## ON-VEHICLE REPAIR COMPONENTS





### **REAR OIL SEAL REPLACEMENT**

### **1. DRAIN DIFFERENTIAL OIL**

### 2. DISCONNECT FRONT PROPELLER SHAFT

- (a) Place matchmarks on the flanges.
- (b) Remove the 4 nuts, washers and bolts, disconnect the front propeller shaft.



#### **3. REMOVE COMPANION FLANGE**

- (a) Using a chisel and hammer, loosen the staked part of the nut.
- (b) Using SST to hold the flange, remove the nut and washer.
- SST 09330-00021



(c) Using SST, remove the companion flange. SST 09950-30010



# 4. REMOVE OIL SEAL AND OIL SLINGER (a) Using SST, remove the oil seal. SST 09308–10010 (b) Remove the oil slinger.



### 5. REMOVE REAR BEARING AND BEARING SPACER

- (a) Using SST, remove the rear bearing from the drive pinion. SST 09556 – 22010
- (b) Remove the bearing spacer.



# 6. INSTALL BEARING SPACER, REAR BEARING AND OIL SLINGER

- (a) Install a new bearing spacer on the drive pinion.
- (b) Install the rear bearing on the drive pinion.
- (c) Install the oil slinger.



- 7. INSTALL OIL SEAL
  - (a) Using SST, drive a new oil seal. SST 09554–30011
  - Oil seal drive in depth:
  - 1.5 mm (0.059 in.)
  - (b) Apply MP grease to the oil seal lip.

SST



### 8. INSTALL COMPANION FLANGE

(a) Using SST, install the companion flange on the drive pinion.

SST 09950 - 30010

- (b) Coat the threads of a new nut with MP grease.
  - (c) Using SST to hold the flange, torque the nut. SST 09330–00021

Torque: 120 N-m (1,225 kgf-cm, 89 ft-lbf)



SA2351

### 9. ADJUST DRIVE PINION PRELOAD

Using a torque wrench, measure the preload of the backlash between the drive pinion and ring gear. **New bearing preload (at starting):** 

1.2 – 1.9 N–m (12 – 19 kgf–cm, 10.4 – 16.5 in.–lbf) Reused bearing preload (at starting):

**0.6** – **1.0** N–m (6 – 10 kgf–cm, 5.2 – 8.7 in–lbf) If the preload is greater than specification, replace the bearing spacer.

e If the preload is less than specification, retighten the nut a little at a time with a torque of 13 N-m

(130 kgf/cm, 9 ft-lbf) until the specified preload is reached.

### Maximum torque:

### 223 N-m (2,275 kgf-cm, 165 ft-lbf)

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 FRONT PROPELLER SHAFT** 

(a) Align the matchmarks and connect the propeller shaft to the companion flange with the 4 bolts, washers and nuts.

(b) Torque the bolts.

Torque: 74 N-m (750 kgf-cm, 54 ft-lbf)



# 12. FILL DIFFERENTIAL WITH GEAR OIL w/ A. D. D.:

Oil type:

Hypoid gear oil API GL–5

Recommended oil viscosity:

SAE 75W–90

Capacity:

1.86 liters (1.97 US qts, 1.64 lmp. qts)

w/o A.D.D.:

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:

1.60 liters (1.69 US qts, 1.41 lmp. qts)