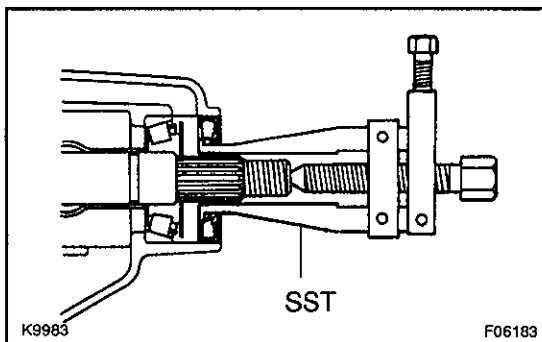


## REAR DIFFERENTIAL

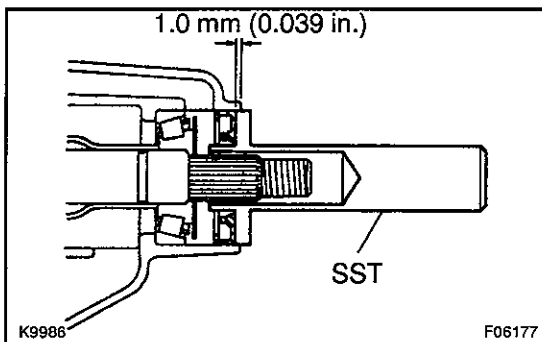
### On-Vehicle Repair

### ON-VEHICLE REPLACEMENT OF OIL SEAL

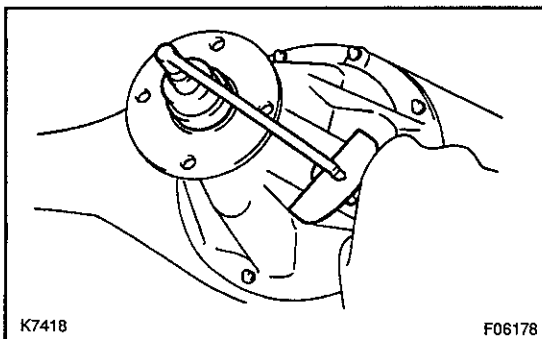
1. **DRAIN DIFFERENTIAL OIL**
2. **DISCONNECT PROPELLER SHAFT FROM DIFFERENTIAL**
  - (a) Place matchmarks on the propeller shaft and companion flange.
  - (b) Remove the 4 bolts, nuts and washers.
  - (c) Disconnect the propeller shaft.
3. **REMOVE COMPANION FLANGE**  
(See step 1. on page SA-129)



4. **REMOVE OIL SEAL AND OIL SLINGER**
  - (a) Using SST, remove the oil seal from the housing.  
SST 09308-10010
  - (b) Remove the oil slinger.
5. **REMOVE FRONT BEARING AND BEARING SPACER**  
(See step 3. on page SA-129)
6. **INSTALL NEW BEARING SPACER AND FRONT BEARING**  
(See step 11. on page SA-137)



7. **INSTALL OIL SLINGER AND NEW OIL SEAL**
  - (a) Install the oil slinger.
  - (b) Using SST, drive in a new oil seal as shown.  
SST 09554-30011  
**Oil seal drive in depth: 1.0 mm (0.039 in.)**
  - (c) Coat the MP grease to the oil seal lip.
8. **INSTALL COMPANION FLANGE**  
(See step 13. on page SA-137)



9. **ADJUST DRIVE PINION PRELOAD**
  - (a) Using a torque wrench, measure the preload of the backlash between the drive pinion and ring gear.  
**Preload (at starting):**

2RZ engine	M/T	5 – 8 kg·cm (4.3 – 6.9 in.·lb, 0.5 – 0.8 N·m)
2RZ-E engine	4WD	
2RZ-E engine	2WD	9 – 13 kg·cm (7.8 – 11.3 in.·lb, 0.9 – 1.3 N·m)
Others		

If preload is greater than the specification, replace the bearing spacer.

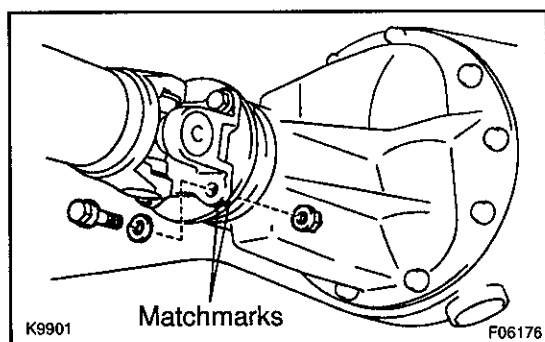
If preload is less than the specification, retighten the nut a little time with a torque of 130 kg·cm (9 ft·lb, 13 N·m) until the specified preload is reached.

**Torque: [Maximum]**

**3,500 kg·cm (253 ft·lb, 343 N·m)**

If the maximum torque is exceeded while retightening the nut, replace the bearing spacer and repeat the preload procedure. Do not back off the pinion nut to reduce the preload.

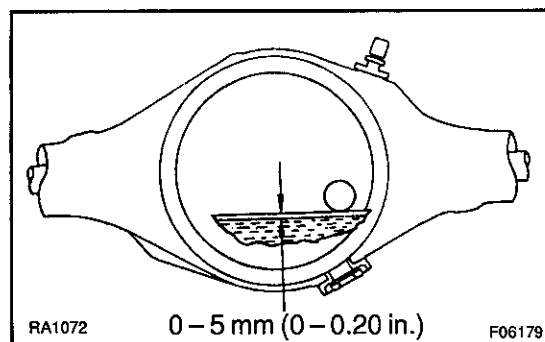
## 10. STAKE DRIVE PINION NUT



## 11. CONNECT PROPELLER SHAFT TO DIFFERENTIAL

- (a) Align the matchmarks on the propeller shaft and companion flange and connect the propeller shaft with 4 bolts, washers and nuts.
- (b) Torque the 4 bolts and nuts.

**Torque: 750 kg·cm (54 ft·lb, 74 N·m)**



## 12. FILL DIFFERENTIAL WITH DIFFERENTIAL OIL

**Oil type:**

**w/o LSD Hypoid gear oil API GL-5**

**w/ LSD Hypoid gear oil API GL-5 for LSD**

**Recommended oil viscosity:**

**Above – 18 °C (0 °F) SAE 90**

**Below – 18 °C (0 °F) SAE 80 W – 90 or 80 W**

**Capacity: 2.2 liters (2.3 US qts., 1.9 Imp. qts)**

**Torque: [Drain plug and filler plug]**

**500 kg·cm (36 ft·lb, 49 N·m)**