DATSUN B210, 200SX, 280Z, 510, & 810

B210
200SX
280Z
510
810

DESCRIPTION

Strut type suspension consisting of a vertically mounted strut assembly, lower control arm, stabilizer bar and compression rod. Strut assembly is mounted at top to chassis frame by a thrust bearing and at bottom to lower control arm by a ball joint. Strut assembly consists of a shock absorber built into outer strut tube, a coil spring mounted on outside of strut tube, and a wheel spindle integral with bottom of strut tube. Compression rod is mounted between lower control arm and chassis. Stabilizer bar is mounted to front chassis member and is connected at end of lower control arm.

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

SPRING & STRUT ASSEMBLY

Removal – **1)** Raise and support front of vehicle. Remove front wheels. Detach brake hose from bracket on front strut (if required). Remove caliper assembly retaining bolts and remove caliper from axle.

2) Remove bolts holding strut to knuckle arm. Detach knuckle arm from bottom of strut by forcing off with suitable pry bar.

3) Place jack under strut to support it when nuts are removed. Remove 3 nuts holding strut to hood ledge and remove strut and spring as an assembly.

Disassembly – **1)** Thoroughly clean strut assembly. Fix assembly in suitable holding tool (KV48100300) and clamp tool in vise.

2) With spring compressor, press spring down just far enough to permit turning of strut mounting insulator and remove self-locking nut.

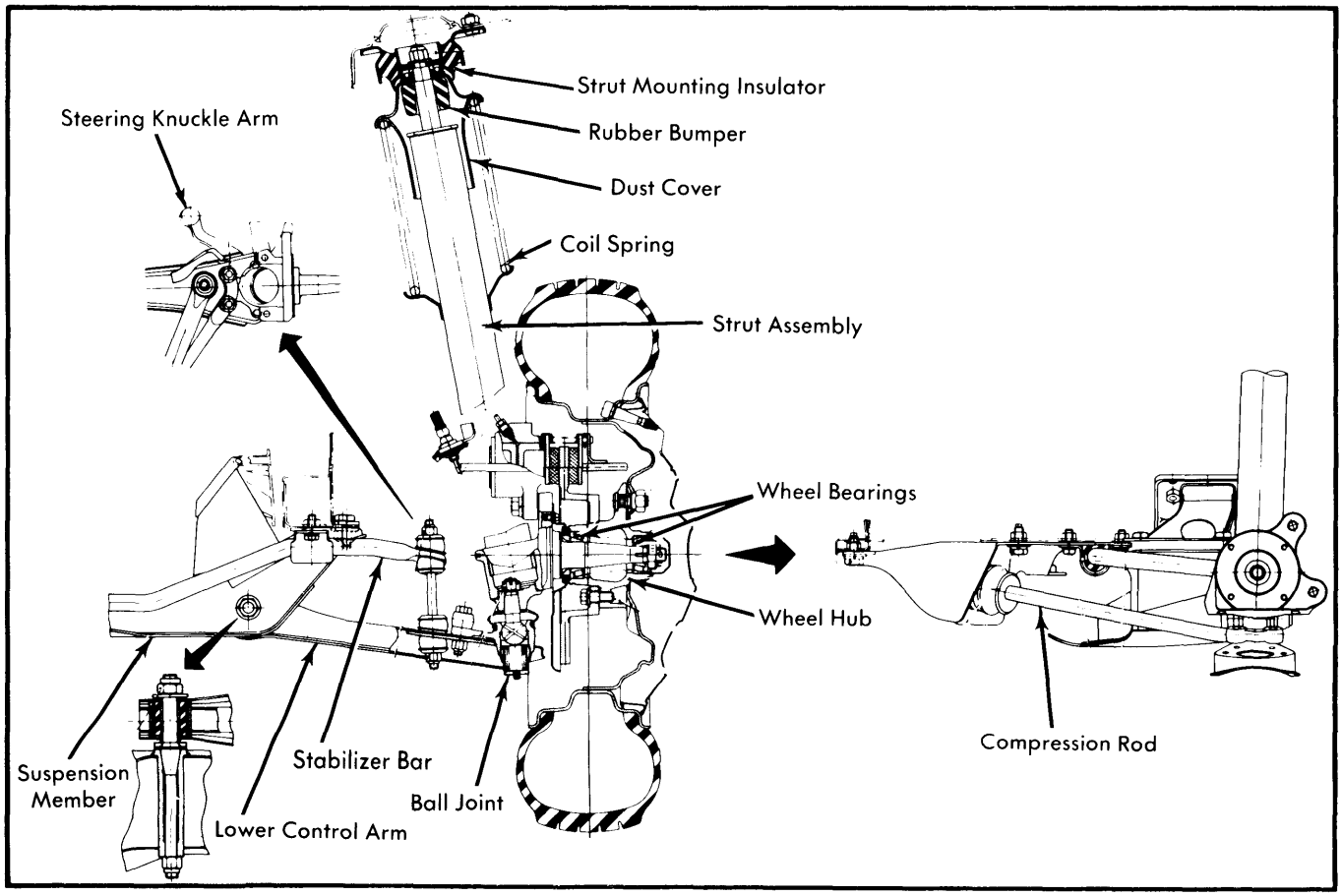

Fig. 1 Assembled View of B210 Front Suspension, with Some Items Shown in Detail (All Other Models Are Similar)

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DATSUN B210, 200SX, 280Z, 510 & 810 (Cont.)

NOTE – *Be sure spring tool evenly engages on at least 3 coils. Do not hit piston rod of strut with spring tool.*

3) Take out strut insulator, bearing, dust seal, upper spring seat, spring and rubber bumper.

4) Push piston rod down until it bottoms. Remove gland packing using suitable wrench (ST35500001). Remove "O" ring from top of piston rod guide and lift out piston rod and cylinder.

NOTE – *The piston rod, piston rod guide and cylinder are furnished as a matched set with precision mating surfaces.*

5) Drain fluid from inner and outer cylinder and discard. Wash all parts in solvent.

Reassembly – 1) Install strut outer casing onto suitable holding tool (KV48100300). Install cylinder and piston rod assemby (shock absorber kit) in outer casing.

2) Remove piston rod guide from cylinder and pour in specified amount of new fluid (outer casing).

Oil Replacement Amounts

Application	Ounces
B210 & 510	11.0
280Z	11.5
200SX & 810	10.0

3) Install piston rod guide, taking care not to damage guide with threaded portion of rod. Install new "O" ring over rod guide. Lube inner edge of sealing lips of gland packing and install packing, using suitable wrench (ST35530000). Tighten gland packing to specification.

4) 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. Repeat several times until there is no variation of pressure between pushing and pulling piston rod.

5) Pull piston rod fully out and install rubber bumper. Place spring on lower spring seat and compress with proper tool (ST35651001). Lubricate dust seal and then install dust cover, spring seat, dust seal, mounting bearing and insulator.

6) Tighten new self-locking nut to specification. To prevent entry of dirt, apply thick coat of multi-purpose grease around upper seal. After positioning spring between upper and lower seats, release spring compressor slowly. Raise rubber bumper to upper spring seat.

Installation – To install, reverse removal procedure, tightening nuts and bolts to specification.

LOWER CONTROL ARM & BALL JOINT

Removal – 1) Raise vehicle. Support with stands. Remove tire, wheel and splash guard (if equipped).

2) Detach 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 to crossmember. Remove lower control arm with ball joint and knuckle arm.

3) Place 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.

4) With suitable tool (ST36720000), extract bushing, from lower control arm.

NOTE – *On 810 models, steering gear arm must be separated from sector shaft and steering linkage lowered to remove lower control arm from driver's side. On passenger side, idler arm assembly must be separated from frame and linkage lowered.*

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; 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)
Gland Packing	51-94 (7-13)
Piston Rod Self-Locking Nut	43-54 (6.0-7.5)
Strut-to-Body Nuts	18-25 (2.5-3.5)
Steering Knuckle Arm-to-Strut	53-72 (7.3-9.9)
Stabilizer Bar Bracket Bolts	
B210 & 200SX	12-15 (1.6-2.1)
280Z	9-20 (1.2-2.7)
810	20-27 (2.7-3.7)
510	52-31 (3.2.4.3)
Compression Rod-to-Lower Control Arm	
B210 & 200SX	35-46 (4.9-6.3)
280Z	44-51 (6.1-7.1)
810	33-40 (4.5-5.5)
510	37-44 (5.2-6.1)
Compression Rod Nut	33-40 (4.5-5.5)
Lower Control Arm-to-Crossmember	
B210 & 200SX	65-72 (9.0-10.0)
280Z	80-101 (11.1-14.0)
810 & 510	58-80 (8.0-11.0)
Ball Joint-to-Lower Control Arm	
B210 & 200SX	35-46 (4.9-6.3)
280Z	40-55 (6.5-7.6)
810	33-40 (4.5-5.5)
510	37-44 (5.1-6.1)
Tie Rod Ball Joint	40-55 (5.5-7.6)

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