

## 8. Daily Inspection and Maintenance



### DANGER

- Do not handle the unit when cables are live. Be sure to turn off the power; otherwise, electric shock may result.
- Do not approach or touch any rotating parts (output shaft, etc.) during maintenance or inspection of the unit; loose clothing may become caught in these rotating parts and cause serious injury or death.
- Customers shall not disassemble or modify **explosion-proof type motors**; otherwise, explosion, ignition, electric shock, or damage to the equipment may result.
- The lead-in condition of an **explosion-proof type motor** shall conform to the facilities electrical codes, extension regulations and explosion-proofing guide, as well as the maintenance manual; otherwise, explosion, ignition, electric shock, or damage to the equipment may result.




### CAUTION

- Do not put fingers or foreign objects into the opening of the gearmotor otherwise, electric shock, personal injury, fire, or damage to the equipment may result.
- The gearmotor becomes very hot during operation. Touching the unit with bare hands may result in serious burns.
- Do not touch the terminal when measuring insulation resistance; otherwise, electric shock may result.
- Promptly identify and correct, according to instructions in this manual, any abnormalities observed during operation. Do not operate until abnormality is corrected.
- Do not use damaged gearmotors; otherwise, personal injury, fire, or damage to the equipment may result.
- We can not assume any responsibility for damage or injury resulting from an unauthorized modification by a customer.
- Dispose gearmotor, lubricant as general industrial waste.
- When measuring the insulation resistance of an **explosion-proof type motor**, confirm that there is no gas, steam, or other explosive substance around the unit in order to prevent, explosion or ignition.

- The gear section is filled with long-life grease that allows it to operate for extended periods without replenishment. However, overhaul the gear section every 20,000 hours or 3 to 5 years to ensure long service life.
- Oil seal life depends on operation condition. It can be needed to replace within 20,000 hrs or 3years.
- Overhauling the gearmotor or reducer requires specific skills. Be sure to use a workshop specified by Sumitomo for overhaul.

To ensure proper and continued optimum operation, use Table 11 to perform daily inspections.

Table 11 Daily Inspection

Inspection item	Details of inspection
Electric current	Is the current below the rated current shown on the rating plate ?
Noise	Is there abnormal sound ? Is there sudden change in sound ?
Vibration	Is there excessive vibration ? Does vibration change suddenly ?
Surface temperature	Is the surface temperature abnormally high ? Does the surface temperature rise suddenly ? ( The temperature rise during operation differs according to the model. When the difference between the temperature of the gear surface and the ambient temperature is approx. 40°C degrees, there will be no problem if there is no fluctuation. )
Grease leakage	Does oil or grease leak from the gear section ?
Foundation bolt	Are foundation bolts loose ?
Chain and V-belt	Are chain and V-belt loose ?
Brake 	Is the brake lining abraded ? ( After operation for an extended period of time, the brake lining becomes abraded. Check the brake gap occasionally, following instructions in section 9, Brake Inspection / Maintenance (p.35-41). )

When any abnormality is found during the daily inspection, take corrective measures according to Section 10, Troubleshooting (pages 42 and 43.) If the abnormality cannot be eliminated, contact our nearest agent, distributor, or sales office.