Exit

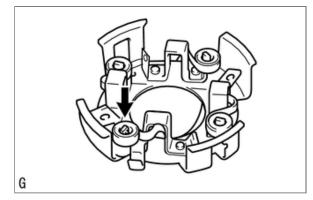
WINCH WINCH UNIT REASSEMBLY

# **PROCEDURE**

# **■** 1.INSTALL WINCH MOTOR BRUSH SPRING

38613B

a.

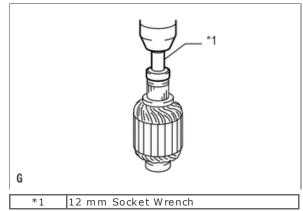


Install the brush spring as shown in the illustration.

## 2.INSTALL NO. 1 WINCH MOTOR ARMATURE BEARING

38603B

a.

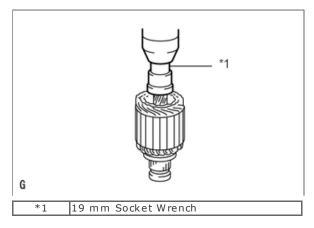


Using a 12 mm socket wrench and press, press in a new bearing.

### **3.INSTALL NO. 2 WINCH MOTOR ARMATURE BEARING**

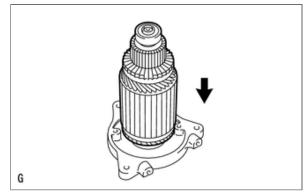
38603C

a.



Using a 19 mm socket wrench and press, press in a new bearing.





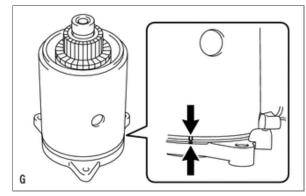
Apply high temperature grease to the inside of the end frame bushing.

**b.** Install the armature to the end frame.

### **5.INSTALL WINCH MOTOR YOKE SUB-ASSEMBLY**

38601A



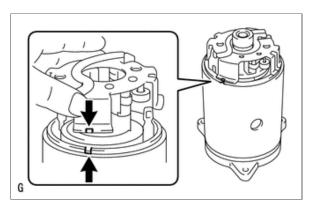


Align the alignment marks and install the yoke to the end frame.

### 6.INSTALL WINCH MOTOR BRUSH HOLDER ASSEMBLY

38604A



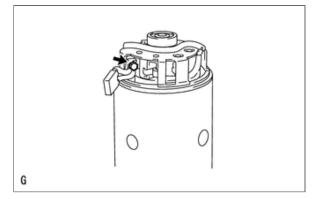


Align the alignment marks and install the brush holder to the yoke.

**■** 7.INSTALL WINCH MOTOR BRUSH

38613A

a.



Install the brush with the bolt.

#### **Torque**:

3.4 N\*m (35 kgf\*cm, 30 in.\*lbf)

**b.** Using a screwdriver, pry the brush spring forward and insert the brush into the holder as shown in the illustration, then remove the screwdriver from the spring.

#### HINT:

Use the same procedures to install the 3 remaining brushes.

# 8.INSTALL WINCH MOTOR O-RING

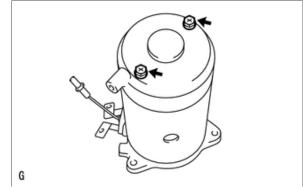
38614A

a. Install a new O-ring to the yoke.

#### 9.INSTALL WINCH MOTOR COMMUTATOR END FRAME

38618

a.



Install the end frame with the 2 bolts.

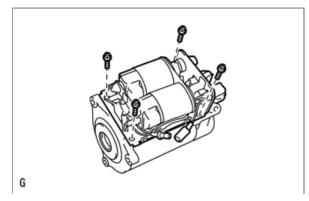
# Torque:

7.6 N\*m (77 kgf\*cm, 67 in.\*lbf)

# 10.INSTALL WINCH MOTOR MAGNET SWITCH ASSEMBLY

38600A

a.



Install the switch to the motor with the 4 bolts.

**Torque:** 

4.9 N\*m (50 kgf\*cm, 43 in.\*lbf)

**b.** Install the wire harness with the 2 washers, 2 spring washers and 2 nuts.

**Torque:** 

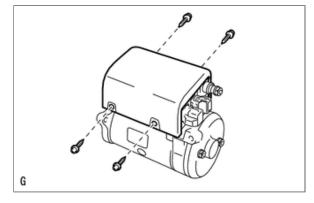
9.3 N\*m (95 kgf\*cm, 82 in.\*lbf)

c. Connect the connector.

#### 11.INSTALL MAGNET SWITCH WINCH COVER

38621B

a.



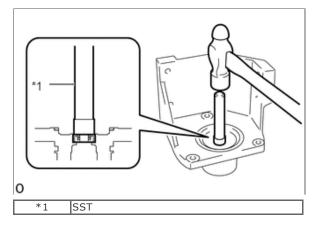
Install the cover with the 4 screws.

Torque:

1.5 N\*m (15 kgf\*cm, 13 in.\*lbf)

# **■** 12.INSTALL OIL SEAL

a.



Using SST, install a new oil seal.

SST

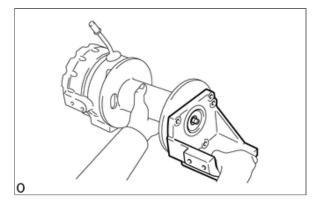
09950-60010 09950-70010 (09951-00320, 09951-07150)

**b.** Apply MP grease to the new oil seal.

## 13.INSTALL WINCH BRAKE CASE SUB-ASSEMBLY

- **a.** Apply MP grease to the new x-ring.
- **b.** Install a new x-ring to the winch brake case sub-assembly.

c.



Install the winch brake case sub-assembly.

d. Install the winch wire guide with the bolt.

Torque: 10 N\*m (102 kgf\*cm, 7 ft.\*lbf)

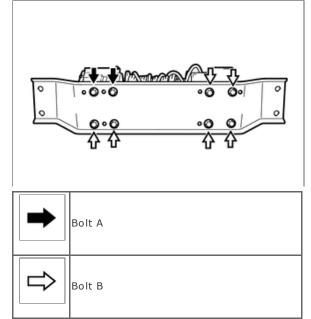
#### 14.INSTALL WINCH MOTOR ASSEMBLY

38600A

**a.** Install the winch motor assembly with the 3 bolts.

Torque: 16 N\*m (163 kgf\*cm, 12 ft.\*lbf)

b.



Install the winch base with the 8 bolts.

### **Torque:**

for bolt A: 32 N\*m (326 kgf\*cm, 24 ft.\*lbf) for bolt B: 59 N\*m (602 kgf\*cm, 44 ft.\*lbf)

c. Install the member with the 4 bolts.

### Torque:

22 N\*m (224 kgf\*cm, 16 ft.\*lbf)