

Trial run · Periodic inspection · Maintenance table

Notes

<To Maintenance manager>

- Inspections item at the time of the pre-use test run(Checking at periodic inspection).
- For using safely, please inspect the system one month after starting regular operation.
- The inspection cycle is mentioned below. However, determine your own inspection cycle based on the actual operating rate and environmental condition.
- Items in bold: Inspection items requiring particular attention.

| | | | |
|--------|------------|----------|------------------------------|
| Result | ○ : Normal | Measures | ○ : Exchange required |
| | × | | ● : Finished with exchange |
| | | | △ : Adjustment required |
| | | | ▲ : Finished with adjustment |

| | | | | | |
|---------|-----------|---|---|---|----------------------------|
| A title | Check day | Y | D | M | The check person in charge |
|---------|-----------|---|---|---|----------------------------|

| Name | Inspecting point | Contents of inspection | Remedy | ※ | Result | Measures | Inspection cycle (standard) | | | | | | | | | | | | | | |
|--|---|---|--|---|---------------------------|--------------------------|-----------------------------|---------------|-----|------|---------------------|-----------------------|---------|-----|------|---------------------|-----------------------|--|---|--|--|
| High-Tro-Reel unit | Conductor | Check to see if there is any foreign particles adhering on its sliding surface or if it is seriously contaminated. | Clean with a specific purpose cleaner or waste cloth. | | | | Once every 3 to 6 months | | | | | | | | | | | | | | |
| | | Is there any ark generated protrusion (convex shaped) on its sliding surface? | Remove any protrusion (convex) on the arc scratch using a file. | | | | | | | | | | | | | | | | | | |
| | | Amount of wear of the conductor is correct? Amount of wear of the conductor :0.5 mm or less | If it exceeds a threshold amount of wear, please replace the main conductor In case of wearing down to the replacement indication line at next inspection, please replace earlier than usual. | | | | | | | | | | | | | | | | | | |
| | Unit | Is the unit moving in zigzag way? | Review distance between conductors at connecting section. | | ○ | | | | | | | | | | | | | | | | |
| | | Isn't the unit dislocated from the hanger? | Review for any dislocated position on the unit. Correct if any. | | ○ | | | | | | | | | | | | | | | | |
| | | Is the unit mounted parallel to the traveling rail? | Adjust the unit to be parallel. | | ○ | | | | | | | | | | | | | | | | |
| | Insulating sheath | Is there any cracked or broken? | Replace if cracked or broken sheath is found. | | ○ | | | | | | | | | | | | | | | | |
| Don't the insulated sheath and the resin part of collector spinning shaft touch? | | Check the amount of wear of the collector and conductor of the duct, replace it if necessary. | | | | | | | | | | | | | | | | | | | |
| End tension insulator | Coil spring | Is the coil spring length adequate? | Adjust the coil spring length to be adequate. When applying tension to the High-Tro-Reel unit, be sure to tighten the nuts on the tension bolts evenly. <table border="1" style="margin-left: 20px;"> <tr> <th>Ambient temperature during installation</th> <th>Coil spring length, (L)mm</th> <th>Tension(N)</th> </tr> <tr> <td rowspan="2">10°C or lower</td> <td>115</td> <td>4508</td> </tr> <tr> <td>70 (For transverse)</td> <td>3332 (For transverse)</td> </tr> <tr> <td rowspan="2">11~40°C</td> <td>125</td> <td>3136</td> </tr> <tr> <td>75 (For transverse)</td> <td>2254 (For transverse)</td> </tr> </table> | Ambient temperature during installation | Coil spring length, (L)mm | Tension(N) | | 10°C or lower | 115 | 4508 | 70 (For transverse) | 3332 (For transverse) | 11~40°C | 125 | 3136 | 75 (For transverse) | 2254 (For transverse) | | ○ | | |
| | | Ambient temperature during installation | Coil spring length, (L)mm | Tension(N) | | | | | | | | | | | | | | | | | |
| | 10°C or lower | 115 | 4508 | | | | | | | | | | | | | | | | | | |
| | | 70 (For transverse) | 3332 (For transverse) | | | | | | | | | | | | | | | | | | |
| | 11~40°C | 125 | 3136 | | | | | | | | | | | | | | | | | | |
| 75 (For transverse) | | 2254 (For transverse) | | | | | | | | | | | | | | | | | | | |
| | Is there any nut (double nut) of coil spring loosen? | Retighten. | | ○ | | | | | | | | | | | | | | | | | |
| Insulator | Is there any feed-in terminal screw loosen? | Retighten. | | ○ | | | | | | | | | | | | | | | | | |
| Resin section | Is there any cracked or broken on resin section? | Replace if cracked or broken sheath is found. | | | | | | | | | | | | | | | | | | | |
| Cover | Is there any off or drop-out on the cover? | Attach the cover for off or drop-out of the cover. | | | | | | | | | | | | | | | | | | | |
| Joiner | Connection | Is there any aperture or difference in level between conductors? | Correct the connection for aperture or difference in level. | | ○ | | | | | | | | | | | | | | | | |
| | | Is there any serious flaw or crack on the conductor surface? | Do over again the cutting and correct for serious flaw or crack. | | | | | | | | | | | | | | | | | | |
| | | Is there any fixed screw loosen? | Retighten. | | ○ | | | | | | | | | | | | | | | | |
| Cover | Is there any cracked or broken on resin section? | Replace the cover if cracked or broken on resin is found. | | | | | | | | | | | | | | | | | | | |
| | Is there any off or drop-out on the joiner cover? | Attach the cover for any off or drop-out of the cover. | | ○ | | | | | | | | | | | | | | | | | |
| Joiner (without feed-in terminal) | Joints | Is there a large gap between the tow conductors? | Fix the conductor connection section. | | ○ | | | | | | | | | | | | | | | | |
| | | Is there a significant damage and cracks on conductor surface? | Re-processing terminal again, and fix | | | | | | | | | | | | | | | | | | |
| | | Is there a loose the screws? | Tighten screws more. | | ○ | | | | | | | | | | | | | | | | |
| Center feed-in joiner | Terminal | Is there a loose the terminal screws ? | Tighten screws more. | | ○ | | | | | | | | | | | | | | | | |
| | Cover | Is there a damage or cracks in the resin? | Replace the cover. | | | | | | | | | | | | | | | | | | |
| | | Is there a out of Joiner cover or drop out? | Attached to the cover | | ○ | | | | | | | | | | | | | | | | |
| Hanger | Nut | Is there any mounting nut loosen? | Retighten. | | ○ | | | | | | | | | | | | | | | | |
| | Resin section | Is there any cracked or broken on resin section? | Replace if cracked or broken sheath is found. | | | | | | | | | | | | | | | | | | |
| Collector arm | Collector shoes | Is there any serious wear to replacement indication line. | Replace the collector shoes if there is wear to replacement indication line. | | | | | | | | | | | | | | | | | | |
| | | Is there any ark generated protrusion (convex shaped)? | Remove the protrusion (convex) on the arc scratch using a file. | | | | | | | | | | | | | | | | | | |
| | | Is there any bur generated? | Remove the bur using a sand paper. | | | | | | | | | | | | | | | | | | |
| | Arm | Is there any mounting bolt loosen? | Retighten. | | ○ | | | | | | | | | | | | | | | | |
| | | Is the arm installing dimension correct? Dislocation in left and right direction: ±10mm or less Position of mount rod and sliding surface (movable range): 90±20mm | Adjust its mounting dimension. | | ○ | | | | | | | | | | | | | | | | |
| | | Is there any serious twisting on the mount rod? | Correct twisting. | | ○ | | | | | | | | | | | | | | | | |
| | | Is there any curve or variation on the arm? | Replace the arm if there is curve or variation. | | | | | | | | | | | | | | | | | | |
| | Spring pin | Is there any chip or broken? | Replace if chip or broken spring pin is found. | | | | | | | | | | | | | | | | | | |
| | Spinning shaft | Is there any cracked or broken on the spinning shaft? | Replace if cracked or broken spinning shaft is found. | | | | | | | | | | | | | | | | | | |
| | Spring bearing metal | Is there any wear or hole loosen on spring bearing metal? | Replace the collector shoes if there is wear to replacement indication line. | | | | | | | | | | | | | | | | | | |
| Lead wire | Is there any damage on the sheath of lead wire? | If there is damage, replace the collector shoes. | | | | | | | | | | | | | | | | | | | |
| | Is the collector shoes pulled by the lead wire? | If the collector shoes pulled, correct to have extra length on lead wire. | | ○ | | | | | | | | | | | | | | | | | |
| Mount metal | Are the centers of the collector arm mounted metal and the Hi-Tro-Reel unit matching? | Correct to be match the centers. | | ○ | | | | | | | | | | | | | | | | | |
| Collector arm support parts for transverse | Unit | Are there modification of a spring (6.2mm or more clearance between the spring) or rust on the spring? | Deformation of the spring, if there is rust, replace | | | | | | | | | | | | | | | | | | |
| | | Are there abnormal wear? | If there is abnormal wear of the arm, replace the collector arm. | | | | | | | | | | | | | | | | | | |
| | | Is there a loose the screws? | Tighten screws more. | | ○ | | | | | | | | | | | | | | | | |
| High-Tro-Reel | | Confirm insulation resistance and contact resistance level according to the Government Rules in your country. | | | | Once every 1 to 3 months | | | | | | | | | | | | | | | |