

Front Suspension

DATSUN 610 & 710

610
710

DESCRIPTION

Strut type suspension consisting of a vertically mounted strut assembly. Strut assembly is mounted to chassis frame at top by means of a thrust bearing. Lower end of strut assembly is mounted to a ball joint. Strut assembly consists of a shock absorber built into strut outer tube and a coil spring mounted to outside upper portion of strut tube. The spindle is integral with bottom of strut. A stabilizer bar is mounted to front of cross-member and is connected at ends to lower control arms.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See *Wheel Alignment Specifications & Procedures* in *WHEEL ALIGNMENT* Section.

WHEEL BEARING ADJUSTMENT

See *Wheel Bearing Adjustment* in *WHEEL ALIGNMENT* Section.

BALL JOINT CHECKING

See *Ball Joint Checking* in *WHEEL ALIGNMENT* Section.

REMOVAL & INSTALLATION

STRUT ASSEMBLY

Removal — Raise vehicle and support with safety stands, then remove wheel and tire. Loosen flare nut attaching brake hose-to-tube on frame, then remove locking spring and plate. Separate brake hose from tube and remove hanger spring. Disconnect brake hose from brake cylinder and plug openings. Remove caliper mounting bolts and lift complete assembly from vehicle. Remove bolts connecting strut to steering knuckle arm. Using suitable pry bar, force steering knuckle arm from strut. Position a jack under strut. Working from under hood, remove nuts holding top portion of strut to body. While guiding strut assembly with hand, slowly lower jack and remove entire strut assembly from vehicle.

Disassembly — Using suitable holding tool (ST27700002) mount strut assembly in vise. Remove snap ring from dust cover. Compress coil spring, using suitable tool, enough to turn mounting insulator by hand. Remove self-locking nut. Remove insulator, strut bearing, oil seal, upper spring seat, and rubber bumper. With coil spring still compressed, remove from strut tube. Depress piston rod to bottom of stroke and remove packing gland using suitable wrench (ST35500001). Remove "O" ring from top of piston rod guide. Pull piston rod and cylinder assembly upward to remove from strut tube.

NOTE — Do not remove piston rod and guide from cylinder assembly, it is an assembly and must be serviced as an assembly. Drain oil from cylinder and from strut tube.

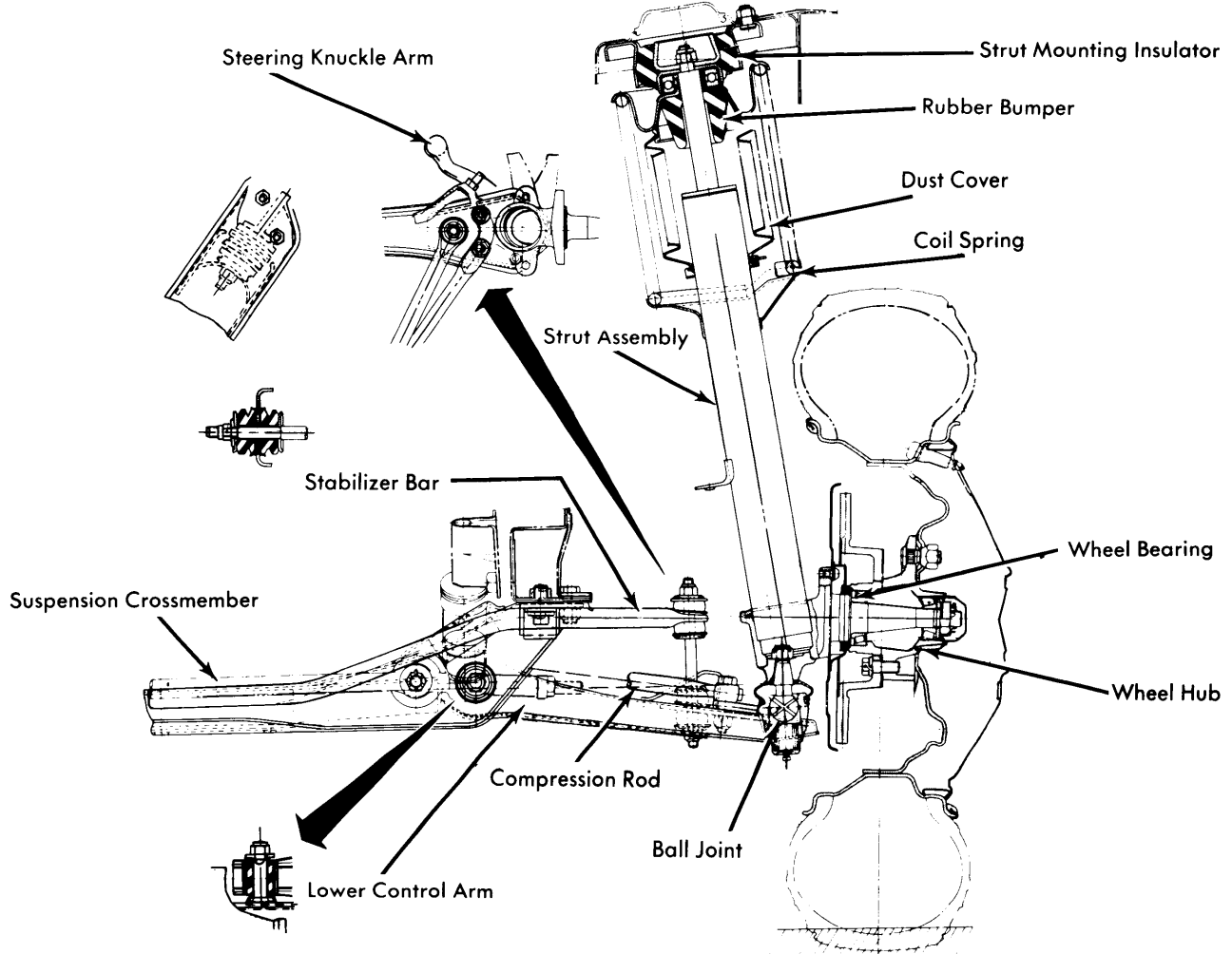


Fig. 1 Front Suspension Assembly Including Detail Views

DATSUN 610 & 710 (Cont.)

Reassembly — Inspect all components for wear or damage. Clean all parts thoroughly before reassembly. Mount strut tube in vise using a suitable holding tool. Install piston rod and cylinder into place in outer casing. Fill strut assembly with specified amount of shock absorber oil (see specifications). Install "O" ring on top of piston rod guide. Using suitable guide (ST35530000) install packing gland over piston rod. Tighten packing gland to specification. **NOTE** — When tightening packing gland nut it is important that piston rod be extended approximately 4.72" (120 mm) from end of outer casing. To correctly bleed strut assembly, stand strut vertically with spindle end down and pull piston rod up to end of stroke. Turn strut assembly until spindle end is up and depress piston rod to end of stroke. Do this operation several times until there is no variation of pressure between pulling or depressing of piston rod. Install rubber bumper. Place the compressed coil spring over strut assembly and install dust cover, upper spring seat, oil seal, thrust bearing and mounting insulator. Install piston self-locking nut and tighten. Release coil spring compressor tool.

Installation — To install, reverse removal procedure and tighten all nuts and bolts.

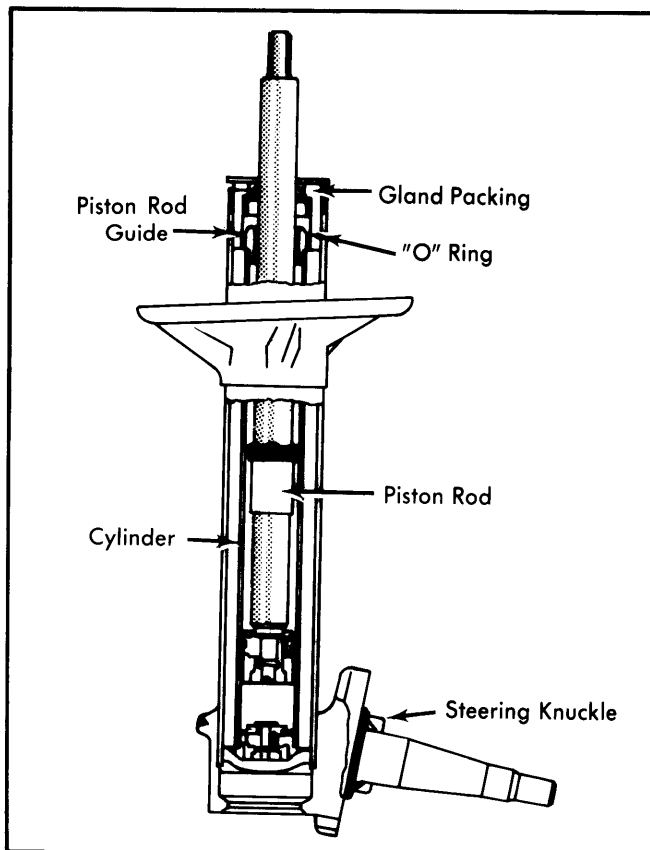


Fig. 2 Sectional View of Suspension Strut Assembly

LOWER CONTROL ARM & BALL JOINT

Removal — Raise vehicle and support with safety stands, then remove tire and wheel. Remove splash board. Disconnect tie rod at ball socket. Remove steering knuckle arm bolts and separate arm from bottom of strut. Separate compression rod and stabilizer bar from lower control arm. Remove bolt connecting lower control arm complete with ball joint and knuckle arm. After placing lower control arm in vise loosen control arm ball joint bolts and remove ball joint. Place steering knuckle arm in vise and remove cotter pin and nut; remove knuckle from control arm. Using suitable tool (ST36700000) extract bushings from lower control arm.

Installation — Using suitable bushing replacement tool set (ST36700000) press bushing into control arm. To install lower control arm, reverse removal procedure. Do not tighten nuts and bolts to final torque until weight of vehicle is on front wheels.

COMPRESSION RODS

Removal — Raise vehicle and support with safety stands, then remove tire and wheel. Remove splash board, back off nuts securing compression rod to mounting bracket. Remove bolts attaching compression rod to lower control arm. Rod can now be maneuvered from vehicle.

Installation — To install, reverse removal procedure and tighten nuts and bolts.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.(mkg)
Ball Joint-to-Control Arm	14-18(1.9-2.5)
Ball Joint-to-Knuckle Arm	40-55(5.5-7.6)
Compression Rod Bracket Bolt	37-50(5.1-6.9)
Compression Rod-to-Control Arm	35-46(4.9-6.3)
Compression Rod Attaching Nut	33-40(4.5-5.5)
Control Arm-to-Crossmember	65-72(9-10)
Crossmember-to-Frame	29-36(4-5)
Gland Packing	51-95(7-13)
Piston Self Locking Nut	43-54(6-7.5)
Stabilizer Bar Bracket Bolt	10-13(1.4-1.8)
Stabilizer Bar Attaching Nut	9-12(1.3-1.7)
Strut Rod-to-Body	18-25(2.5-3.5)
Strut Rod-to-Knuckle Arm	53-72(7.3-9.9)

Shock Absorber Oil Specifications

Application	Quantity
Atsugi	11 ounces
Kayaba	11.2 ounces