## TRIUMPH TR7

TR7

## DESCRIPTION

Suspension is strut type with a coil spring around strut tube. Strut is secured at top to inner fender and at bottom to control arm link. A stabilizer bar is connected to chassis and lower control link. Control arm links are mounted by a ball joint at stub axles and through bolts at chassis.

## 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

### LOWER CONTROL LINK

**Removal** – 1) Raise and support vehicle with safety stands. Remove tire and wheel. Remove mounting hardware from end of stabilizer bar. Remove bolts holding steering arm to stub axle and move out of way. Remove nut and separate ball joint. Remove bolt and nut securing lower control link to chassis, then take out link.

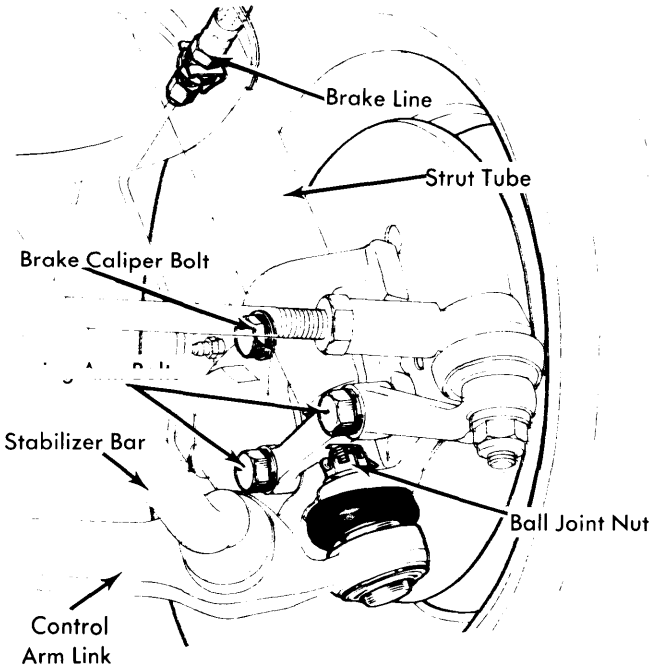


*Fig. 1 Installation Detail of Front Suspension Assembly*

2) Remove plastic and rubber ring from ball joint. Remove snap ring retaining ball joint housing to bottom link. Press or drive out ball joint and housing. Install new ball joint, fit snap ring, plastic, and rubber ring.

**Installation** – To install reverse removal procedure and tighten lower control link when vehicle weight is on ground.

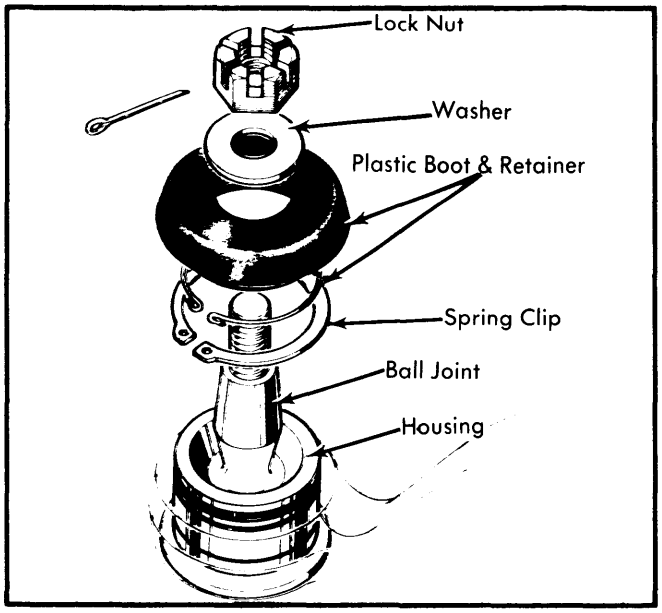


*Fig. 2 Exploded View of Ball Joint Assembly*

### STRUT ASSEMBLY

**Removal** – 1) Raise vehicle and support with jack stands. Remove tire and wheel. Separate steering arm from stub axle assembly by removing two bolts. Disconnect brake hose from bracket on strut tube. Disconnect brake caliper and hang out of way.

2) Remove ball joint nut and separate from stub axle. Remove three nuts mounting strut assembly to inner fender panel. Pull strut downward and maneuver from vehicle.

3) Using a spring compressor, collapse coil and remove slotted nut from top of strut assembly. Take out spring pan complete with top mounting and swivel assembly. Remove spring from strut.

**Disassembly** – Remove retainer securing strut tube to plug nut using a $\frac{1}{8}$" diameter drill. Using a suitable tool, remove plug nut. Slide shock absorber (damper) from strut tube.

**Reassembly** – Drill $\frac{1}{4}$" diameter hole $\frac{1}{16}$" deep at a 90° angle to the existing recess in plug nut. Fit shock absorber (damper) assembly to strut tube, then fit plug nut and tighten. Using center punch, stake strut tube into recess in plug nut.

## TRIUMPH TR7 (Cont.)

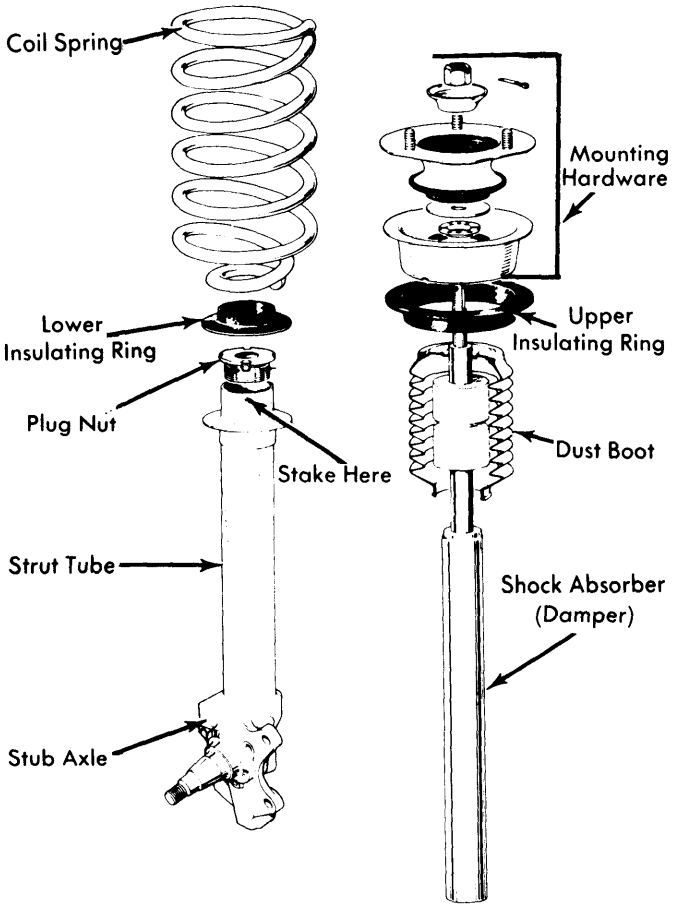


*Fig. 3 Exploded View of Strut Assembly*

**Installation** – 1) Compress coil spring and ensure bumper stop is correctly positioned. Fully extend strut rod and fit the following: lower insulating ring, rubber seal, spring, upper insulating ring, and spring pan. Fit seal to thrust collar and place on upper spring pan.

2) Install plain washer, ground surface facing spring pan. Insert rubber mounting to strut and secure with dished washer and slotted nut. To complete installation, reverse removal procedure. Bleed brake system.

### STABILIZER BAR

**Removal** – Raise vehicle and place on safety stands. Remove bolts and brackets mounting stabilizer bar to chassis. Remove mounting nut and rubber bushing securing stabilizer bar to lower control link. Pull out stabilizer, adjusting vehicle height as necessary. If necessary, inner bushing and mounting bushings can now be removed and replaced.

**Installation** – Refit inner dished washer with dish facing bushing, then install inner bushing on each end of stabilizer bar. Insert stabilizer bar and fit outer rubber bushings with dished washers. Reinstall mounting brackets and tighten all nuts and bolts.

### TIGHTENING SPECIFICATIONS

| Application | Ft. Lbs. (mkg) |
|---|---|
| Stabilizer Bar-to-Chassis | 30-37 (4.2-5.1) |
| Stabilizer Bar-to-Lower Control Link | 48-59 (6.7-8.1) |
| Strut Mounting-to-Body | 16-21 (2.3-2.9) |
| Strut-to-Mounting | 30-44 (4.2-6.0) |
| Tie Rod-to-Stub Axle | 59-74 (8.2-10.2) |
| Strut Tube Plug Nut | 50-60 (7.0-8.2) |