# Motive Power Battery Four (4) Year Fast Charge Warranty

**EFFECTIVE DATE: FEBRUARY 2, 2009** 

## WARRANTY (9 or more plates per cell)

Deka Batteries manufactured by East Penn Manufacturing Company, Inc. (referred to as "EPM") containing nine (9) or more plates per cell are warranted by EPM to be free of defects in workmanship and materials for a period not to exceed forty-eight (48) months from date of invoice. If prior to forty-eight (48) months from the date of invoice, (a) a battery fails to provide at least eighty (80) percent of the six (6) hour rated capacity when tested under EPM supervision and in accordance with B.C.I. Standard BCIS-14 (or its latest revisions), or (b) if any cells or parts of the battery assembly do not meet EPM specifications for new material, EPM, at its option, will either (a) repair parts, cells, or battery at its expense, for both labor and parts, or (b) furnish a suitable replacement battery, having a rated capacity equal to the published rated capacity of the battery returned. The replacement battery shall only be warranted for the remaining unused portion of the original warranty of the replaced battery. The original battery will become the property of EPM. The owner of the battery will be responsible for delivery of the battery to EPM's nearest authorized representative or factory as directed by EPM's product support department. The use of a rental battery is not part of this warranty.

### **TERMS AND CONDITIONS**

- The user shall install and maintain each battery in accordance with the Deka Industrial Battery Service Manual (EPM Form No. 0656 or its latest revision), pertaining to Battery Safety -Section II, and Battery Maintenance and Troubleshooting -Section IV.
- The user and EPM shall mutually agree each battery is of the proper size, design, weight, and capacity to perform the duty cycle at the time of purchase and must not be required to perform a duty cycle greater than this agreed value during this warranty period.
- 3. Each battery may be fast charged as required on a daily basis. The battery must be charged to a minimum of 80% state of charge every twenty-four (24) hour period. The battery shall receive a 100% state of charge and an equalize charge on a weekly basis. The maximum depth of discharge shall be 80% of the six (6) hour rated capacity. Total ampere-hour throughput for the warranty period shall not exceed 1.6 times the 80% rated capacity of the battery multiplied by 1040. Warranty period is limited to total ampere-hour throughput (as calculated above) or maximum forty-eight (48) months, which ever occurs first.
- 4. Each battery shall be charged on a properly rated fast charger that is mutually agreed upon by the user and EPM. The maximum start rate current of the fast charger shall not exceed five hundred (500) amps or 40 amps per 100 AH. One hundred (100) percent charged shall be evidenced by the battery's full charge specific gravity as shown on the battery name-plate specification. The average daily electrolyte temperature of the battery shall not exceed one hundred twenty (120) degrees Fahrenheit nor drop below fifty (50) degrees Fahrenheit.

### **TERMS AND CONDITIONS (continued)**

- This warranty shall be void if batteries are subjected to misuse, abuse, or any physical damage other than ordinary wear. Battery electrolyte level shall not fall below the cell separator protector at any time.
- EPM or its authorized representatives shall have access to the battery at reasonable hours and intervals for purpose of inspection.
- 7. Accurate battery maintenance records shall be maintained to confirm one hundred (100) percent charge is attained and equalize charged on a weekly basis. Water additions, repairs, and capacity test data records must also be maintained. Such records must be made available to EPM and/or its authorized agent with reasonable advanced notice and during normal business hours.
- 8. A service contract must be established with the local authorized EPM agent and will include quarterly inspections of the batteries. The batteries shall be equipped with an EPM approved recording device that has the capability of monitoring and archiving battery operation events (must include ampere-hour throughput and electrolyte temperature) for the life of the battery.
- 9. This warranty applies to the original user and is non-transferable.
- This warranty will be considered void if service, maintenance and repairs are made by other than EPM or its designated service representatives.
- 11. Battery(s) will be considered to be at the end of their useful life when eighty (80) percent of the published rated six (6) hour capacity is not achieved when tested under the supervision of EPM in accordance with B.C.I. Standard BCIS-14 (or its latest revision).
- 12. Battery or cell failure due to optional add-on devices (factory and/or field installed) are NOT covered under this warranty policy. Such devices include but are not limited to:
  - Single Point Watering Systems
  - Electrolyte Level Indicators
  - · Battery Data Acquisition Systems
  - Voltage Taps
  - DC/DC Converters or DC/AC Inverters

#### LIMITATION

EPM's sole obligation and the user's exclusive remedy under this warranty shall be for repair or replacement as stated above. ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. IN NO EVENT SHALL EAST PENN MANUFACTURING COMPANY BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

#### **WARRANTY (7 plates per cell)**

All Deka seven (7) plate batteries will carry a twelve (12) month warranty.

# EAST PENN manufacturing co., inc.

Lyon Station, PA 19536-0147 • Phone: 610-682-6361 • Fax: 610-682-4212 E-mail: epmmotve@eastpenn-deka.com