

MAINTENANCE INSTRUCTIONS

The LineBOSS switch is designed to operate for many years without maintenance in most environmental applications. However, there are service conditions or other causes for switch maintenance. The following guidelines should be used for field service and maintenance of LineBOSS outdoor switchgear.

For additional information refer to ANSI C37.35 "IEEE Guide for the Application and Installation, Operation and Maintenance of High Voltage Air Disconnecting and Load Interrupting Switches."

All installation documentation received in the switch-shipping container should be retained for future reference. Replacement documentation is available from Inertia Engineering upon request.

- Switch inspection:
 - Control Mechanism:
 - Inspect operating handle and control rod guides to verify that they have not been damaged or bent and insure that the operating handle mounting bolts have the proper torque (40-60 ft. lbs.). Replace components that have been damaged. Fiberglass control rods should be replaced when excessive "blooming" or exposed stringy fibers are observed as the insulation capability of the rod is compromised when this type of degradation occurs.
 - <u>Switch Contacts</u>:
 - Switch contact jaws and blades may require periodic lubrication in corrosive environments. Switches that become difficult to operate should have grease applied to the top and bottom of the rotating contact blade where it contacts the stationary contact jaws. The old contact grease should be whipped clean prior to the application of new grease to the switch contacts. The contacts are "self wiping" and will displace the new grease as required upon closing the switch.
 - Switch contacts are lubricated at the factory with "Mobile 28" corrosion preventative grease. Chevron FM NLGI Grade 2 can also be used for switch contact maintenance. These greases are a high performance, high viscosity greases that act as a lubricant and are water tolerant.
 - Switch contacts can be replaced, if required by ordering a replacement "single-phase kit".
 - Switch attachments:
 - Arc horns:
 - Arc horns are non-spring, non-loadbreak stainless steel arms which should be visually inspected for excessive wear at the interface between the stationary "pre-strike" arm, and the rotating blade "pre-strike" arm. Any



arm with less than one-half of its original diameter remaining at any point should be replaced.

- Arch Whips:
 - Arch Whips, or "Quick break whips" are Beryllium copper "spring" mechanisms which should be inspected to ensure that the whip is properly engaged with the catch when the switch is in the closed position. Whips should be replaced when 20% of the original length has eroded. Refer to installation and adjustment procedures for original whip lengths.
- AmpRupter and AmpVac loadbreaks:
 - Loadbreak interrupters should be inspected to ensure that the trip arm and catch arm are properly latched when the switch is closed (refer to the proper loadbreak type installation instructions). Interrupters that show signs of external arcing (black soot) on the external interrupter housing should be replaced.
- Switch model number and serial number are required to ensure proper replacement components.

Inertia Engineering application engineering and replacement components sales can be reached at 1-800-791-9997