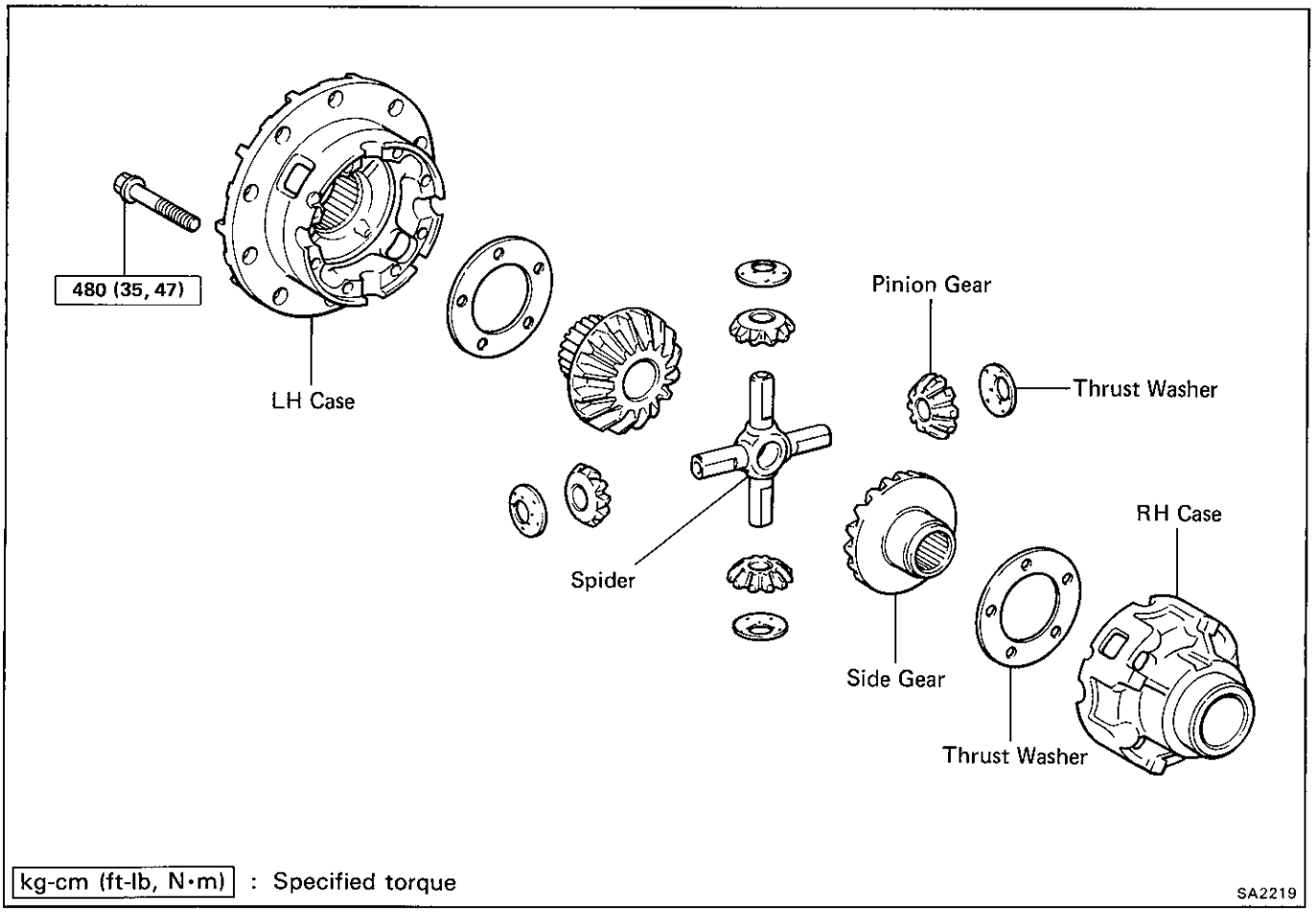
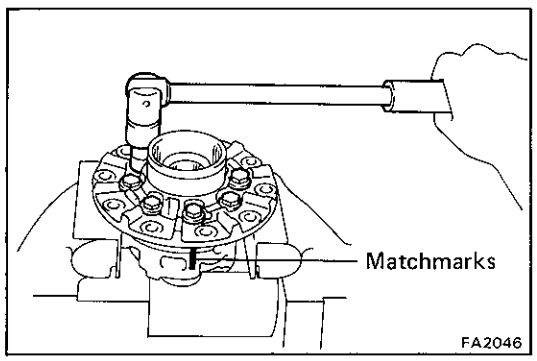
# Differential Case
# (4 Pinion Type)

## COMPONENTS



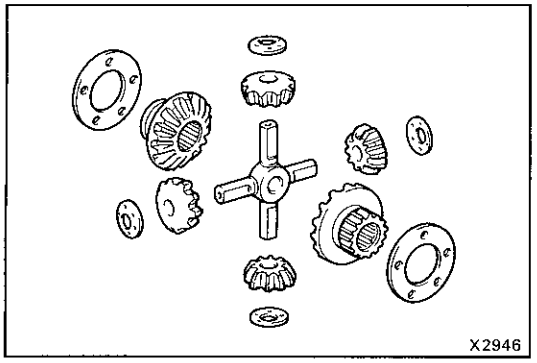

## REMOVAL OF DIFFERENTIAL CASE

1. **REMOVE DIFFERENTIAL (See page SA-54)**
2. **REMOVE DIFFERENTIAL CASE FROM CARRIER (See page SA-60)**




## DISASSEMBLY OF DIFFERENTIAL CASE

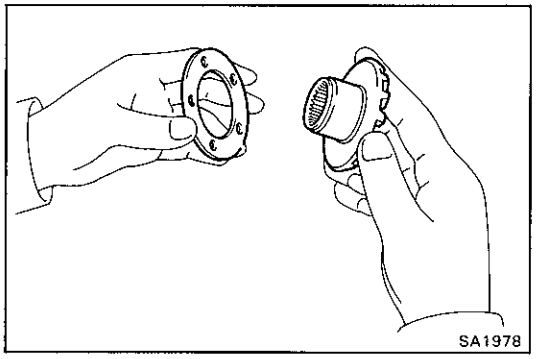
1. **DISASSEMBLE DIFFERENTIAL CASE**
   (a) Place matchmarks on the LH and RH cases.
   (b) Remove the eight bolts uniformly, a little at a time.
   (c) Using a plastic hammer, separate the LH and RH cases.



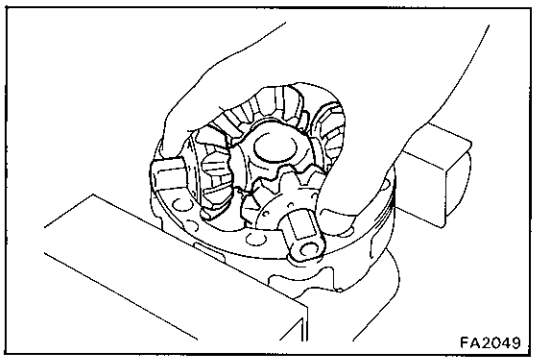

2. **REMOVE FOLLOWING PARTS FROM CASE:**
   - Side gear (2 pieces)
   - Side gear thrust washer (2 pieces)
   - Spider
   - Pinion gear (4 pieces)
   - Pinion gear thrust washer (4 pieces)

## ASSEMBLY OF DIFFERENTIAL CASE

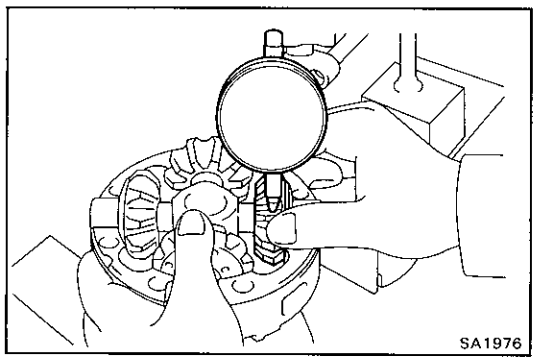
**(See page SA-84)**




1. **MEASURE SIDE GEAR BACKLASH**
   (a) Apply gear oil to each part.
   (b) Install the thrust washer to the side gear.
   (c) Install the side gear to the RH case.




   (d) Install the four pinion gears and thrust washers to the spider.
   (e) Install the pinion gear and spider to the RH case.



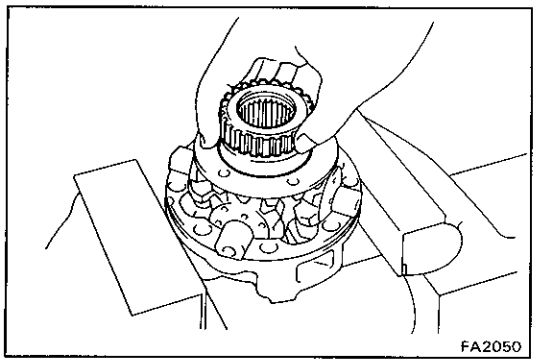

   (f) Hold the side gear and spider, measure the side gear backlash.

**Standard backlash: 0.05 — 0.20 mm (0.0020 — 0.0079 in.)**

HINT:
- Measure at all four locations.
- Measure the backlash at the RH case at the LH case.

If the backlash is not within specification, install a thrust washer of a different thickness.

| Thrust washer thickness | | | mm (in.) |
|---|---|---|---|
| 0.9 | (0.035) | 1.2 | (0.047) |
| 1.0 | (0.039) | 1.3 | (0.051) |
| 1.1 | (0.043) | | |

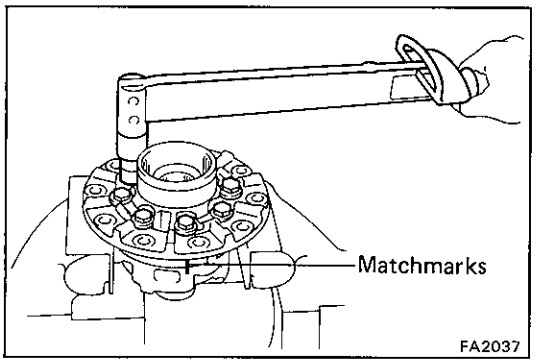



2. **ASSEMBLE DIFFERENTIAL CASE**

(a) Install the side gear and thrust washer to the RH case.

(b) Install the pinion gears and spider to the RH case.

(c) Install the side gear and thrust washer to the RH case.




(d) Align matchmarks on the LH and RH cases.

(e) Torque the eight bolts uniformly, a little at a time.

**Torque: 480 kg-cm (35 ft-lb, 47 N·m)**

## INSTALLATION OF DIFFERENTIAL

1. **INSTALL DIFFERENTIAL CASE IN CARRIER**
**(See page SA-60)**

2. **INSTALL DIFFERENTIAL**
**(See page SA-54)**