

HONDA

Accord
Civic
Prelude

DESCRIPTION

Strut type front suspension consisting of a vertically mounted strut assembly. Strut assembly is mounted to body at the top by means of a thrust bearing. Lower end of strut is connected to steering knuckle, which is mounted to lower control arm by means of 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. On Accord, radius rods are attached to crossmember and lower control arms. A stabilizer bar is attached to lower control arms on Civic and Prelude models and is attached to radius rods on Accord.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

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

WHEEL BEARING ADJUSTMENT & INSPECTION

Adjustment — Wheel bearings are non-adjustable.

Inspection — Check axial end play and wheel wobble. Place dial indicator against wheel spindle and zero indicator. Grasp tire firmly and push in and out while observing indicator dial. End play should not exceed .020" (.5 mm) on Prelude models. There should be no end play on all others. To check wheel wobble, zero indicator against outer rim of wheel and shake wheel. Movement should not exceed .020" (.5 mm). If either reading exceeds specifications check spindle nut torque and bearings for damage. Replace as needed.

BALL JOINT CHECKING

Raise and support front of vehicle. Attach dial indicator to lower control arm with indicator tip on steering knuckle near ball joint. Place pry bar between lower control arm and steering knuckle. Push on pry bar and observe movement on dial indicator. Movement should not exceed .020" (.5 mm). Ball joint and control arm are serviceable as an assembly only. If ball joint exceeds limit, replace control arm.

REMOVAL & INSTALLATION

STEERING KNUCKLE

Removal — 1) Raise and support vehicle and remove wheel. Remove spindle nut. Remove brake caliper without disconnecting hydraulic line and support out of way. On Civic and Prelude, screw 2 M8 x 1.25 x 12 mm bolts into threaded holes in brake rotor until rotor is pulled off hub.

2) On Accord models: Install hub puller and slide hammer and remove hub with rotor from spindle. On all models: Disconnect tie rod and control arm from knuckle, taking care not to damage seals. Loosen lock bolt holding steering knuckle to strut assembly and tap knuckle off of strut. Slide knuckle assembly off axle.

3) On Civic and Prelude models, press hub from knuckle.

NOTE — When hub removal procedure involves use of slide hammer, both inner and outer wheel bearings must be replaced each time hub is removed.

Installation — Replace wheel bearings where required. Reverse removal procedures to install.

WHEEL BEARINGS

Removal — 1) With knuckle and hub removed from vehicle, remove splash guard and snap ring from knuckle. Remove inner grease seal, bearing and race. Press out outer race.

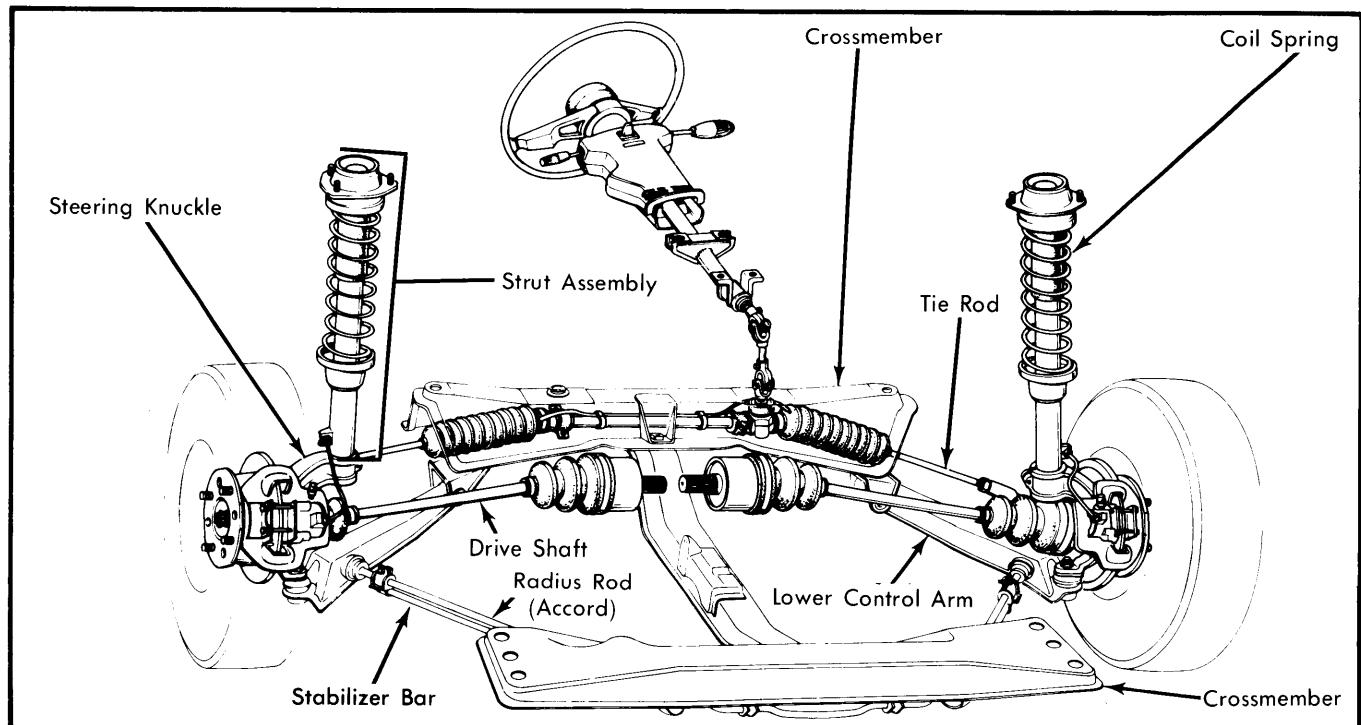


Fig. 1 Assembled View of Honda Front Suspension Showing Component Relationships

HONDA (Cont.)

2) Pull out outer bearing inner race and remove grease seal. Wash knuckle and hub thoroughly with clean solvent before reassembly.

Installation — 1) Press in bearing outer race. Pressure required must not exceed 5000 lbs. (22240 N). Pack bearings and coat races before installing bearings. Install outer bearing and race. Install snap ring securely in groove.

2) Pack grease seal groove and coat sealing lip with grease. Press in seal. Install splash guard, inner bearing and race. Reverse removal procedures to complete installation.

STRUT ASSEMBLY

Removal — Raise and support vehicle, then remove wheel. Disconnect brake line at strut assembly and remove retaining clip. On Prelude and Civic, remove brake caliper without disconnecting hydraulic line and support out of way. On all models, loosen lock bolt securing strut to steering knuckle and separate knuckle from strut. Remove nuts retaining upper end of strut to body and remove strut.

Disassembly — Using suitable tool, compress coil spring to relieve tension from upper shock absorber retaining nut. Remove nut, seals, spacers, etc. (noting arrangement), beneath upper mounting plate. Slowly remove pressure from spring and lift spring off. Shock absorber may now be replaced, if necessary.

Reassembly — Reverse disassembly procedure using Fig. 2 as a guide. Coat both sides of needle bearing with grease. Check all components for signs of seepage and correct as needed.

Installation — Reverse removal procedure and note: Make sure slot in steering knuckle is engaged in tab on shock (strut) housing before seating it into steering knuckle.

LOWER CONTROL ARM

Removal — Raise and support vehicle. Remove front wheel. Disconnect lower ball joint from steering knuckle, using ball joint remover tool. Disconnect stabilizer retaining bolts and nuts from control arm (it may be necessary to loosen front stabilizer retaining brackets). Remove lower control arm pivot bolt and remove control arm.

Installation — To install, reverse removal procedure and note: On Accord models only, make sure bolt mounting lower control arm to crossmember is tightened with weight of vehicle on jack. This simulates normal riding height.

STABILIZER BAR

Removal — Remove stabilizer bar brackets from crossmember. On Civic and Prelude, remove stabilizer-to-control arm nuts and remove stabilizer bar. On Accord, remove stabilizer-to-radius rod bolts and remove stabilizer bar.

Inspection — Inspect all rubber bushings and metal sleeves for excessive wear or damage.

Installation — Reverse removal procedure and note the following: On Civic, install bar with white stripe on driver's side of vehicle and align inside edge of stripe with stabilizer bar bushing. On Prelude, notice that the right side stabilizer bracket bolts are longer than the left side bolts.

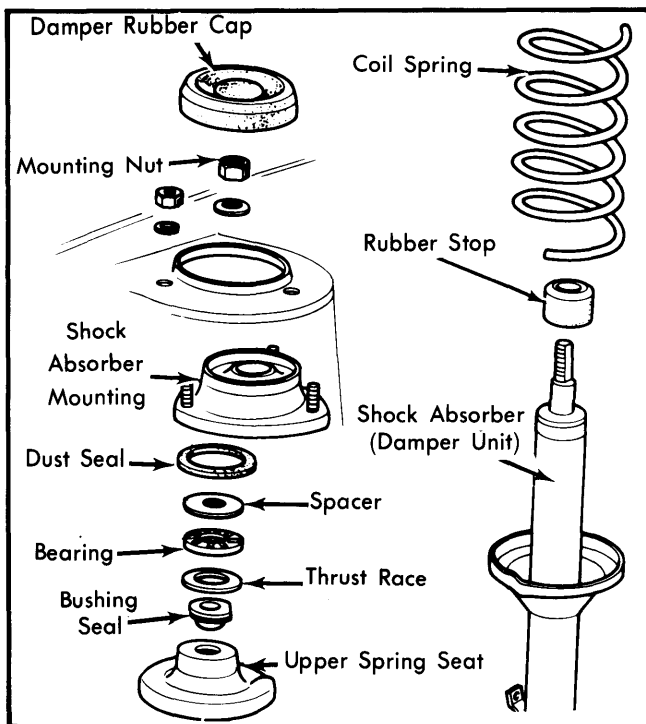


Fig. 2 Exploded View of Honda Strut Assembly (Accord Shown; Civic Models Similar)

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N•m)
Spindle Nut	108 (147)
Ball Joint	
Accord & Prelude	33 (45)
Civic	25 (34)
Control Arm-to-Crossmember	
Accord	36 (49)
Civic & Prelude	40 (54)
Strut-to-Knuckle	
Accord & Prelude	47 (64)
Civic	36 (49)
Strut-to-Body	
Accord (3)	22 (30)
Civic & Prelude (1)	33 (45)
Stabilizer-to-Control Arm	
Civic & Prelude	32 (44)
Stabilizer-to-Radius Rod	
Accord	16 (22)
Stabilizer-to-Body	
Accord	16 (22)
Civic	37 (50)
Prelude	28 (38)
Tie Rod End-to-Knuckle	32 (44)
Radius Rod-to-Control Arm	
Accord	40 (54)