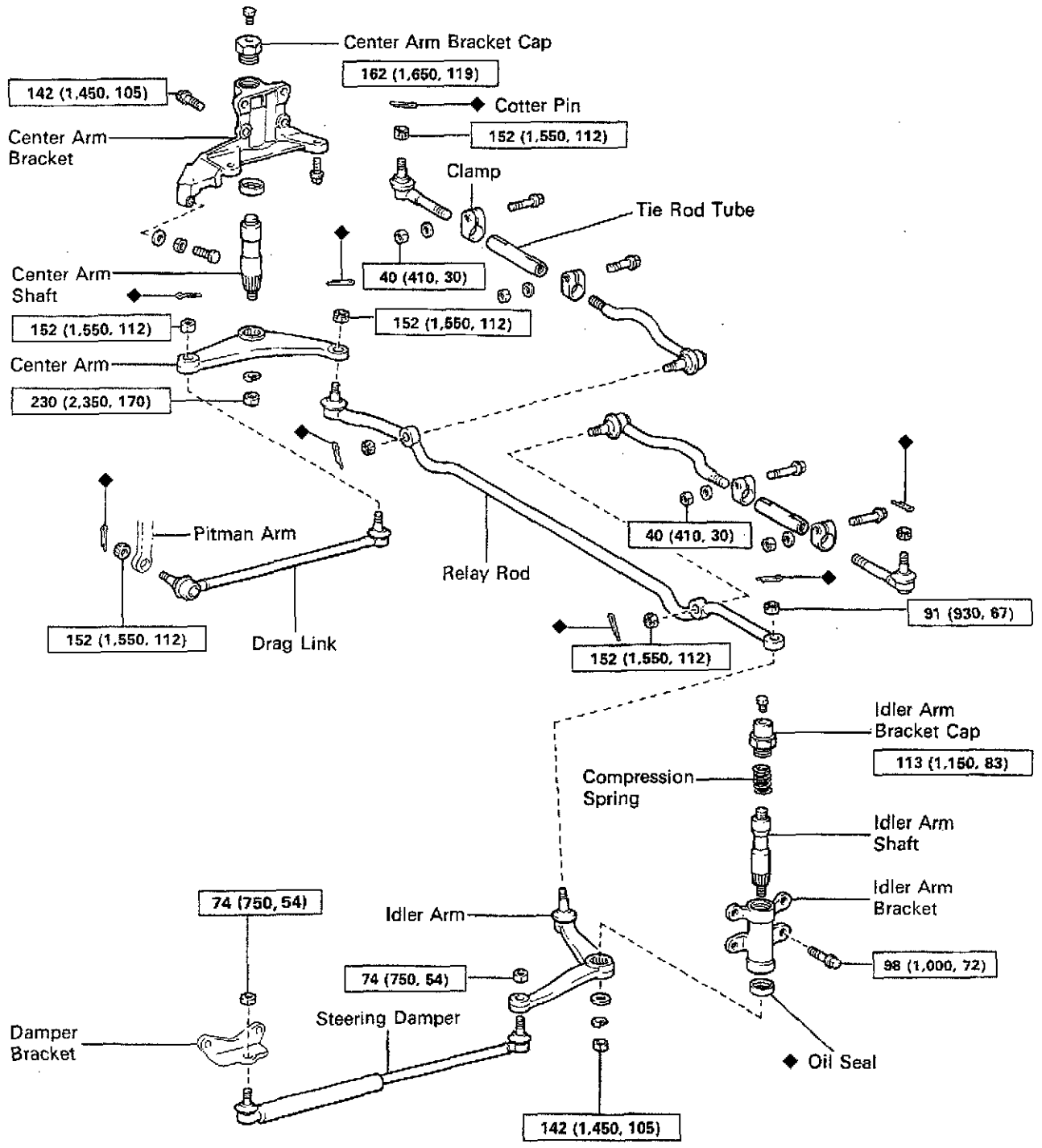
STEERING LINKAGE

STEERING LINKAGE REMOVAL AND INSTALLATION

4RDFN-01

Remove and install the parts, as shown.



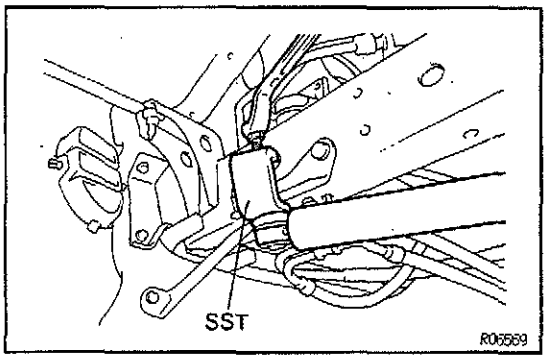
N·m (kgf·cm, ft·lbf) : Specified toque

◆ Non-reusable part

R06568

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 the cotter pin.
- After installing any of the steering linkage components, check the front wheel alignment.
(See page SA–3)

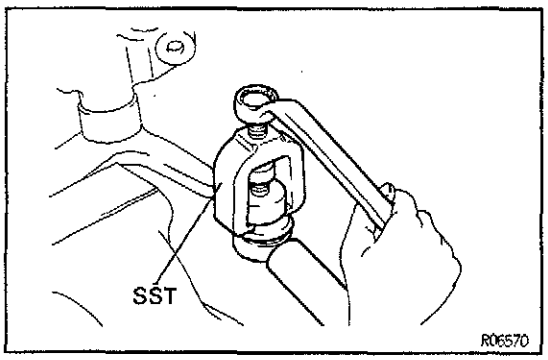


MAIN POINTS OF REMOVAL AND INSTALLATION

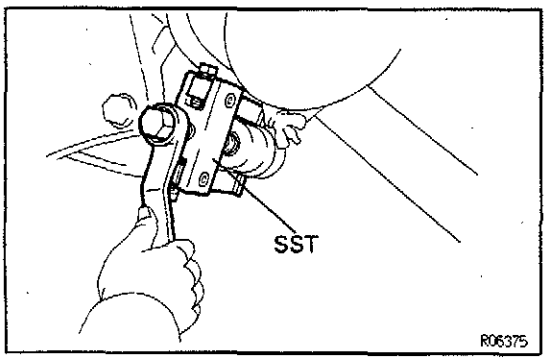
1. DISCONNECT STEERING DAMPER FROM IDLER ARM

(a) Remove the 2 nuts.

(b) Using SST, disconnect the steering damper from the steering damper bracket.
SST 09628–10011

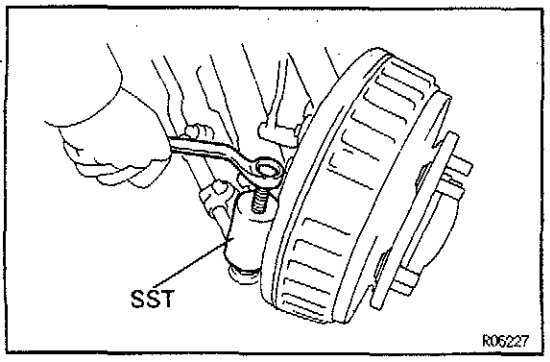


(c) Using SST, disconnect the steering damper from the idler arm.
SST 09611–20015



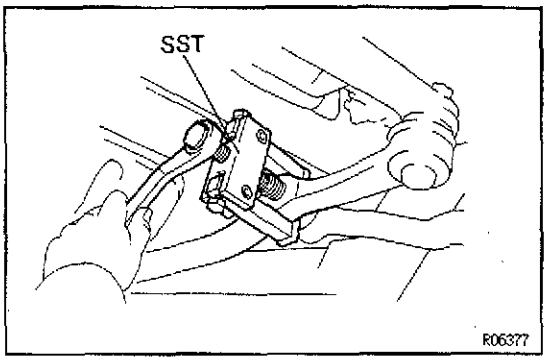
2. DISCONNECT AND CONNECT PITMAN ARM FROM/ TO DRAG LINK

Using SST, disconnect the pitman arm from the drag link.
SST 09628–62011

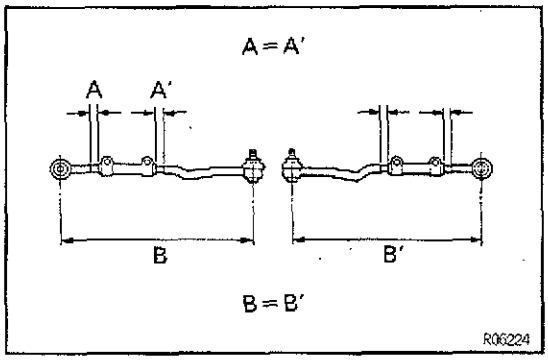


3. DISCONNECT TIE ROD FROM KNUCKLE ARM AND RELAY ROD

(a) Using SST, disconnect the tie rods from the knuckle arm.
SST 09610–20012

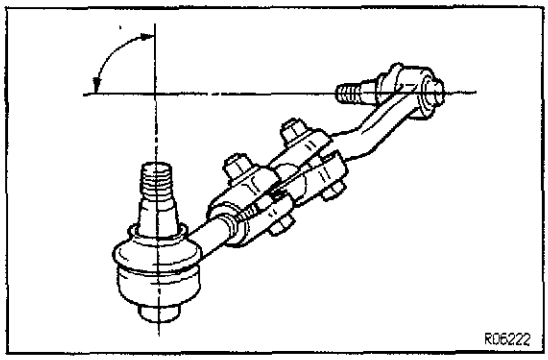


(b) Using SST, disconnect the tie rods from the relay rod.
SST 09628–62011

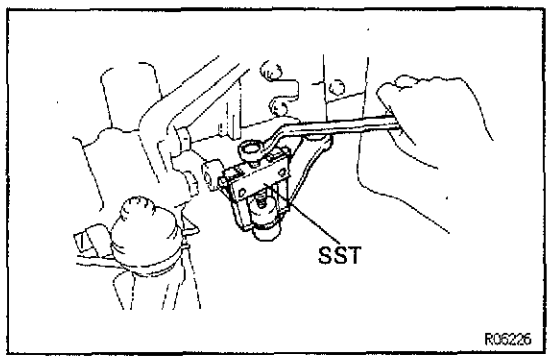


4. CONNECT TIE ROD

(a) Screw the tie rod ends into the tie rod.
HINT: The tie rod length should be approximately 438.5 mm (17.26 in.), and the remaining length of threads on both tie rod ends should be equal.

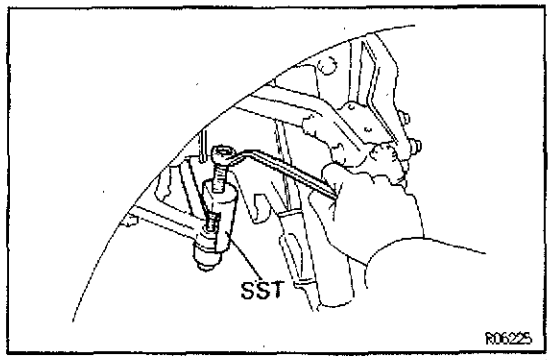


(b) Turn the tie rods so that they cross at about 90 degrees.



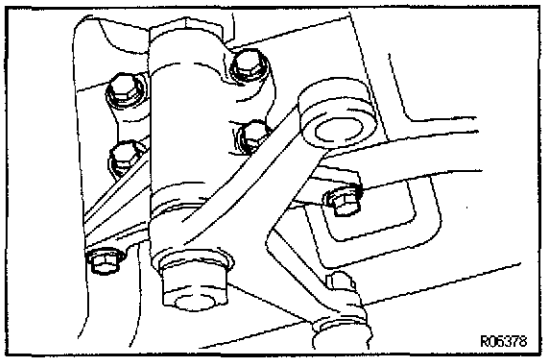
5. DISCONNECT IDLER ARM FROM RELAY ROD

Using SST, disconnect the idler arm from the relay rod.
SST 09628–62011

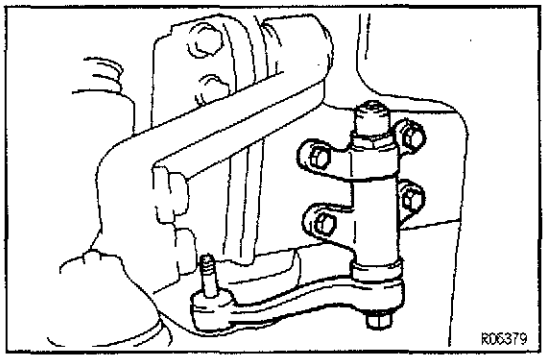


6. DUSCONNECT CENTER ARM FROM RELAY ROD

Using SST, disconnect the center arm from the relay rod.
SST 09610–22012

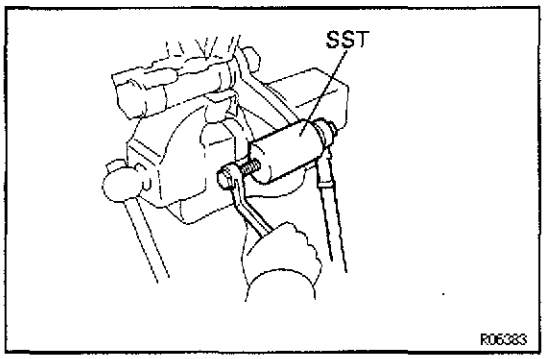


7. REMOVE CENTER ARM BRACKET AND DRAG LINK
Remove the 6 bolts, center arm bracket and drag link.



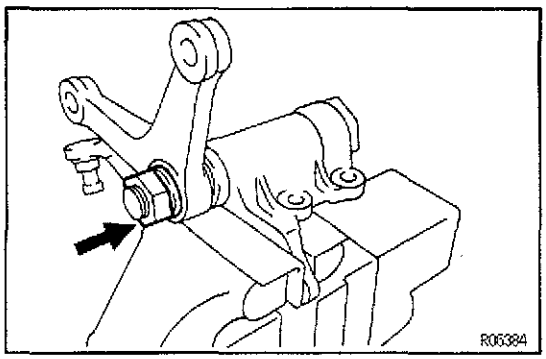
8. REMOVE IDLER ARM BRACKET
Remove the 4 bolts.

SR

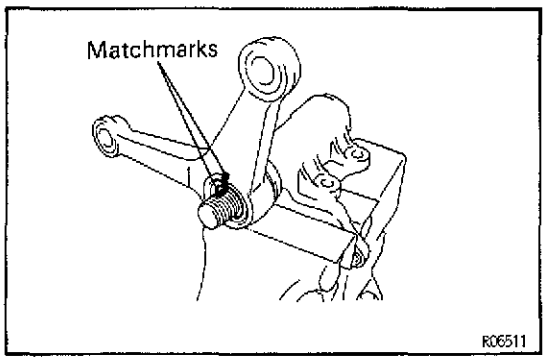


CENTER ARM BRACKET INSPECTION AND DISASSEMBLY

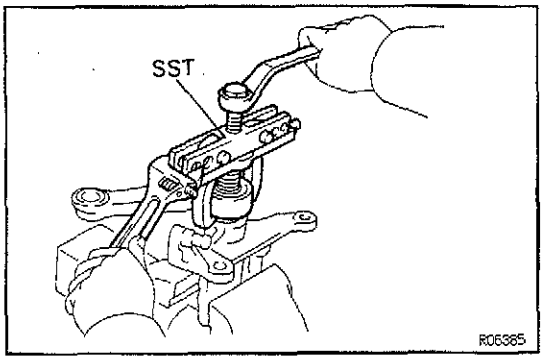
1. REMOVE DRAG LINK FROM CENTER ARM BRACKET
Using SST, disconnect the drag link from the center arm bracket.
SST 09610–20012



2. REMOVE CENTER ARM FROM CENTER ARM SHAFT
(a) Remove the nut and washer from the center arm shaft.

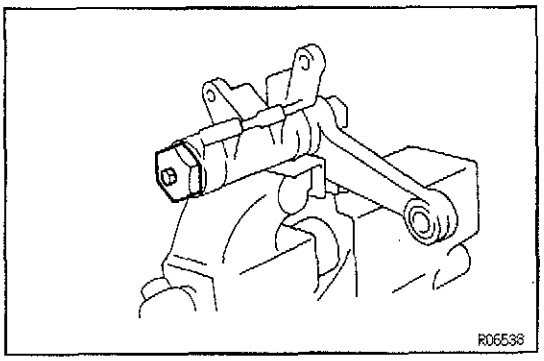


(b) Place matchmarks on the center arm and center arm shaft.

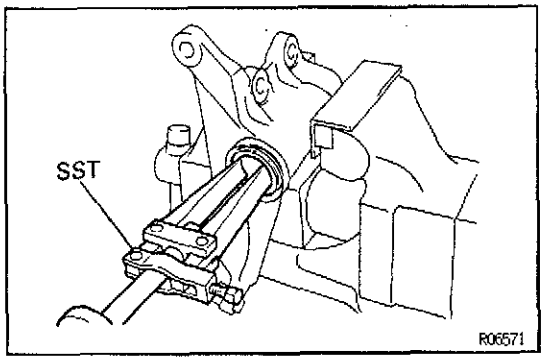


(c) Using SST, remove the center arm from the center arm shaft.
SST 09950–20017

3. REMOVE CENTER ARM SHAFT
Turn off the center arm shaft.



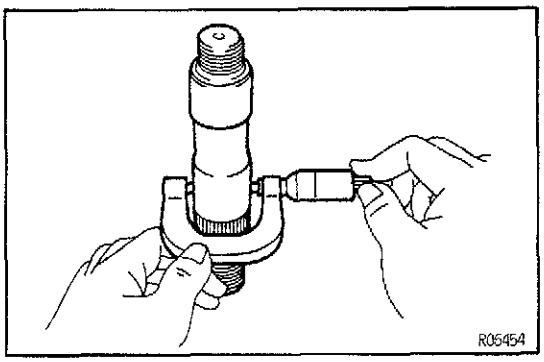
4. REMOVE CENTER ARM BRACKET CAP



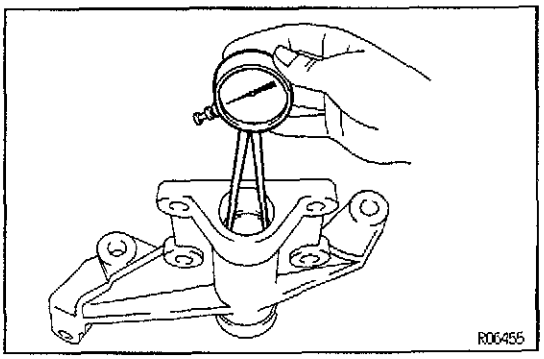
5. REMOVE OIL SEAL
Using SST, remove the oil seal.
SST 09308–00010

CENTER ARM BRACKET INSPECTION AND REPAIR

SR0FQ-01



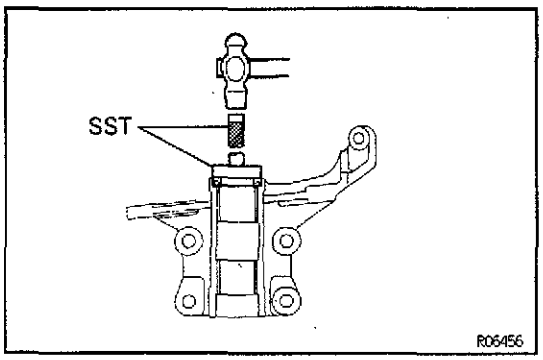
1. INSPECT CENTER ARM SHAFT
Measure the shaft outer diameter.
Standard Outer diameter:
35.966 – 35.991 mm (1.4160 – 1.4170 in.)



2. INSPECT BUSHING
(a) Check the bushings for wear or damage.
(b) Using calipers, measure the bushing inner diameter.
(c) Calculate the oil clearance between the center arm shaft and bushing.
Standard oil clearance:
0.009–0.059 mm (0.0004–0.0023 in.)
If necessary, replace the bushing.

3. INSPECT CENTER ARM FOR DAMAGE OR CRANCKS

Check for cracks with flaw detecting penetrant.

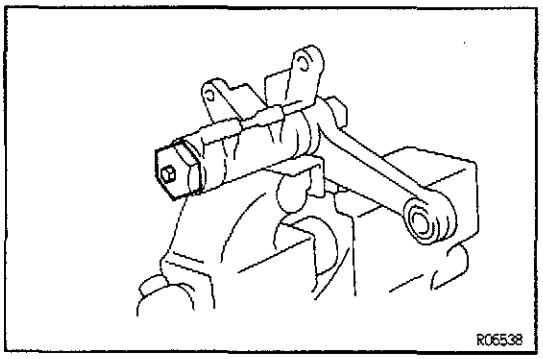


CENTER ARM BRACKET ASSEMBLY

1. INSTALL NEW OIL SEAL

Using SST, tap in a new oil seal.

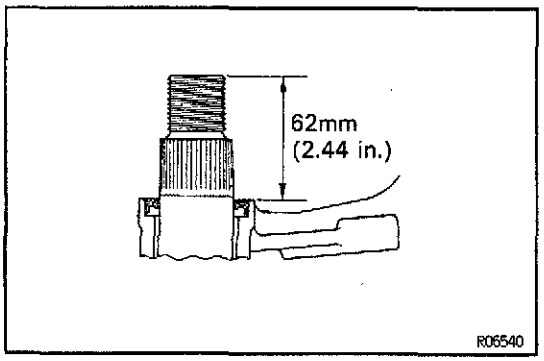
SST 09550–10012 (09252–10010, 09556–10010)



2. INSTALL CENTER ARM BRACKET CAP

Tighten the cap.

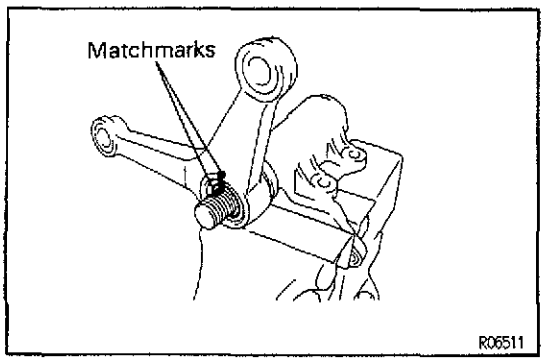
Torque: 162 N·m (1,650 kgf·cm, 119 ft·lbf)



3. INSTALL CENTER ARM SHAFT

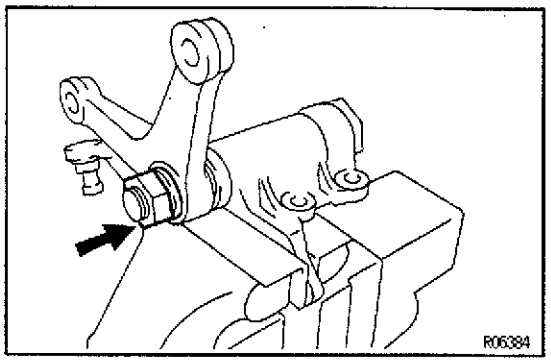
(a) Insert and screw in the center arm shaft.

(b) Set the center arm shaft end height is as indicated in the illustration.

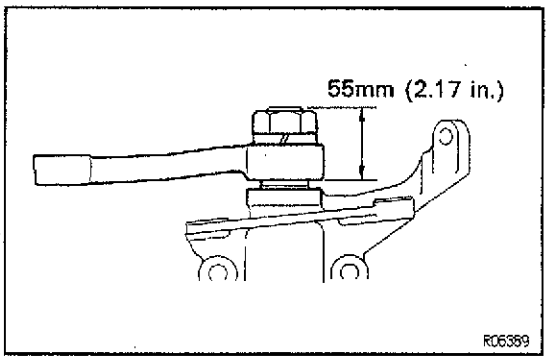


4. CONNECT CENTER ARM

(a) Align the matchmarks and connect the center arm to the center arm shaft.

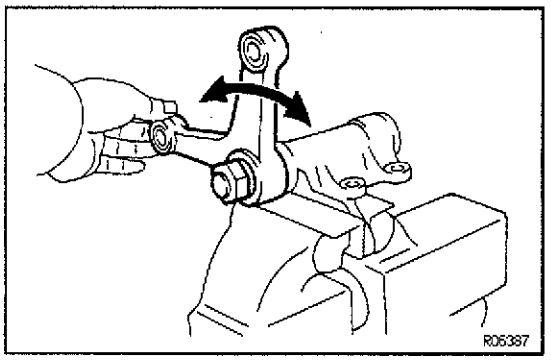


(b) Tighten the center arm nut.
Torque: 230 N·m (2,350 kgf·cm, 170 ft·lbf)

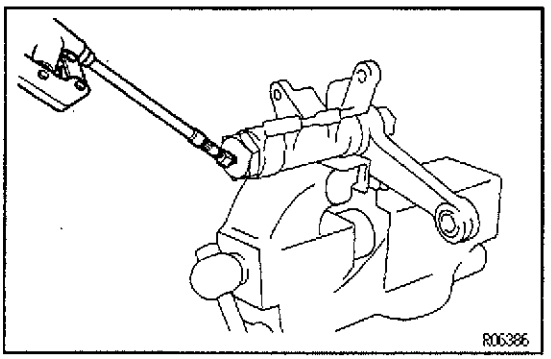


5. CHECK AND ADJUST CENTER ARM HEIGHT

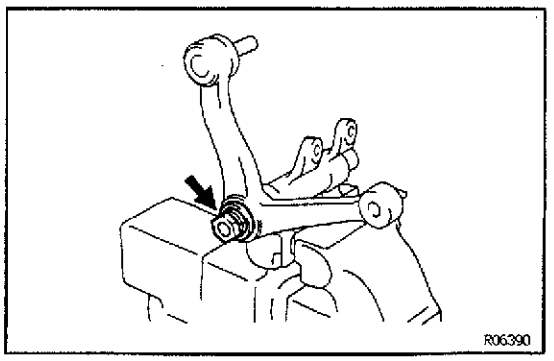
(a) Check that the height from the center arm shaft top to the center arm end is as indicated in the illustration.



(b) Check that the center arm moves smoothly.



6. APPLY CHASSIS GREASE

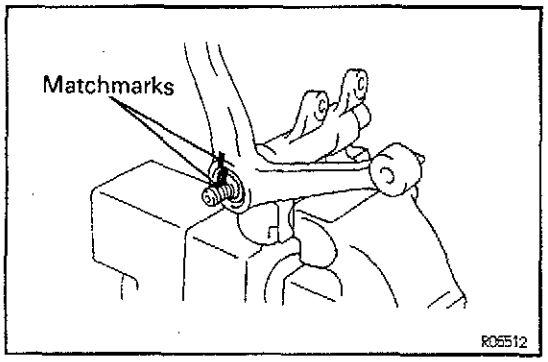


IDLER ARM BRACKET INSPECTION AND DISASSEMBLY

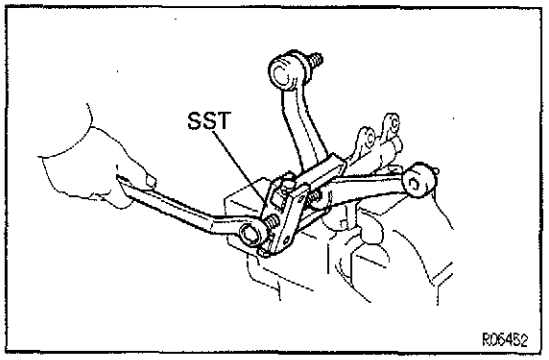
SR0FS-01

1. REMOVE IDLER ARM BRACKET FROM IDLER ARM

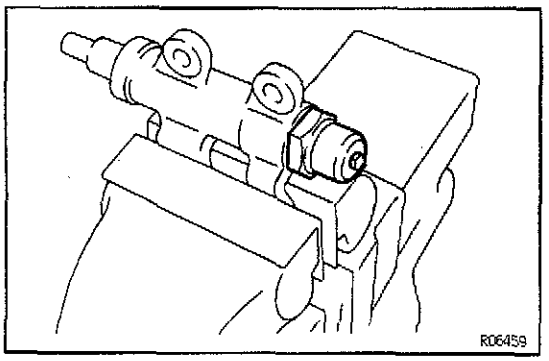
(a) Remove the bolt and washer.



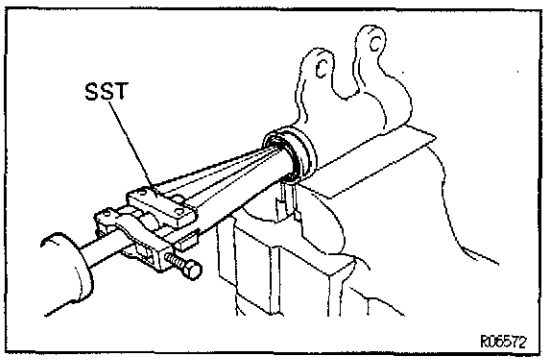
(b) *Place macthmarks on the idler arm shaft and idler arm.*



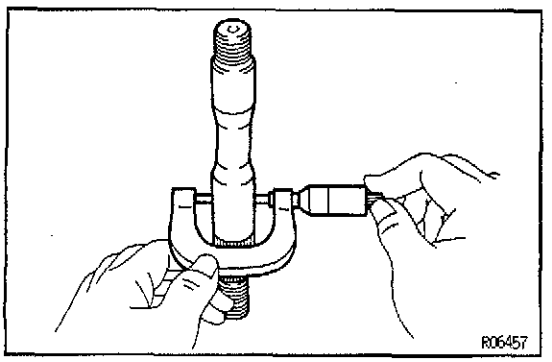
(c) Using SST, disconnect the idler arm from the idler arm bracket.
SST 09628–62011



2. REMOVE IDLER ARM BRACKET CAP, COMPRESSION SPRING AND IDLER ARM SHAFT
Remove the idler arm bracket cap, compression spring and idler arm shaft.

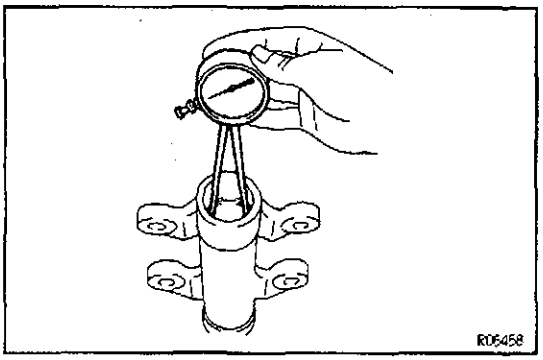


3. REMOVE OIL SEAL
Using SST, remove the oil seal.
SST 09308–00010



IDLER ARM BRACKET INSPECTION AND REPAIR SR6FT-01

1. INSPECT IDLER ARM SHAFT
Measure the shaft outer diameter.
Standard Outer diameter:
24.972–24.993 mm (0.9831–0.9840 in.)



2. INSPECT BUSHING

(a) Check the bushings for wear or damage.

(b) Using calipers, measure the bushing inner diameter.

(c) Calculate the oil clearance between the center arm shaft and bushing.

Standard clearance:

0.007 – 0.049 mm (0.0003 – 0.0019 in.)

If necessary, replace the bushings.

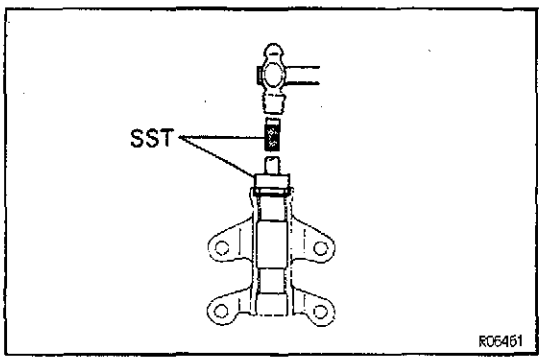
3. INSPECT IDLER ARM FOR WEAR, DAMAGE OR CRACKS

Check for cracks with flaw detecting penetrant.

SR

IDLER ARM BRACKET ASSEMBLY

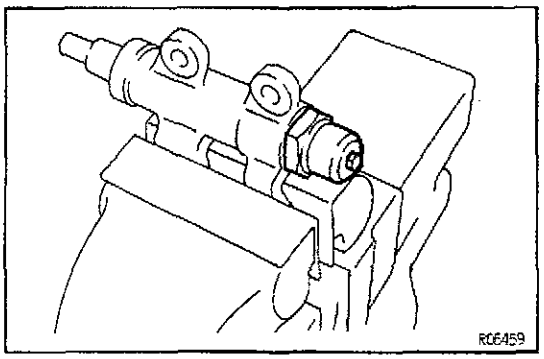
SROFU-01



1. INSTALL OIL SEAL

Using SST, tap in a new oil seal.

SST 09608 – 20012 (09608 – 00080, 09608 – 03020)

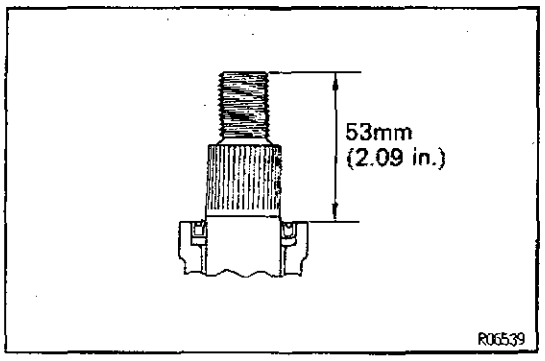


2. INSTALL IDLER ARM SHAFT, COMPRESSION SPRING AND IDLER ARM BRACKET CAP

(a) Install the idler arm shaft, compression spring and cap.

(b) Tighten the idler arm bracket cap.

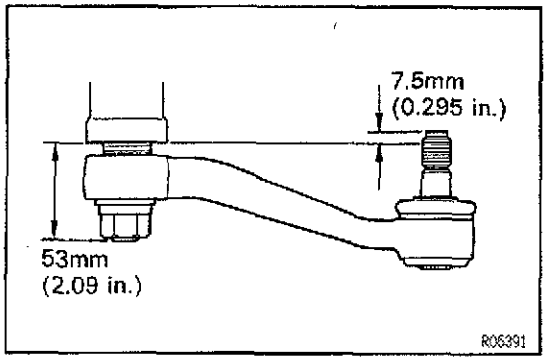
Torque: 113 N·m (1,150 kgf·cm, 83 ft·lbf)



3. INSTALL IDLER ARM SHAFT

(a) Insert and screw in the idler arm shaft.

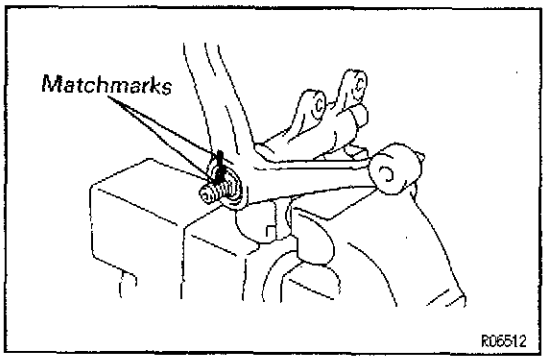
(b) Set the idler arm shaft end height approximately.



4. CHECK AND ADJUST IDLER ARM HIDGHT

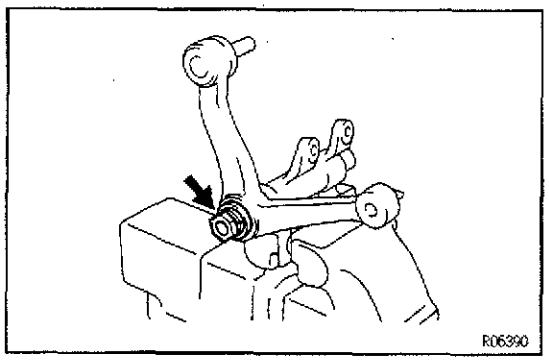
(a) Check and adjust idler arm bracket end installed to the idler arm is, as shown.

(b) Check that the ball stud height to the bracket end is, as shown.

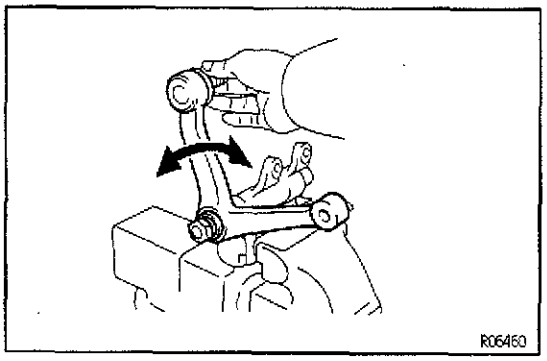


5. INSTALL IDLER ARM NUT

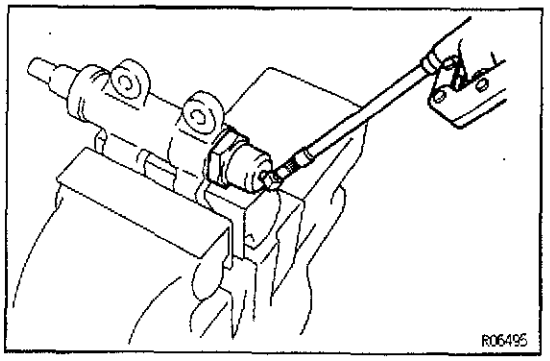
(a) Align the matchmarks on the idler arm and idler arm shaft.



(b) Torque the idler arm nut.
Torque: 142 N·m (1,450 kgf·cm, 105 ft·lbf)



(c) Check that the idler arm moves smoothly.



6. APPLY CHASSIS GREASE

SR