

SUSPENSION - FRONT

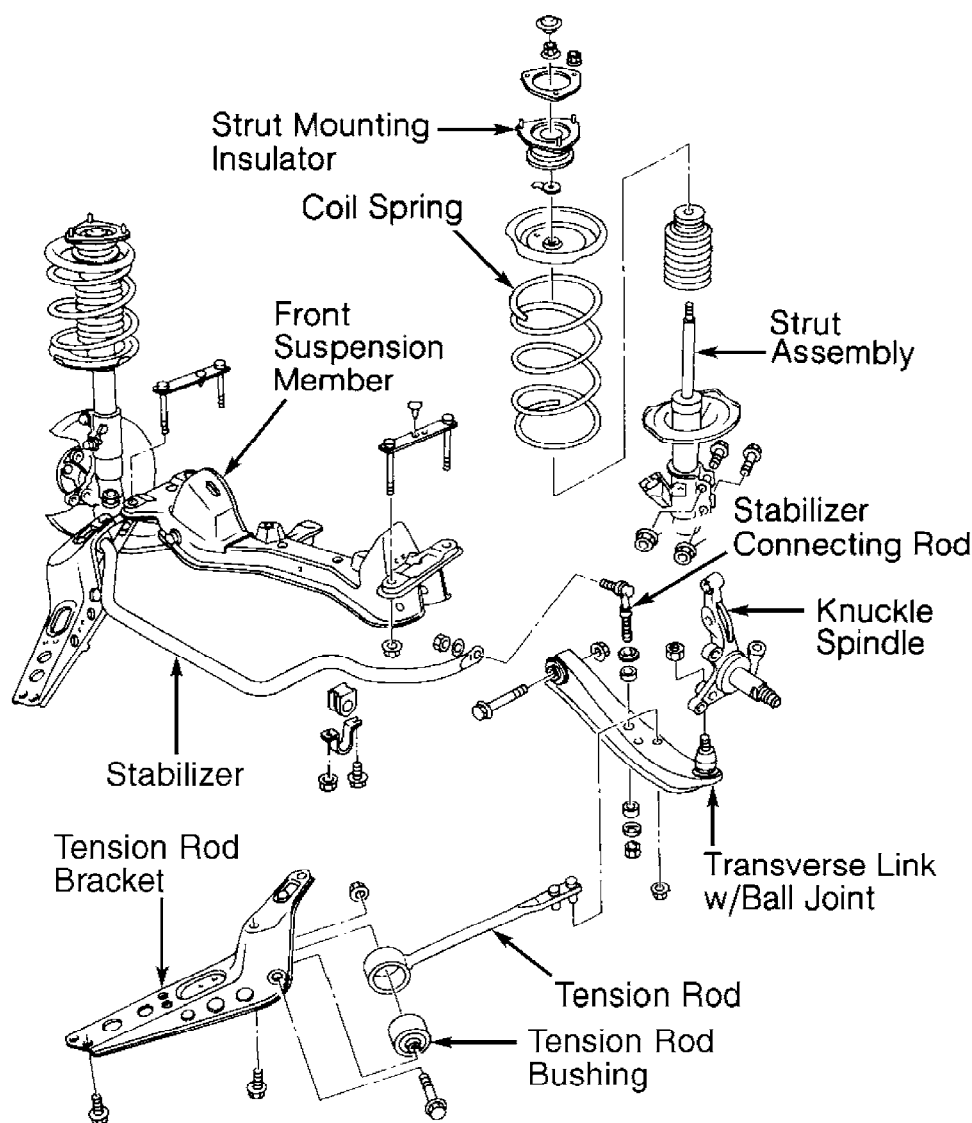
1990 Nissan 240SX

1990 SUSPENSION
Front

240SX

DESCRIPTION & OPERATION

The 240SX uses a coil spring over shock absorber-type suspension system, consisting of a vertically-mounted shock, transverse link, stabilizer bar and tension rod. See Fig. 1.



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Fig. 1: Exploded View of Front Suspension
Courtesy of Nissan Motor Co., U.S.A.

WHEEL BEARING ADJUST

Wheel bearing is pressed into steering knuckle and is not adjustable. Replace the wheel bearing any time it is removed from steering knuckle.

BALL JOINT CHECKING

1) Separate transverse link from ball joint. Attach torque gauge to top of ball joint stud nut. Measure ball joint stud turning torque. See BALL JOINT TURNING TORQUE SPECIFICATIONS table.

BALL JOINT TURNING TORQUE SPECIFICATIONS

Application	INCH Lbs. (N.m)
240SX	4.3-30.4 (.49-3.43)

2) Using a spring gauge, measure ball joint side-to-side torque. Side-to-side torque should be 1.8-12.3 lbs. (0.8-5.6 kg).

3) Measure lower ball joint vertical play (up and down) movement of ball joint stud. No vertical play should exist.

COIL SPRING & STRUT ASSEMBLY R & I

Removal

1) Raise and support vehicle. Remove wheel assemblies. Remove bolts holding struts to knuckle arm. Detach knuckle arm from bottom of strut. Remove 3 nuts holding upper end of strut to body. DO NOT remove piston rod lock nut.

2) Remove strut/spring from vehicle. Secure strut lower end in a soft-jawed vise. Slightly loosen center shaft lock nut. Compress spring with spring compressor and remove piston rod lock nut. Remove spring from strut.

Inspection

Check for smooth operation through a full stroke, both compression and extension. Check for oil leakage. Check piston for cracks, deformation or other damage.

Installation

Ensure flat spring surface is facing upward. Install spring onto strut assembly. Ensure cutout on upper spring seat should face inner side of vehicle. To complete installation, reverse removal procedure. See Fig. 1.

STABILIZER SHAFT R & I

Removal & Installation

1) Raise vehicle and support with safety stands. Remove wheel assembly and splash guard. Back off nuts securing tension rod to mounting bracket.

2) Remove bolts attaching tension rod to transverse link. Remove nuts securing stabilizer bar to transverse link. Remove stabilizer bracket bolts and brackets. Remove stabilizer bar. To install, reverse removal procedure. Final tighten when vehicle is on the ground.

STEERING KNUCKLE/HUB R & I

Removal & Installation

1) Raise vehicle and support with safety stands. Remove wheels. Remove caliper bolts and wire caliper aside. Remove tie rod-to-steering knuckle nut. Separate tie rod end from steering knuckle. Remove lower ball joint nut. Separate ball joint from steering knuckle. Remove steering knuckle-to-king pin nut and remove steering knuckle/hub.

2) To install, reverse removal procedure and tighten bolts to specification. See TORQUE SPECIFICATIONS table.

TRANSVERSE LINK & BALL JOINT R & I

Removal

Raise and support vehicle. Remove wheel assembly. Remove tension rod bolts at transverse link. Remove ball joint nut. Separate ball joint from steering knuckle. Remove transverse link pivot bolt and remove transverse link and ball joint.

Installation

To install, reverse removal procedure. Do not tighten nuts and bolts to final torque until weight of vehicle is on front wheels. Check wheel alignment. See WHEEL ALIGNMENT section.

WHEEL BEARING R & I

Removal

1) Raise and support vehicle. Remove wheel and tire. Remove caliper assembly and wire out of way. Remove rotor. Remove cotter pin and hub nut from drive shaft. Using Separator (HT72520000), remove tie rod ball joint.

2) Separate drive axle from hub assembly by tapping inward with wooden drift. Remove 3 transverse link-to-steering knuckle bolts. Remove 2 lower strut assembly-to-steering knuckle bolts. Remove steering knuckle. Press knuckle from hub. Remove seal. Remove snap rings. Press out bearing race.

3) Press wheel bearing from hub. Drive out bearing race with a brass drift fitted through notches in knuckle.

NOTE: Wheel bearings and races must be replaced as a set.

Installation

To install, reverse removal procedure. Tighten nuts and bolts to specification. See TORQUE SPECIFICATIONS table.

TORQUE SPECIFICATIONS

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Application	Ft. Lbs. (N.m)
Stabilizer Bar Bracket Bolt	29-36 (39-49)
Strut Rod Nut	43-58 (59-78)
Strut-to-Body Nut	29-40 (39-54)
Strut-to-Steering Knuckle Nut	84-98 (114-133)
Tension Rod-to-Transverse Link Nut .	65-80 (88-108)
Tie Rod Ball Joint Nut	22-29 (29-39)
Torsion Rod Bracket Bolt	29-36 (39-49)
Transverse Link-to-Crossmember	
Pivot Bolt	65-80 (88-108)

