

## TRIUMPH TR6

TR6

### DESCRIPTION

Independent type front suspension, consisting of upper and lower control arms, steering knuckles, coil springs and hydraulic shock absorbers. Upper and lower control arms pivot in mounts integral with chassis. Steering knuckles mount to upper control arms by means of ball joints and to lower control arms by means of trunion joints. Coil springs and shock absorbers mount at bottom to lower control arms and at top to chassis. A stabilizer bar is also installed.

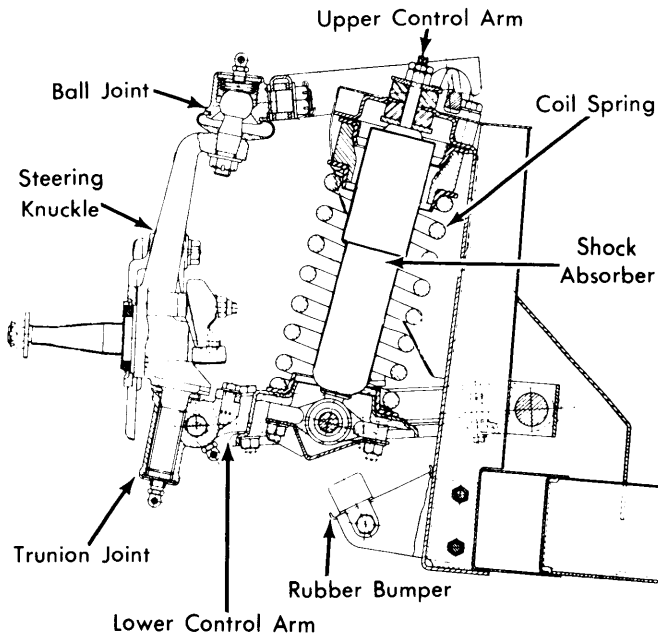


Fig. 1 Sectional View of Front Suspension Assembly

### ADJUSTMENT

#### WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See *Wheel Alignment Specifications and 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

#### STABILIZER BAR

**Removal** — Disconnect stabilizer bar link from lower control arms on both sides. Remove nuts securing "U" bolts to crossmember. Remove "U" bolts and brackets and remove stabilizer bar. Disconnect link assemblies from stabilizer bar if necessary.

**Installation** — Replace any rubber bushings as necessary. To install stabilizer bar, reverse removal procedure.

### SHOCK ABSORBERS

**Removal & Installation** — Raise vehicle and support with safety stands; remove tire and wheel. Remove the four lower shock absorber mounting nuts from under lower control arm. Remove lock nut and mounting nut from upper end of shock absorber, then withdraw unit. To install, reverse removal procedure.

### BALL JOINT

**Removal** — Raise vehicle, position safety stands under chassis and remove wheel and tire. Place a jack under lower control arm and raise enough to remove spring tension from ball joint. Remove ball joint stud nut and, using a suitable puller (S166), separate ball joint from steering knuckle. Remove bolts securing ball joint to upper control arm and remove ball joint.

**Installation** — To install ball joint, reverse removal procedure and note that outside ball joint housing mounting bolt enters from rear side.

### TRUNION JOINT

**Removal** — Raise vehicle, position safety stand under chassis and remove wheel and tire. Remove brake caliper, front hub and disc brake shield. Place a jack under lower control arm and raise enough to relieve spring tension from ball and trunion joints. Remove pivot bolt and nut securing trunion joint to lower control arm. Pull out on steering knuckle and separate trunion joint from control arm. Unscrew trunion from steering knuckle. Remove bushings from trunion if defective.

**Installation** — Install new bushings if old were removed. Partially fill trunion with 90 S.A.E. lubricant and install rubber boot. Screw trunion on steering knuckle. Reverse removal procedure to finish installation.

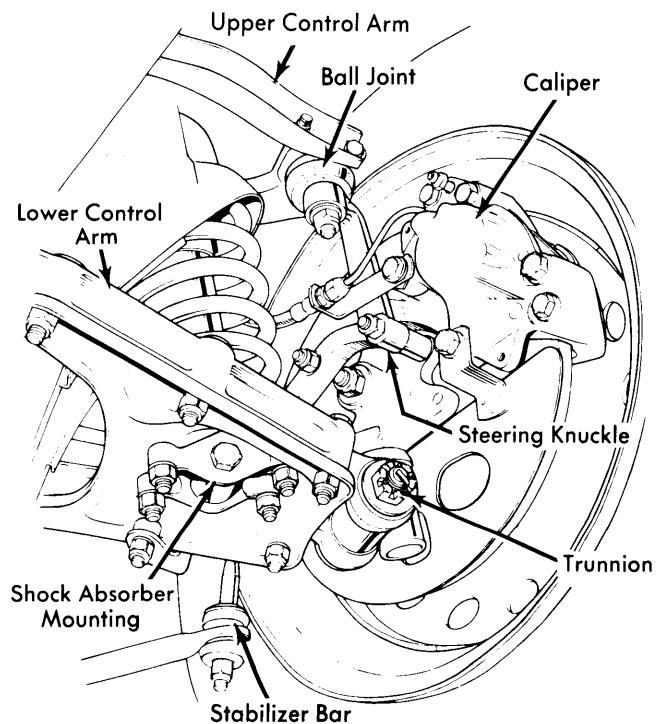


Fig. 2 Installed View of Front Suspension Assembly

# Front Suspension

## TRIUMPH TR6 (Cont.)

### COIL SPRING

**Removal** — Raise vehicle, position safety stands under chassis and remove wheel and tire. Remove shock absorber and disconnect link from stabilizer bar. Position a jack under lower control arm directly under spring seat. Raise jack slightly to release spring pressure from steering knuckle joints. Disconnect trunion from lower control arm. Remove stabilizer bar link mount from lower control arm. Remove nuts securing lower spring seat to lower control arm. Carefully lower jack and remove spring seat and spring with upper and lower insulating rings.

**Installation** — Fit insulating rings to coil spring. Thin ring is top ring. Place top of spring into position and maneuver lower end into spring pan. Put jack directly under spring pan and compress spring. Engage spring plate into position, fit mounting studs, then tighten evenly. Refit stabilizer bar. Align trunion in lower control arm making sure thrust washers are installed. Tighten slotted trunion mounting nut. Reverse removal procedure for remaining components.

### STEERING KNUCKLE

**Removal** - Raise vehicle, position safety stands under chassis and remove wheel and tire. Remove disc brake caliper, hub and dust shield. Position a jack under control arm and raise slightly to release tension from steering knuckle joints. Remove brake caliper mount and steering arm from steering knuckle.

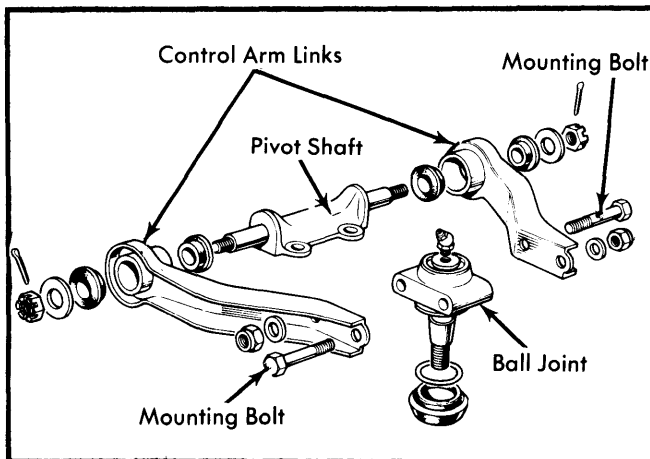


Fig. 3 Exploded View of Upper Control Arm Assembly

Disconnect ball joint from steering knuckle as previously outlined. Unscrew steering knuckle from trunion joint on lower control arm.

### UPPER CONTROL ARMS

**Removal** — Raise vehicle, position safety stands under chassis and remove wheel and tire. Place a jack under lower control arm and raise slightly to release spring tension from upper control arm. Disconnect upper control arm from ball joint. Pull steering knuckle and ball joint from upper control arms.

Remove bolts securing control arm pivot shaft to chassis and remove shaft complete with arms. Remove arms from pivot shaft complete with rubber bushings. Remove bushings if defective.

**Installation** — To install upper control arms and bushings, reverse removal procedure.

### LOWER CONTROL ARMS

**Removal** — Raise vehicle, position safety stands under chassis and remove wheel and tire. Remove coil spring as previously outlined. Disconnect control arm pivot brackets from chassis, noting amount of adjustable shims, if equipped, and remove control arm. Remove pivot bolts and separate control arms from mounts. Remove rubber bushings from control arms if defective.

**Installation** - To install coil spring and components, reverse removal procedure.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Lower Control Arm-to-Mounting Bracket.....	46 (6.4)
Trunion Slotted Nut.....	65 (9.0)
Lower Control Arm-to-Spring Pan.....	32 (4.4)
Upper Ball Joint Housing-to-Control Arm.....	32 (4.4)
Upper Ball Joint Nut.....	50 (6.9)
Upper Control Arm-to-Pivot Shaft.....	40 (5.5)