

# HIACE AMBULANCE



## **OUR COMPANY**

Spectrum was founded in Dubai, UAE to become the world's leading producer and supplier of life safety solutions. By recognizing the importance and convenience of having easy access to multiple safety services, we became specialized by offering complete solutions under one roof for all types of high quality firefighting equipment, fire protection systems, fire alarms, addressable emergency systems, security systems, custom-made vehicles such as fire trucks, ambulances, mobile hospitals and airport rescue firefighting vehicles (ARFF).

With the most talented and dedicated employees from around the world, Spectrum has over 2,000 passionate t engineers and over 6.5 million square feet of manufacturing facilities. We are currently exporting to over 100 countries worldwide.

Spectrum manufactures UL, FM, BSI & Global Mark approved products in our facility in consistent with International Standards UL-DQS, BSI certifies for the Quality Management System against ISO 9001. Our Environmental (ISO 14001) & Occupational Health & Safety (ISO 45001) Management Systems have been certified by UL-DQS. Our Trucks & Vehicles division has been assessed & certified for Quality Management System requirement for Aviation, Space & Defense organization (AS 9100) by UL-DQS.

Our success is driven by our passion to protect; our vision is to become the world's number one provider of innovative solutions in protecting life, environment and property.

# **CERTIFICATES**





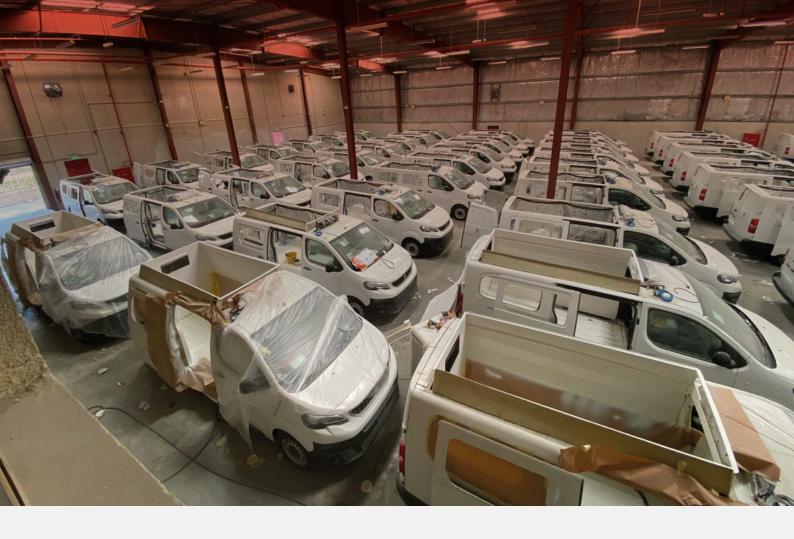


Spectrum Vehicles Division maintain Quality, Environmental and Safety Management Systems.

Compliance to AS 9100C ensures that there is a robust design process to meet safety and reliability requirements to the standards of the aerospace industry and that each

phase of product realization, from planning to shipment, is tightly controlled for delivery of conforming product.

It also ensures adequate Product Monitoring and measurement that defines requirements for product validation prior to shipment.

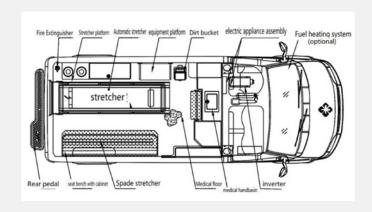


### **ENGINEERING**

Spectrum extensive experience of safety and emergency and applications acquired over the last 25 years has been instrumental in the establishment and rapid development of the trucks division.

The division is supported by our state-of-the-art technology and software allowing for extensive research and development into optimum configurations for maximum space utilization, engine power performance, on road efficiency and safety/security features. Spectrum has a qualified R&D team to incorporate latest technologies and trends in the field.

These powerful in-house resources have enabled our engineers to simulate designs in both static and dynamic views while paying particular attention to load displacement to ensure a reliable vehicle both on-road and off-road depending on the required application.







# **MANUFACTURING**

Spectrum manufacturing department has the latest technology, state-of-the-art machines (CNC machines, hydraulic shearing and bending machines, all types of welding machines - MIG, TIG, ARC etc.), and a complete machine shop that make us meet the needs of any production requirement.

Spectrum has the ability to introduce the latest technological systems & equipment in the field, as our engineers and technicians are well qualified & experienced to produce quality products.







# QUALITY CONTROL & AFTER-SALES DEPARTMENT

To empower customers to secure Life, Property and Business by delivering high quality and innovative protection solution using world class manufacturing process with the finest engineering technology.

Spectrum is committed for working towards continuous improvement with the aim of meeting with customer requirements and expectations. Spectrum is committed to comply with requirements and continually improve the effectiveness of the quality management system. A dedicated team of quality control department to coordinate material incoming/in process and final inspection in accordance with ISO-9000 procedures is also a remarkable asset of Spectrum .

Spectrum, not only offers a product, but also back-up what we sell with full servicing, maintenance and training options.

We have a separate department totally dedicated for maintenance of Firefighting Systems and Equipment. We offer the service of our Engineers and Technicians round the clock (24 hours) for emergency requirements.

Further, we also undertake annual and half-year maintenance contracts, which will ensure the smooth functioning of the various Firefighting System and Equipment throughout the year.



# **TRAINING**

Our Biomedical Engineers are technically qualified team which works collaboratively with researchers of Medical devices for use in the clinical and research settings. They are keeping up to date with new developments in the field locally and globally.



# **MAINTENANCE**

Our sales department is run by experienced and passionate team who are well aware of customers' requirements and maintain excellent customer relations to promote the different medical products we represent.



# **AFTER SALES**

Maintain a high level of customer satisfaction in partnership with our engineers and sales team, in the delivery of a support service to our customers which exceeds their expectations in professionalism, solution provision and turnaround. They provide technical assistance when required, to promote the use of products.

# **BODY AND GENERAL CONSTRUCTION**









1 x Folding Stretcher (ShieldMedica)



1x First Aid Kit



Ambulance Flooring: The ambulance flooring is covered with marine-grade plywood, heavy-duty vinyl anti-slip, anti-static and liquid-proof.



Medical Cabinet: On street-side of the Ambulance a full-length Medical Cabinet is installed made of GRP, the Cabinet is divided into two sections. Upper section consists of four lockable compartments made of GRP materials and polycarbonate doors that are opening upwards.

#### **AIR Conditioning**

Separated A/C system for the patient compartment





Partition: A glass-reinforced plastic (GRP) covered bulkhead is installed between driver and patient compartment. The bulkhead is made of plywood-coated with both sides with 3 mm GRP. A sliding window fitted on the Bulkhead.



**Squad Bench**: A Squad Bench mounted on the kerbside of the ambulance able to accommodate three persons with individual backrest. Body of the bench is made of GRP at bottom with lid, assisted by gas struts for easy operation.



**SUCTION ASPIRATOR**: The ambulance is equipped with an on-board Aspirator with one 1,000 ml receptacle. An electric Vacuum Pump 12 V driven is mounted under action-area in order to provide vacuum to Aspirator.



**CENTRAL OXYGEN SYSTEM**: The ambulance is fitted with a central Oxygen System,  $2 \times 48$  CFT Capacity Oxygen Cylinder. The System has one self-standing BS Oxygen Outlet in the action-area.

#### Notes:

- The Outlets are provided with Regulator, Flowmeter, Humidifier, and Mask.
- One 48 ft3 Capacity Spare Cylinder is supplied as a Spare

## **ELECTRICAL SYSTEM**

In Addition to the standard electrical system of the vehicle in accordance with international and local traffic regulations, the following are fitted:



#### LIGHT-BAR

One LED Light-Bar on cabin roof (Red/Blue) with PA system



#### **LOADING & INTERNAL LIGHTS**

Internal Roof Lights, 12 V, LED, White Light, CE Approved, IP67. One Loading Light at the rear.



#### **WARNING LIGHTS**

Ten (10) Red LED warning lights all around the ambulance. Three (3) at each side, two (2) at the grills.



#### **ROOFTOP VENTILATOR** (G&C LE MANS)

One roof-mounted 12 V electric Ventilator Fan for suction/ blowing function.



#### MAP READING LIGHT

One Map Reading Light in the action-area.



#### 12 V DC POWER SOCKET WITH PLUG / 12 V SOCKETS POWER



#### **CONTROL PANELS & SYSTEM**

All Electrical Controls are arranged into two ergonomically designed Switch Panels located in action-area and driver cabin.



#### **AUDIBLE WARNING/PA SYSTEM**

Electronic Siren with amplifier and electro-magnetic speakers



#### SHORELINE

**OUTLETS** 

Auto-Eject Shoreline weatherproof Outlet Plug (220/240 V) fixed at exterior part of the ambulance



#### **BATTERY**

Additional Battery 12V DC 100AH Maintenance free



#### **BATTERY CHARGER**

12DC 15 Amps Battery charge.



#### **INVERTER**

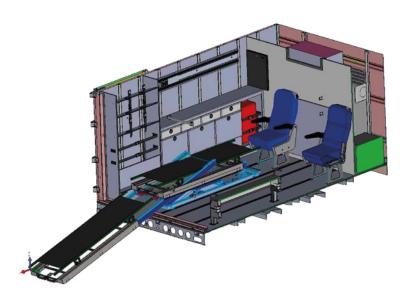
12V DC/220V AC Inverter 400 Watts.

## MANDATORY EQUIPMENT

Two ABC dry chemical powder (DCP) minimum 2 kg (5 lb) unit, in a quick-release bracket. One mounted in the patient compartment.

'No Smoking' signs 'Fasten Seatbelt' signs are provided in two clearly visible areas inside the ambulance. One Hazard Warning Triangle





# **3D Layout**

#### NOTES:

Spectrum reserves the right to introduce minor changes to improve operational and performance related aspects of the vehicle and if also necessary to supply equivalent equipment/components if they should become unavailable or obsolete.

Pictures and unit locations are presented for reference purpose only. Actual units may differ.

All Oxygen Cylinders will be shipped empty.

# **PAINT & DECALS**

Body Colour: Main Body – White

Decals: Standard Ambulance Decal with night-time visibility, micro-prismatic reflective material. Ambulance Decal includes the following:

- 'Ambulance' in rear
- Reverse Ambulance on the front bonnet
- Red Stripe on both sides



# **AMBULANCE CONVERSION**

# AMBULANCE CONVERSION ON TOYOTA HIACE HIGH ROOF VAN (CLIENT SUPPLIED VAN)

In Addition to the standard electrical system of the vehicle in accordance with international and local traffic regulations, the following are fitted:

	Description	Basic Option	Medium Option	Advance Option
11	Main Stretcher with automatic folding legs and side support rails made of anodised aluminium. Non-magnetic type with back-rest. Shield Medica (UK) or equivalent (ISO certified standards)  Mattress: flame-retardant and easy-to-clean, Support belts for quick fixing, Locking/fixing device to prevent stretcher movement during transport.  IV Holder: Foldable type	Included	Included	Included
1.2	Heavy-duty Foldable secondary stretcher made of aluminium alloy fixed underneath the squad bench, Orange colour. Brand Shield Medica (UK) or equivalent (ISO certified standards)	Included	Included	Included
1.3	Polythene Spinal board with straps and rapid unhooking buckle, Orange colour. Brand BullDozer (UK) or equivalent (ISO certified standards)	Included	Included	Included
1.4	First-aid kit	Included	Included	Included
1.5	Full-length GRP medical cabinet on street-side with storage compartment having polycarbonate sliding doors. Controls panel for patient cabin integrated with medical cabinet next to EMSP seat for easy access. Open storage space with strapping for medical equipment in the cabinet. Access panel for electrical components provided in the lower part of the GRP cabinet.	Included	Included	Included
1.6	A Squad Bench mounted on the kerbside of the ambulance able to accommodate three persons with individual backrest. Body of the bench is made of GRP at bottom with lid, assisted by gas struts for easy operation.	Included	Included	Included
1.7	EMSP Seat One fully reclinable swivel emergency medical services provider (EMSP) Seat sliding, ergonomically correct seat back with lumbar support, minimise neck and back injuries with the extra headrest (ISO certified standard). Features below:  • Adjustable armrest for both sides • Cover with easy clean vinyl upholstery • 3-point safety-belt for maximum safety and seating comfort Heavy-duty double locking slide track with wrap-around release bar can be released quickly and easily with either hand (travel app. 190 mm) incline 14° back side with locking system for each position.	Included	Included	Included
1.8	Partition wall made of glass-reinforced plastic (GRP) Bulkhead coated white colour material with a slide window.	Included	Included	Included
1.9	Flooring is covered with marine-grade plywood, 12 mm thick, heavy-duty vinyl anti-slip, anti-static, washable and liquid-proof (Navy Blue colour)	Included	Included	Included
1.10	LED type lights, 12 V, White, CE Approved, IP67 fixed on ceiling in passenger compartment.	Included	Included	Included
1.11	Intravenous (IV) feeding holder having two hooks fixed on the roof on movable locking type track made of aluminium.	Included	Included	Included
1.12	Roof-mounted 12 V electric ventilator with fan for suction/blowing function: 1 No. (Water-proof, Mushroom type, EU or US make)	Included	Included	Included
1.13	Grab rail made of stainless steel 01 No fixed to the ceiling in patient compartment.	Included	Included	Included
1.14	Stainless steel Grab bar fixed on rear door entry: 02 Nos and side door entrance: 1 No.	Included	Included	Included
1.15	Central Oxygen pipeline system with quick disconnect couplings fitted with 1 No 48 ft <sup>3</sup> capacity oxygen cylinders with regulator, socket and flow valve (CE Certified)	_	Included	Included
1.16	Portable Oxygen system (1 X D size, portable oxygen therapy inhaler kit with regulator, socket and flow valve)	Included		
1.17	Suction Unit: Eqipped with an on-board Aspirator with 1,000 ml receptacle. An electric Vacuum Pump 12 V driven is mounted under action-area in order to provide Vacuum to Aspirator. (Rico RS-4)	Included	Included	Included
1.18	Frosted Glass 2/3 on rear and sides	Included	Included	Included

# AMBULANCE CONVERSION ON TOYOTA HIACE HIGH ROOF VAN (CLIENT SUPPLIED VAN)

Two ABC dry chemical powder (DCP) minimum 2 kg (5 lt) unit, in a quick-release bracket. One mounted in the driver/cab compartment or in the body reachable from outside the vehicle, one in the patient compartment. (CE or UL certified)  120  LED Patient lamp 12 V LED, flexible type: 1 No (Map light)		Description	Basic Option	Medium Option	Advance Option
Sharps Disposal: 1 No plastic container for sharps disposal in action-area provided in the patient compartment, yellow colour  122 Shoreline Weather proof Outlet plug (240 / 220 V or 110 V depending on country of use) fixed at exterior part of ambulance and 10 metre cable  123 Loading Light 1No to be fixed at the rear  124 02 × LED lights to be fixed inside front grille of ambulance  125 Included	1.19	quick-release bracket. One mounted in the driver/cab compartment or in the body reachable from outside the vehicle, one in the patient	Included	Included	Included
provided in the patient compartment, yellow colour    122	1.20	LED Patient lamp 12 V LED, flexible type: 1 No (Map light)	Included	Included	Included
country of use) fixed at exterior part of ambulance and 10 metre cable  123 Loading Light 1No to be fixed at the rear  124 02 × LED lights to be fixed inside front grille of ambulance  125 Included  126 Multi-flashing LED light bar in Red or (Red and Blue) lens colour (fixed on roof in front) consisting: Siren, amplifier with speaker and microphone (Three tone type- wail/yelp, Hi / Lo): 1 No (EU or US Brand)  126 06 × Flashing LED lights fixed on ambulance roof (3 on left hand side and 3 on right hand side)  127 Inverter system (220 V or 110 V depending on country of use) which includes: additional battery, battery charger, inverter 300 W, 50 A fuse with base, solenoid relay 80 A and special wiring to operate medical equipment and monitoring device inside ambulance  128 Sign writings and marking: AMBULANCE sticker to be pasted on front bonnet and on Rear door of vehicle. Red stripes on right and left side of vehicles.  129 Client LOGO Included Included Included  2.1 Scoop stretcher (Brand:Shiled Medica / Model:SM-NFC2) Included Included Included  2.2 Portable Suction Unit (Brand:Yuwell / Model:MR-7ED) Included Included Included Included  2.3 Wall Mounted Sphygmomanometer With Stethoscope (Wall Mounted Sphygmomanometer Brand:GiMA Model:32749) (Stethoscope: Brand: Spencer / Model: DGX111)  2.4 Thermometer (Brand:HuBDIC / Model:TB100) Included	1.21		Included	Included	Included
124 02 × LED lights to be fixed inside front grille of ambulance Included Included Included  125 Multi-flashing LED light bar in Red or (Red and Blue) lens colour (fixed on roof in front) consisting: Siren, amplifier with speaker and microphone (Three tone type- wail/yelp, Hi / Lo): 1 No (EU or US Brand)  126 06 × Flashing LED lights fixed on ambulance roof (3 on left hand side and 3 on right hand side)  127 Included Included Included Included with base, solenoid relay 80 A and special wiring to operate medical equipment and monitoring device inside ambulance  128 Sign writings and marking: AMBULANCE sticker to be pasted on front bonnet and on Rear door of vehicle. Red stripes on right and left side of vehicles.  129 Client LOGO Included Included Included Included Included 2.1 Scoop stretcher (Brand:Shiled Medica / Model:SM-NFC2) Included Included Included Included Included Included 2.2 Portable Suction Unit (Brand:Yuwell / Model:MR-7ED) Included Inclu	1.22		Included	Included	Included
Multi-flashing LED light bar in Red or (Red and Blue) lens colour (fixed on roof in front) consisting: Siren, amplifier with speaker and microphone (Three tone type- wail/yelp, Hi / Lo): 1 No (EU or US Brand)  126	1.23	Loading Light 1No to be fixed at the rear	Included	Included	Included
roof in front) consisting: Siren, amplifier with speaker and microphone (Three tone type- wall/yelp, Hi / Lo): 1 No (EU or US Brand)  126	1.24	02 × LED lights to be fixed inside front grille of ambulance	Included	Included	Included
Inverter system (220 V or 110 V depending on country of use) which includes: additional battery, battery charger, inverter 300 W, 50 A fuse with base, solenoid relay 80 A and special wiring to operate medical equipment and monitoring device inside ambulance  128 Sign writings and marking: AMBULANCE sticker to be pasted on front bonnet and on Rear door of vehicle. Red stripes on right and left side of vehicles.  129 Client LOGO Included Included Included  2.1 Scoop stretcher (Brand:Shiled Medica / Model:SM-NFC2) Included Included Included  2.2 Portable Suction Unit (Brand:Yuwell / Model:MR-7ED) Included Included Included  2.3 Wall Mounted Sphygmomanometer With Stethoscope (Wall Mounted Sphygmomanometer Brand:GIMA Model:32749) (Stethoscope: Brand: Spencer / Model: DGX111)  2.4 Thermometer (Brand:HuBDIC / Model:TB100) Included Incl	1.25	roof in front) consisting: Siren, amplifier with speaker and microphone	Included	Included	Included
includes: additional battery, battery charger, inverter 300 W, 50 A fuse with base, solenoid relay 80 A and special wiring to operate medical equipment and monitoring device inside ambulance  1.28 Sign writings and marking: AMBULANCE sticker to be pasted on front bonnet and on Rear door of vehicle. Red stripes on right and left side of vehicles.  1.29 Client LOGO Included Included Included Included  2.1 Scoop stretcher (Brand:Shiled Medica / Model:SM-NFC2) Included Included Included  2.2 Portable Suction Unit (Brand:Yuwell / Model:MR-7ED) Included Included Included  2.3 Wall Mounted Sphygmomanometer With Stethoscope (Wall Mounted Sphygmomanometer Brand:GIMA Model:32749) (Stethoscope: Brand: Spencer / Model: DGX111)  2.4 Thermometer (Brand:HuBDIC / Model:TB100) Included Included Included Included  2.5 Tourniquet including junctional tourniquet, Assorted Included In	1.26		_	Included	Included
bonnet and on Rear door of vehicle. Red stripes on right and left side of vehicles.  129 Client LOGO Included I	1.27	includes: additional battery, battery charger, inverter 300 W, 50 A fuse with base, solenoid relay 80 A and special wiring to operate medical	_	_	Included
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2.2 Portable Suction Unit (Brand:Yuwell / Model:MR-7ED) Included Included Included  Wall Mounted Sphygmomanometer With Stethoscope (Wall Mounted Sphygmomanometer Brand:GIMA Model:32749) Included Included Included (Stethoscope: Brand: Spencer / Model: DGX111)  2.4 Thermometer (Brand:HuBDIC / Model:TB100) Included Incl	1.29	Client LOGO	Included	Included	Included
Wall Mounted Sphygmomanometer With Stethoscope (Wall Mounted Sphygmomanometer Brand:GIMA Model:32749) (Stethoscope: Brand: Spencer / Model: DGX111)  2.4 Thermometer (Brand:HuBDIC / Model:TB100)  Included Includ	2.1	Scoop stretcher (Brand:Shiled Medica / Model:SM-NFC2)	Included	Included	Included
2.3 Mounted Sphygmomanometer Brand:GIMA Model:32749) (Stethoscope: Brand: Spencer / Model: DGX111)  2.4 Thermometer (Brand:HuBDIC / Model:TB100)  1 Included	2.2	Portable Suction Unit (Brand:Yuwell / Model:MR-7ED)	Included	Included	Included
2.5 Tourniquet including junctional tourniquet, Assorted Included Included Included	2.3	Mounted Sphygmomanometer Brand:GIMA Model:32749)	Included	Included	Included
	2.4	Thermometer (Brand:HuBDIC / Model:TB100)	Included	Included	Included
2.6 Isothermic Blanket Included Included Included	2.5	Tourniquet including junctional tourniquet, Assorted	Included	Included	Included
	2.6	Isothermic Blanket	Included	Included	Included

# AMBULANCE CONVERSION ON TOYOTA HIACE HIGH ROOF VAN (CLIENT SUPPLIED VAN)

# OPTIONAL MEDICAL EQUIPMENT

	Description	Basic Option	Medium Option	Advance Option
3.1	Stair Chair (Brand:Shiled Medica / Model:SM-NFW2)	_	Included	_
3.2	Automated External Defibrillator (Brand:Primedic / Model:Radian AED)	_	_	_
3.3	Ventilator for Adult (Brand: Allied / Model: EPV 200)	_	_	_
3.4	Syringe Pump (Brand:Szosen / Model:OSP500)	_	_	<u>—</u>
3.5	Laryngoscope Set - Miller (Brand:GIMA / Model:34305)	_	_	_
3.6	Handheld Pulse Oximeter (Adult, Paediatric, Neonate) (Brand:Shiled Medica / Model:SM-AHMX)	_	_	_
Sub Total		\$00,000.00	\$00,000.00	\$00,000.00



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