

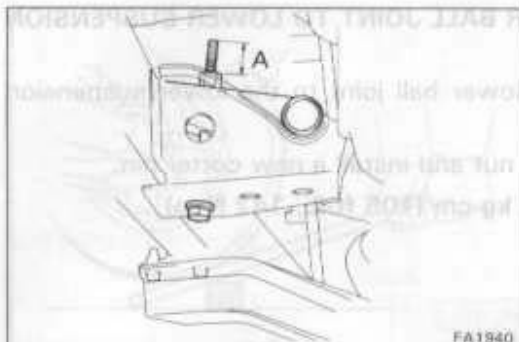
## Torsion Bar Spring

(See page SA-133)

### REMOVAL OF TORSION BAR SPRING

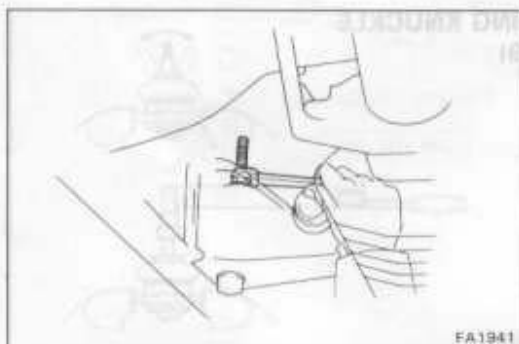
1. PLACE MATCHMARKS ON TORSION BAR SPRING, ANCHOR ARM AND TORQUE ARM

Remove the boots and place matchmarks on the torsion bar spring, anchor arm and torque arm.



2. MEASURE PROTRUDING BOLT END "A", AS SHOWN

HINT: Use this measurement for reference when adjusting the chassis ground clearance.



3. LOOSEN ADJUSTING NUT AND REMOVE ANCHOR ARM AND TORSION BAR SPRING

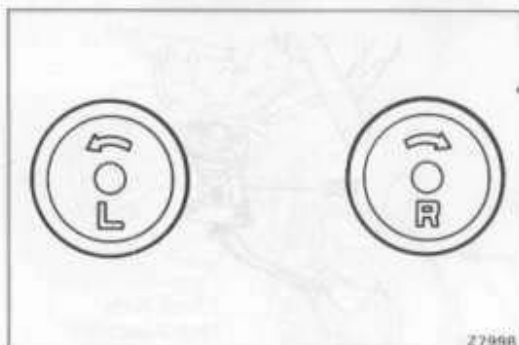
(a) As shown in the figure, the ball joint nut must be turned 1/2 turn clockwise and 1/2 turn counter-clockwise before the nut is removed.

(b) Using a torque gauge, turn the nut continuously clockwise every 1/2 - 4 seconds and take the torque reading on the 5th turn.

Torque (turning):

Lower ball joint

30 - 60 N·m (22 - 52 lb-ft) 3.0 - 5.0 ft-lb



### INSTALLATION OF TORSION BAR SPRING

HINT: There are left and right indication marks on the rear end of the torsion bar spring. Be careful not to interchange them.

2. REMOVE LOWER BALL JOINT FROM LOWER SUSPENSION ARM

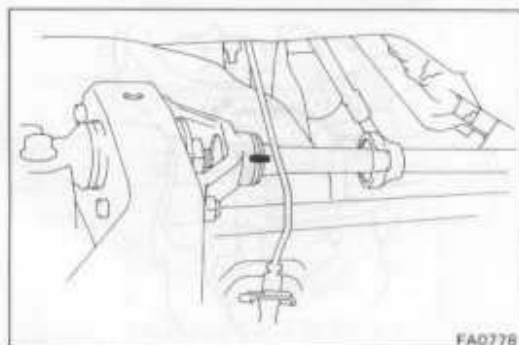
(a) Remove the cotter pin and nut.

(b) Using SST, remove the lower ball joint from the lower suspension arm.

SST 09828-62011

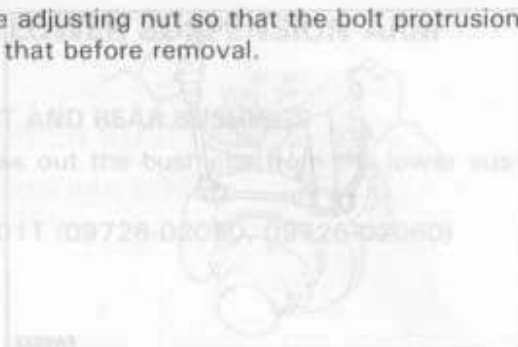
1. INSTALL TORSION BAR SPRING AND ANCHOR ARM  
If Reusing Torsion Bar Spring

- (a) Apply a light coat of molybdenum disulphide lithium base grease to the spline of the torsion bar spring.
- (b) Align the matchmarks and install the torsion bar spring to the torque arm.
- (c) Align the matchmarks and install the anchor arm to the torsion bar spring.





- (d) Tighten the adjusting nut so that the bolt protrusion is equal to that before removal.



**If Using a New Torsion Bar Spring**

- (a) Remove the wheel.  
 (b) Install the two boots to the torsion bar spring.  
 (c) Apply a light coat of the molybdenum disulphide lithium base grease to the spline of the torsion bar spring.  
 (d) Temporarily install the anchor arm to the small end of the torsion bar spring and place the matchmarks on the torsion bar spring and anchor arm.

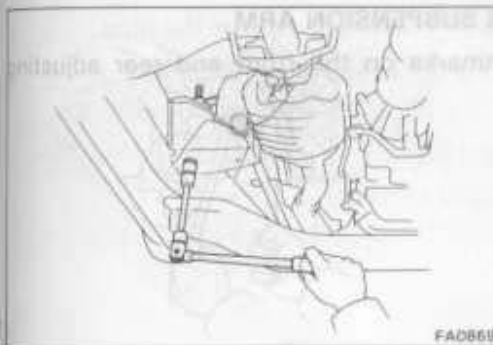
**HINT:**

- There is one spline on the torsion bar spring that is larger than the others. Install the torsion bar spring into the anchor arm by slowly turning the anchor arm until you feel the large spline enter the matching point in the anchor arm.
- Place matchmarks on the torsion bar spring and anchor arm on the bottom of each.



- (e) Remove the anchor arm from the torsion bar spring.  
 (f) Install the torsion bar spring into the torque arm.

**HINT:** There is one spline on the torsion bar spring that is larger than the others. Install the torsion bar spring into the torque arm by slowly turning the torsion bar spring until you feel the large spline enter the matching point in the torque arm.



- (g) Align the matchmarks and install the anchor arm to the torsion bar spring.  
 (h) Torque the adjusting nut.

**Nut tightening limit: A = 70 mm (2.76 in.)**

- (i) Temporarily install the lock nut.  
 (j) Install the wheel and remove the stands, bounce the vehicle to settle the suspension.  
 (k) Adjust the chassis ground clearance by turning the adjusting nut.

**Chassis ground clearance: See page A-25**

**2. ASSEMBLE BOOTS**

- (b) Install a new cotter pin