

STEERING LINKAGE REMOVAL AND INSTALLATION

Knuckle Arm

Clamp

Tie Rod

Clamp

Tie Rod Sub-Assembly

Tie Rod End Sub-Assembly

90 (920, 67)

22 (225, 16)

★ Idler Arm Bracket Cap

78 (800, 58)

Plate Washer

Idler Arm Bracket

◆ Bushing

142 (1,450, 105)

◆ Oil Seal

◆ Bushing

Idler Arm

90 (920, 67)

Knuckle Arm

◆ Cotter Pin

Power Steering Gear

Pitman Arm

59 (600, 43)

Relay Rod

90 (920, 67)

59 (600, 43)

177 (1,800, 130)

25 (260, 19)

Steering Damper

90 (920, 67)

N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non-reusable part

★ Precoated part

R1309

HINT:

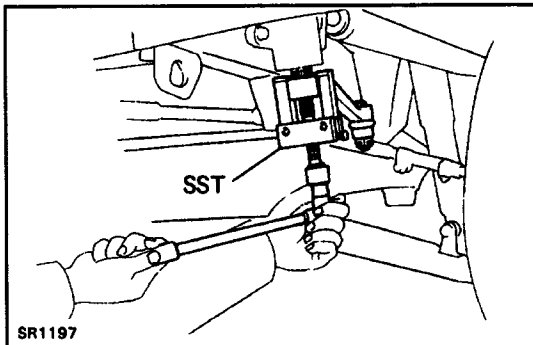
- When connecting the ball stud to the arm or rod, remove the grease on the joint surfaces.
- After torquing the ball stud nut to specified torque, advance the nut just enough to insert a new cotter pin.
- After installing any of the steering linkage components, check the front wheel alignment.
(See page [SA-4](#))

MAIN POINTS OF REMOVAL AND INSTALLATION

1. DISCONNECT AND CONNECT PITMAN ARM

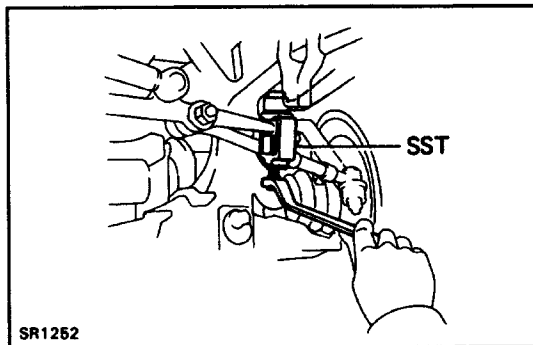
- (a) Using SST, disconnect the pitman arm from the cross shaft.

SST 09628-62011

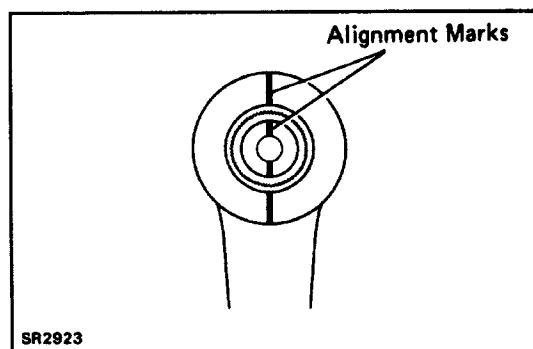


- (b) Using SST, disconnect the pitman arm from the relay rod.

SST 09611 -22012



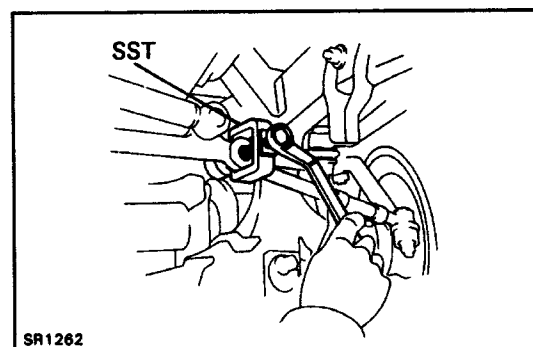
- (c) Align the alignment marks on the pitman arm and cross shaft.

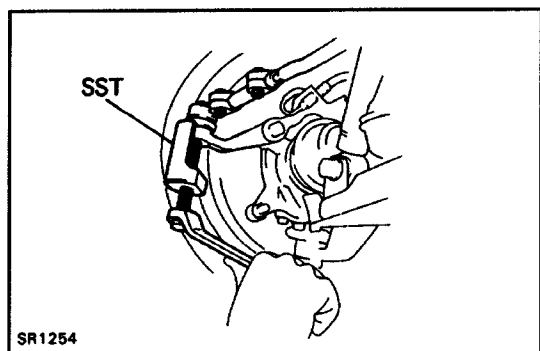


2. DISCONNECT AND CONNECT RH AND LH TIE ROD ASSEMBLYS

- (a) Using SST, disconnect the tie rod assembly from the relay rod.

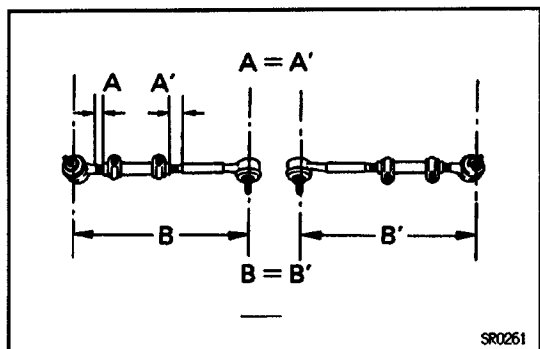
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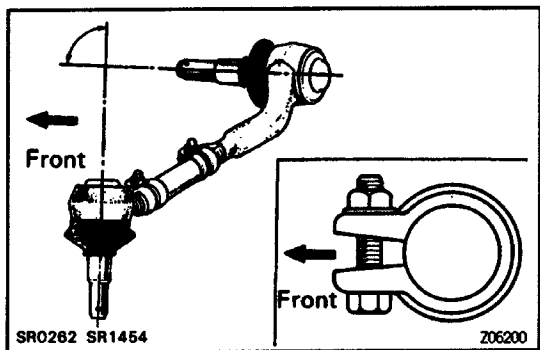
- (b) Using SST, disconnect the tie rod assembly from the knuckle arm.

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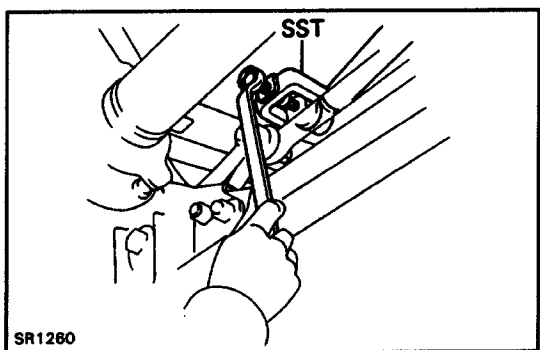


- (c) Screw the tie rod end sub-assembly and tie rod sub-assembly into the tie rod.

HINT: The tie rod assembly length should be approximately 328.5 mm (12.933 in.), and the remaining length of threads on both tie rod assemblies should be equal.



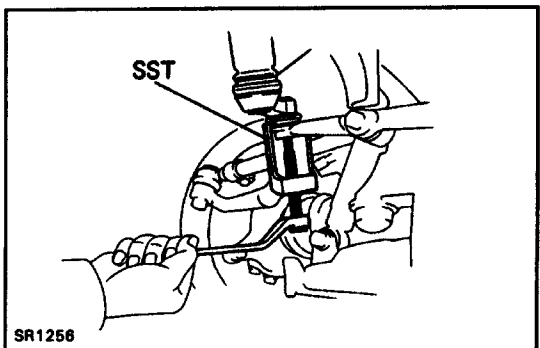
- (d) Turn the tie rod end sub-assembly so that they cross at about 90 degrees.



3. DISCONNECT STEERING DAMPER

Using SST, disconnect the steering damper from the relay rod.

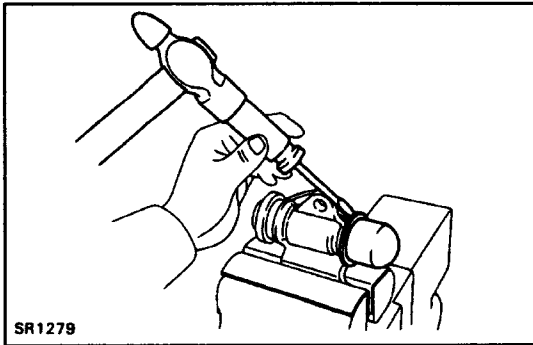
SST 09611 – 22012



4. DISCONNECT IDLER ARM

Using SST, disconnect the idler arm from the relay rod.

SST 09610-20012

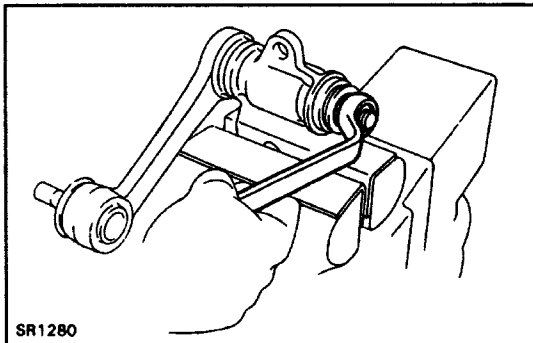


IDLER ARM DISASSEMBLY

NOTICE: When using a vise, do not overtighten it.

1. REMOVE IDLER ARM BRACKET CAP

Using a screwdriver and hammer, remove the idler arm bracket cap.

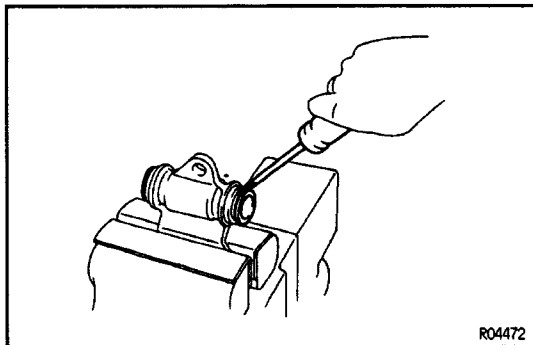


2. REMOVE IDLER ARM

Remove the nut, plate washer and pull out the idler arm from the idler arm bracket.

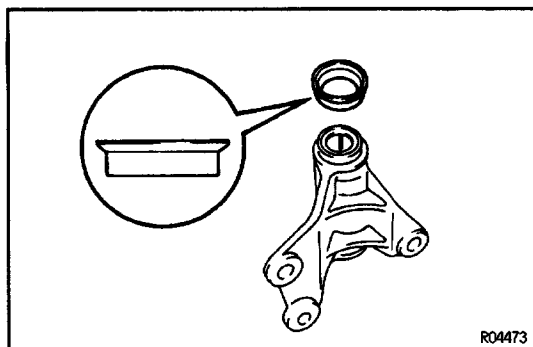
3. REMOVE OIL SEAL

Remove the oil seal from the idler arm bracket.



4. REMOVE BUSHINGS

Using a screwdriver, remove the 2 bushings.



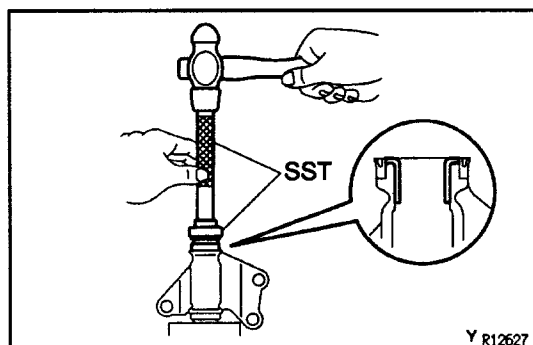
IDLER ARM ASSEMBLY

NOTICE: When using a vise, do not overtighten it.

1. INSTALL OIL SEAL

- (a) Coat a new oil seal with NIP grease.
- (b) Install the oil seal to the idler arm bracket.

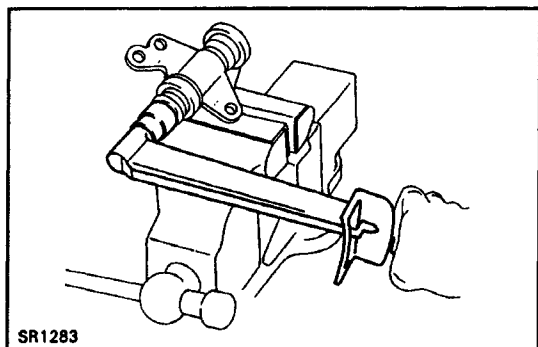
NOTICE: Make sure you install the oil seal facing the correct direction.



2. INSTALL BUSHINGS

- (a) Coat inside of 2 new bushings with MP grease.
- (b) Using SST and a hammer, tap in the 2 bushings to the idler arm bracket.

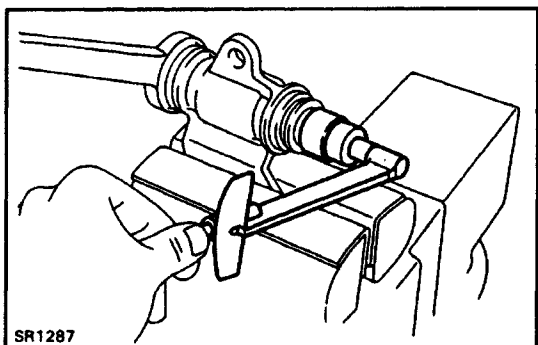
SST 09620-30010 (09627-30010, 09631-00020)



3. INSTALL IDLER ARM

- (a) Coat the idler arm with MP grease.
- (b) Install the idler arm to the idler arm bracket.
- (c) Install the plate washer.
- (d) Torque the nut.

Torque: 78 N-m (800 kgf-cm, 58 ft-lbf)

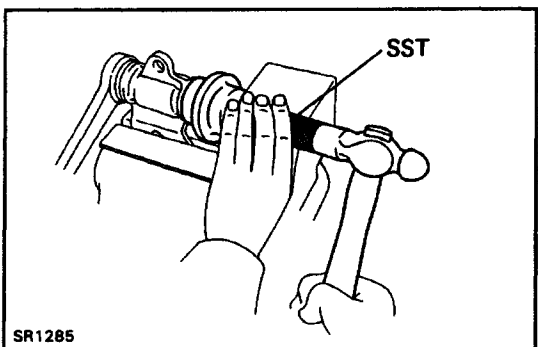


4. MEASURE IDLER ARM ROTATING TORQUE

Using a torque wrench, turn the nut several times and take the torque reading.

Torque (Turning):

0.5 – 2.9 N-m (5 – 30 kgf-cm, 5 – 26 in.-lbf)



5. INSTALL IDLER ARM BRACKET CAP

- (a) Apply sealant to the cap end.

Sealant:

**Part No. 08826-00090. THREE BOND 1281
or equivalent**

- (b) Using SST and a hammer, tap in the idler arm bracket cap.

SST 09223-46011