

GOVERNMENT OF ARUNACHAL PRADESH
DIRECTORATE OF FIRE & EMERGENCY SERVICES
ITANAGAR

No.DIR/F&ES/MT-133/2020


Dated Itanagar the 25th August' 2020

TENDER NOTICE

Scaled tender on plain paper are invited from well established and reputed fabricators for fabrication of 26(twenty six) nos. of Fire Crew Vehicles on Mahindra Bolero Camper Gold ZX BS6 for Arunachal Pradesh Fire & Emergency Services as per attached Terms & Conditions and Technical Specification. Tender will be **received upto 1600 hrs on 29/09/2020 and will be opened on 30/09/2020 at 1130 hrs.** The tenderers or their representatives may remain present at the time of opening of tenders.

The tender papers containing full details with specification and terms & conditions can also be obtained from Directorate of Fire & Emergency Services, Ganga, Itanagar on any working day during office hours w.e.f. 26/08/2020 to 28/09/2020 on payment of Rs.1,000/ (Rupees one thousand) only (non refundable) as tender fee in the form of Demand Draft/ Bankers Cheque in favour of Superintendent of Police, Fire & Emergency Services, Itanagar, Arunachal Pradesh payable at SBI Itanagar. It may also be downloaded from website www.arunpol.nic.in. The tenderer downloaded tender papers from website should be submitted tender fee Rs.1,000/-(Rupees one thousand) only (Non refundable) along with tender documents.

Incomplete tenders are liable to be rejected.


Director General
Fire & Emergency Services
Arunachal Pradesh
Itanagar


NOT TO BE PUBLISHED

No.DIR/F&ES/MT-133/2020

Dated Itanagar the 25th August' 2020

Copy to:

1. The I/c Computer Cell, PHQ Itanagar may upload the Tender Notice, Terms & Conditions and Technical Specifications of Fire Crew Vehicle on the website www.arunpol.nic.in.
2. Notice board.
3. Office copy.


Director General
Fire & Emergency Services
Arunachal Pradesh
Itanagar

**GOVERNMENT OF ARUNACHAL PRADESH
DIRECTORATE OF FIRE & EMERGENCY SERVICES
ITANAGAR**

No.DIR/F&ES/MT-133/2020

Dated Itanagar the 25th August' 2020

TERMS AND CONDITIONS

1. The Director General of Fire & Emergency Services, Arunachal Pradesh, Itanagar invites sealed tender on plain paper from well established and reputed fabricators for fabrication of 26(twenty six) nos. of Fire Crew vehicles on Mahindra Bolero Camper Gold ZX BS6 for Arunachal Pradesh Fire & Emergency Services as per specifications of this office. **The sealed tender will be received upto 1600 hrs on 29/09/2020 and will be opened on 30/09/2020 at 1130 hrs.** The tenderers or their representatives may remain present at the time of opening of tender.
2. Tender fee Rs.1000.00 (Rupees one thousand) only (non-refundable) per bid should be paid in the form of Demand Draft/Bankers cheque drawn in favour of Superintendent of Police, Fire & Emergency Services, Itanagar payable at State Bank of India, Itanagar. It is also applicable for those bidders who download the tender papers through web site.
3. Tender received after scheduled date and time shall not be entertained.
4. **Tender should be typed or hand written clearly in block letters. All literature or correspondence in connection with Tender shall be made in English.**
5. **Tenders will not be accepted unless properly sealed. Tender sending through postal/courier shall reach to the addressee in good condition. Tender in torn condition will not be received.** The tenderer shall intimate the mode of submission of tender through email-dirfs@arunpol.nic.in
6. (A) Envelope, containing tender shall be superscribed in block letters with the heading "**TENDER FOR FABRICATION OF FIRE CREW VEHICLE FOR ARUNACHAL PRADESH FIRE & EMERGENCY SERVICES**" and should be addressed to **the Superintendent of Police, Fire & Emergency Services,**

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Old PHQ Building, Ganga, Itanagar, District-Papumpare, Arunachal Pradesh, Pin-791113.

(B) Tenderer should write his full address at the bottom of the left side of envelope.

7. Correction(s) in the Tender, if any must also be typed clearly or written in block capital letters in ink and duly initialed. Overwriting on the tender is liable to be rejected.
8. Tender once submitted shall be final. No alteration/modification in the rates and terms and conditions of the tenders shall be entertained after opening of tender.
9. Tender should be quoted in two bid system, the bidder have to submit their offer in two parts. **Both the bids should be sealed in two separate envelops.**

Part-'I' Technical Bid- It shall contain EMD, documents related to qualifying requirement as per NIT, technical details, drawing, terms & conditions, experiences, past performances, facilities at yards, financial position and other tender related documents in one envelop clearly super scribing NIT No. and indicating the contents inside the envelope.

Part-'II' Financial Bid- It shall contain price bid only in one envelop clearly super scribing NIT No. and indicating the contents inside the envelope.

Price should not be indicated in the Technical bid. Price should be quoted in Indian currency.

10. Tender opening:

The first envelop i.e., **Part-'I' Technical bid** shall be opened on the specific date indicated in the Tender documents. Credential and other related documents shall be evaluated and only the qualified tenderer will be considered.

The second envelope i.e., **Part-'II' Financial bid** shall be opened subsequently only in respect of those tenderers who qualified in technical bid by the committee.

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M.T.O. (P.P.S.)

11. The tender should be accompanied with earnest money of **Rs.7,00,000/- (Rupees seven lakh)** only in the shape of Demand Draft or Bank Guarantee of any scheduled bank in Itanagar pledged in the name of **the Superintendent of Police, Fire & Emergency Services, Itanagar, Arunachal Pradesh**. Tender without earnest money will be summarily rejected. The tenderer participating from the State of Arunachal Pradesh has to pledge EMD for tender in the shape of NSC/KVP. The tenderers who are registered with the Micro Small & Medium Enterprises (MSME), Small Scale Industries (SSI) are exempted from pledging EMD. They must submit an attested copy of the registration certificate.
12. The successful Tenderer shall have to execute the contract agreement with the Superintendent of Police, Fire & Emergency Services, Itanagar, Arunachal Pradesh stipulating the terms and conditions of the contract. Security deposit will be subject to forfeiture in case of non fulfillment of any or all the terms and conditions of the contract. The Earnest money of successful tenderer shall be forfeited to the government in case of failure to furnish security money and execution of "DEED OF AGREEMENT".
13. The Rates should be quoted in figures as well as in words and if GST or other taxes are not mentioned it will be taken as included in rates quoted.
14. Tender will remain valid upto 31/12/2021. Rates quoted will be final and will not be allowed to be increased during the validity period under any circumstances and for any reason whatsoever. Those who do not quote validity of rates upto the above mentioned date, their bids will be rejected.
15. The rates should be quoted FOR Itanagar destination. The price should be inclusive of all taxes, duties, insurance, transportation etc. whichever is applicable shall be shown separately.
16. The Tenderer shall not sublet the contract to any other Agency/Firm.
17. The Tenderers shall clearly mention the factory's address where the Fire Crew Vehicles will be fabricated and shall give undertaking to the effect that the fabrication works shall be fully insured against fire, theft, riots and burglary.
18. The firms should be financially sound and capable of undertaking fabrication of Fire Crew Vehicles within stipulated time given by the undersigned and no advance payments shall be made.

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19. A team of officers nominated by the department shall conduct stage wise inspection of Fire Crew Vehicles as regards its satisfactory fabrication and effective functionality of all fittings at the factory premises. Proper testing facilities of the appliances must be available at the factory site itself and must be provided by the fabricator at their cost. Any defect(s) noticed/pointed out by the above committee shall have to be rectified by the fabricator before acceptance of the fabricated Fire Crew Vehicles by the department. The payments for fabrication shall be paid only if the fabrication works in the opinion of the above committee and the accepting authority found satisfactory.
20. The earnest money in respect of unsuccessful tenderers shall be released soon after finalization of the tender. The earnest money of the successful tenderer shall be released after signing of the contract agreement and submission of security money/Bank Guarantee @ 5% of the total value within ten days from the date of issue of letter of acceptance of tender.
21. TDS/Income Tax against the supply order shall be deducted from the bill as per applicable rate.
22. The fabricator should have following pre qualification criteria:
- The tenderer should submit valid ISO certificate.
 - The tenderer should have minimum 3(three) years of experience on fabrication of Fire vehicles. Documents should be submitted in this regard.
 - The tenderer should be financially sound and necessary documents to this effect may be submitted.
 - The tenderer should have their Regional Office/Representative at NE region for immediate response and have better after sales and service support.
 - The Tenderer should submit valid trading license and GST registration certificate issued by the competent authority.
 - Any other documents related to the tender.
23. **The tenderer should submit undertaking regarding non blacklisting of his firm by any department/organization in India in last two years. The tender will be rejected if, the firm will not submit undertaking.**

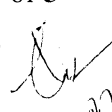
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24. The successful bidder shall not claim for additional fund in case of cost escalation of the items in the market.
25. The Fire Crew Vehicle duly fabricated as per specification shall have to be delivered within 90 (ninety) days from the date of issue of supply order. 50% of total vehicle should be delivered within 60 days from the date of issue of supply order, failing which 5% of the total value of the fabrication will be forfeited and the supply order will be cancelled.
26. The vehicles shall be guaranteed for a period of minimum 2(two) years for all manufacturing defects. During this period if any manufacturing defect develops in the vehicle, the same shall be repaired or replaced free of charge by the tenderer. The tenderer/manufacture should provide guarantee certificate of the vehicles at the time of delivery.
27. The tenderer shall furnish guarantee for the pump, Hose reel hose, material, workmanship and performance of the appliance and for all the equipment supplied, for a period of 3(three) years from the date of supply of the vehicle. The tenderer has to replace any part which may become unserviceable during this period due to substandard material/bad workmanship free of all charges. The manufacturer shall also ensure to provide the spares of all parts of the vehicle for repair and replacement for 5(five) years.
28. The materials/items installed in the vehicles should be IS marking.
29. The Director General of Fire & Emergency Services, Arunachal Pradesh, Itanagar reserves the right to reject the lowest or all or any of the tender without assigning any reason thereof.
30. In case of any dispute, legal jurisdiction shall be at Itanagar, Arunachal Pradesh.
31. In case of any bandh call on the date of opening of tender, the same will be opened on next working day.

NOTE:-26(twenty six) Nos. of Mahindra Bolero Camper Gold ZX BS6 vehicle shall be procured by the tenderer.


Director General
Fire & Emergency Services
Arunachal Pradesh
Itanagar


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TECHNICAL SPECIFICATION
FOR FABRICATION OF FIRE CREW VEHICLE

1. The Fire Crew vehicle with water mist fire fighting systems shall be fabricated on the vehicle Mahindra Bolero Camper Gold ZX BS6 shall be provided by the tenderer/fabricator. The driver's/Crew Cabin shall be the original cabin supplied by the vehicle manufacturer having seating capacity of 5(five) personnel.

2. **The Fire Crew vehicle with water mist fire fighting systems shall also capable for sanitization of area keeping in mind the Covid-19** outbreak shall have filling volume of 500 litres of water. It should have minimal requirements of space and weight while optimizing on manpower requirement and minimizing the water and other collateral damage to negligible in comparison to conventional water tender. The unit design is complete with opening roller shuttler and frame, which provide protection for the unit itself and easy transportation.

3. **GENERAL DESCRIPTION OF WATER MIST FIRE FIGHTING UNIT:**
 - 3.1 The Water Mist Fire fighting System shall be a self driven fire fighting unit operated with inbuilt petrol engine coupled to a pump and attached with a reducer, hose pipes and Mist generating Guns.

 - 3.2 The water mist system shall be capable of carrying 350 (three hundred) fifty litres of water and 50(fifty) litres of foam concentrate with a separate system to pump and mix the required ratio, which can be discharged in the form of a mist from a gun. The tank shall be made of Glass Reinforced Plastic (GRP).

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- 3.3 The system should have 1(one) no of 30 metres standard hose reel hose to deliver water to the scene of fire which shall be tested at 1.5 times the max working pressure of the system.
- 3.4 The discharge gun shall be of light weight having stainless steel/brass nozzle capable of producing Water Mist with the ability to control the discharge in short burst and long shots by means of a rotating collar in the gun. The gun shall have necessary handles to hold it properly for fire fighting.
- 3.5 The foam required shall be aqueous film forming foam (AFFF).
- 3.6 The unit shall have adequate provisions for safety of the system.

4. Main Pump of Water Mist Fire Fighting Unit.

- 4.1 The pump should be capable of suction of water from tank and to maintain adequate discharge rate and pressure for operation of nozzle at optimum efficiency.
- 4.2 Max. Pressure: 40 bars
- 4.3 Max flow: 70 l/min
- 4.4 Power of the engine : Not less than 13HP
- 4.5 Fuel: Unleaded Petrol

5. Secondary Pump (Water Sprayer Machine for sanitization purpose)

- 5.1 One portable sprayer pump/machine shall also be mounted on the vehicle for sanitization purpose separate from water mist system. Separate segment capacity of 100 litres in the main water tank shall be provided for this pump. The water sprayer pump/machine should have the following features:-
- i. Displacement (cc) - 40 cc and above.
 - ii. Power output (hp) - 2 hp and above.
 - iii. Weight (kg) - light weight.
 - iv. Working pressure (bar) - 5-40 bar.
 - v. Spray range - 3 meters and above
 - vi. Flexible 30 m spray hose with gun.

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6. Engine of the unit

- 6.1 The prime mover for pump shall be 4-stroke Petrol driven engine and shall have compatible electrical and lubrication system.
- 6.2 The engine should preferably be on 12V battery for which adequate charger shall also be provided.
- 6.3 Suitable electronic instruments shall be provided on the body of engine/ panel for fuel level, battery and temperature, pressure.
- 6.4 The engine must have electric starter and emergency manual starter

7. Foam Mixing System of Water Mist Fire Fighting Unit.

- 7.1 A suitable means shall be provided for mixing of foam from tank so that proportion for delivery remains constant and foam quality is maintained.
- 7.2 Size of foam tank: 50lts (Min) (included in the water tank).
- 7.3 Max. mixing: 6% (adjustable from 3 to 6%)
- 7.4 The foam should be mixed inside the pump NOT through a venturi system for a better mixing of foam.
- 7.5 The foam mixing system should prevent the return of foam inside the water tank and water to the foam tank.
- 7.6 The unit should be able to deliver a very good quality of low, medium and high expansion whatever the length of the hose.

8. Specification details of the complete unit.

- 8.1 Weight of empty 500 litres complete: <200 kgs(Max)
unit (including tanks pumping unit
piping, hose reel, etc.)
- 8.2 Capacity of the tank : 500 litres
- 8.3 Usable Water capacity : 450 litres (for Water mist pump 350
litres & for secondary pump 100litres)
- 8.4 Built in foam agent tank : 50 litres

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8.5 No. of deliveries : 1(one) No. for water mist Pump and
1(one) No. for secondary pump
(water sprayer machine)

9. Extinguishing Gun(Water/Foam) of Water Mist Fire Fighting Unit.

- 9.1 Weight of extinguisher gun: 2 kgs Max.
- 9.2 Gun Dimensions : As compact as possible.
- 9.3 Working pressure on the nozzle: 60 bars max with nominal reaction
- 9.4 Throw: Jet: Not less than 15m (+/- 10%), Spray: 6m (+/- 10%)
- 9.5 Hose reel: 30 meters (standard) on manual drum.
- 9.6 Max. set operating pressure: 40 bars
- 9.7 Mechanical water level indicator to be provided.

10. Main Water Tank

- 10.1 The water tank shall be made of Glass reinforced plastic (GRP) giving a free corrosion for life and a lightweight of the water mist system, having useable water storage capacity of 500 Litres properly baffled into segment to reduce water surge. The division of segment of water tank shall be, 350 litres for water mist pump, 100 litres for the water sprayer machine and 50 litres for foam. Both the pump unit should be connected with separate pipe line directly from water tank. There should be no inter connection of piping between these pumps and water tank.
- 10.2 The thickness of the water tank should be of 5mm minimum. Separate manhole of 330 mm for both the segment with overflow pipe for and an optical level of water should be part of the tank.
- 10.3 The tank should resist to the flame and be anti ignition complying with the following standards:-DIN 53438 - 3, FIAT 50433, FIAT 50433/01.

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10.4 The tank must be monolithic (one-piece design) to eliminate the problem of the limited mechanical resistance to lateral and centrifugal forces of the tank when vehicle driven on uneven ground. The details of materials of the tank along with specification shall be indicated in the bid.

11. Hose Reel Hose

- 11.1 The hoses provided in the system shall be high quality and shall be capable of holding the temp. ranges from -10°C to $+50^{\circ}\text{C}$.
- 11.2 The material specification, working pressure, test pressure and cracking pressure should be indicated for each type of hose.
- 11.3 The minimum length of each hose should be 30 M.
- 11.4 The seals and O-rings used in the system should be of synthetic material like Nitrite rubber of equivalent.

12. Safety Devices

- 12.1 The following safety device shall form part of equipment.
- The system will have proper heat & exhaust outlet for the engine without causing any interference to the operator while operating the unit.
 - Any other safety device which is felt to be necessary to be a part of the equipment.

13. Operating Conditions

- 13.1 Water Mist Fire fighting system shall operate satisfactorily under the following climatic conditions.
- Variation of ambient temperature from -10°C to 50°C with 98% relative humidity.
 - Dusty and corrosive atmosphere with dust content in air up to 1.6 gm/ cubic meter.
 - Altitude – Up to 3500m above Sea level.

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14. Marking

Marking shall give details of capacity, manufacturer's name, month/ year of manufacturing of the system etc.

15. Stowage.

- 15.1 Sufficient numbers of stowage's shall be provided in the vehicle.
- 15.2 Suitable clamps, brackets, holders etc. shall be provided in the stowage's.
- 15.3 A carrier of suitable dimension shall be provided on roof of the vehicle to carry raft/rubber boat etc.

16. Workmanship and finish

- 16.1 All parts of the appliance shall be of good workmanship and shall have streamlined finish. The vehicle shall be painted with good quality paint in Fire Red "DUPONT" make conforming to shade No.536 of IS:5-2007 as per clause No.5.2 of IS:10460-1983. The chassis shall be under coated with 2 coats of anticorrosive paint.
- 16.2 The vendor shall submit the drawings showing plan, section and elevation along with load distribution diagram of the appliance fully loaded with their offer. All material specification and quantity shall also be supplied along with their offer.

17. Accessories

- 17.1 Electric starter (Enabling the unit to be electrically started) - 1 No
- 17.2 Utility light 12V, 55W complete with telescopic bar mounted on the vehicle at suitable place - 1 No.
- 17.3 Complete control panel - 1 No
- 17.4 Hour counter - 1 No
- 17.5 Aspiration kit complete with 6 meters suction pipe – 1 No
- 17.6 Emergency light bar (Beacon light) with combination of red, blue and white on the roof of the cab with one electric siren (range 500m) would

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- be provided on the cabin roof top in the best suitable manner. The control of the light/siren would be provided on the dash board.
- 17.7 Sufficient light shall be provided in the stowage's and pump unit.
- 17.8 For water mist pump: one spare hose reel hose, 30 meters length and an extinguishing gun of same parameter should be provided.
- 17.9 For water sprayer pump: one spare hose reel hose, 30 meters length and an extinguishing gun of same parameter should be provided.

18. Affixing Department Name & Logo:

- 18.1 Name of the department, "**ARUNACHAL PRADESH FIRE & EMERGENCY SERVICES**" shall be painted on both sided of vehicle in letter of suitable size in golden yellow paint with black color shading.
- 18.2 Name of the Fire Station shall be painted at the rear of the vehicle in letter of suitable size in golden yellow paint with black color shading. List of Fire Station enclosed at Annexure-A.
- 18.3 The "LOGO" of the department shall be painted on both sides of the vehicle in natural colors at suitable place (doors). The logo is at Annexure-B.

19. Manufacturer's Guarantee Certificate:

- 19.1 The vehicles shall be guaranteed for a period of minimum 2(two) years for all manufacturing defects. During this period if any manufacturing defect develops in the vehicle, the same shall be repaired or replaced free of charge by the tenderer. The tenderer/manufacture should provide guarantee certificate of the vehicles at the time of delivery.
- 19.2 The Manufacture shall furnish guarantee for the pump, Hose reel hose, material, workmanship and performance of the appliance and for all the equipment supplied, for a period of 3(three) years from the date of supply of the appliance. The manufacturer has to replace any part which

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may become unserviceable during the above period due to substandard material/ bad workmanship free of all charges. The manufacturer shall also provides the spares of all parts for repair and replacement for 5(five) years.

19.3 The materials/ items installed on the vehicles should be IS marking.

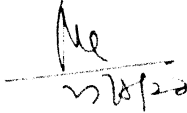
20. INSPECTION AND TESTS

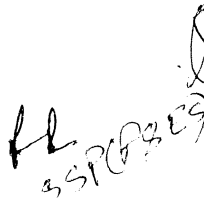
20.1 Stage wise inspections will be carried out from the department as regards its satisfactory fabrication and effective functionality of all fittings at the factory premises.

- i. First stage inspection shall be conduct before mounting of the complete unit.
- ii. Second stage inspection shall be conducted after mounting of the complete unit.
- iii. Any defect(s) noticed/point out by the committee shall have to be rectified by the fabricator before stall them ahead of the acceptance authority.
- iv. All necessary arrangements shall be arranged by the tenderer at the fabrication yard for the proper conduct of such inspections.

20.2 Layout of Pump unit to be mounted on Mahindra Bolero Camper Gold ZX BS6 is at Annexure 'C'.

20.3 Final Inspection for acceptance of Fire Crew Vehicles will be carried out at Itanagar.


Director General
Fire & Emergency Service
Arunachal Pradesh
Itanagar


SSP (F&ES) MTO (F&ES)

List of Fire Stations

| Sl.No | Name of Fire Station to be painted at rear side of the vehicle |
|-------|--|
| 1 | Fire Station, Itanagar Arunachal Pradesh |
| 2 | Fire Station, Naharlagun Arunachal Pradesh |
| 3 | Fire Station, Pasighat Arunachal Pradesh |
| 4 | Fire Station, Ziro Arunachal Pradesh |
| 5 | Fire Station, Daporijo Arunachal Pradesh |
| 6 | Fire Station, Dumporijo Arunachal Pradesh |
| 7 | Fire Station, Aalo Arunachal Pradesh |
| 8 | Fire Station, Basar Arunachal Pradesh |
| 9 | Fire Station, Likabali Arunachal Pradesh |
| 10 | Fire Station, Yingkiong Arunachal Pradesh |
| 11 | Fire Station, Seppa Arunachal Pradesh |
| 12 | Fire Station, Bomdila Arunachal Pradesh |
| 13 | Fire Station, Bhalukpong Arunachal Pradesh |
| 14 | Fire Station, Tawang Arunachal Pradesh |
| 15 | Fire Station, Khonsa Arunachal Pradesh |
| 16 | Fire Station, Changlang Arunachal Pradesh |
| 17 | Fire Station, Roing Arunachal Pradesh |
| 18 | Fire Station, Tezu Arunachal Pradesh |
| 19 | Fire Station, Namsai Arunachal Pradesh |
| 20 | Fire Station, Koloriang Arunachal Pradesh |
| 21 | Fire Station, Anini Arunachal Pradesh |
| 22 | Fire Station, Hawaii Arunachal Pradesh |
| 23 | Fire Station, Longding Arunachal Pradesh |

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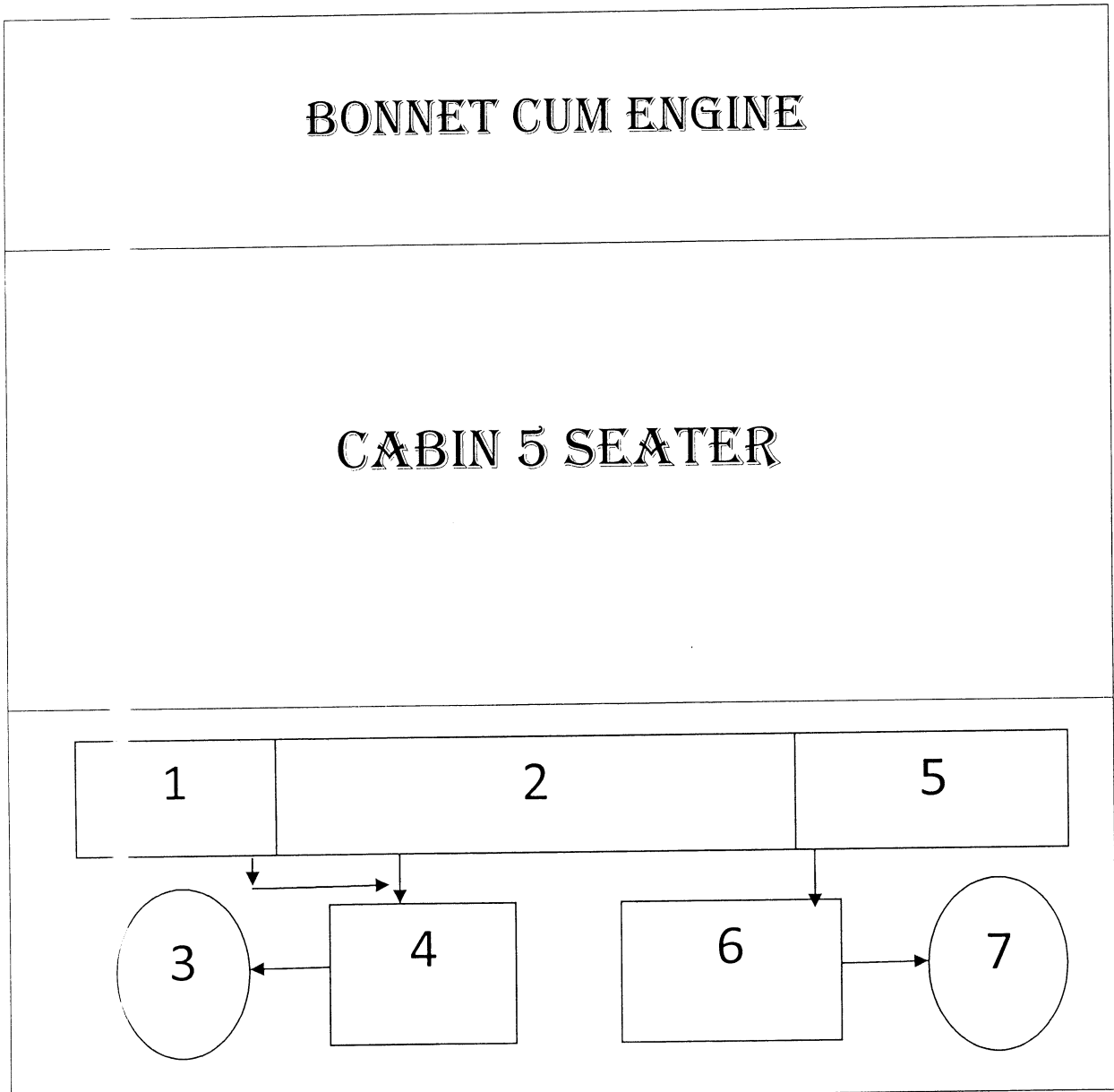


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31/10/2018 (PSES)

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4/11/2018 (PSES)

LAYOUT OF PUMP UNITS TO BE MOUNTED ON MAHINDRA BOLERO
CAMPER GOLD ZX BS6



INDEX:

1. FOAM TANK - 50 LTRS CAPACITY
2. WATER TANK - 350 LTRS CAPACITY
3. HOSE REEL WITH DRUM (LENGTH - 30 MTRS) CONNECTED WITH WATER MIST UNIT
4. WATER MIST PUMP
5. WATER TANK FOR SANITIZING - 100 LTRS CAPACITY
6. WATER SPRAYING MACHINE/PUMP CONNECTED WITH WATER TANK NO. 5
7. HOSE REEL WITH DRUM (LENGTH 30 MTRS) CONNECTED WITH WATER SPRAYING MACHINE.

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