

No. IV-15021/23/2014-Prov (MT) - 2080
भारत सरकार/Government of India
गृह मंत्रालय/Ministry of Home Affairs
पुलिस आधुनिकीकरण प्रभाग /Police Modernization Division
संभरण-I डेस्क/Prov.I Desk

26. Man Singh Road, Jaisalmer House.
New Delhi, the 15th December, 2016.

To,

DsG: AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject: Qualitative Requirements (QRs) and Trial Directives (TDs) of Mortuary Van for Referral Hospital of CAPFs – reg.

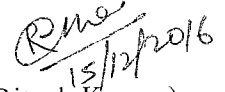
The QRs and TDs in respect of Mortuary Van for Referral Hospital of CAPFs, as per Annex-I and Annex-II respectively have been approved by the Competent Authority in MHA.

2. Henceforth, All the CAPFs should procure the above item required by them strictly as per revised laid down QRs/TDs.

3. Concerned CAPF will be accountable for correctness of the QRs/TDs of Mortuary Van.

Encl: As above.

Yours faithfully,



(Ritesh Kumar)

Under Secretary (Prov-I)

Tel: 2338 1278

✓ Copy forwarded for necessary action to:

Section Officer (IT), MHA: with the request to upload the instant QRs and TDs of Mortuary Van (copy attached) on the MHA website (under the page of Organizational Set up-Police Modernization Division-Qualitative Requirement under Hospital Equipment list). Soft copy is being sent through e-mail.



(V. Devadas)

Section Officer (Prov-I)

Copy to: DDG (Procurement), MHA

**FRESH QRs/SPECIFICATION IN RESPECT OF MORTUARY VAN PROPOSED FOR
REFERAL HOSPITAL CAPFS**

| S.No. | Parameter | Q.R./Specification |
|-------|--------------------------------|---|
| 1 | TECHNICAL SPECIFICATION | |
| | General | Vehicle should be 4x4 wheel drive meeting all latest CMVR Norms for transporting dead bodies. Vehicle should be suitable for continuous operation in tropical conditions. Bidder shall ensure that the vehicle offered complies with the stipulated requirements of law pertaining to operation of vehicles in India or any modification there in effect at the time of submitting bid. All items to be fully assemble with all the normal standard fitting and tested ready for immediate use. Engine & body of the vehicle should be adopted to various modifications to suite requirement as per area of deployment. |
| | Engine | i) Engine shall meet at least BS-III & above emission norms prescribed in latest CMVR, confirming to ARAI/SAE standard. ii) Gross power- Not less than 90 HP iii) Torque- Not less than 300 NM at 1500-1900 rpm |
| | Fuel Tank Capacity | Min 60 Ltrs |
| | Clutch | Single plate dry friction type |
| | Transmission | i) 5 speed manual gear box (Five forward & one reverse) ii) Transfer case- Twin speed. |
| | Steering | Integral Power steering. |
| | Brakes | Power assisted Hydraulic brakes or duel circuit full air – S cam brake |
| | Suspension | Mechanical/leaf spring/Semi-elliptical. |
| | Electrical | Rear i) Battery- Twin, 80AH maintenance free. ii) Alternator capacity Min. 80 Amp. |
| | Turning circle Radius | Not more than 08 mtr. |
| | Ground clearance | Not less than 220 mm |
| | Wheel & Tyres | Front -02, Rear- 04 and 01 spare of standard size |
| | Frame | Ladder type frame with riveted/botted cross member, side members are of channel section |
| | Overall dimensions | i) Length- 5000- 5500 mm ii) Width- 1800-2000 mm iii) Height- 2300 - 2800 mm |
| | Pay load | Not less than 2000 kg |
| | Special feature | Provision for Tow Hooks at front & rear. |
| | Documents & Tool | Provided with Tool Kit, Jack, workshop manual & service manual. |
| 2 | DRIVER CABIN | 01 Driver seat, 01 co-driver seat and 02 passenger seat provided with safety belts. Open/close door left and right with key lock. Space for one battery box (accommodating two batteries and a UPS) will be placed in remaining space between the two passenger seats. Two Nos. 80 Ampere Hours Battery, maintenance free. |

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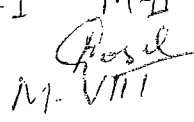
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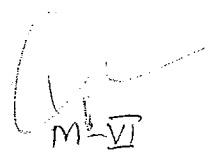
| 3 | | BODY SPECIFICATIONS - |
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| | Body cabin | To be fully closed on all sides with doors only on the rear side and long seat to accommodate- 05 persons (guard) at a time. Separate partition with glass panels between driver cabin and body cabin. Fitted with mounting pads for keeping stretcher with manual lock. |
| | Structure | Main structure of the body shall be welded. |
| | Panels | Exterior- Side and roof aluminum sheet. Interior- GI pre-painted panels |
| | Flooring | Flooring shall made of ISI marked BWR grade plywood with vinyl. |
| | Seats | Co-driver seat tiltable- Attendant seats- 02 Nos each in rear saloon. Stretcher bed cum seat- 02 stretcher bed cum seat. (01 upper folding and 01 lower fixed) Optional- 02 stretcher |
| | Doors | Driver door : flap type on RHS Co-driver door : flap type on LHS Rear door : twin flap type with fixed Toughened glass & locking mechanism manually operated. |
| | Glasses | Window: plain toughened glass two layer to withstand all weather condition. Glass provided are ARAI approved. Front wind shield : single piece curved Laminated clear glass : Rear glasses : Plain toughened glass in two pieces at rear gliding sideward. |
| | Rear saloon fitment | Roof lamps |
| | Other fitments | Fan fitting :- 02 each sides. |
| | Paint | PU Paint SWAN white |
| 4 | Specification for freezer box for (single body) | i) Type : fixed type ice box(freezer Box) ii) Size: a) Ice Box inner size- 79"x23"x25"(LxBxH) b) Ice box outer size- 81"x25"x27"(LxBxH) iii) Fabrication material to be used :- The system should fabricated by stainless steel mater with the thickness of 18G and 304 grades. iv) Door :- The freezer box should be provided with front door with insulation puff 2" thickness. The door should be able to open outward. Lock should be provided for the door with key. v) Cooling system :- The cooling system should have supported by compressor and should be run through vehicle engine. The suitable wiring connection and accessories if any to be provided. The condenser shall be fitted on the top of the vehicle at appropriate place to avoid damage during transit. The system should provide agitation fan for the use of conventional ice tray. Should have adequate cooling capacity to maintain 01 degree Celsius inside the Ice Box chamber. vi) Accessories to be provided with the unit : a) The unit should have stretcher with wheel. The stretcher should glide easily into the freezer box with the body and it should get accommodated it entire breadth and length. b) The system should have conventional Ice tray with size of 78"x22x4"(LxBxH) vii) Other requirement- |


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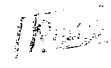



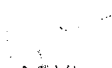


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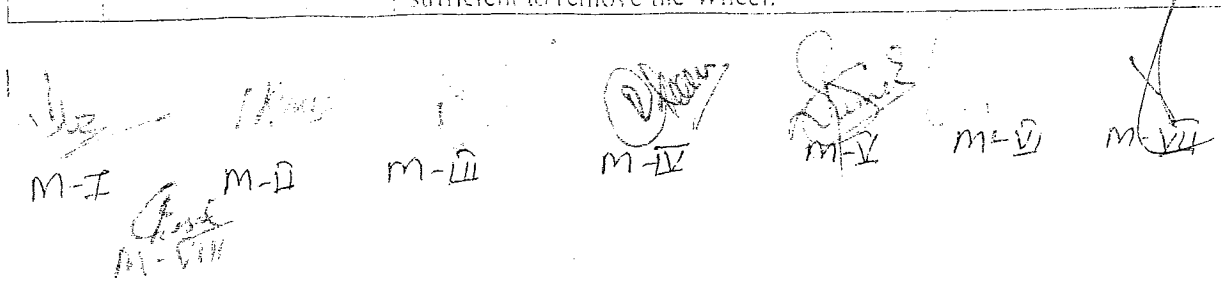
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| | | <ul style="list-style-type: none"> a) The total system should be fixed inside the mortuary van. necessary fitting items also to be mentioned and supplied. b) The system should have compatibility to work in all conditions during the transit time. necessary shock absorber ability shall be provided to avoid damage to the unit due to heavy vibrations. c) The system should be suitable for operation in temperature 10 degree C to 50 degree with relative humidity of 100%. d) System offered shall be adequately protected and be able to withstand the prevailing climate in all over India e) System performance should not be affected by electromagnetic interference radiated or conducted through power lines from another device. f) System should have no sharp edges. should be securely mounted and should provide adequate protection against moving and electrically in energized parts. g) Controls(e.g. switches, knobs) should be visible and clearly indentified. h) Labels and marking should be clear and visible. i) System should be simple to use, operate and maintain. It should be designed for easy access to serviceable parts. j) Backup power 2-3 Hours. k) Long term preservation of bodies l) No emission of foul smell. <p>viii) Packing and storage-</p> <ul style="list-style-type: none"> a) Packing of the system should be easy to open and well labeled and marked with devices. b) System should be able to withstand temperature and humidity extremes likely to be encountered during storage and transportation. c) Bidders may please indicate standards(s) with which the product complies. Alternately bidders may indicate that their device is registered with a national or international medical device regulation agencies such as USFDA or EUMDD which assures that the product meets GMP, performance and safety. d) Freezer box(single body) for mortuary van. for Hearse service own make confirming to the above specification. with components of the freezer box covered under Indian Standard Specification. |
| 5 | Partition Wall | <ul style="list-style-type: none"> i) The partition between the Driver and Deceased Compartments will be at a distance(L=3200mm) from the Rear door's inner trim. ii) Will be of 3/4" MS Square Section Pipe frame structure and will have. <ul style="list-style-type: none"> 1. Proper Opening space of AC Air suction window at a Given height (1500mm. minimum) 2. Fixture to fit AC Evaporator with Blowers Unit, to fit comfortably within given Height. 3. A minimum opening (width-800mm. Height-300mm) to accommodate window in between the two compartments. 4. Space for fitting Exhaust(6"-8") Fan to Fit in properly. |

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| 6 | Deceased Compartment with Freezer Box. | <ul style="list-style-type: none"> i) Stretcher bed- 02 stretcher beds in two tires (1 upper folding and 1 lower fixed. ii) There should be no requirement to keep such opening from inside this compartment (neither on floor nor on any other walls) which would be necessary for servicing the vehicle under any circumstances. iii) No Battery space in this compartment. iv) The flooring level (outness/flatness) should be maintained within fabrication standards limits (or must suitably within ± 1.5mm at any remote two points on the floor). v) Flooring should be evenly and properly reinforced vi) There should be no projected parts vii) Rear Door Trim. viii) Grab Handle. Both doors Both Sides. ix) Inner Locking knob for RHS door. x) Shooting Bar Type Lock, with single Handle to Operate and which operates both sides (up and down) for locking LHS door from inside. xi) Fixed Glass type Rear Side Windows xii) Rear side window with a approx 500mm height by 500mm width at a distance of 300mm (approx) from the rear door and at a 875mm approx height from the floor. xiii) The lower ledge of the side windows should be in line with the rear door window's lower edge. xiv) Any supporting reinforcement from inside to protect the vehicle against any side Damages. xv) Firm Rear Door Hinges. xvi) Gap between door and flooring should be just enough to accommodate the sheet and mating without extra gap left further and air light. xvii) The compartment should have minimum possible gaps between the door edges. xviii) All the welding Joints should be properly coated with anti rust coating. xix) No unfinished joints are left open without finishing and de burring. xx) All electrical wiring harness should be properly secured and have safe route. |
| 7 | Exterior Issues | <ul style="list-style-type: none"> i) Body parts should not obstruct the serviceability of the parts like Wipers, fuel tank Unit, Spare wheel, head lights, Horn, Filters. ii) Rear Foot step should be comfortably placed in terms of height (around 360mm from ground) and placing of the foot to be 150mm (± 10mm) wide. iii) The width of the Rear Feet Step should be minimum 1500mm distributed equally on both the sides. iv) Joint less appearance from all over. v) Over all Finish and the integration of the Sheet Joints, shoulder joints, proper radius, uneven sheet, mismatch etc. vi) The overall skirting level of the vehicle should be inline or above the Axle line. And should be properly reinforced from inside and finished. vii) Spare wheel removal should take Maximum 10 Minutes to complete Cycle (from wheels removal to replacing the wheels) viii) Clear Spare wheel removal passage. Wheel arch radius to be sufficient to remove the Wheel. |



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- ix) To remove the spare wheel an opening for wheel spanner to get in to drive the ratchet up and down in order to handle the wheel.
- x) Both the rear Doors should have 270 degree securing mechanism to hold them on Outer side walls while the Rear passage is being used in vehicle stationary condition.
- xi) Smoothness of Color Painted from all over.
- xii) Fuel Tank Serviceability.
- xiii) Serviceability of Head Lights, Horn, Filters.
- xiv) Mud Flap on all the Four Tyres properly fitted and secured.
- xv) Under Hood Serviceability.
- xvi) Under Body Serviceability.
- xvii) Easy in Oil Change of all kinds.

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DIRECTOR GENERAL
I.T.B. POLICE

TRIAL DIRECTIVE IN RESPECT OF MORTUARY VAN PROPOSED FOR REFERAL HOSPITAL CAPFS

Date of Trial.....
 Time of Trial.....
 Place of Trial.....
 GR of Trial Area.....

Temperature.....
 Altitude.....
 Weather Condition.....


(Vehicle should be suitable for continuous operation in tropical conditions)

| S. No. | Parameter | Specification | Procedure Suggested for Trial | Result expected/desired |
|--------|--------------------------------|--|-------------------------------|-------------------------|
| 1 | TECHNICAL SPECIFICATION | | | |
| | General | Vehicle should be 4x4 wheel drive meeting all latest CMVR Norms for transporting dead bodies. Vehicle should be suitable for continuous operation in tropical conditions. Bidder shall ensure that the vehicle offered complies with the stipulated requirements of law pertaining to operation of vehicles in India or any modification there in effect at the time of submitting bid . All items to be fully assemble with all the normal standard fitting and tested ready for immediate use. Engine & body of the vehicle should be adopted to various modifications to suite requirement as per area of deployment. | | |
| | Engine | i) Engine shall meet at least BS-III & above emission norms prescribed in latest CMVR, confirming to ARAI/SAE standard. ii) Gross power- Not less than 90 HP iii) Torque- Not less than 300 NM at 1500-1900 rpm | | |
| | Fuel Tank Capacity | Min 60 Ltrs | | |
| | Clutch | Single plate dry friction type | | |
| | Transmission | i) 5 speed manual gear box (Five forward & one reverse) ii) Transfer case- Twin speed. | | |
| | Steering | Integral Power steering. | | |
| | Brakes | Power assisted Hydraulic brakes or duel circuit full air – S cam brake | | |
| | Suspension | Mechanical/leaf spring/Semi-elliptical. | | |
| | Electrical | Rear i) Battery- Twin, 12V 80AH maintenance free. ii) Alternator capacity Min. 80 Amp. | | |
| | Turning circle Radius | Not more than 08 mtrs | | |

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| | Ground clearance | Not less than 220 mm | | |
| | Wheel & Tyres | Front -02, Rear- 04 and 01 spare of standard size | | |
| | Frame | Ladder type frame with riveted/botted cross member, side members are of channel section | | |
| | Overall dimensions | i) Length- 5000- 5500 mm ii) Width- 1800-2000 mm iii) Height- 2300 - 2800 mm | | |
| | Pay load | Not less than 2000 kg | | |
| | Special feature | Provision for Tow Hooks at front & rear | | |
| | Documents & Tool | Provided with Tool Kit, Jack, workshop manual & service manual. | | |
| 2 | DRIVER CABIN | 01 Driver seat, 01 co-driver seat and 02 passenger seat provided with safety belts. Open/close door left and right with key lock. Space for one battery box (accommodating two batteries and a UPS) will be placed in remaining space between the two passenger seats. Two Nos 80 Ampere Hours Battery, maintenance free. | | |
| 3 | BODY SPECIFICATIONS - | | | |
| | Body cabin | To be fully closed on all sides with doors only on the rear side and long seat to accommodate- 05 persons (guard) at a time. | | |
| | | Separate partition with glass panels between driver cabin and body cabin. | | |
| | | Fitted with mounting pads for keeping stretcher with manual lock. | | |
| | Structure | Main structure of the body shall be welded. | | |
| | Panels | Exterior- Side and roof aluminum sheet. Interior- GI pre-painted panels | | |
| | Flooring | Flooring shall made of ISI marked BWR grade plywood with vinyl. | | |

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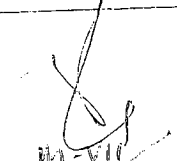

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| | Seats | Co-driver seat tiltable- Attendant seats- 02 Nos each in rear saloon. Stretcher bed cum seat- 02 stretcher bed cum seat. (01 upper folding and 01 lower fixed) Optional- 02 stretcher | | |
| | Doors | Driver door : flap type on RHS Co-driver door : flap type on LHS Rear door : twin flap type with fixed Toughened glass & locking mechanism manually operated. | | |
| | Glasses | Window: plain toughened glass two layer to withstand all weather condition. Glass provided are ARAI approved. Front wind shield : single piece curved Laminated clear glass : Rear glasses : Plain toughened glass in two pieces at rear gliding sideward. | | |
| | Rear saloon fitment | Roof lamps | | |
| | Other fitments | Fan fitting :- 02 each sides. | | |
| | Paint | PU Paint SWA: white | | |
| 4 | Specification for freezer box for (single body) | <p>i) Type : fixed type ice box(freezer Box)</p> <p>ii) Size: a) Ice Box inner size- 79"x23"x25"(LxBxH) b) Ice box outer size- 81"x25"x27"(LxBxH)</p> <p>iii) Fabrication material to be used :- The system should fabricated by stainless steel mater with the thickness of 18G and 304 grades.</p> <p>iv) Door :- The freezer box should be provided with front door with insulation puff 2" thickness. The door should be able to open outward. Lock should be provided for the door with key.</p> <p>v) Cooling system : - The cooling system should have supported by compressor and should be run through vehicle engine. The suitable wiring connection and accessories if any to be provided. The condenser shall be fitted on the top of the vehicle at appropriate place to avoid damage during transit. The system should provide agitation fan for the use of conventional ice tray. Should have adequate cooling capacity to maintain 01 degree Celsius inside the Ice Box chamber.</p> <p>vi) Accessories to be provided with the unit :</p> <p>c) The unit should have stretcher with wheel. The stretcher should glide easily into the freezer box with the body and it should get accommodated it entire breadth and length.</p> <p>d) The system should have conventional ice tray with size of - 78"x22x4"(LxBxH)</p> <p>Other requirements</p> | | |

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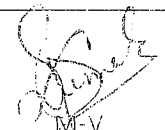
- m) The total system should be fixed inside the mortuary van, necessary fitting items also to be mentioned and supplied.
- n) The system should have compatibility to work in all conditions during the transit time, necessary shock absorber ability shall be provided to avoid damage to the unit due to heavy vibrations.
- o) The system should be suitable for operation in temperature 10 degree C to 50 degree with relative humidity of 100%
- p) System offered shall be adequately protected and be able to withstand the prevailing climate in all over India.
- q) System performance should not be affected by electromagnetic interference radiated or conducted through power lines from another device.
- r) System should have no sharp edges, should be securely mounted and should provide adequate protection against moving and electrically energized parts.
- s) Controls(e.g. switches, knobs) should be visible and clearly indentified.
- t) Labels and marking should be clear and visible.
- u) System should be simple to use, operate and maintain. It should be designed for easy access to serviceable parts.
- v) Backup power 2-3 Hours.
- w) Long term preservation of bodies
- x) No emission of foul smell.
- viii) Packing and storage-
 - e) Packing of the system should be easy to open and well labeled and marked with devices.
 - f) System should be able to withstand temperature and humidity extremes likely to be encountered during storage and transportation.
 - g) Bidders may please indicate standards(s) with which the product complies. Alternately bidders may indicate that their device is registered with a national or international medical device regulation agencies such as USFDA or EUMDD which assures that the product meets GMP, performance and safety.
 - h) Freezer box(single body) for mortuary van, for Hearse service own make confirming to the above specification, with components of the freezer box covered under Indian Standard Specification.

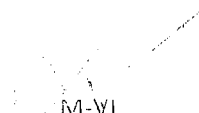

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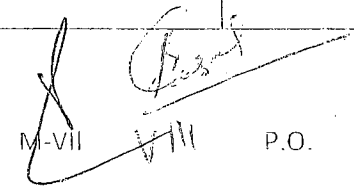

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| 5 | Partition Wall | <ul style="list-style-type: none"> i) The partition between the Driver and Deceased Compartments will be at a distance(L=3200mm) from the Rear door's inner trim. ii) Will be of 3/4" MS Square Section Pipe frame structure and will have. <ul style="list-style-type: none"> 5. Proper Opening space of AC Air suction window at a Given height (1500mm. Minimum) 6. Fixture to fit AC Evaporator with Blowers Unit, to fit comfortably within given Height. 7. A minimum opening (width-800mm, Height-300mm) to accommodate window in between the two compartments. 8. Space for fitting Exhaust(6"-8") Fan to Fit in properly. | | |
| 6 | Deceased Compartment with Freezer Box. | <ul style="list-style-type: none"> i) Stretcher bed- 02 stretcher beds in two tires (1 upper folding and 1 lower fixed. ii) There should be no requirement to keep such opening from inside this compartment (neither on floor nor on any other walls) which would be necessary for servicing the vehicle under any circumstances. iii) No Battery space in this compartment. iv) The flooring level(out ness/flatness) should be maintained within fabrication standards limits (or must suitably within +/- 1.5mm at any remote two points on the floor.) v) Flooring should be evenly and properly reinforced vi) There should be no projected parts vii) Rear Door Trim. viii) Grab Handle, Both doors Both Sides. ix) Inner Locking knob for RHS door. x) Shooting Bar Type Lock, with single Handle to Operate and which operates both sides (up and down) for locking LHS door from inside. xi) Fixed Glass type Rear Side Windows xii) Rear side window with a approx 500mm height by 500mm width at a distance of 300mm (approx) from the rear door and at a 875mm approx height from the floor. xiii) The lower ledge of the side windows should be in line with the rear door window's lower edge. xiv) Any supporting reinforcement from inside to protect the vehicle against any side Damages. xv) Firm Rear Door Hinges. xvi) Gap between door and flooring should be just enough to accommodate the sheet and mating without extra gap left further and air light. xvii) The compartment should have minimum possible gaps between the door edges. xviii) All the welding Joints should be properly coated with anti-rust coating. xix) No unfinished joints are left open without finishing and de-couring xx) All electrical wiring harness should be properly secured and have safe route. | | |

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Exterior Issues

- i) Body parts should not obstruct the serviceability of the parts like Wipers, fuel tank Unit, Spare wheel, head lights, Horn, Filters.
- ii) Rear Foot step should be comfortably placed in terms of height(around 360mm from ground) and placing of the foot to be 150mm(± 10mm) wide.
- iii) The width of the Rear Feet Step should be minimum 1500mm distributed equally on both the sides.
- iv) Joint less appearance from all over.
- v) Over all Finish and the integration of the Sheet Joints, shoulder joints, proper radius, uneven sheet, mismatch etc.
- vi) The overall skirting level of the vehicle should be inline or above the Axle line. And should be properly reinforced form inside and finished.
- vii) Spare wheel removal should take Maximum 10 Minutes to complete Cycle (from wheels removal to replacing the wheels)
- viii) Clear Spare wheel removal passage. Wheel arch radius to be sufficient to remove the Wheel.
- ix) To remove the spare wheel an opening for wheel spanner to get in to drive the ratchet up and down in order to handle the wheel.
- x) Both the rear Doors should have 270 degree securing mechanism to hold them on Outer side walls while the Rear passage is being used in vehicle stationary condition.
- xi) Smoothness of Color Painted from all over.
- xii) Fuel Tank Serviceability.
- xiii) Serviceability of Head Lights, Horn, Filters.
- xiv) Mud Flap on all the Four Tires properly fitted and secured.
- xv) Under Hood Serviceability.
- xvi) Under Body Serviceability.
- xvii) Easy in Oil Change of all kinds.


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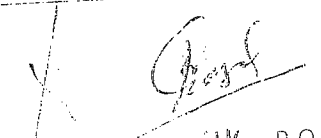

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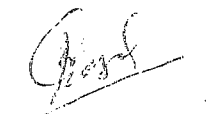

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APPROVED


DIRECTOR GENERAL
I.T.B. POLICE