ENGLISH

# Cluster Inspection, Replacement and Lubrication

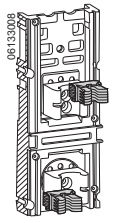
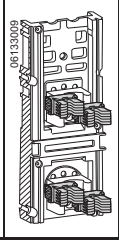
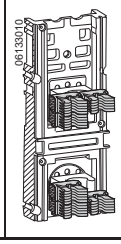
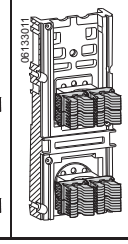
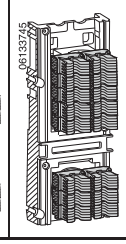
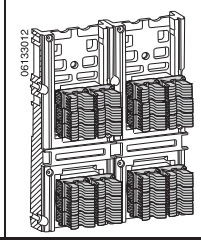
## Cluster Inspection

1. Inspect cluster and cluster supports on back of drawout circuit breaker. Make sure clusters are installed and configured properly as shown in Table 5.
2. Visually inspect clusters for signs of damage such as:
   - — Discolored areas
   - — Visible copper on fingers
   - — Cracked or broken springs
   - — Not aligned with other clusters (indicates spring damage)
3. Visually inspect clusters for wear.
4. Replace any cluster which does not pass inspection, following the instructions in “Cluster Replacement” below.

**Table 4: Number of Clusters Per Pole**

| Type | N / N1 | H1 | HA | H / H2 / H3 / HF | L / L1 / LF / L1F / HB / HC |
|---|---|---|---|---|---|
| NW08 | 2 | 4 | 4 | 4 / 6 / 6 / 4 | 8 |
| NW12 | 2 | — | — | 4 | 8 |
| NW16 | 6 | 6 | 6 | 6 | 8 |
| NW20 | 8 | 8 | 8 | 8 | 16 |
| NW25/NW30 | — | — | — | 16 | 16 |
| NW32 | — | 16 | 16 | 16 | 24 |
| NW40/NW50 | — | — | 24 | 24 | 24 |
| NW60 | — | — | — | 24 | 24 |

**Table 5: Cluster Configuration**

| Number of Clusters Per Pole | | | | | |
|---|---|---|---|---|---|
| 2 | 4 | 6 | 8 | 16 | 24 |
|  |  |  |  |  |  |

## Cluster Replacement

**CAUTION**

**HAZARD OF EQUIPMENT DAMAGE**

- If clusters are removed for any reason, clusters must be installed using cluster positioning tool S47542.
- Lubricate clusters as shown in “Cluster Grease Application” on page 20.
- Reset Clusters as shown in “Reset Cluster Springs” on page 20.
- Do not install anything in the cluster jaw except 3/8 in. (9.5 mm) wide bus bar or cluster reset tool (CLUSRETOOL).

**Failure to follow these instructions can result in equipment damage.**