

## 5 Disassembly and Reassembly of the Motor

### 5.1 Disassembly and Reassembly of the S-Axis Motor

#### ■ Disassembly

1. Turn OFF the YRC1000 power supply.
2. Disconnect the manipulator cable from the manipulator.
3. Unscrew the installation bolts and put the manipulator down sideways. Before unscrew the bolts, be sure to perform positioning to restore the installed position. If the installed position is changed after the motor replacement, all the teaching points for the JOBs need to be modified.
4. Unscrew the hexagon socket button head screws ⑨. Then remove the cover ⑦ and the gasket ⑧.
5. Disconnect the cables (both encoder and power-cables) of the S-axis motor ① from the internal wiring harness.
6. Unscrew the hexagon socket head cap screws ② ⑥. Then remove the S-axis motor ① and the gear ③ with the M-base ⑤, using the tap of M-base for the hexagon socket head cap screws ⑥ as a removal tap.
7. Unscrew the hexagon socket head cap screws ④. Then remove the gear ③ and the gasket ⑩.
8. Remove the M-base ⑤ from the S-axis motor ① with the removal tap of M-base ⑤.
9. Disconnect the connector (fixing bolt: pan-head sems screw M2) of the S-axis motor ①, and disconnect the power cable.

#### ■ Reassembly

1. Connect the power cable to the S-axis motor ①, and tighten the fixing bolt; pan-head sems screw M2 with the tightening torque 0.15 N·m. (The fixing bolt for the connector is installed to the connector.)
2. Install the M-base ⑤ on the S-axis motor ①. At this time, be careful not to damage the oil seal of the M-base ⑤.
3. Tighten the hexagon socket head cap screws ⑥ with the tightening torque shown in *table 5-1(a) "S-Axis Motor Parts Checklist (GP8)"* *table 5-1(b) "S-Axis Motor Parts Checklist (GP7)"*.
4. Mount the gasket ⑩ and then the gear ③ on the S-axis motor ①.
5. Attach the conical spring washer to the hexagon socket head cap screw ④, then apply LOCTITE 243 to its thread part and tighten it with the tightening torque shown in *table 5-1(a)*, *table 5-1(b)*.
6. Before mounting the S-axis motor unit which is reassembled to the step 3 on the base, apply Three Bond 1206C to the matching face between the M-base ⑤ and the base.
7. Apply Three Bond 1206C to the hexagon socket head cap screws ②. Then tighten them with the tightening torque shown in *table 5-1(a)*, *table 5-1(b)*.
8. Connect the cables of the S-axis motor ① with the internal wiring harness.
9. Mount the cover ⑦ and the gasket ⑧. Then apply Three Bond 1206C to the bolts ⑨ and tighten the bolts ⑨ with the tightening torque shown in *table 5-1(a) "S-Axis Motor Parts Checklist (GP8)"*, *table 5-1(b) "S-Axis Motor Parts Checklist (GP7)"*.
10. Install the manipulator at the original position.
11. Connect the manipulator cable with the manipulator.
12. Turn ON the YRC1000 power supply.