



	E-RICKSHAW PRODUCTS							
Sl.no.	Model	12V_AH @C20	Length ±3mm	Width ±3mm	Height ±3mm	Gross Wt-kg ±1.5%	Warranty- Months	Millage (kms)
1	FE110ER	110	360	174	275	30.4	6	70+
2	FE115ER	115	412	176	267	32.1	6	70+
3	FE120ER	120	360	174	275	32.3	9	80+
4	FE125ER	125	412	176	267	33.6	9	80+
5	FE140ER	140	412	176	267	35.11	12	110+
6	FE140ER	150	412	176	267	38.1	15	120+

## **BENEFITS of our Batteries**

- Future Energy tubular E-Rickshaw batteries provide a steady performance with affordable cost to the customer.
- Product available in different warranty segment ranging from 6, 9, 12 months & 15 months.
- Environmentally friendly aqua Ceramic vent plugs specially designed ensures low acidic fumes
- Highly reliable compared to other flat plate batteries available in the market.
- Low maintenance very low water topping up required in comparison to other brands.
- Lowest per km cost ensure more saving.

## **E-Rickshaw Battery-Merit's**

- ✓ Higher mileage.
- ✓ Faster Recharge with specially designed E-Rickshaw battery chargers.
- ✓ Specially designed vent plug with flame retardant material resulting no spillage.
- ✓ Vibration Resistant.
- ✓ Low self-discharge (<2mv per day).
- ✓ Low power consumption.





# DO's & Don'ts for E- Rickshaw

# **Battery Application**

- 1. Always clean the top surface of battery from dry cotton cloth after topping up with DM water. It will prevent clogging of vent holes.
- 2. Always check the sulphation of terminals. If found, clean it, after cleaning, apply petroleum jelly.
- 3. During connection of the battery never ever tightened the fasters not more than 8 10Nm torque. It will cause cracked down the terminal.
- 4. All terminal bolts must be tightened with spring and plain washers. The tightness of all bolts to be checked once in every 15 days. Always make sure the cable connection will not be loose. It should be properly tightened to prevent sparking & terminal heating.
- 5. Use recommended & proper sized cables along with correct plugs and crimping during installation.
- 6. Always check the battery electrolyte at regular intervals after 15 days filled up to vent hole collar.
- 7. Always use DM water for top up the cells. Never add tap water/acid. It will lead to contamination of electrolyte which affects the battery and its mileage.
- 8. Before usage, battery should be 100% charged then only take for use. No partially charged battery taken for use.
- 9. Before charging, slightly open the vent plug up to 1 to 2 threads.
- 10. After charging, off & remove the charger & give 1 hour rest period for usage.
- 11. If battery stored for more than one month from date of manufacturing require freshening charge with the recommended charger.
- 12. Refresh charge to be given under storage period, if open circuit voltage drops below 12.75v (±0.05) and the specific gravity drops below 1.270@ 27°c.
- 13. Always maintain set of four batteries in cleaning, water level, proper clamping, as these are balanced to give a good performance.
- 14. In E- rickshaw, batteries always connect in series combination.
- 15. Once a week always check the physical condition of the connecting cables.
- 16. Always keep the batteries placed away from sparks, fire, cigarettes etc.
- 17. Do not allow discharged battery for more than 12 hours in idle condition.
- 18. Do not overcharged or boost charge it will starts affecting battery health.
- 19. Charge the batteries immediately after discharge with recommended charger.
- 20. Do not allow any metal object to rest on the battery. This may cause short circuit.
- 21. Provide proper isolation between battery and battery rack.
- 22. Batteries must be disconnected, Before carrying out any welding job on E- rickshaw.



## **Trouble Shooting**

Area	Trouble	Cause	Trouble Shooting
	Low Specific gravity in all cell	Insufficient charging (charging system trouble, improper usage of car	Charge the battery
		Leakage ( Improper cleaning, excessive water addition)	Clean the battery top, adjust the water level
Electrolyte	Too low specific gravity	Internal short- circuit, Insufficient top up, impurities, short due to overcharge	Replace new battery or adjust specific gravity
	Too high specific gravity	Acid added to the electrolyte, no topping up	Adjust the specific gravity / Top up with DM water only
	Low level of electrolyte	Overcharging, no topping up	Add DM water
	Normal Specific gravity but low capacity	Improper terminal connection, break down, deep charge - discharge	Clean up, Replace the battery, Check the starting system
Battery Case	Broken down, crack, leakage	Stones, bad installation, too tight or too loose clamping, bad hold down	Replace / repair the clamps and battery
Cover Vent Plug	Deformation	Excessive heat up of electrolyte due to high charging current, High temperature etc.,	Replace or adjust the battery
	Corrosion	Electrolyte	Clean up and adjust the electrolyte level
Terminal		Leakage at penetration part of electrode pole of terminal	Replace the battery
	Rupture	Heat up due to external short- circuit, sparks, bad contact	Repair / Properly fix the terminals, or replace the battery



### **Handling of Warranty Claims**

#### 1. Receipt and Recording of Warranty Claim

On receipt of the following documents together with the warranty claim, Warranty Claim Form is prepared as per the format.

a. Battery Warranty Card duly filled by the respective channel partner.

b. Copy of the Sale Invoice.

In case any of the above documents are not available the claim will not be accepted. If any approval from the company's authority by providing a reasonable ground to establish that the claim is genuine based on Manufacturing code, Serial Number etc.,

#### 2. Examination

Check the Mfg.code / Serial No. / Date of sale. Any Tampering in the warranty card or bill copy will invalidate the warranty.

#### 3. WCF Distribution

- a. 1st copy to Customer.
- b. copy to be kept with the documents for checking by the service personnel and thereon send it to company in case of replacement.
- c. 3rd copy to retained by the Distributor,

#### 4. Diagnosis

As per the SBPL Test procedure and specification.

#### 5. Charging

Voltage & Specific gravity reading should be recorded as per the SBPL Procedures if the battery is found to be discharged and requires only a recharge.

#### 6. Return Documentation

If the battery is found to be OK in Distributor premise, the same will be returned to the customer with Delivery Challan along with the received documents to the customer.

#### 7. Accounting for Scrap

If the battery found to be failed and accepted for replacement, the defective will be sent to SBPL service station along with the necessary documents for making a FOC bill.

Lead a major component in your battery, if not handled responsibly, can harm the environment and our Health. Return your used battery and make the world a better place.



## **Warranty Claim Form**

Name of the Distributor / Dealer Address Mobile No.	: :	
Name of the Customer Address Mobile No.	:	
Battery Vehicle Details a. Battery Type b. Battery Mfg Code / Sl.No c. Battery Date of Sale d. Vehicle Make (Manufacturer) e. Vehicle Model f. Vehicle Registration Number	::	
Documents Enclosed a. Warrany Card b. Copy of the Battery sales Invoice	: :	YES / NO YES / NO
Apparent Condition of the battery	:	
a. At the time of receipt	:	

Specific gravity per cell									
Cell 1	Cell 2	Cell 3	Cell 4	Cell 5	Cell 6	OCV	PHYSICAL CONDITION		

b. After Charging

Specific gravity per cell

Cell 1	Cell 2	Cell 3	Cell 4	Cell 5	Cell 6	OCV	PHYSICAL CONDITION

Customer Signature

Dist / Dealer Signature

