

1971-72 MAZDA 1200 & R100

Mazda R100 (1971)
Mazda 1200 (1971-72)

DESCRIPTION

Independent strut type suspension with coil springs. Strut assemblies are mounted between lower control arms and upper fender panels. Strut assemblies consist of a shock absorber built into strut outer tube; a coil spring is mounted on outside of strut outer tube; steering knuckle is integral with bottom of strut tube. Lower control arms pivot in mounts connected to crossmember and connect at outer ends to strut assemblies by means of ball joints. Strut rods are mounted between control arms and chassis members. A stabilizer bar mounts to chassis and is connected at ends to strut rods.

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

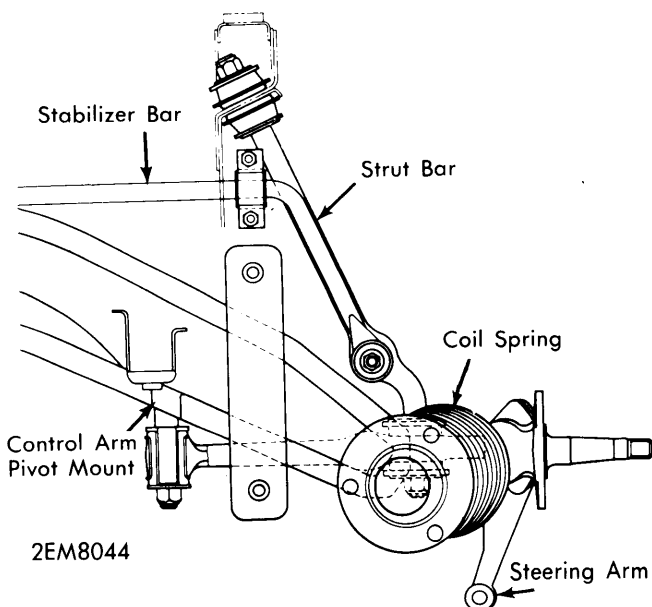
STRUT ASSEMBLY

Removal — Raise vehicle and place safety stands under body. Remove wheel and tire. Remove disc brake caliper (if

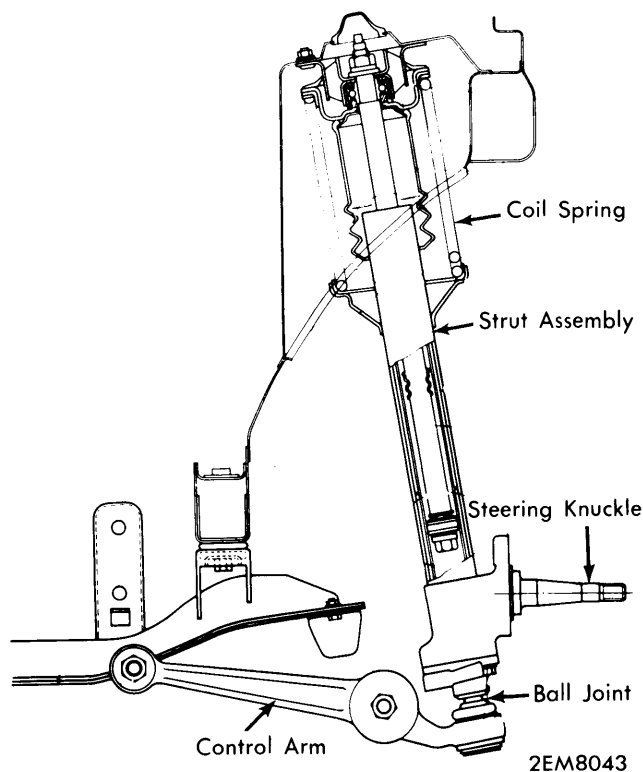
equipped) and brake disc or drum. Remove backing plate or brake disc splash shield. **NOTE** — See appropriate story in *BRAKE SYSTEMS* Section for removal of front brake components. Remove three nuts attaching upper strut mount to fender panel. Disconnect stabilizer bar from strut rod by removing nut from link bolt. Remove nuts from both ends of strut rod and remove rod. Remove nut from control arm pivot stud and remove strut assembly and control arm. Place strut assembly in a vise and remove three bolts retaining steering arm to bottom of strut tube and separate control arm and steering arm from strut assembly.

Disassembly — Place strut assembly in a vise and using a suitable spring compressor (49 223 640), compress coil spring enough to remove nut from shock absorber piston rod. Remove washer, mount, spacer, seal, upper spring seat and boot, upper rubber seat, adjusting plate and coil spring. Using a suitable wrench (49 0259 700), remove cap nut and seal from upper tube. Remove "O" ring from inside strut tube. Pull up on piston rod and remove pressure tube and piston rod assembly. Remove valve from bottom of pressure tube and remove piston rod assembly. Place upper end of piston rod in a vise and remove nut from top. Remove washer, relief valves and piston. Remove bolt and nut from bottom of valve assembly and remove seats, relief valve and orifice valve.

Reassembly — Inspect all components for wear or distortion. Piston rod should be no smaller than 0.785". Inner diameter of pressure tube should be no more than 1.184". Place piston rod in a vise and install washer, check valve spring, check valve, piston, four relief valves, washer and nut. **NOTE** — Make sure piston assembly is installed with open notched side toward upper end of piston rod. Tighten nut to specification and stake around edge of nut to prevent nut from working loose. Place



MAZDA FRONT SUSPENSION (TOP VIEW)



MAZDA FRONT SUSPENSION (FRONT VIEW)

Front Suspension

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check valve spring and check valve on lower valve bolt. Install bolt in lower valve casing and install orifice valve, relief valve, three seats and nut. Tighten nut to specification and stake in center of nut to prevent working loose. Insert stopper guide, stopper, back-up ring and piston rod guide into pressure tube. Install first oil stop ring in approximately 5.1" and second oil stop ring in about 2.36". Install piston rod and bottom valve assembly into bottom of pressure tube. Place pressure tube in strut tube and fill strut tube with exactly 17 cu.in. (230cc) of shock absorber oil. Install "O" ring and cap nut. Tighten cap nut to specification. Install coil spring and components in reverse of removal order, compress spring and tighten nut to specification.

Installation — Reverse removal procedure for installation. Tighten all bolts and nuts to specifications. Check front wheel alignment.

CONTROL ARM & BALL JOINT

Removal — Raise vehicle and place safety stands under body. Remove wheel and tire. Remove control arm and strut assembly as previously outlined. Remove three bolts retaining steering arm-to-strut assembly. Remove ball joint stud nut and separate ball joint from steering arm. Remove set ring and dust cover from ball joint. Using a suitable mandrel (49 0259 860), press ball joint from control arm.

Installation — Inspect control arm for distortion or damage. Thoroughly clean ball joint mounting bore and ball joint before installing. Using a suitable mandrel (49 0259 860), press ball joint in control arm. Install dust cover and set ring. Place steering arm on ball joint and tighten nut to specification. Install steering arm on strut assembly and tighten bolts to specification. Install in vehicle as previously outlined. Tighten all bolts and nuts to specifications and check wheel alignment.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Lower Piston Rod Nut.....	11
Bottom Valve Assembly Nut.....	2
Cap Nut.....	47
Steering Arm-to-Strut Assembly Bolts.....	47
Ball Joint Stud Nut.....	65
Control Arm Pivot Stud Nut.....	65
Strut Rod Nuts.....	65