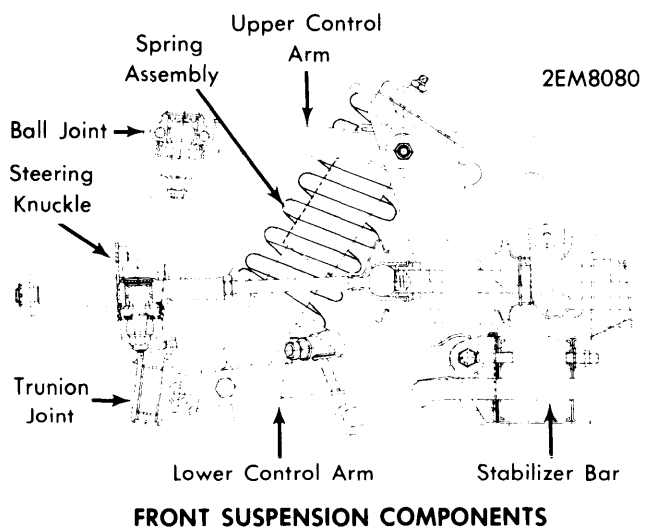


TRIUMPH SPITFIRE

Spitfire

DESCRIPTION

Independent type front suspension consisting of upper and lower control arms, coil spring and shock assemblies and steering knuckles. Control arms pivot in mounts connected to chassis. Coil spring and shock assemblies are mounted between lower control arms and mounts integral with chassis. Steering knuckles are connected to upper control arms by means of ball joints and to lower control arms by means of trunion joints. Later models are equipped with a stabilizer bar.



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

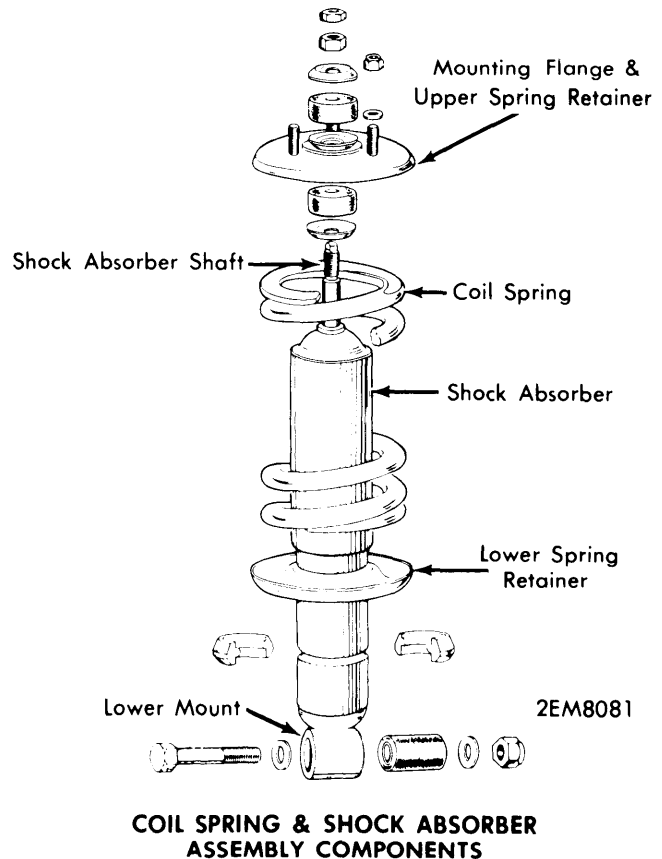
See *Ball Joint Checking* in *WHEEL ALIGNMENT* Section.

REMOVAL & INSTALLATION

COIL SPRING & SHOCK ABSORBER

Removal — Raise and support vehicle. Place safety stands behind front wheels and remove wheel and tire. Loosen bolts securing lower control arm to trunion joints. Remove bolts securing bottom spring assembly mount to control arm. Remove three nuts securing upper spring assembly mount to chassis and remove spring and shock absorber as an assembly.

Disassembly — Using a suitable spring compressor, compress coil spring until spring is not contacting upper spring seat. Remove nut securing shaft from shock absorber to mount and remove rubber mounts, mount seats and mounting flange. Release spring compressor and remove coil spring.



Assembly — Push shock absorber shaft in and out a few times, pressure should be constant and equal on either stroke. If little or no resistance is felt, or if shaft cannot be moved, replace shock absorber. To assemble coil spring and shock assembly, reverse disassembly procedure.

Installation — To install coil spring and shock absorber assembly, reverse removal procedure.

UPPER CONTROL ARMS

Removal — Raise vehicle, position safety stands behind front wheels and remove wheel and tire. Remove coil spring and shock assembly as previously outlined. Remove bolts securing upper control arms to ball joint. Remove both upper control arm pivot bolts and separate control arms from pivot mounts and ball joint.

Installation — To install upper control arms, reverse disassembly procedure. Do not tighten pivot bolts until weight of vehicle is on front wheels.

Front Suspension

TRIUMPH SPITFIRE (Cont.)

LOWER CONTROL ARMS

Removal – Raise vehicle, position safety stands behind front wheels and remove wheel and tire. Disconnect stabilizer bar link from lower control arm. Disconnect bottom spring assembly mount from control arm. Remove bolt securing control arms to trunion joint. Remove inner pivot bolts and remove control arms.

Installation – To install lower control arms, reverse removal procedure. Do not tighten inner pivot bolts until weight of vehicle is on front wheels.

BALL JOINT

Removal – Raise vehicle, position safety stands behind front wheels and remove wheel and tire. Remove ball joint stud nut and separate ball joint from steering knuckle using a suitable puller (S.160). Remove bolts securing ball joint to control arms and remove ball joint.

Installation – To install ball joint, reverse removal procedure.

TRUNION JOINT

Removal – Raise vehicle, position safety stands behind front wheels and remove wheel and tire. Remove wheel hub and dust shield. Remove bolt securing trunion joint to lower control arm. Disconnect shock absorber mount from lower control arm. Pull trunion and steering knuckle from lower control arm and unscrew trunion from steering knuckle.

Installation – To install trunion joint, screw trunion on steering knuckle as far as possible and back off to first working position. This will allow full turning radius. Reverse removal procedure to finish installation.

STEERING KNUCKLE

Removal – Raise vehicle, position safety stands behind front wheels and remove wheel and tire. Remove brake caliper, disc

hub and dust shield from steering knuckle. Remove steering arm from knuckle. Remove ball joint stud nut and separate ball joint from steering knuckle. Disconnect shock absorber from lower control arm. Remove bolt securing trunion joint to control arm and remove steering knuckle. Remove trunion from steering knuckle. If necessary, remove nut securing spindle to steering knuckle and press spindle from knuckle.

Installation – To install steering knuckle, reverse removal procedure.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Stabilizer Bar Link-to- Control Arm	13 (1.8)
Ball Joint-to-Upper Control Arm	19 (2.6)
Ball Joint Stud Nut	40 (5.5)
Upper Control Arm Pivot Bolts	29 (4.0)
Trunion Joint-to-Control Arm	37 (5.1)
Lower Control Arm Pivot Bolts	27 (3.7)
Lower Control Arm Pivot Mounts-to-Chassis	23 (3.1)
Shock Absorber Mount Upper	9 (1.2)
Lower	44 (6.0)
Spindle-to-Steering Knuckle	95 (13.1)