







# EAST PENN manufacturing co., inc.

LYON STATION, PA 19536 • 610-682-6361

## SEALED VALVE REGULATED LEAD-ACID (SVRLA) GELLED ELECTROLYTE BATTERIES

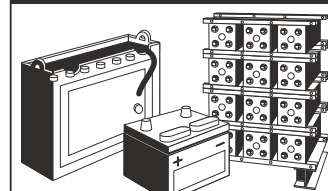
Congratulations on your choice of a new Deka industrial battery. The SVRLA line of Deka industrial batteries incorporates every feature required by today's user of electric industrial trucks. Designed with East Penn engineering technology and built by master battery craftsmen according to strict quality assurance guidelines, Deka industrial batteries are the finest available to meet today's material handling requirements. Deka precision construction provides new equipment performance throughout a long life. This battery has been inspected prior to shipment to ensure that it meets your specifications as ordered. By following the operating and maintenance instructions, you will be ensuring optimum life and performance of your new Deka industrial battery.

### OPERATING INSTRUCTIONS

<b>⚠ DANGER</b>			
 <b>HIGH VOLTAGE...</b> RISK OF SHOCK. DO NOT TOUCH UNINSULATED TERMINALS OR CONNECTORS.	 <b>SHIELD EYES.</b> EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.	 <b>NO SPARKS, FLAMES, OR SMOKING</b>	 <b>SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS.</b>
<b>KEEP VENT CAPS TIGHTLY IN PLACE.</b>		<b>VENTILATE WELL WHEN IN AN ENCLOSED SPACE AND WHEN CHARGING.</b>	
<b>SEE INSTALLATION, MAINTENANCE AND OPERATION INSTRUCTIONS FOR IMPORTANT SAFETY PRECAUTIONS.</b>		<b>REPAIR SHOULD BE PERFORMED ONLY BY A QUALIFIED SERVICE TECHNICIAN.</b>	

<b>California Proposition 65 Warning</b>	<b>WARNING:</b> Batteries, battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. <b>Wash hands after handling.</b>
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**BATTERIES AND RELATED PARTS CONTAIN LEAD**



**WASH HANDS AFTER HANDLING!**

CALIFORNIA PROPOSITION 65 WARNING: Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

California Proposition 65 Workplace Warning Sign 7/04  
Must be posted in workplace near batteries.

**WARNING:** Charging shall be performed by using only the supplied on-board charger for Gelmate. Only use an approved East Penn charger with a sealed lead-acid gel battery charge curve profile.

**The valve-regulated vent should not be removed. Removal of the vent will adversely affect the battery's life and performance.**

**The battery's warranty will be void if these guidelines are not followed.**

1. Upon receipt of the battery, if there are signs of rough handling, or exposed electrolyte, or loose or missing vent(s), file a claim with the carrier and advise your East Penn representative.
2. Check the nameplate of your charger against the nameplate of the battery to make sure they both show the same voltage and that the six-hour ampere hour capacity of the battery falls within the recharge range of the charger.
3. The "Battery Type Identification" shown on the battery (E, EO), should match the "Battery Type Identification" specified on the truck nameplate.
4. Make sure that the battery "SERVICE WEIGHT," which is stamped below the lifting hole in the steel tray, falls within the battery weight range shown on the truck nameplate. East Penn Manufacturing Co., Inc. cannot be responsible for determining that the battery weight is sufficient to counterbalance your particular truck.

**OPERATING INSTRUCTIONS** (continued)

5. The battery should receive an equalizing charge prior to placing the battery into service. The battery shall be charged by using the supplied charger. The equalizing charge is complete when the charger automatically terminates. No other charger should be used unless approved by East Penn. Doing so will void the warranty.
6. The battery shall be placed on charge at the end of the work shift and the charge should continue until the charger terminates the charge automatically. All vents should be unobstructed and securely tightened. The steel tray cover or the truck compartment should be kept open during the entire duration of charge.
7. Overcharging and undercharging a sealed gel electrolyte battery will greatly affect the life of the battery.
8. Measuring the open circuit voltage provides a way to determine the state of charge of the battery. The open circuit voltage shall be taken with a voltmeter. Voltage measurements should be taken no earlier than 4 hours on open circuit following a charge.

**STATE OF CHARGE VS. OPEN CIRCUIT**

% Charge	Open Circuit Voltage
100	2.15 – 2.18
75	2.12
50	2.07
25	2.01
0	1.97

9. EPM recommends when lifting a battery that an insulated lifting beam be used. Also, make certain that the lifting hooks are the correct size and are properly aligned with the holes in the lifting ears of the tray prior to hoisting a battery.

**MAINTENANCE INSTRUCTIONS**

**SEALED VALVE REGULATED LEAD-ACID (SVRLA)  
GELLED ELECTROLYTE BATTERIES**

**WARNING:** *Always wear safety glasses when working around batteries! Keep sparks and flames away! The valve regulated pressure relief valve should never be removed or loosened!*

1. The top of the battery should be kept clean and dry at all times. Simply clean the top of the battery with a damp cloth. The valve regulated vent and shroud shall remain on the battery at all times.
2. The cables and connectors should be inspected monthly for exposed copper wires, frayed or cracked insulation, loose connections, or pitted contacts, and repaired as required.
3. Be especially careful to keep metallic objects off the top of the battery. Any metal touching two or more connectors may cause a short circuit resulting in an arc or spark which ignite battery gasses explosively.
4. The output rate and voltage of the charger should be checked periodically. Make certain that the DC voltage and ampere hour range of the charger match the nameplate information on the battery.
5. Depending on the type of service, it will be necessary to give the battery an equalizing charge every one to four weeks. Set the charger to the equalize position.

TYPE	PLATES PER CELL	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33
<b>G45</b>	6 Hr A.H. Rating	90	135	180	225	270	315	360	405	—	—	—	—	—	—	—
<b>G75</b>	6 Hr A.H. Rating	150	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200
<b>G105</b>	6 Hr A.H. Rating	—	—	420	525	630	735	840	945	—	—	—	—	—	—	—