

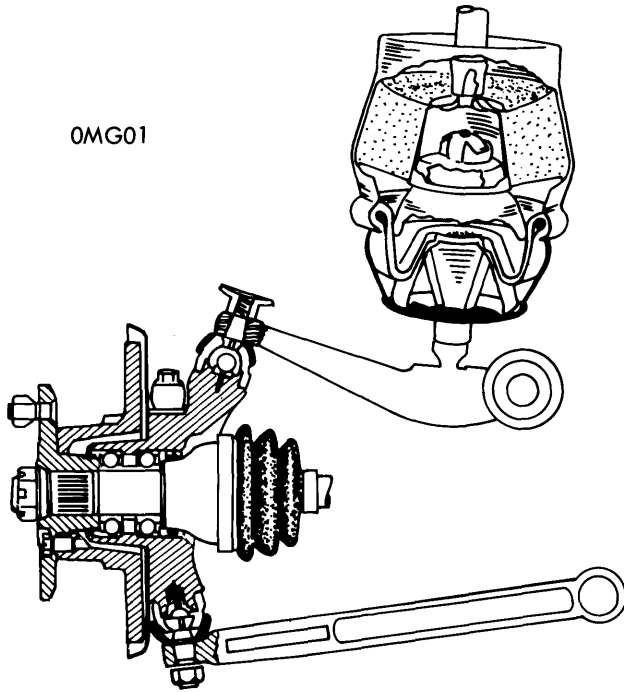
## 1968-71 AUSTIN AMERICA

Austin America (1968-71)

### DESCRIPTION

Suspension is hydrostatic type consisting of two displacer units, strut rods, upper and lower control arms which are attached to a steering knuckle by ball joints. Displacer unit consists of a piston, diaphragm, upper and lower chamber housing, and a conical spring of compressed rubber.

OMG01



FRONT SUSPENSION & DISPLACER UNIT

### 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.

### DEPRESSURIZING, EVACUATING & PRESSURIZING

**CAUTION** — Before work is done on suspension system and its components, system must be depressurized.

#### DEPRESSURIZING

1) Remove dust cap from displacer unit pressure line valve. Using service equipment (18G 682 or 18G 703), install black connector (with knurled knob unscrewed) of service machine to displacer unit pressure line valve.

2) Open valve number 2 (black valve) on service machine. Screw in knurled knob to drain fluid from suspension system into pressure tank. After system is drained, unscrew knurled knob, close number 2 valve and remove service machine black connector.

#### EVACUATING

When installing suspension units, air must be evacuated from system. Remove dust cap from displacer unit pressure line valve and connect service machine (18G 682 or 18G 703) yellow connector. Operate vacuum pump until all fluid movement has ceased and vacuum reading is 27 in. Hg. Open valve number 1 (yellow valve) of service machine.

**CAUTION** — Allow further fluid movement to stop before disconnecting service machine yellow connector from displacer unit pressure valve.

#### PRESSURIZING

Connect black connector (knurled knob unscrewed) of service machine to displacer unit pressure valve. Close valve number 2 (black valve) on service machine and bleed valve. Operate pressure pump until air is out of connecting tube and fluid appears. Close bleed valve and screw in knurled knob. Operate service machine pressure pump until correct pressure is obtained (see fluid pressure specifications). Unscrew knurled knob, open valve number 2 (black valve) and remove service machine black connector.

**NOTE** — When pressurizing new displacer unit, increase pressure to 350 psi and let pressure remain for 30 minutes. Drain system until normal operating pressure is obtained (see fluid pressure specifications).

### FLUID PRESSURE SPECIFICATIONS

Application	Pressure (psi)
Austin America Manual Trans. ....	220
Austin America Auto. Trans. ....	220

### REMOVAL & INSTALLATION

#### DISPLACER UNIT & UPPER CONTROL ARM

**Removal** — Raise and support vehicle on safety stands, remove wheels. Depressurize system. Disconnect displacer hose at engine block. Remove upper control arm ball joint nut and disconnect control arm from ball joint. Remove fulcrum shaft nut and withdraw fulcrum shaft. Remove control arm with roller foot and displacer unit.

**Installation** — To install displacer unit and upper control arm, reverse removal procedure. Tighten nuts and bolts to specifications.

#### STEERING KNUCKLE ASSEMBLY

**Removal** — Raise and support vehicle on safety stands, remove wheels. Detach tie rod ends from steering arms. Disconnect axle shaft inner coupling, mark flange and joint for correct reassembly. Remove caliper and support caliper out of

# Front Suspension

## 1968-71 AUSTIN AMERICA (Cont.)

the way. Disconnect strut rod from lower control arm. Detach upper and lower control arms from ball joints. Remove steering knuckle assembly.

**Disassembly** — Remove cotter pin, nut, collar, and withdraw hub flange with rotor. Tap end of axle shaft to remove shaft from steering knuckle. Remove seals, water shield and bearings.

**Reassembly** — To reassemble steering knuckle assembly, reverse removal procedure. Tighten nuts and bolts to specifications.

### LOWER CONTROL ARM & STRUT ROD

**Removal** — Raise and support vehicle on safety stands, remove wheels. Support suspension under steering knuckle assembly. Detach strut rod from lower control arm. Detach lower control arm from lower ball joint, remove inner fulcrum shafts and nuts. Remove lower control arm. Remove lock nut and bushings from strut rod, remove strut rod.

**Installation** — To install lower control arm and strut rod, reverse removal procedure. Tighten nuts and bolts to specifications.

### FRONT SUSPENSION ASSEMBLY

**Removal** — Front suspension, sub frame, and engine are removed as a complete unit. Raise and support vehicle on safety stands, remove wheels. Disconnect battery and remove hood. Depressurize system as previously outlined. Remove all

electrical connections from engine. Remove air cleaner and carburetor(s), disconnect tail pipe. Disconnect speedometer cable from transmission. Drain cooling system, disconnect heater and radiator hoses. Disconnect heater control cables. Detach clutch slave cylinder bolts and move cylinder out of the way. Remove transmission extension and shift linkage. Disconnect displacer unit, brake hoses, and tie rods. Support engine and sub-frame on jack. Remove bolts from corners of sub-frame to body. Remove bolts securing upper mounting brackets to body. Lower jack and remove sub-frame assembly complete with engine and suspension assembly.

**Installation** — To install front suspension assembly, reverse removal procedure, tighten nuts and bolts to specifications.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Steering Lever-to-Hub .....	30-35
Tie Rod Ends.....	25
Front Hub Nut .....	150
Fulcrum Shaft Nuts.....	35-40
Rotor-to-Hub .....	38-45
Steering Knuckle-to-Caliper .....	45-50
Ball Joints .....	35-40
Strut Rod .....	35-40