

Front Suspension

MAZDA ROTARY PICKUP

Rotary Pickup

DESCRIPTION

Independent type suspension, consisting of upper and lower control arms and wheel spindle mounted between upper and lower arms by means of ball joints. Upper control arm pivots on a shaft attached to frame, lower control arm pivots on a shaft mounted to crossmember. A coil spring is mounted between lower control arm and frame. Shock absorber is hydraulic double action type, mounted between lower control arm and frame inside coil spring.

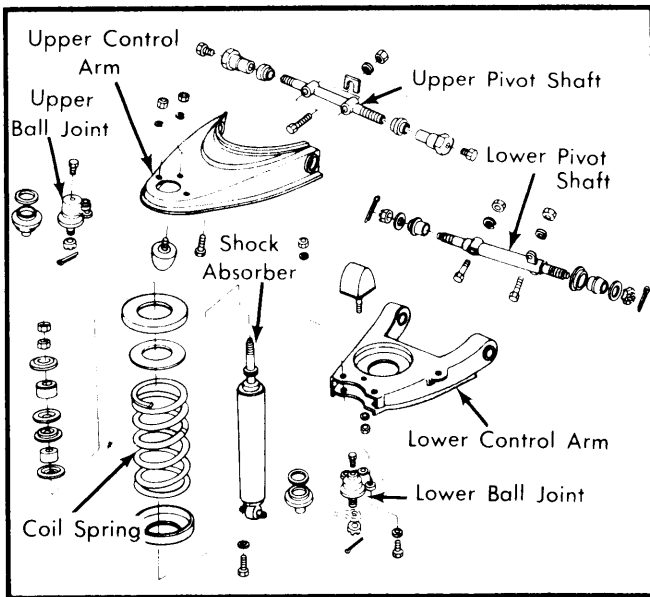


Fig. 1 Exploded View of Front Suspension Assembly for Component Identification

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

SHOCK ABSORBERS

Removal — Remove nut, rubber bushing and washer attaching upper end of shock absorber to crossmember. Remove lower retaining bolts holding shock absorber to lower control arm, and remove shock absorber from vehicle.

Installation — Reverse removal procedure and tighten mounting bolts.

UPPER CONTROL ARM & BALL JOINT

Removal — 1) Raise vehicle and suitably support with safety stands located under lower control arm. Remove tire and wheel. Take off brake caliper assembly and suspend out of way. Disconnect and remove front shock absorber as previously outlined.

2) Remove cotter pin and nut mounting upper ball joint to steering knuckle. Use a suitable puller and disengage ball joint from knuckle. Note position and number of wheel alignment shims.

3) Remove 3 retaining nuts and bolts then remove ball joint from control arm. To remove control arm, open hood and remove 2 upper arm retaining bolts and pull control arm from vehicle.

Installation — Position ball joint in upper control arm and tighten bolts. Install control arm in vehicle and tighten. Install steering knuckle on ball joint, tighten nut, and remove safety stands; lower vehicle. Check wheel alignment.

LOWER CONTROL ARM, BALL JOINT & COIL SPRING

Removal — 1) Raise vehicle and place safety stands under frame behind both lower control arms. Remove tire and wheel. Take off brake caliper and suspend out of way. Disconnect stabilizer bar from lower control arm. Fit suitable spring compressor to coil and collapse spring.

2) Remove lower ball joint nut and disconnect stud from steering knuckle using a puller. Remove bolts attaching lower arm to crossmember and slide arm with coil spring from vehicle.

Installation — To install, reverse removal procedure noting the following: Ensure ball joint is greased. Install stabilizer bar with white stripe aligned with outside of support bracket.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Ball Joint-to-Steering Knuckle	58 (8.0)
Pivot Shaft-to-Frame	
Upper	69 (9.5)
Lower	62 (8.6)
Lower Control Arm-to-Pivot Shaft	62 (8.6)
Ball Joint-to-Control Arm	65(9.0)
Shock Absorber	
Upper Mount	①
Lower Mount	15(2.1)

① — Distance from top of lock nut to top of shock absorber stud should be .14" (3.5 mm)