

## **AXLE SHAFTS - REAR**

### **Article Text**

1997 Subaru SVX

For 1

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## **ARTICLE BEGINNING**

1997-98 DRIVE AXLES

Subaru AWD - Rear Axle Shafts

1997: SVX

1997-98: Impreza, Legacy

1998: Forester

## **DESCRIPTION & OPERATION**

Axle shafts transfer power from rear differential to rear wheels. Axle shafts consist of a shaft with a flexible Constant Velocity (CV) joint at each end. Inner and outer CV joints are enclosed by CV joint boots. Boot maintains lubrication in the joint and prevents contaminants from entering joint. Boots must be replaced when signs of leakage or cracks are present. Inner tripod type CV joint can be repaired, but outer CV joint and shaft must be replaced as an assembly. Shafts are identified with one padding mark on shaft; 79AC-RH and 79AC-LH are used on Impreza and Legacy. Shafts for SVX are identified as 87AC-RH and 87AC-LH. Shaft identification numbers for Forester are not available from manufacturer. See Fig. 1.

## **TROUBLE SHOOTING**

NOTE: See TROUBLE SHOOTING - BASIC PROCEDURES article in the GENERAL TROUBLE SHOOTING section.

## **REMOVAL, DISASSEMBLY, REASSEMBLY & INSTALLATION**

### **REAR AXLE SHAFTS**

#### **Removal**

1) Disconnect negative battery cable. Raise and support vehicle. Remove wheel. Remove axle shaft nut. Remove speed sensor clamps and parking brake cable bracket. Remove bolts attaching lateral link assembly and trailing link assembly to axle housing.

2) Remove axle shaft using pry bar (2.2L A/T only). DO NOT damage axle shaft holder. On all other models, remove axle shaft using Drive Shaft Remover (28099PA100). DO NOT remove circlip from inside of differential. DO NOT damage side bearing retainer.

#### **Disassembly**

Remove inner CV joint boot clamps using screwdriver. DO NOT damage boot. Slide boot away from inner joint. Remove circlip from outer race. See Fig. 2. Remove outer race. Remove balls. Remove snap ring. Slide inner race off shaft. Remove cage. Wrap shaft splines with tape to avoid damage to outer boot. Remove outer boot clamps and boot. DO NOT disassemble outer CV joint.

NOTE: DO NOT disassemble outer CV joint. If outer CV joint is

defective, replace axle shaft as an assembly.

Inspection

Inspect all components for damage, wear and excessive play.

Replace components as necessary.

Reassembly

1) Slide outer boot on axle shaft. Apply 2.12-2.47 oz. (60-70 g) of grease (Molylex No. 2) to outer CV joint. Coat inner surface of boot with 0.71-1.06 oz. (20-30 g) of grease. Install boot on outer joint. Install boot clamps and tighten to specification. See BOOT CLAMP SPECIFICATIONS table.

2) To complete installation, reverse removal procedure. Apply 2.82-3.17 oz. (80-90 g) of grease (VU-3A702) to inside of outer race. Coat balls and inner race with grease. Coat inside of inner boot with 0.71-1.06 oz. (20-30 g) of grease. Install boot and clamps.

BOOT CLAMP SPECIFICATIONS

| Application                | INCH Lbs. (N.m)    |
|----------------------------|--------------------|
| Inner & Outer              |                    |
| Large Diameter Clamp ..... | 116 (13.1) Minimum |
| Small Diameter Clamp ..... | 98 (11.1) Minimum  |

Installation

Using Installer (9224310000) and Adapter (927390000), install outboard joint into hub. See Fig. 3. Install, but DO NOT tighten NEW axle shaft nut. Install NEW circlip on inner CV joint splines (2.2L A/T only). Using Side Oil Seal Protector (28099PA090), install axle shaft into differential. To complete installation, reverse removal procedure. Tighten all nuts and bolts to specification. See TORQUE SPECIFICATIONS.

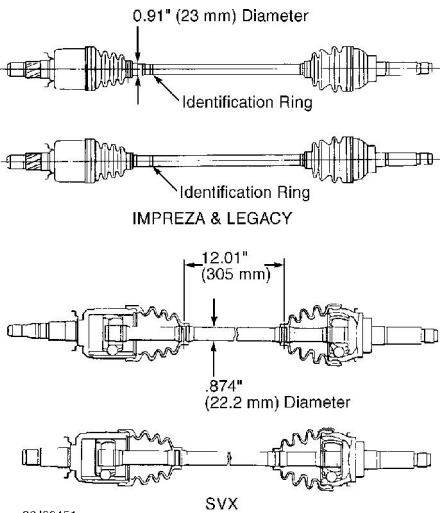
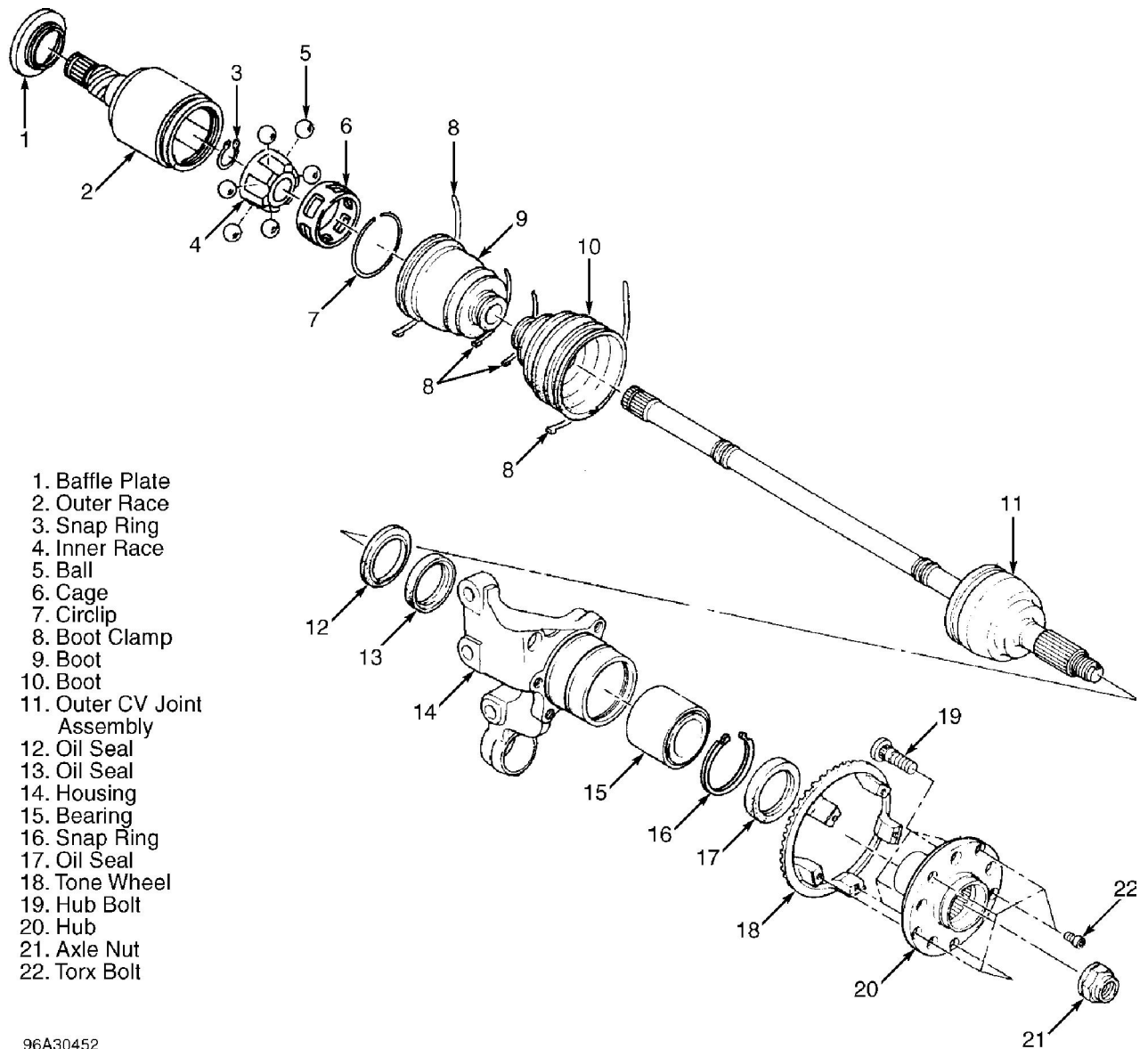
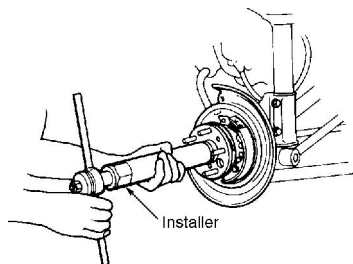


Fig. 1: Identifying Rear Axle Shafts  
Courtesy of Subaru of America, Inc.



96A30452  
 Fig. 2: Exploded View Of AWD Rear Axle & Hub Assembly  
 Courtesy of Subaru of America, Inc.



G82701400  
 Fig. 3: Installing Axle Shaft In Rear Housing  
 Courtesy of Subaru of America, Inc.

## REAR HUB ASSEMBLY

**CAUTION:** On vehicles with anti-lock brakes (ABS), DO NOT damage toothed wheel (tone wheel).

**NOTE:** DO NOT remove bearing unless damaged. DO NOT re-use bearing after removal.

### Removal & Disassembly

1) Remove axle shaft. See REAR AXLE SHAFTS under REMOVAL, DISASSEMBLY, REASSEMBLY & INSTALLATION. On models with disc brakes, remove brake caliper and wire aside. Remove brake rotor. On models with drum brakes, remove brake drum. Remove brake fluid line from wheel cylinder.

2) On all models, disconnect parking brake cable. Remove nuts and bolts attaching lower strut assembly to axle housing. Remove axle housing. Remove backing plate from axle housing. Press hub from axle housing. Use a screwdriver to remove inner and outer oil seals. Remove snap ring from axle housing. See Fig. 2. Press bearing assembly out of axle housing.

### Reassembly & Installation

Clean housing before installing bearing assembly. Lubricate and install new bearing assembly and oil seals. Ensure snap ring fits properly into groove. To complete reassembly, reverse disassembly procedure. Tighten nuts and bolts to specification. See TORQUE SPECIFICATIONS.

## TORQUE SPECIFICATIONS

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| Application                                | Ft. Lbs. (N.m)    |
|--------------------------------------------|-------------------|
| Axle Shaft Nut .....                       | 122-152 (166-206) |
| Backing Plate-To-Inner Arm Bolt .....      | 34-43 (46-58)     |
| Brake Caliper-To-Backing Plate Bolts ..... | 34-43 (46-58)     |
| Lateral Link                               |                   |
| Inner Bolt .....                           | 61-83 (83-113)    |
| Outer Bolt .....                           | 72-101 (98-137)   |
| Strut-To-Axle Housing .....                | 138-174 (186-235) |
| Strut-To-Body Bolt .....                   | 10-19 (14-26)     |
| Tone Wheel Bolt .....                      | 7-12 (10-16)      |
| Trailing Link Bolt .....                   | 101-130 (137-177) |
| Trailing Link Bushing Bolt .....           | 80-101 (108-137)  |
| Wheel Lug Nut .....                        | 58-72 (78-98)     |

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**END OF ARTICLE**