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03 August 2023

RE-EVALUATION/STANDARDIZATION OF WRECKER HEAVY (CAPACITY 10 TON AND ABOVE)

Reference:

A. Army Headquarters, Master General of the Ordnance Branch, Electrical and Mechanical Engineers Directorate letter number 23.01.901.048.20.079.01.18.07.23 Dated 23 July 2023.

1. Please be informed that, Bangladesh Army is planning to procure Wrecker Heavy (Capacity 10 Ton and Above) for Bangladesh Army. In this regard, you are requested to provide offer, Brochure, Catalogue, technical/training/ operational/maintenance manuals and budgetary offers along with 100% updated original spare parts catalogue (Hard & Soft copy) etcetera for re-evaluation/standardization of models Wrecker Heavy (Capacity 10 Ton and Above). Offered models should be compatible with general technical specification attached herewith and submits directly to Army Headquarters, Master General of the Ordnance Branch, Electrical and Mechanical Engineers Directorate, Dhaka Cantonment by **20 August 2023** with intimation to this office. You are also requested to provide enlistment certificate of DGDP along with technical offer.

2. Forwarded for your information and necessary action please.



MD SHAHARIARE KHAN
Lieutenant Colonel
For Director General

Annexure:

A. Technical Specification of Wrecker Heavy (Capacity 10 Ton and Above) - 09 (Nine) Pages only.

Distribution:

External:

Action:

(All Concerned Supplier/Firm)

Information:

Army Headquarters, General Staff Branch, Weapon Equipment and Statistic Directorate

Army Headquarters, Master General of the Ordnance Branch, Ordnance Directorate

Army Headquarters, Master General of the Ordnance Branch, Electrical and Mechanical Engineers Directorate

Internal:

IT Section - (For sending to enlisted Supplier/Firm with DGDP through e-mail). Also publish in web site.

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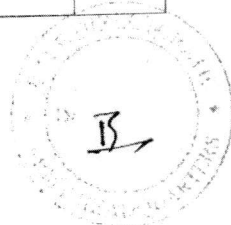
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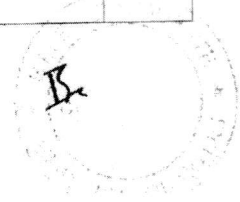
GENERAL TECHNICAL SPECIFICATIONS: WRECKER HY (CAP 10 TON AND ABOVE)

Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
1.	Name of the firm/local agent with full address	To be mentioned	
2.	Name of Manufacturer with full address	To be mentioned	
3.	Name of the principal with full address	To be mentioned	
4.	Nomenclature	Wrecker Hy (Cap 10 Ton and above)	
5.	Make and Model	To be mentioned	
6.	Year of manufacture	Not before the year of contract	
7.	Drive	RHD	
8.	Configuration	6x6/8x8	
9.	Country of Origin	Group-A	
10.	Country of Manufacturer	Group-A	
11.	Country of Assembly	Group-A	
12.	Kerb Weight (Vehicle + Wrecker)	To be mentioned	
13.	Weights		
	a. Kerb Weight	To be mentioned	
	b. Pay load	To be mentioned	
	c. Gross Vehicle Weight (GVW)	To be mentioned	
14.	Truck Specification		
	a. Make and model	To be mentioned	
	b. Country of origin	Group-A	
	c. Country of manufacturer	Group-A	
	d. Country of assembly	Group-A	
15.	Dimension		
	a. Overall length (mm)	To be mentioned	
	b. Overall width (mm)	To be mentioned	
	c. Overall height (mm)	To be mentioned	
	d. Cabin height (mm)	To be mentioned	
16.	Ground clearance (minimum)	≥300 mm	
17.	Wheel base (mm)		
	a. From 1 st to 2 nd axle	To be mentioned	
	b. From 2 nd to 3 rd axle	To be mentioned	
	c. From 3 rd to 4 th axle (if applicable)	To be mentioned	
18.	Angle of approach (degree)	25° minimum	
19.	Angle of departure (degree)	25° minimum	
20.	Maximum grade ability (%/degree)	25° minimum	
21.	Fording depth (mm)	650 mm minimum	
22.	Turning radius (meter)	13 meter maximum	
23.	Tread front	To be mentioned	
24.	Tread rear	To be mentioned	
25.	Engine		
	a. Type	To be mentioned	
	b. Make and model	To be mentioned	
	c. Country of Origin	Group-A	
	d. Country of Manufacturer	Group-A	
	e. Country of Assembly	Group-A	
	f. No of cylinder	To be mentioned	
	g. HP at rated rpm	To be mentioned	
	h. Maximum torque at rated rpm	To be mentioned	
	j. Bore and stroke (mm)	To be mentioned	
	k. Piston displacement (cc)	To be mentioned	
	i. Type of injection	To be mentioned	
	m. Power/weight ratio	To be mentioned	

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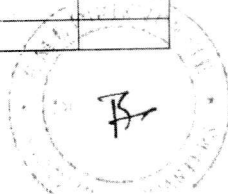
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Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
	n. Turbocharger/intercooler available or not	To be mentioned	
	p. Compression ratio	To be mentioned	
	q. Engine Test Bench Report	1. Engine Test Bench Report for all engines prepared by manufacturer during production of engine at manufacturing factory must be submitted to the SI/PSI team for each model. 2. If Engine Test Bench Report of all engines can not be submitted, in that case, for other engines of the same model must be certified and confirmed with the engine Test Bench Report (mentioning engine number) by the manufacturer duly signed and stamped.	
	r. Cooling type	Liquid cooled	
	s. Emission Standard	Euro-3	
26.	Fuel System	Details to be mentioned	
	a. Fuel Type	Diesel	
	a. Fuel Consumption Liter/Hour (in static operation)	To be mentioned	
	b. Fuel Consumption Liter/100 km (on plain road)	To be mentioned	
	c. Fuel tank capacity	300 liters minimum	
	d. Fuel Injection Pump	To be mentioned	
27.	Vehicle Speed		
	a. High Way	To be mentioned	
	b. Cross Country	To be mentioned	
	c. Mobility at different terrain condition	To be mentioned	
28.	Clutch		
	a. Type	Details to be mentioned	
	b. Clutch system	Details to be mentioned	
29.	Front Axle.		
	a. Type	To be mentioned	
	b. Axle Capacity	To be mentioned	
	c. Country of Origin	Group-A	
	d. Country of Manufacturer	Group-A	
	e. Country of Assembly	Group-A	
30.	Rear Axle.		
	a. Type	To be mentioned	
	b. Axle Capacity	To be mentioned	
	c. Country of Origin	Group-A	
	d. Country of Manufacturer	Group-A	
	e. Country of Assembly	Group-A	
	f. Number of wheel at rear axle	To be mentioned	
31.	Transmission.		
	a. Type of transmission *	Manual / Mechatronics	
	b. Country of origin	Group-A	
	c. Country of manufacturer	Group-A	
	d. Country of assembly	Group-A	
	e. Number of gears	To be mentioned	
	f. Gear ratio	To be mentioned	
	g. Gear shift type	To be mentioned	
	h. Differential lock/limited slip differential (LSD)/ equivalent technology	To be mentioned	
32.	Transfer Case.		
	a. Make & Model	To be mentioned	
	b. Country of Origin	Group-A	
	c. Country of Manufacturer	Group-A	
	d. Country of Assembly	Group-A	
33.	Suspension		
	a. Front	Details to be mentioned	
	b. Rear	Details to be mentioned	



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Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
34.	Chassis		
	a. Type	To be mentioned	
	b. Country of Origin	Group-A	
	c. Country of Manufacturer	Group-A	
	d. Country of Assembly	Group-A	
	e. Length (mm)	To be mentioned	
	f. Width (mm)	To be mentioned	
	g. Height from ground (mm)	To be mentioned	
	h. Thickness of chassis	8 mm (Minimum)	
35.	Cabin		
	a. Type	To be mentioned	
	b. Observatory hatch (manual/auto operated)	To be provided	
	c. Cabin AC	Details to be mentioned	
	(i) Make & Model	To be mentioned	
	(ii) Country of Origin & Manufacturer	Group-A	
	d. Manual hydraulically assisted tilt adjustable driver's seat with seat belt, firm double co-driver's seat with seat belts	To be mentioned	
	e. Rear view camera fitted	To be mentioned	
36.	Tyre		
	a. Tyre size	To be mentioned	
	b. Tyre Brand	Bridgestone/Dunlop/Goodyear/ Yokohama /Toyo/ Uniroyal/Continental/Michelin/Folda/ Firestone/ Armstrong/ AMTEL/Pirelli/ Hankook and Kumho	
	c. Country of Origin	USA, Japan, EU Countries, Russia, Brazil, Indonesia, Malaysia, Philippines Singapore, Thailand and South Korea	
	d. Tyre Pattern	Non-directional (ND) Ground Grip (GG) and Cross country (CC).	
	e. Number of tyre (including spare tyre)	To be mentioned	
37.	Ground pressure (kg/square cm)	To be mentioned	
38.	Rim size	To be mentioned	
39.	Brake System		
	a. Main brake	Details to be mentioned	
	b. Parking brake	Details to be mentioned	
	c. Service brake	Details to be mentioned	
	d. Emergency brake	Details to be mentioned	
	e. Auxiliary brake	Details to be mentioned	
	f. Any other brake system	Details to be mentioned	
40.	Steering	Hydraulic assisted power steering	
41.	Electrical System		
	a. Volt	24 Volt	
	b. No of Battery	2x12 Volts	
	c. Volt, AH	To be mentioned	
	d. Alternator (Volt, Amp)	To be mentioned	
	e. Starter (Volt, KW)	To be mentioned	
	f. Panel lamps, standard instruments and gauges (e.g. panel lamps, battery, charge lamp, fuel gauge, head and rear lights, stop & turning signal lights)	Details to be mentioned	
	g. Amber, turning (flasher) lamps, mounted on the cab roof	Details to be mentioned	
42.	Wrecker		
	a. Make/Model	To be mentioned	
	b. Country of Origin	Group-A	
	c. Country of Manufacture	Group-A	
	d. Country of Assembly	Group-A	
	e. Year of production	Not before the year of contract	

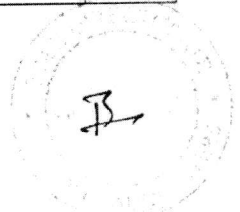


Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
	f. Operating system	To be mentioned	
	g. Number of boom	To be mentioned	
	h. Number of section in boom	To be mentioned	
	j. Boom/turret rotation (degree)	Turret rotation is 360 degree or endless continuous rotation	
	k. PTO driven hydraulic pump	To be mentioned	
	l. Lifting Boom		
	(i) Type	Telescopic or any other advanced system	
	(ii) Boom Extension speed (meter/min)	To be mentioned	
	(iii) Boom extending time	To be mentioned	
	m. With Full Boom Extension		
	(i) Length of boom	7 meter minimum	
	(ii) Maximum load radius	To be mentioned	
	(iii) Maximum lifting height on hook	To be mentioned	
	(iv) Maximum boom lifting angle	60 degree minimum	
	(v) Maximum side working radius with boom fully extended	To be mentioned	
	(vi) Lifting working sector (in degree)	To be mentioned	
	(vii) Rear lifting capacity with boom full extended	To be mentioned	
	(viii) Side lifting capacity with boom full extended	To be mentioned	
	n. With Boom Retracted		
	(i) Boom length	To be mentioned	
	(ii) Maximum load radius	To be mentioned	
	(iii) Maximum lifting height on hook	To be mentioned	
	(iv) Maximum boom lifting angle	For stable lifting and under EU regulation the maximum boom lift angle is set at 65°	
	(v) Lifting capacity	Lifting capacity min 20 ton with boom full retracted	
	p. Lifting performance graph	To be provided	
	q. Rear pulling capacity at first layer of cable	To be mentioned	
43.	Main Winch		
	a. Number of Winch	To be mentioned	
	b. Cable length (meter)	60 meter minimum	
	c. Cable dia mm	20 mm minimum	
	d. Pulling capacity of each winch	To be mentioned	
	e. Barrel drum dia (mm)	To be mentioned	
	f. Pulling force at first layer of cable	30 ton minimum	
	g. Function (electrical/hydraulic)	To be mentioned	
44.	Auxiliary Winch		
	a. Number of Winch	To be mentioned	
	b. Cable length (meter)	40 Meter (Minimum)	
	c. Pulling capacity of each winch	To be mentioned	
	d. Barrel drum dia (mm)	To be mentioned	
	e. Function (electrical/hydraulic)	To be mentioned	
45.	Self Recovery Winch		
	a. Number of Winch	To be mentioned	
	b. Cable length (meter)	20 Meter (Minimum)	
	c. Pulling capacity of each winch	10 Ton (Minimum)	
	d. Barrel drum dia (mm)	To be mentioned	
	e. Function (electrical/hydraulic)	To be mentioned	
46.	Hoist Winch or Equivalent		
	a. Number of Winch	To be mentioned	
	b. Cable length (meter)	60 Meter (Minimum)	
	c. Pulling capacity of each winch	To be mentioned	
	d. Barrel drum dia (mm)	To be mentioned	
	e. Function (electrical/hydraulic)	To be mentioned	

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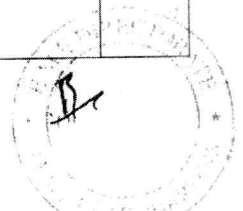
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Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
47.	Hook Capacity		
	a. Main	30 Tons	
	b. Auxiliary	To be mentioned	
48.	Underlift		
	a. Length fully retracted (mm)	To be mentioned	
	b. Length fully extended (mm)	To be mentioned	
	c. Tow capacity	To be mentioned	
	d. Range of towing mass	To be mentioned	
49.	Outrigger		
	a. Number	4 Numbers minimum	
	b. Type	Hydraulic operated outriggers driven by PTO-Pump; control and operation are outside driver's cabin on wrecker body on rear side	
	c. Longitudinal span between front outrigger and rear outrigger (mm)	To be mentioned	
	d. Transverse span of front outriggers (mm)	To be mentioned	
	e. Transverse span of rear outriggers (mm)	To be mentioned	
50.	Performance		
	a. Climbing ability	To be mentioned	
	b. Crossing ability	To be mentioned	
	c. Cruising range (on road)	To be mentioned	
51.	Superstructure Recovery Body		
	a. Heavy duty body shall be of steel, arc welded, 6mm thick plates, with floor made of chequered plate of 3-5 mm thick with suitable reinforcements.	Details to be mentioned	
	b. Mainframe structure made of 100 mm channels	Details to be mentioned	
	c. Channel size	Details to be mentioned	
	d. Controls to be recessed in the body side panels at the rear and to provide independent power-up/down control of both winches from either side of the truck.	Details to be mentioned	
	e. Tail gate made of 6mm plate, flanged top and bottom with two pivotally attached towing rings built in	Details to be mentioned	
	f. All mounting brackets to be fitted such that drilling will be done only through the side of the truck frame in accordance with the truck manufacturer's recommendations. One foldable access step at each side of rear.	Details to be mentioned	
	g. 2 Number suitable size tool compartments to be fitted on each side of body	Details to be mentioned	
	h. Heavy-duty hydraulic outboard legs/outriggers attached to each side of mainframe structure.	Details to be mentioned	
	j. Fitted with heavy duty towing hooks at both rear and front.	Details to be mentioned	
53.	Tools and accessories must be provided as per list given in appendix 1 in Annexure A	To be provided (Group-A)	
53.	Standard maintenance tools & any others accessories (If applicable). (The list must be based on operating manual and other publications of the offered equipment/ vehicle)	To be mentioned	
54.	Towing attachment: (To carry vehicles and equipment casualty after recovery)	To be mentioned	
55.	Seating Arrangement for 4xCrew Operator	To be mentioned	
56.	Any Special/Remarkable Feature	Description to be given	



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Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
57.	Following Information's/Documents to be submitted along with the Offer		
	a. Details of working principle	To be mentioned	
	b. Provision of supply of major spare parts for minimum 15 years	Certificate to be provided	
	c. Provision of supply fast and slow moving spare parts for minimum 15 years	Certificate to be provided	
	d. Model validity in years (minimum 10 years)	Certificate to be provided	
	e. Any other relevant technical information may also be enclosed	To be mentioned	
58.	Misc Items		
	a. 1x First aid box	To be provided	
	b. Operators cab with the wrecker unit to be provided as per manufacturer standard	To be provided	
	c. 02x Beacon light on cabin roof	To be provided	
	d. Head light	To be provided	
	e. Fog light	To be provided	
	f. Towing attachment (Towing attachment including NATO towing pintle hook, electric 12 pin socket & air coupling provided)	To be provided	
	g. Blackout lights (i) 02 x Blackout light at front (ii) 02 x Blackout light at rear (iii) 02 x Blackout convoy light (iv) 02 x Blackout driving light	To be provided	
	h. Lighting protection guards for all outside lights	To be provided	
	j. Siren (standard)	To be provided	
	k. Search light	To be provided	
	l. Wiper Blade	To be provided	
59.	Operational items (if any)	To be mentioned	
60.	Operational temperature	-5°C to +55°C	
61.	Different levels of maintenance	To be mentioned	
62.	Petrol Oil Lubricant (POL) Information. The following information must be submitted with the offer:		
	a. Grade of fuel used in Vehicle	To be mentioned	
	b. Type of Engine Oil used in Vehicle	To be mentioned	
	c. Type of gear Oil (Equivalent grade) used in vehicle	To be mentioned	
	d. Grade of fuel to be used in Bangladesh	The vehicle must be suitable for used with fuel available in Bangladesh	
63.	Colour	As per indentor requirements	
64.	Training Requirements.		
	a. User Training	To be provided (As per requirement of User/Sponsor Directorate)	
	b. Operation, Repair and Maintenance Training	To be provided (As per requirement of Electrical and Mechanical Engineers Directorate)	
	c. Inventory Control & Management Aspect Training	To be provided (As per requirement of Ordnance Directorate)	
65.	Publications		
	a. Driver's/Owner's manual in English for Vehicle (Complete Book type)	To be provided as per requirement of EME Dte	
	b. Updated workshop/repair manual (for vehicle) in English (Complete Book type).	To be provided as per requirement of EME Dte	
	c. Spare Parts Catalogue in English Book type.	To be provided as per requirement of EME Dte	
	d. Spare Parts Price Catalogue in English Book type.	To be provided as per requirement of EME Dte	
	e. Other Operator's manuals Catalogue (Book Type) for additional equipment like Radio, Navigational Equipment etc.	To be provided as per requirement of EME Dte	



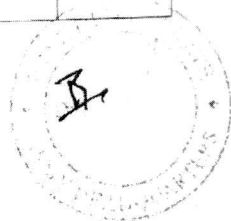
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Ser	Description of Technical Specifications	Required Technical Specifications	Rmk
66.	Fast and slow moving spare parts	List to be provided as per requirement of EME Dte	
67.	Analyzer, measuring & testing/fault finding and diagnostic set	To be provided as per requirement of EME Dte	
68.	Special Service Tools (SST)	List to be provided as per requirement of EME Dte	
69.	Special Service Materials (SSM)	List to be provided as per requirement of EME Dte	
70.	Weapon stowage	Arrangement for rifle clips for drivers and crews to be made	
71.	Safety device	Details to be mentioned	
72.	Tool list for different lvl of maint	List to be provided	
73.	Any items not included in this specification but which are deemed necessary for efficient or improved operation of the equipment	Details to be mentioned	
74.	Terms and Conditions.		
	a. Time of Free Service	1 Year	
	b. Warranty/Guaranty	1 Year or 20,000 KM	
	c. Technical offer should be on the original pad of principal/ manufacturer with sign & seal	Must be confirmed as per requirement	
	d. Offered technical specifications must conform to the specifications mentioned in the submitted brochure/catalogue otherwise offer will not be accepted	To be submitted during evaluation stage	
	e. Authorization certificate (Original) in favour of principal by the original vehicle manufacturer to be submitted along with offer	To be submitted during evaluation stage	
	f. Authorization certificate (Original) in favour of local agent by the principal to be submitted along with offer	To be submitted during evaluation stage	
	g. The Manufacturer, Principal and local agent must give a guarantee certificate for the following	To be submitted during evaluation stage	
	(1) Same/similar model of vehicle/ equipment will be available for next 10 years (Confirmation certificate to be provided by manufacturer)	To be submitted during evaluation stage	
	(2) Spares will be available for at least 15 years (Confirmation certificate to be provided by Manufacturer)	To be submitted during evaluation stage	
	(3) After sales service should be available with local agent and will be provided as and when required for indefinite period (at free of charge up to guarantee period) and then onwards with payment (Confirmation certificate to be provided by local agent)	To be submitted during evaluation stage	
76.	Production Date	Manufactured not before the year of contract	



**TOOLS AND ACCESSORIES MUST BE PROVIDED WITH WRECKER HY (CAP 10 TON AND ABOVE)
FOR EACH VEHICLE (COUNTRY OF ORIGIN: GROUP-A)**

Ser	Description of Technical Specifications	A/U	Qty	Rmk
1.	Levers & Crow Bars: (each type suitable for heavy wrecker)	No	02	
2.	Shackle 'D' type ¾" dia	No	06	
3.	Bow shackle (each bow shackle of 20 tons)	No	02	
4.	Hold Fast Anchor (with required anchor pin)	No	04	
5.	Triangular Anchor (with required anchor pin)	No	04	
6.	Hand saw electric	No	01	
7.	Sheaves stock block and snatch block (Load capacity 20/30 ton)	No	03x Single, 03x double	
8.	Thimbles	No	10	
9.	Bulldog grip	No	15	
10.	Double throat clamp	No	06	
11.	Fire extinguisher ABC&E type 03 kg (Minimum), Origin to be mentioned	No	02	
12.	Spare wheel with lifting facilities (Mechanical/Hydraulic)	No	01	
13.	Tool Box with Double Jerry can Carrier (Fitted on vehicle)	No	02	
14.	Towing hook at front (capacity to be mentioned)	No	02	
15.	Pintle hook at rear (Rotary type)	No	01	
16.	Tyre inflator set complete with high pressure hose, adaptor, pressure gauge & nozzle (from main air compressor to all wheels)	Set	01	
17.	Hydraulic jack 30 ton with handle	No	01	
18.	Inspection lamp complete with min 10 meter cable + plug & socket	No	01	
19.	Wheel wrench with handle	No	01	
20.	Chain rope 30ft complete with hook ½" (Capacity 20 ton)	No	01	
21.	Chain rope 30ft complete with hook 3/8" (Capacity 20 ton)	No	01	
22.	Rope sling (lever hoists) capacity 20 ton	No	01	
23.	Chain sling load capacity 10 ton	No	01	
24.	Chain sling load capacity 5 ton	No	01	
25.	Hoisting belt (3000 kg each)	No	02	
26.	Steel cable loops (4 Nos. steel cable sling of 20 mm Ø x 3,500 mm with hook of capacity 5000 kg each)	No	02	
27.	Nylon sling capacity 10 ton	No	02	
28.	Nylon sling capacity 5 ton	No	01	
29.	Wire rope 100 feet complete with hooks 3/8"	No	01	
30.	Wire rope 50 feet complete with hooks 3/8"	No	01	
31.	Jump starter electric cables 20 feet	No	01	
32.	Portable rechargeable flash light 60 watt	No	02	
33.	Safety triangles, metal type	No	04	
34.	Oil resistant gloves heavy duty	Pairs	06	
35.	Towing bar steel 75mm diameter, 20ft long complete with hooks	No	01	
36.	Safety Vests	No	06	
37.	Safety helmet	No	08	
38.	Hand torch light metallic (rechargeable)	No	06	



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Ser	Description of Technical Specifications	A/U	Qty	Rmk
39.	Traffic Cones	No	08	
40.	Hand gloves leather	Pair	12	
41.	Warning triangle	No	02	
42.	Traffic lighting bar with cable	No	01	
43.	Sledge hammer 10/14 lbs	No	04	
44.	Pipe wrench forged steel 600mm length, 80mm capacity	No	01	
45.	Adjustable spanner 315mm	No	01	
46.	Ball pen hammer 900gm metal type	No	01	
47.	Pliers -180mm combination pliers	No	01	
48.	Pliers -280mm self grip pliers	No	01	
49.	Towing attachment to carry vehicles and equipment casualty after recovery (Towing capacity is 24 tons with 5 tons vertical load at towing hook)	Set	01	
50.	20 Liter metallic jerry can	No	02	

