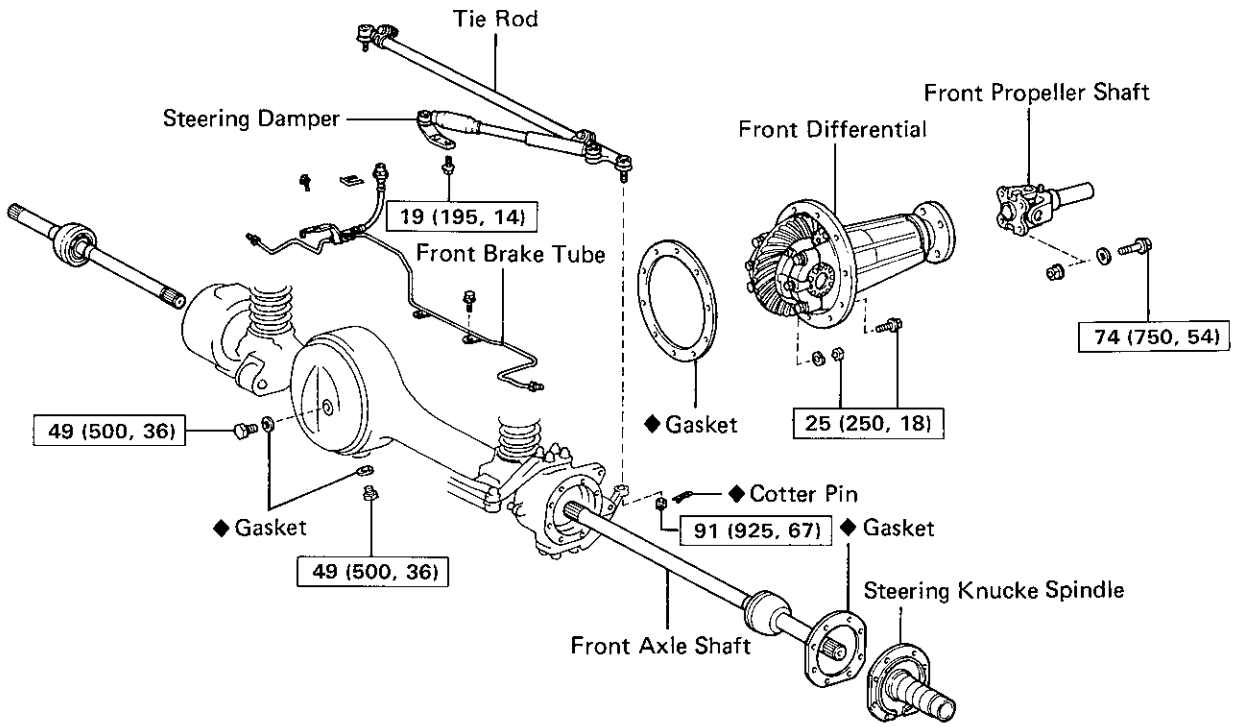
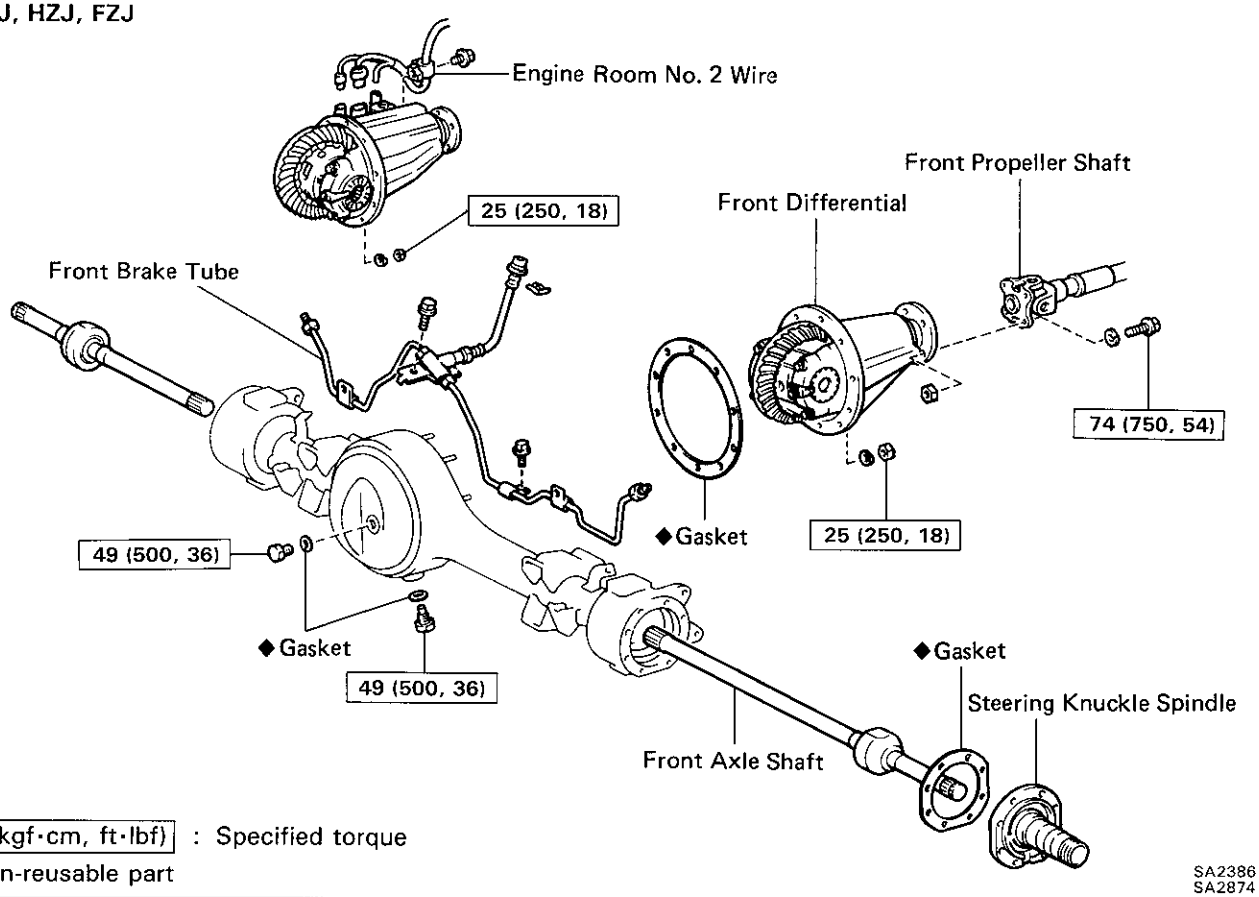
Removal and Installation of Front Differential

COMPONENTS

RJ, LJ



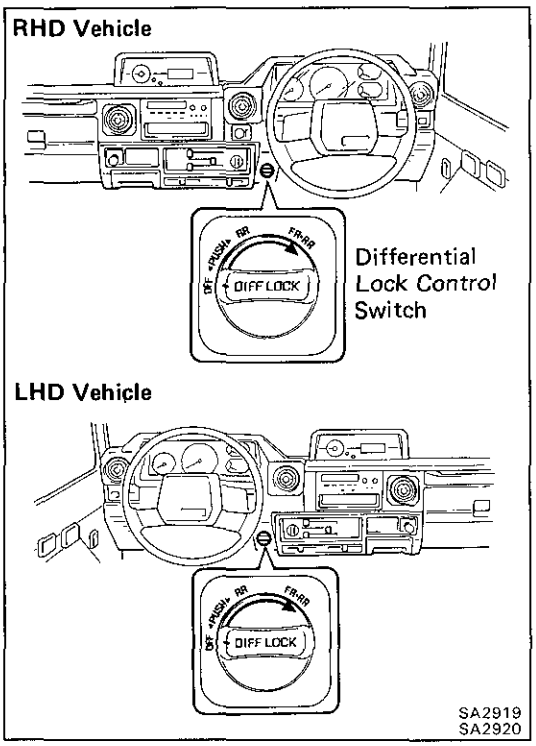
FJ, PZJ, HZJ, FZJ



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

◆ Non-reusable part

SA2386
SA2874



REMOVAL OF FRONT DIFFERENTIAL

(See page SA-20)

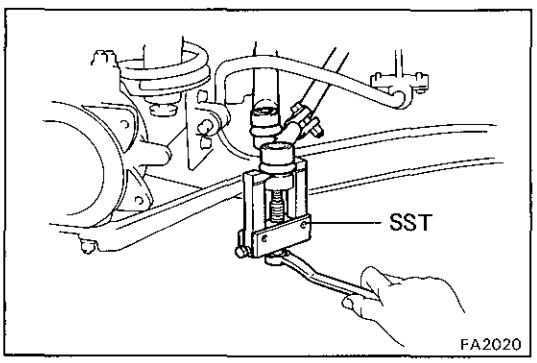
1. (w/ DIFFERENTIAL LOCK)
   SHIFTING FRONT DIFFERENTIAL LOCK
   (a) Turn the ignition switch to ON position.
   (b) Put on the 4WD switch.
   (c) Turn the differential lock control switch to FR·RR position, and lock the front differential.

   HINT: Turning round the tires, check the tires, check they are the differential lock condition.

   (d) Disconnect the cable from the negative terminal of the battery.

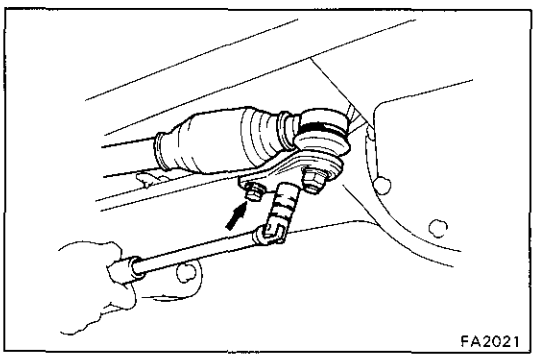
2. **REMOVE DRAIN PLUG AND DRAIN DIFFERENTIAL OIL**

3. **REMOVE FRONT AXLE SHAFTS**
   (See Pub. No. RM183E, see pages SA-39 and SA-40)



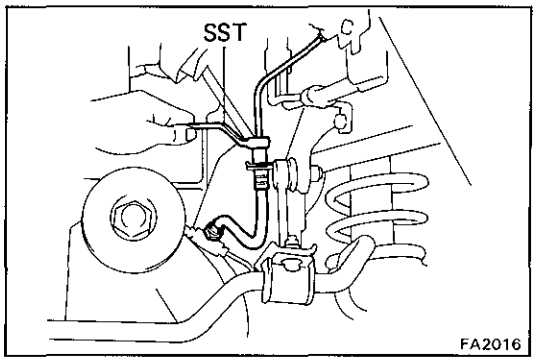
4. (RJ, LJ)
   REMOVE TIE ROD AND STEERING DAMPER
   (a) Using SST, disconnect the tie rod from the knucle arm.

   SST 09611-22012



   (b) Remove the two bolts and steering damper.

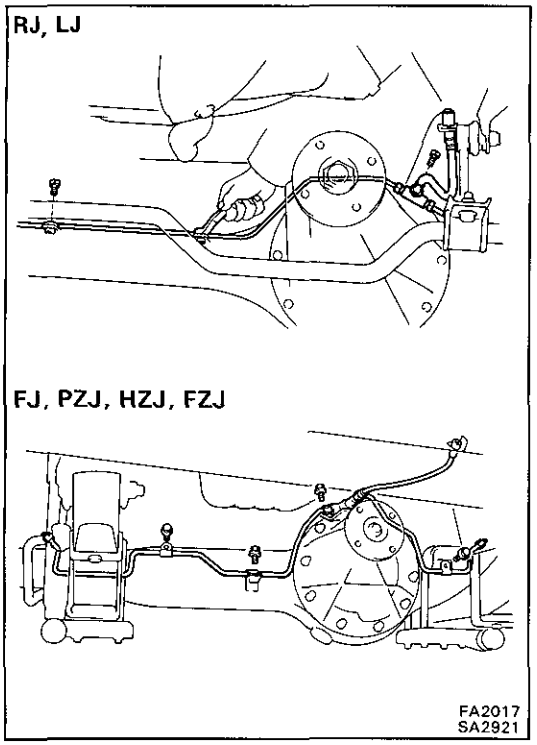
5. **DISCONNECT FRONT PROPELLER SHAFT**
   (See step 1 on page SA-16)



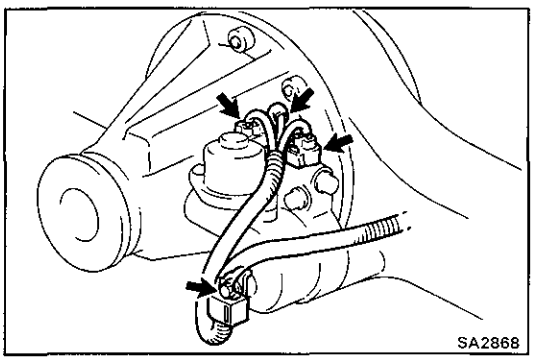
6. REMOVE FRONT BRAKE TUBE

(a) Using SST, disconnect the brake tube at the frame side and remove the clip.

SST 09751-36011



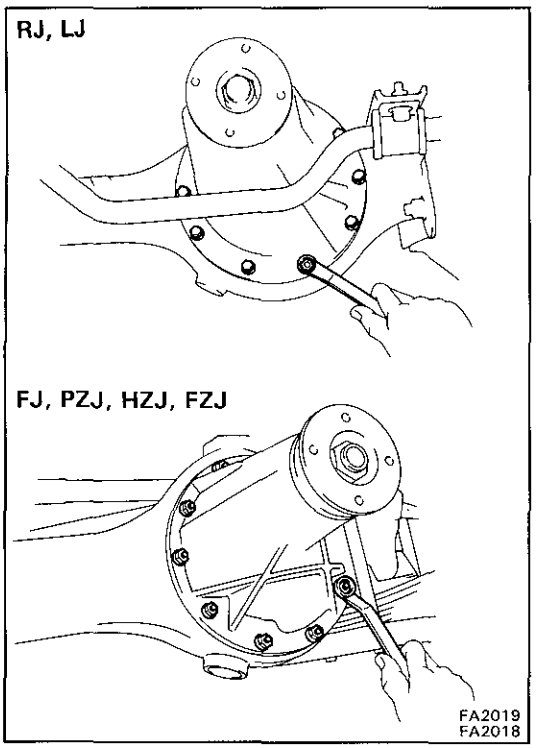
(b) Remove the clamp bolts, and remove the three-way with the brake hose and tube.



7. (w/ DIFFERENTIAL LOCK) DISCONNECT ENGINE ROOM NO.2 WIRE

8. REMOVE DIFFERENTIAL CARRIER ASSEMBLY

NOTICE: Do not scratch the installation surface.



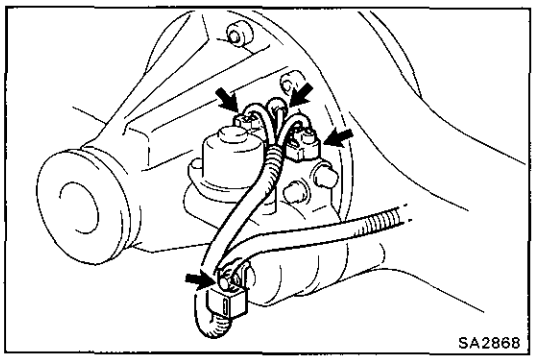
INSTALLATION OF FRONT DIFFERENTIAL

(See page SA-20)

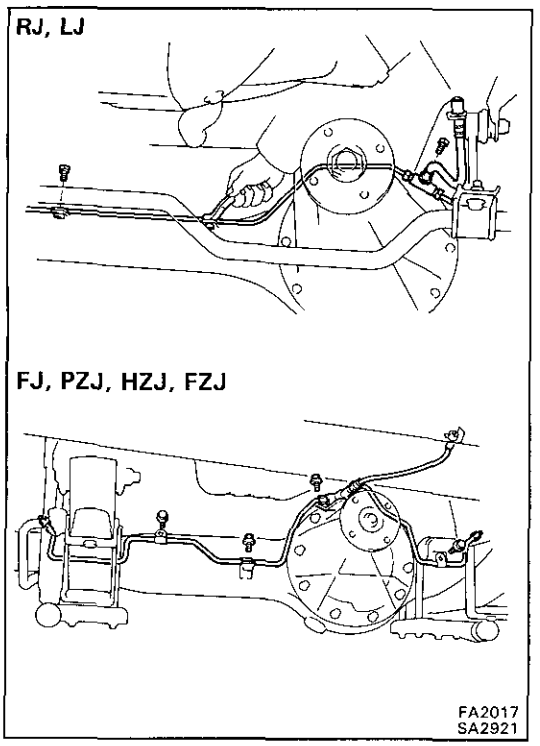
1. **(w/ DIFFERENTIAL LOCK)**
   CHECK DIFFENTIAL LOCK OPERATION
   (a) Connect the connector of the actuator to the connector of the vehicle side, and check that the sleeve is on work with switching over the differential lock control switch.
   (b) After checking the differential, keep it in a lock state.

2. **INSTALL A NEW GASKET**

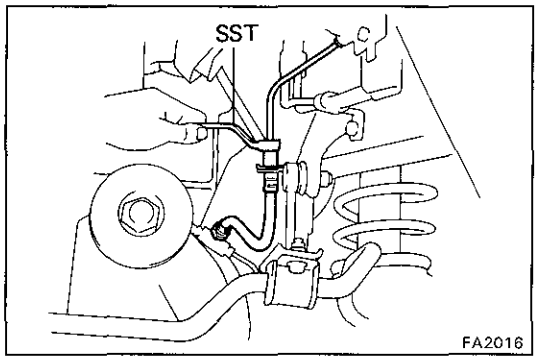
3. **INSTALL DIFFERENTIAL CARRIER ASSEMBLY**
   Install the differential carrier assembly in the axle and install the two nuts and eight bolts (RJ, LJ) or two nuts and ten nuts (FJ, PZJ, HZJ, FZJ). Torque the nuts and bolts.
   Torque: 25 N·m (250 kgf·cm, 18 ft·lbf)



4. **(w/ DIFFERENTIAL LOCK)**
   CONNECT ENGINE ROOM NO.2 WIRE
   HINT:
   - When connecting the bleeder tube of the harness side to the hose of the actuator side, its depth of insertion is approx. 15 mm (0.59 in.).
   - Take care that water or the equivalant shall not adhere to the connectors and hose.



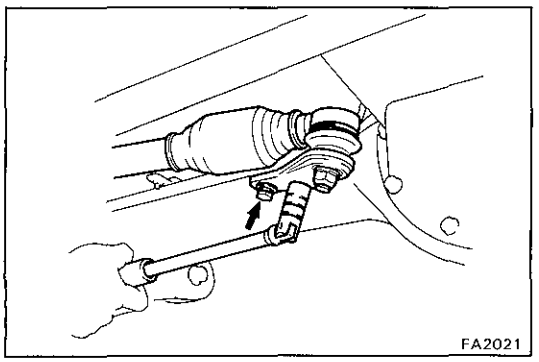
5. **INSTALL FRONT BRAKE TUBE**
   (a) Install the three-way with the brake hose and tubes to the axle housing.



(b) Using SST, connect the brake tube at the frame side, and install the clip.

SST 09751-36011

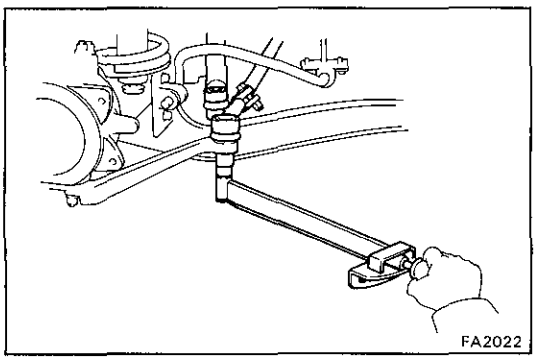
6. **CONNECT FRONT PROPELLER SHAFT**
(See step 16 on page SA-19)



7. **(RJ, LJ)**
INSTALL TIE ROD AND STEERING DAMPER

(a) Install the steering damper with the two bolts.

Torque: 19 N·m (195 kgf·cm, 14 ft·lbf)

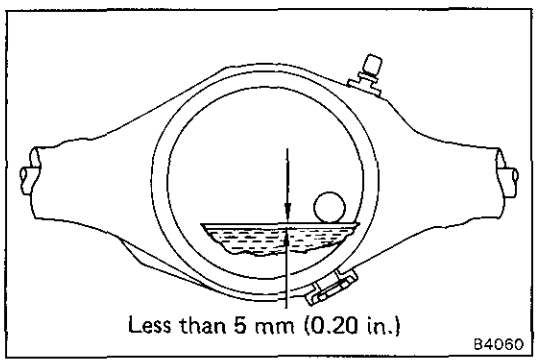


(b) Torque the castle nut and secure it with a new cotter pin.

Torque: 91 N·m (925 kgf·cm, 67 ft·lbf)

8. **INSTALL FRONT AXLE SHAFTS**
(See Pub. No. RM183E, see pages SA-44 and SA-49)

9. **INSTALL DRAIN PLUG**



10. **FILL DIFFERENTIAL WITH GEAR OIL**

Fill with hypoid gear oil.

Oil type: Hypoid gear oil API GL-5

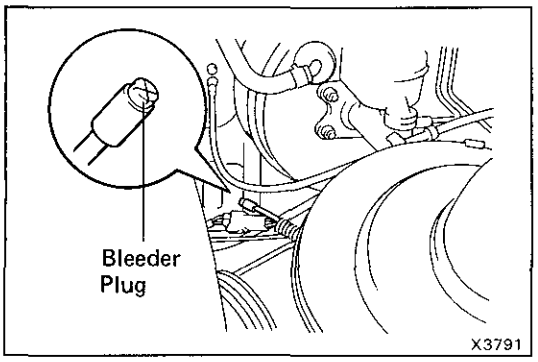
Recommended oil viscosity:

Above −18°C (0°F)	**SAE 90**
Below −18°C (0°F)	**SAE 80W or 80W-90**

Capacity:

RJ, LJ
1.9 liters (2.1 US qts, 1.7 Imp.qts)

FJ, PZJ, HZJ, FZJ
2.6 liters (2.7 US qts, 2.3 Imp.qts)



11. **(w/ DIFFERENTIAL LOCK)**
CHECK DIFFERENTIAL LOCK OPERATION
(See page SA-58)

12. **(w/ DIFFERENTIAL LOCK)**
CHECK BLEEDER PLUG

Check that the bleeder plug at the tip of the bleeder tube (inside of the engine room) is not damaged of worn.