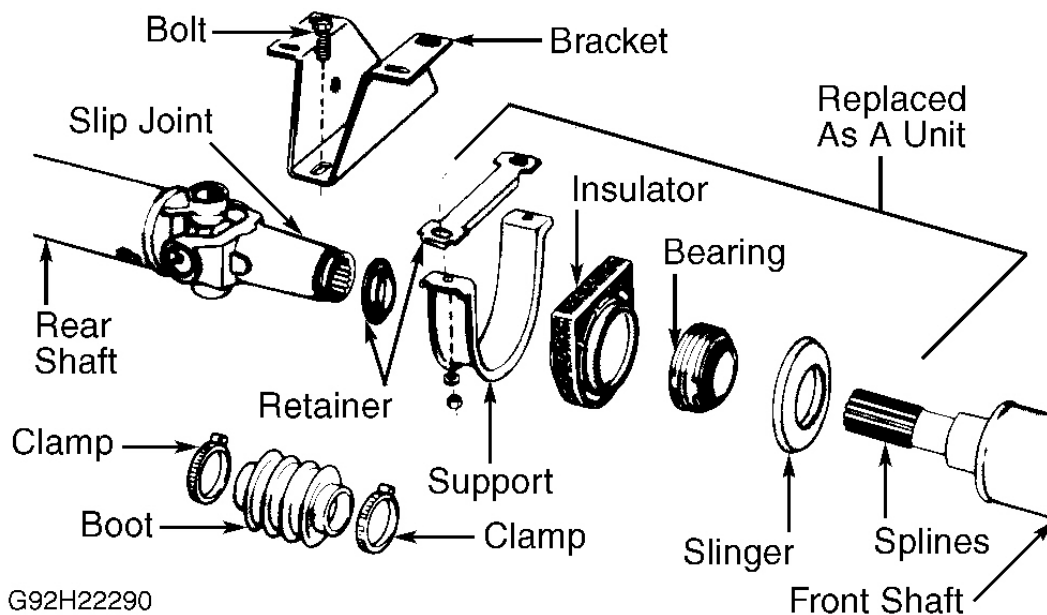


Fig. 10: Identifying Center Bearing Support Assembly Components
Courtesy of CHRYSLER CORP.

Disassembly

CAUTION: DO NOT clamp drive shaft tube or slip joint tube in a vise. Clamp only forged portion of each yoke in vise. To avoid distorting yoke, DO NOT overtighten vise jaws.

1. Clamp front drive shaft in a soft-jaw vise. If required, disassemble "U" joint from yoke to access yoke-to-drive shaft retaining bolt. Scribe mark yoke or slip joint to drive shaft for reassembly reference. Slide yoke or slip joint off shaft splines.

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2. Remove and retain center bearing support bracket and retainer. (Service replacement assembly may not come with these items.) Remove rubber insulator from bearing housing. See **Fig. 10**.
3. Bend slinger away from center bearing to provide clearance for bearing puller. Using bearing puller, remove center bearing from drive shaft. On some applications, outer bearing cover/cage and balls must be removed to attach puller to bearing race.

Reassembly & Installation

Install NEW slinger to shaft. Install/press bearing onto shaft using appropriate tool or tube until bearing is seated to shaft shoulder. To complete installation, reverse disassembly and removal procedures. Ensure support bracket angle adjustment shims are reinstalled (if removed).

OVERHAUL

NOTE: Manufacturer recommends replacing "U" joint(s) whenever "U" joint is disassembled from yoke. ALWAYS replace complete "U" joint whenever extreme external lubrication leakage or bearing cap damage exists.

Before disassembly, mark flange/yoke to drive shaft for reassembly reference, and remove "U" joint lube fitting (s). If joints are rusted or corroded, apply penetrating oil before pressing bearing caps out of yoke or off "U" joint trunnion pin.

SINGLE CARDAN "U" JOINTS

Other than adding grease, "U" joint assembly items are not individually serviceable or repairable. If needle bearings, seals, spider, or bearing caps are found to be defective, damaged or excessively worn, complete "U" joint must be replaced.

NOTE: Saturate bearing caps and yokes with penetrating oil before removal.

Removal

Raise and support vehicle. Remove drive shaft. Remove inner or outer type bearing cap retainer clips. See **Fig. 11**. Press bearing caps from yokes. Remove bearings, seals and spider from yoke bore, and discard.

Cleaning

Clean yoke bores using solvent and wire brush or crocus cloth. Remove rust, corrosion and foreign matter from yoke bores.

Installation

1. Apply multipurpose lubricant (NLGI grade 2 EP) to yoke bores and into needle bearings of each bearing cap. Position spider in yoke bores.
2. Install seals onto spider trunnions or bearing caps. Lightly tap bearing caps into yoke bore far enough to retain spider in place.

CAUTION: DO NOT clamp drive shaft tube or slip joint tube in a vise. Clamp only forged portion of each yoke in vise. To avoid distorting yoke, DO NOT overtighten vise jaws.

- Using vise or press, push bearing caps into yoke bores, keeping spider aligned in center of bearing caps. Using socket with diameter slightly smaller than bearing cap, continue pressing caps inward until retainer clips can be installed. Install inner or outer type bearing cap retainer clips.
- Install lube fitting, and lube "U" joint. Install drive shaft. Tighten "U" joint clamp bolts to 14 ft. lbs. (19 N.m). Lower vehicle.

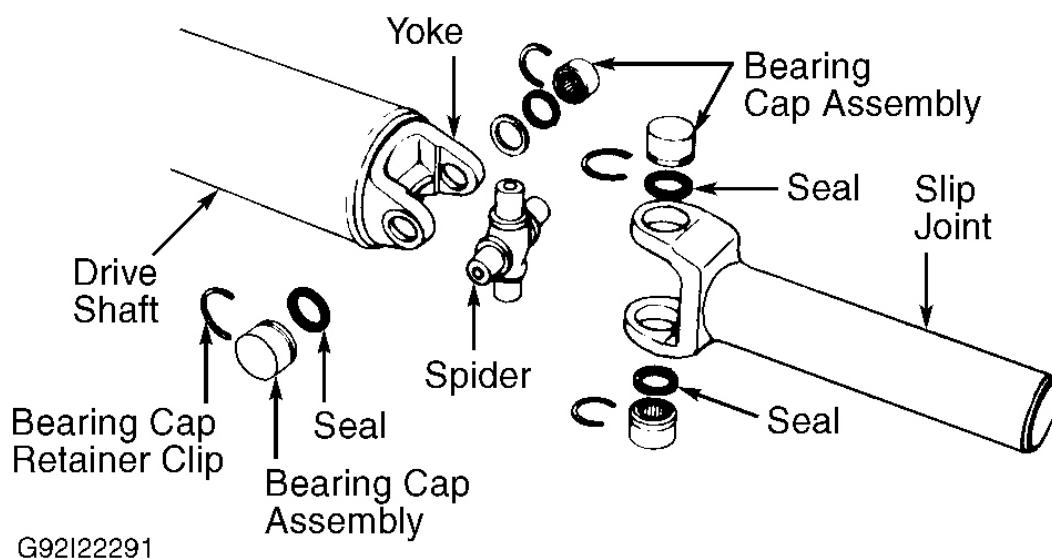


Fig. 11: Exploded View Of Single Cardan "U" Joint
Courtesy of CHRYSLER CORP.

DOUBLE CARDAN CONSTANT VELOCITY (CV) JOINT (4WD)

NOTE: Other than adding grease, "U" joint assembly items are not individually serviceable or repairable. If needle bearings, seals, spider, or bearing caps are found to be defective, damaged or excessively worn, complete "U" joint assembly must be replaced.

Removal & Disassembly (Dakota & Ram Trucks)

CAUTION: DO NOT allow pinion flange end of front drive shaft to hang free or bend at sharp angle from CV joint.

- Mark drive shaft yoke-to-front pinion flange position and transfer case flange-to-CV joint flange position

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for installation reference. Remove CV joint flange-to-transfer case flange bolts first, then remove pinion flange bolts. Remove front drive shaft from vehicle. DO NOT bend shaft at sharp angle from CV joint.

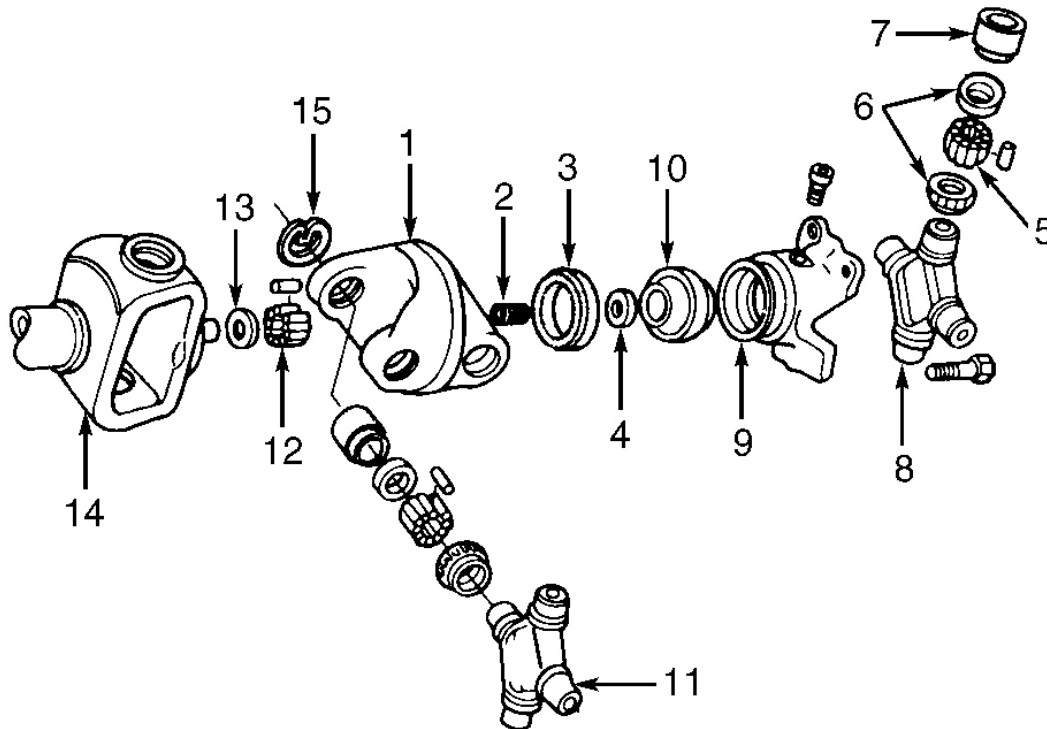
2. Mark CV joint components for reassembly reference. Remove all inner or outer type bearing cap retaining clips. See **Fig. 12** .
3. Set joint in arbor press or vise and place a socket on upper bearing cap. Partially press one bearing cap from outer side of link yoke enough to grasp bearing cap with vise jaws. Remove grease fittings that interfere with removal.
4. Grasp protruding bearing in vise jaws. Tap link yoke with mallet and drift to dislodge bearing cap from yoke.
5. Flip assembly and repeat steps 3 and 4 to remove opposite bearing cap. Remove cross centering kit assembly and spring.
6. Press remaining bearing caps out other end of link yoke to complete disassembly.

Reassembly & Installation

1. Clean dirt and rust from all contact areas. Apply multipurpose lubricant (NLGI grade 2 EP) to yoke bores and into needle bearings of each bearing cap. Lube center socket yoke and needle bearings. See **Fig. 12** .
2. Position spider in drive shaft yoke bore. Reassemble components in reverse order of disassembly, ensuring reference marks align. Install drive shaft in vehicle, and tighten flange bolts to specification. See **TORQUE SPECIFICATIONS** table.

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- | | |
|-------------------------|----------------------|
| 1. Link Yoke | 9. Socket Yoke |
| 2. Socket Spring | 10. Socket Ball |
| 3. Socket Ball Retainer | 11. Front Spider |
| 4. Thrust Washer | 12. Needle Bearings |
| 5. Needle Bearings | 13. Thrust Washer |
| 6. Seal | 14. Drive Shaft Yoke |
| 7. Bearing Cap | 15. Retaining Clip |
| 8. Rear Spider | |

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Fig. 12: Double Cardan Constant Velocity (CV) "U" Joint (Dakota & Ram Trucks)
Courtesy of CHRYSLER CORP.

Installation

1. Before installing drive shaft, clean mating flange, and inspect machined surface for scratches, nicks and burrs. Support drive shaft during installation to prevent bending shaft at sharp angle to CV joint and causing damage to "U" joints.
2. Aligning reference marks, install CV joint flange to transfer case flange first, then install shaft to pinion flange. Attach 2 clamps to pinion flange, and tighten attaching bolts to specification. Install and tighten 4 bolts to CV joint at transfer case flange.

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TORQUE SPECIFICATIONS**TORQUE SPECIFICATIONS**

Application	Ft. Lbs. (N.m)
Center Bearing Support Bracket-To-Upper Bracket Bolts	50 (68)
Center Bearing Upper Bracket-To-Frame Bolts	50 (68)
Spring "U" Bolt Nuts	
Dakota	
2WD	65 (88)
4WD	110 (149)
Ram Pickup	110 (149)
Ram Van/Wagon	
B150 & B250	45 (61)
B350	110 (149)
Transfer Case Flange-To-CV Joint Flange Bolts	
Dakota	20 (27)
Ram Pickup	65 (88)
"U" Joint Clamp-To-Pinion Flange Bolts	
1/4"	14 (19)
5/16"	25 (34)
Wheel Lug Nuts	
Dakota	85-115 (115-156)
Ram Pickup	
5-Lug	95 (129)
8-Lug (Single Wheel)	135 (183)
8-Lug (Dual Wheel)	145 (196)
Ram Van/Wagon	
5-Lug	80-110 (108-149)
8-Lug	120-150 (163-203)

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Spring "U" Bolt Nuts	
Dakota	
2WD	65 (88)
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Ram Pickup	110 (149)
Ram Van/Wagon	
B150 & B250	45 (61)

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B350	110 (149)
Transfer Case Flange-To-CV Joint Flange Bolts	
Dakota	20 (27)
Ram Pickup	65 (88)
"U" Joint Clamp-To-Pinion Flange Bolts	
1/4"	14 (19)
5/16"	25 (34)
Wheel Lug Nuts	
Dakota	85-115 (115-156)
Ram Pickup	
5-Lug	95 (129)
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