



## Innovative *Lube by Number*® Kit for High-Voltage Circuit Breaker Maintenance

*Easy-to-use lubrication system for improved reliability and extended service intervals*



A unique *Lube by Number*™ kit from FirstPower Group LLC can help simplify circuit breaker maintenance with a step-by-step *LubeGuide* and numbered lubrication system. Proven, effective *Molykote*® brand *Smart Lubrication*™ solutions from Dow Corning power the kit's potential to solve demanding utility lubrication problems and improve electrical equipment reliability.

### Key Features

- Durable carrying case with nine specific-use service aids and a custom application guide
- Penetrant, cleaner and lubricating oil in squeeze bottles with extended applicators
- Lubricant greases and pastes in containers with a cap-top applicator brush
- *LubeGuide* flowchart matches numbered products to surface/component service needs

### Equipment Applications

- Frozen or corroded surfaces
- Surfaces requiring cleaning
- Hard-to-reach surfaces
- Rolling or sliding metal surfaces
- O-rings, gaskets and seals
- Electrical contacts
- Threaded fasteners
- Electrical connections

### Innovating for Circuit Breaker Reliability

Utility equipment reliability is critical for preventing power disruptions that can have significant customer-service and financial impacts. Yet, most failures of outdoor electrical equipment such as circuit breakers often can be traced to deteriorated, inadequate or misapplied lubrication. An industry service provider, FirstPower Group LLC, designed a smart solution for such problems.

Based on its circuit-breaker-servicing expertise and research to identify the right maintenance lubricants, FirstPower developed the *Lube by Number*™ kit to give utility service personnel a step-by-step guide and complete lubrication system for properly maintaining outdoor electrical equipment.

### Smart Lubrication™ Solutions

Powered by select *Molykote*® brand *Smart Lubrication*™ solutions, the *Lube by Number*™ kit provides the right tools – a penetrant, a cleaner and proven specialty lubricants – for more effective on-site maintenance lubrication of your equipment. Also, a special *LubeGuide* gives you an easy-to-use flowchart to follow for different surfaces and components, identifies proper application, and estimates effective service life.

Look inside the *Lube by Number*™ kit (page 2) and find exactly what you need for reducing circuit breaker failures, improving substation performance reliability and extending your equipment maintenance intervals.

### About FirstPower Group LLC

FirstPower Group LLC is a specialist in expert service and maintenance of high-voltage circuit breakers and associated air compressors. In addition, FirstPower Group also offers the utility industry an extensive range of replacement parts such as air compressors and valves; selected remanufacturing services; and custom equipment, diagnostic aids and service-parts kits. FirstPower is a distributor of *Molykote*® brand lubricants and *Dow Corning*® brand sealants.



## Look Inside: *Lube by Number*<sup>™</sup> Kit Details

LubeGuide Step	Lube by Number Product	Potential Uses; Features/Advantages	Maintenance Aid Packaging
1	Penetrate/loosen frozen/corroded surfaces <i>Molykote</i> <sup>®</sup> L-0501 High Performance Penetrating Lubricant	<ul style="list-style-type: none"> <li>Petroleum distillate with dispersion of anti-wear additive and corrosion and oxidation inhibitors</li> <li>Multipurpose penetrant for rusted/corroded parts</li> <li>Service range: -20° to 120°F (-29° to 49°C)</li> </ul>	110 g squeeze bottle with 12-inch extended-reach applicator
2	Clean/degrease surfaces needing lubrication <i>Dow Corning</i> <sup>®</sup> OS-2 Silicone Cleaner and Surface Prep	<ul style="list-style-type: none"> <li>Multipurpose, VOC-free cleaning agent</li> <li>Effective cleaner/degreaser for bearings, nuts, bolts, chains, other soiled surfaces</li> <li>Use after applying penetrant and before lubricating</li> </ul>	100 g squeeze bottle with 12-inch extended-reach applicator
3	Lubricate hard-to-reach surfaces FirstPower EZ-Reach <sup>®</sup> LIFE	<ul style="list-style-type: none"> <li>Special fluorosilicone oil</li> <li>Contains rust and corrosion inhibitors, anti-wear additives, antioxidants</li> <li>Service range: -76° to 176°F (-60° to 80°C)</li> </ul>	110 g squeeze bottle with 12-inch extended-reach applicator
4	Lubricate rolling surfaces <i>Molykote</i> <sup>®</sup> 3451 Chemical Resistant Bearing Grease	<ul style="list-style-type: none"> <li>Fluorosilicone oil thickened with PTFE</li> <li>Excellent for circuit breaker roller bearings; resists degradation; extends service intervals</li> <li>Service range: -40° to 450°F (-40° to 232°C)</li> </ul>	200 g plastic jar with brush-top cap
5	Lubricate sliding surfaces <i>Molykote</i> <sup>®</sup> G-n Metal Assembly Paste	<ul style="list-style-type: none"> <li>Low-friction MoS<sub>2</sub> lubricating paste</li> <li>Excellent for circuit breaker trip latches; helps prevent seizure from fretting, galling, cold welding</li> <li>Service range: 0° to 750°F (-18° to 399°C)</li> </ul>	180 g plastic jar with brush-top cap
6	Lubricate/dress O-rings, seals and gaskets <i>Molykote</i> <sup>®</sup> 1292 Long Life Bearing Grease	<ul style="list-style-type: none"> <li>Fluorosilicone oil with organic thickener</li> <li>Excellent for flange gaskets; suitable for silicone seals; resists washout, oxidation, most chemicals</li> <li>Service range: -40° to 392°F (-40° to 200°C)</li> </ul>	180 g plastic jar with brush-top cap
7	Protect/lubricate electrical contacts <i>Molykote</i> <sup>®</sup> 33 Extreme Low Temperature Bearing Grease	<ul style="list-style-type: none"> <li>Silicone grease withstands heat/cold; resists oxidation, moisture, evaporation</li> <li>Excellent for electrical contacts, trip latches, coil bearings, anti-friction bearings, plastic/rubber</li> <li>Service range: -100° to 356°F (-73° to 180°C)</li> </ul>	140 g plastic jar with brush-top cap
8	Protect/lubricate threaded connections <i>Molykote</i> <sup>®</sup> 1000 Solid Lubricant Paste	<ul style="list-style-type: none"> <li>Solid-lubricant anti-seize paste for bolted joints</li> <li>Helps ensure proper assembly tightening, nondestructive disassembly; reduces corrosion</li> <li>Service range: -22° to 1202°F (-30° to 650°C)</li> </ul>	180 g plastic jar with brush-top cap
9	Protect electrical connectors No-OX-ID <sup>®</sup> "A-Special"	<ul style="list-style-type: none"> <li>Conductive grease for nonmoving connections</li> <li>Helps prevent corrosion on equipment/switchgear connectors, metal surfaces, conductors</li> <li>Service range: -20° to 120°F (-29° to 49°C)</li> </ul>	120 g plastic jar with brush-top cap

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**LubeGuide Step 4:** *Molykote*<sup>®</sup> 3451 Chemical Resistant Bearing Grease applied to circuit breaker bearings can help maintain proper trip times and avoid trip-coil burnout.

## Learn More: Contact Us

Learn more about the unique, innovative and widely sold *Lube by Number*<sup>™</sup> kit from FirstPower Group LLC by contacting your Dow Corning Technical Representative, sending an email to [industrial@dowcorning.com](mailto:industrial@dowcorning.com) or visiting [firstpowergroupllc.com](http://firstpowergroupllc.com).

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