SUBARU

1600

DESCRIPTION

Steering column assembly consists of a steering wheel incorporating a horn control, a combination turn signal, hazard warning, and headlight dimmer switch assembly, and an energy absorbing steering shaft. The steering column is connected to the steering gear through a universal joint coupling. The energy absorbing steering shaft is designed to collapse during a front end collision. An anti-theft locking mechanism is provided with the ignition switch. With ignition switch in "LOCK" position, and key removed, the steering shaft is locked.

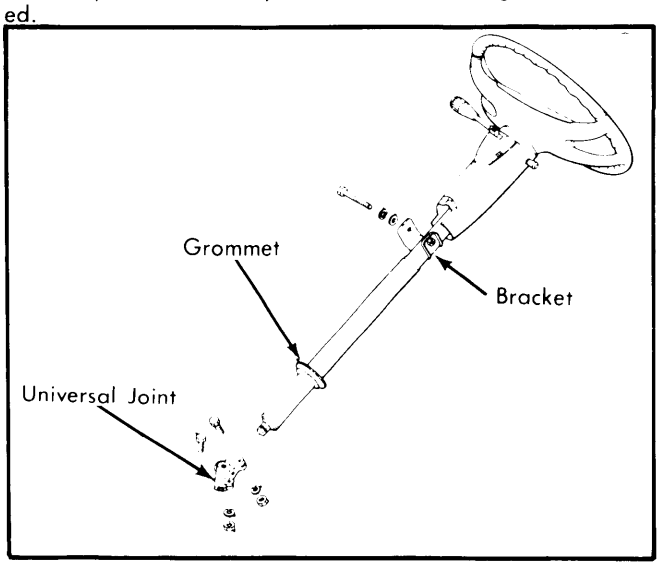

Fig. 1 Subaru Steering Column Assembly

REMOVAL & INSTALLATION

Removal – Disconnect battery, then remove steering wheel. *See Subaru under STEERING WHEEL & COLUMN SWITCHES in this section.* Disconnect lower end of steering shaft from universal joint. Remove steering column bracket bolts at instrument panel, then pull column assembly from toe board.

Installation – To install, reverse removal procedure and note the following: Temporarily tighten bracket bolts after installing column assembly to instrument panel. Tighten universal joint bolt after checking alignment of steering shaft and pinion shaft, then tighten column bracket bolts at instrument panel. After steering wheel is installed, check clearance between steering wheel and column cover. If clearance exceeds .04-.12" (1.0-3.0 mm), loosen column cover screws and adjust cover.

OVERHAUL

Disassembly – Remove screws retaining column cover to steering column, then remove hazard warning switch knob and cover. To remove steering shaft, proceed as follows: Remove snap ring, spacer, washer, and rubber washer. Remove screws retaining housing and bearing assembly to steering column, then drive assembly out of column by using a screwdriver. Remove shaft from steering column.

Inspection – 1) Universal joint should have no play in any direction. Replace if any play exists. Flex universal joint and check for binding. Replace if torque required to flex joint exceeds 0.43 ft. lbs. (0.06 mkg). Check plastic washer for damage, and serration for wear.

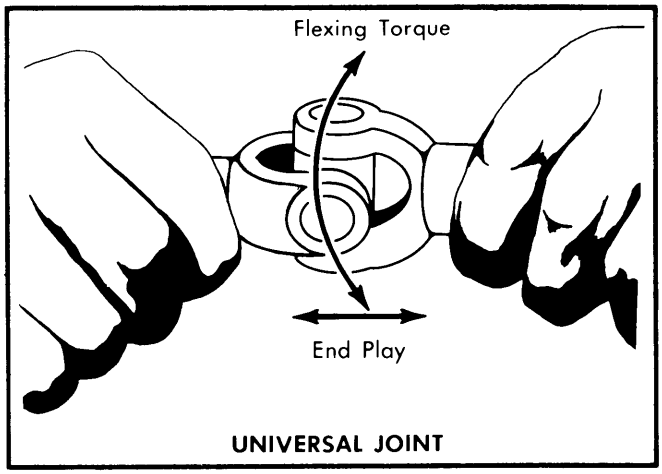

Fig. 2 Flexing "U" Joint to Check Free Play

2) Check length and run-out of steering shaft. Shaft length should be 33.12-33.20" (841.3-843.3 mm). Shaft run-out should be less than .02" (0.6 mm). Replace shaft if not within specifications, or if inspection shows any shaft damage. Check upper and lower steering column bearings for wear or damage and replace if necessary.

Reassembly – To reassemble, reverse disassembly procedure and note the following: Use a suitable locking compound on screws retaining upper bearing and housing assembly to steering column. Install steering shaft into column from lower end. After shaft, washers, spacers, and retainers have been installed, check shaft end play. If end play is more than .010" (0.3 mm), add a spacer to correct. Spacers are available in thicknesses of .012" and .020" (0.3 and 0.5 mm). With steering wheel in place, check clearance between steering wheel and column cover. If clearance exceeds .04-.12" (1.0-3.0 mm), loosen column cover screws and adjust cover.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Steering Wheel Nut	20-29 (2.77-4.01)
Column Bracket Bolt	12-14 (1.66-1.94)
Universal Joint Bolt	16-19 (2.2-2.6)