

Front Suspension

1968-73 DATSUN 510

510 (1968-73)

DESCRIPTION

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

STABILIZER BAR

Removal — Remove lower link bolt nut, attaching stabilizer bar to control arm. Remove stabilizer bracket bolts holding stabilizer to chassis member and remove stabilizer bar.

Installation — Inspect all stabilizer bar components for wear or damage. Reverse removal procedure for installation. Tighten all bolts and nuts to specification.

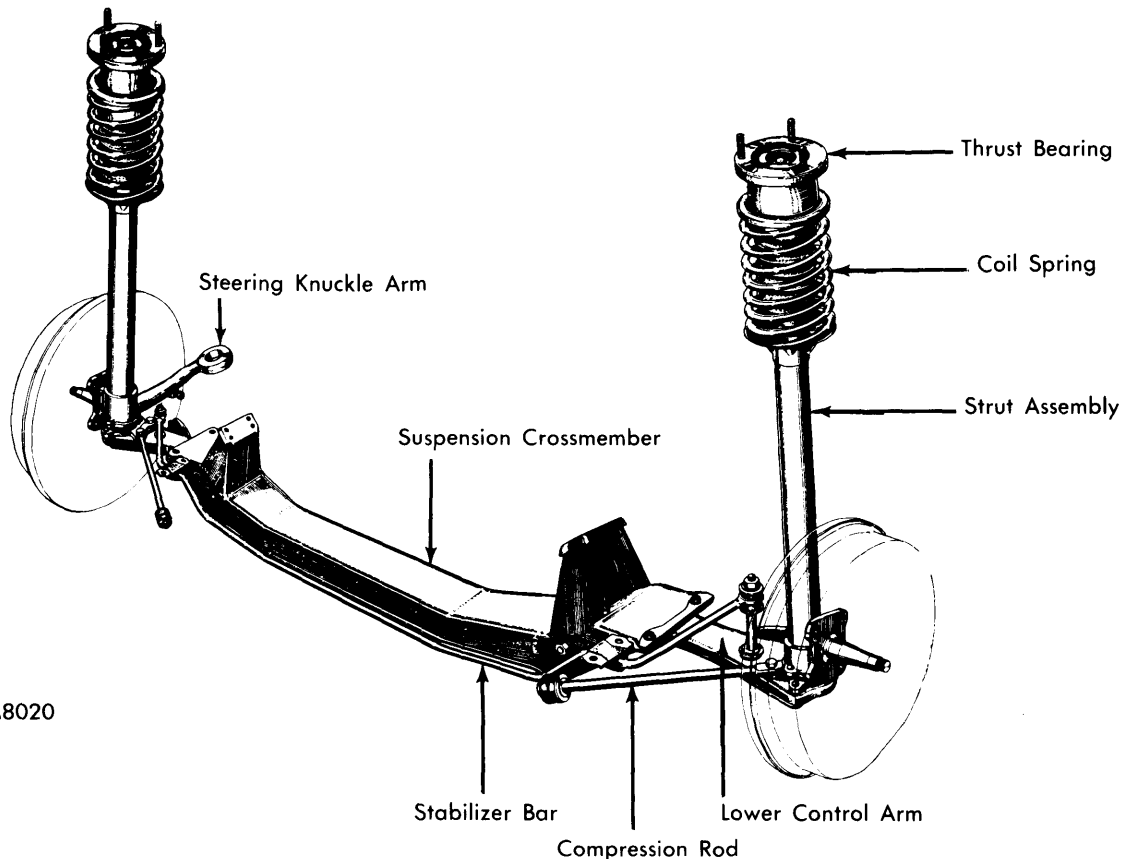
COMPRESSION ROD

Removal — Remove nut holding compression rod to frame. Remove two bolts attaching compression rod to lower control arm and remove compression rod.

Installation — Inspect all compression rod components for wear or damage. Reverse removal procedure for installation. Tighten all bolts and nuts to specification.

STRUT ASSEMBLY

Removal — Raise vehicle and place safety stands under front chassis members. Remove wheel and tire. Remove lock spring to detach brake hose from fenderwell and disconnect brake line from flex hose. Disconnect compression rod from lower control arm. Remove lower nut connecting stabilizer bar link to lower control arm. Separate strut assembly from lower control arm by removing two bolts attaching strut assembly to steering knuckle. Place a jack under strut assembly, open hood and remove three nuts retaining strut to upper chassis frame. Lower jack and remove strut assembly from vehicle.



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Disassembly — Remove brake drum and hub or disc brake caliper and rotor, depending on brake system used. Mount strut assembly in a holding fixture and using a suitable tool (ST491000000 on 1968-72 models or ST35650001 on 1973 models), compress coil spring. Remove thrust bearing self-locking nut and remove thrust bearing, strut mounting insulator, spring seat and bumper rubber. Remove coil spring compressor and remove coil spring. Using a suitable tool (ST491300000 on 1968-72 models or ST35500001 on 1973 models), remove gland packing. Remove "O" ring above piston rod guide and lift piston rod and cylinder assembly upward from strut tube to remove.

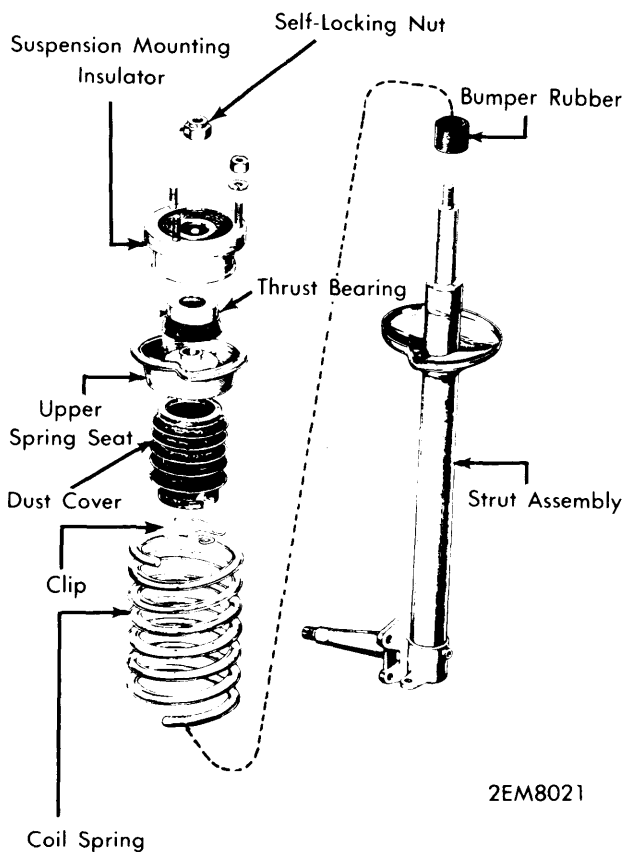
specification. **NOTE** — Use a suitable guide (ST49340000 on 1968-72 models or ST35520000 and ST35530000 on 1973 models) to avoid damaging seal when installing gland packing. To correctly bleed assembly, place spindle side down and pull piston to end of stroke. Turn assembly over and depress piston to end of stroke. Repeat this operation several times. If bleeding operation is done correctly, there should be no variation of pressure during either pushing or pulling of piston rod. Slide coil spring over strut and make sure it is properly seated. Using same compressing tool, compress spring enough to install dust cover, bumper rubber, spring seat and thrust bearing. Install self-locking nut and tighten.

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

LOWER CONTROL ARM & BALL JOINT

Removal — Raise vehicle and place safety stands under chassis members. Remove stabilizer bar and compression rod from control arm as previously outlined. Remove two nuts retaining steering knuckle to strut assembly. Remove control arm pivot stud nut and remove control arm from vehicle. Remove cotter pin and nut from ball joint stud and separate ball joint from steering knuckle. Remove bolts retaining ball joint to lower control arm and remove ball joint. **NOTE** — Ball joint can be removed in vehicle without removing control arm.

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



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STRUT ASSEMBLY COMPONENT ARRANGEMENT

Reassembly — Drain all shock absorber oil from cylinder assembly and strut tube. Thoroughly clean all parts and inspect for damage or wear before reassembly. **NOTE** — Do not remove piston rod and guide from cylinder, it is an assembly and should not be separated. Mount strut tube in a holding fixture and slide piston rod and cylinder assembly in. Fill strut tube with correct amount of suitable shock absorber oil (Nisseki Shock Absorber Oil A-1) specified. Place rubber O-ring on piston rod guide, install gland packing and tighten to

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Stabilizer Link Bolt Nuts.....	10 (1.4)
Stabilizer Brackets.....	16 (2.2)
Compression Rod-to-Frame Bracket	
1968-72	60 (8.3)
1973.....	37 (5.1)
Compression Rod-to-Control Arm	40 (5.5)
Upper Strut Mounting Nuts.....	34 (4.7)
Strut-to-Steering Knuckle	50 (6.9)
Control Arm Pivot Stud Nut	
1968-72	93 (12.9)
1973.....	68 (4.4)
Ball Joint-to-Control Arm.....	16 (2.2)
Ball Joint Stud Nut.....	48 (6.6)
Thrust Bearing Nut.....	48 (6.6)
Gland Packing	
1968-72	45 (6.2)
1973.....	72 (10)

Shock Absorber Oil Specifications

Application (1968-72 Models)	Ozs. (cc)
Sedan (Exc. P510-UTK,TK & S).....	10 (300)
Station Wagon.....	11 (325)
All Others	9.8 (290)
Application (1973 Models)	Ozs. (cc)
Atsugi Make.....	11 (325)
Kayaba Make.....	①11.25 (332)

① — On Kayaba shock absorber number 54302-N1200 capacity is 10 ozs. (300 cc).