

SCOPE OF SUPPLY FOR BATTERY OPERATED TOW MASTER (CAPACITY 5.0 TON)**A. Technical Specification:**

Sl. No.	Specification	Requirement
1	Capacity	5 Tons
2	Type	Sit-down rider type
3	No. of wheels	3 or 4
4	Steering operation	Hydraulic/Manual.
5	Type of Wheels	Solid rubber tyre type.
6	No. of Drive Motor	One Motor
7	Drive Motor Rating	AC or DC, Rating 5 KW or above as per Vendor design.
8	Motor speed control	AC or DC
9	Speed Control type	Through Step/ Step less controller. In case of stepped controller, 4 forward & 1 reverse speed steps.
10	Operator Control	ON/OFF through key switch, Reverse/Forward, Speed Control and Brakes.
11	Brakes	Hydraulic assisted Mechanical type brake.
12	Battery	Exide make Lead Acid type Traction Battery without electrolyte, Uncharged, 48V and Ah rating suitable for Six hours of operation of the master. Battery should have Auto fill system. Electrolyte shall be supplied separately along with order. Filling of electrolyte and charging should be done at the time of commissioning by vendor at BHEL, Haridwar.
13	Charger Type	Electronic /Conventional suitable for fully charging the battery within 8 hours.
14	Emergency Power Cut-off Switch:	Yes
15	Finish Color	Yellow
16	General	a. All standard protections in electric system must be provided. b. Standard two pin nylon connector must be provided for battery connection.

B. Documents

Sl. No.	Item	Quantity
1	Operation Manual	02 nos. with each Tow Master.
2	Service manual for Master and charger, complete with	02 sets with each Tow Master.

Ajay Kumar
22.08.14

<p>parts catalogue. The parts catalogue shall include all bought items like bearings, wheels, speed controllers, Operator foot control etc. and their OEM details along with complete address -2 Nos.</p>	
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- C. **Warranty:** 12 months warranty required from the date successful commissioning at BHEL Haridwar.

A. J. Kumar
22.08.14
Engineer (WEX-MT)

U. S. Singh
23.08.14
Sr. Manager (TTX)