

RESEARCH AND PRODUCTION ASSOCIATION

**PRACTIKA**



# SPECIAL VEHICLES

- SECURITY
- EMERGENCIES
- HUMAN SERVICES
- HEALTHCARE



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## Patrol Vehicles for detainees and prisoners

### Vehicle for detainee's transportation

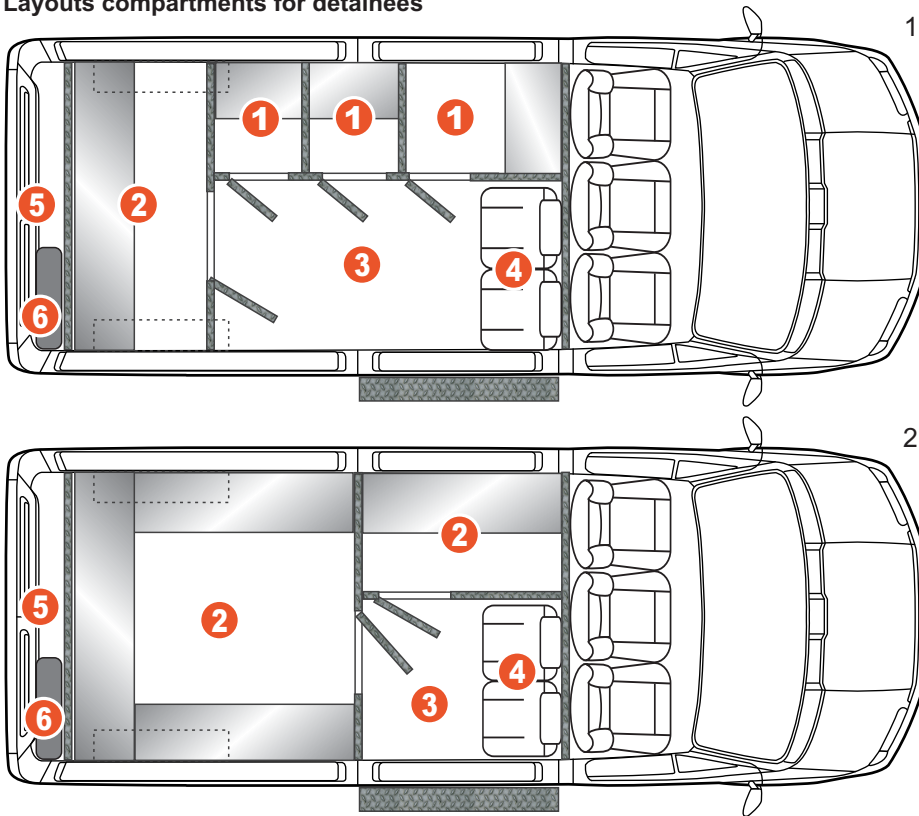
#### Basic equipment

- Intercom system
- Escort compartment (4 seats) with basic upholstery, lightening and seats
- Compartment for two detainees keeping that is equipped with anti vandal coating
- Additional latticed rear door with fixes lock and protected hinge
- Modified rear doors, that are deafened with steel sheet inside
- Steel prepetition beyond back seats, that separate general cabin from the special compartment
- Latticed window in the prepetition between general cabin from the special compartment
- Lightening in the special compartment
- Ceiling lighting, wiring and cables are protected from intentional damage
- Seats in a special compartment
- Special compartment hitter
- Electrical interlocking of the swing door
- Radio station
- Fog lights
- Special colour codes

There can be changes in vehicle equipment in accordance with customer specification.



**Layouts compartments for detainees**



- 1** – Single Camera
- 2** – Total Camera
- 3** – Putting guard
- 4** – Seats guard
- 5** – Auxiliary compartment
- 6** – Spare wheel

**1. The number of seats - 12:** 3 people in the cabin, including the driver; compartment for guard - 2 persons; in compartments for detainees - 7 people. Bay detainees consists of three cameras to one detainee and one camera for four detainees.

**2. The number of seats - 19:** 3 people in the cabin, including the driver; compartment for guard - 2 persons; in the compartments for the detainees - 14 people. Bay detainees consists of one chamber with three seats and one camera with eleven seats.





## Buses for transportation of prisoners

### Basic equipment

#### 1. Compartment convoy

- Heating from regular heating system (output wiring enclosure – under the seats)
- Forced and exhaust fan or air conditioning
- Seats guards with safety belts
- Lining the floor metal
- Walls and ceiling of the metal sheet 1 mm. (galvanized)
- Vandal-proof ceiling lights
- Dividing a lattice with a swing door compartment between the convoy and general (metal grille with mesh bars Ø5 and 35x35 cm.
- The lock on the door
- Attachments for machines

#### 2. The general compartment of detainees

- Twin seat
- Mounts on the seats for fixing prisoners handcuffed
- Decorating the ceiling, back and side walls of the metal sheet
- Lining the floor metal

#### 3. Individual compartments for detainees

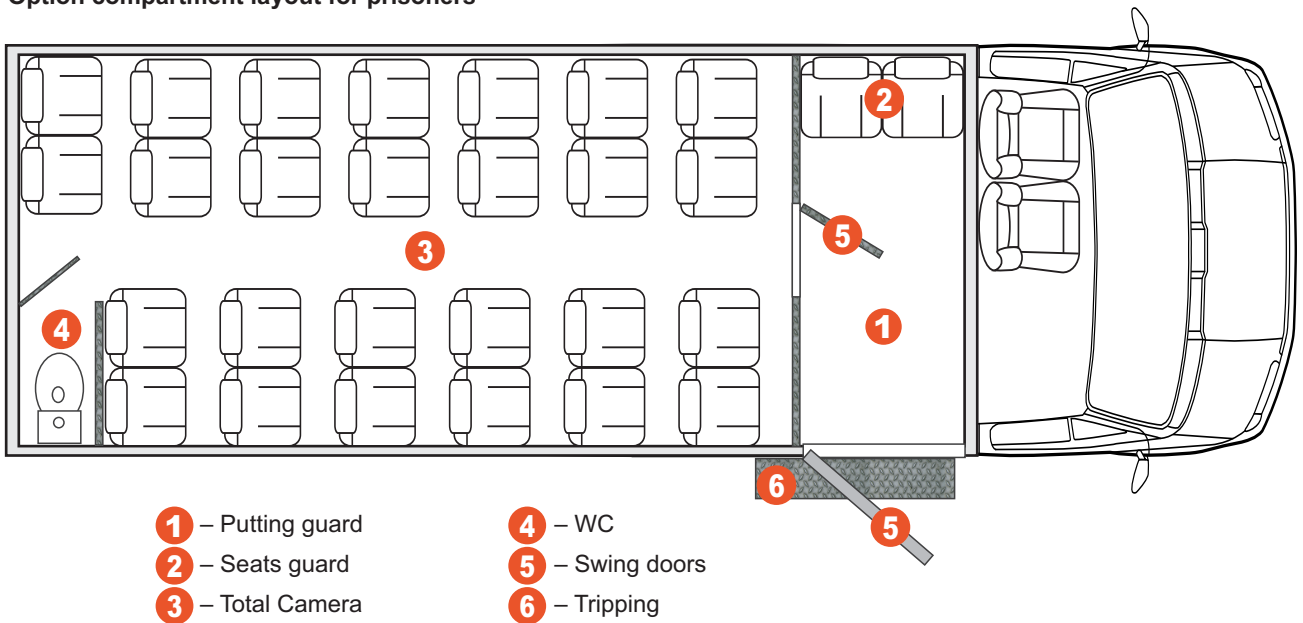
- The compartments in the form of metal cabinets
- Inside the shop for 1 person
- Staples for fastening cuffs detainee to a height of 0.9 m. Above floor level
- 9 holes Ø20 at eye level
- Lockable

#### 4. In addition,

- SSU
- Fire extinguisher in the cab under the seat
- Toilet with washbasin



**Option compartment layout for prisoners**



**Car for transportation of prisoners based on the bus.**

Buses designed for the carriage of groups of prisoners from 20 to 40 people. Are of high quality through the use of modern equipment, and Western European manufacturers, and original certified components. The entire production process transportation for prisoners multi-level quality.

The inner space of the bus is divided into three components: the driver's cabin area and seats for the convoy, the overall interior for prisoners and solitary confinement. The skeleton of the bus enhanced by thick profiled pipes. Another design feature of the car is to unite the base of the camera and the frame, eliminating the escape or trespassing.

In general, the cabin may be necessary to equip the toilet. Capacity special vehicles from 20 to 40 people (including convoy), plus the driver's seat.

Externally, the bus may not differ from the usual bus, as the window will be toned and bars on the windows, located on the inside, will not be visible. Also, the window opening from the inside can be reduced in order to reduce the chance of escape through the window.

**The total area and solitary confinement.**

The overall interior separated from the driver's seat and places convoy lattice partition with the same lattice doors, lockable. Seats in the cabin have increased anchorage and additional accessories for attachment of a prisoner using handcuffs. Solitary confinement is an all-metal frame construction with a seat for the prisoner. Into place chamber is provided with openings for natural ventilation, also in the chamber and in the cabin there is protected from vandalism lamps. Chamber door is a metal sheet with a thickness of 3 mm, it may, as a slam and closed manually. The door is equipped with inspection covers. Floor is also covered with metal, and the outer wall is provided with a heater. Single camera allows you to keep a prisoner in complete isolation from the others.

Total chamber may be divided into multiple latticed dividers compartments. Metal floor bus, but may optionally be coated with a wear-resistant and skid resistant linoleum.





## Special forces armoured vehicles based on serial pickup

### Purpose:

special purpose off-road armoured vehicle is intended for efficient, safe and comfortable travel of special subdivisions in conditions of cross country.

### Description:

Armoured vehicle is divided into two compartments:

#### I. Armoured cabin

- Internal steel armoring of the cabin on all planes.
- Bend bulletproof glass with fragmentation-proof layer imitating the shape of standard glazing is installed instead of the wind screen, driver's and partner's glass in the reinforced armoured frames. Two bulletproof windows are installed in the back side doors of the cabin.
- Two gun slots to fire from the saloon. Location - in the back doors under the bulletproof windows.
- Hinge joint places reinforcement.
- Door discharge elements.
- Doorstops.
- Internal finish of armoured elements of the saloon with carpeting.

#### II. Armoured body

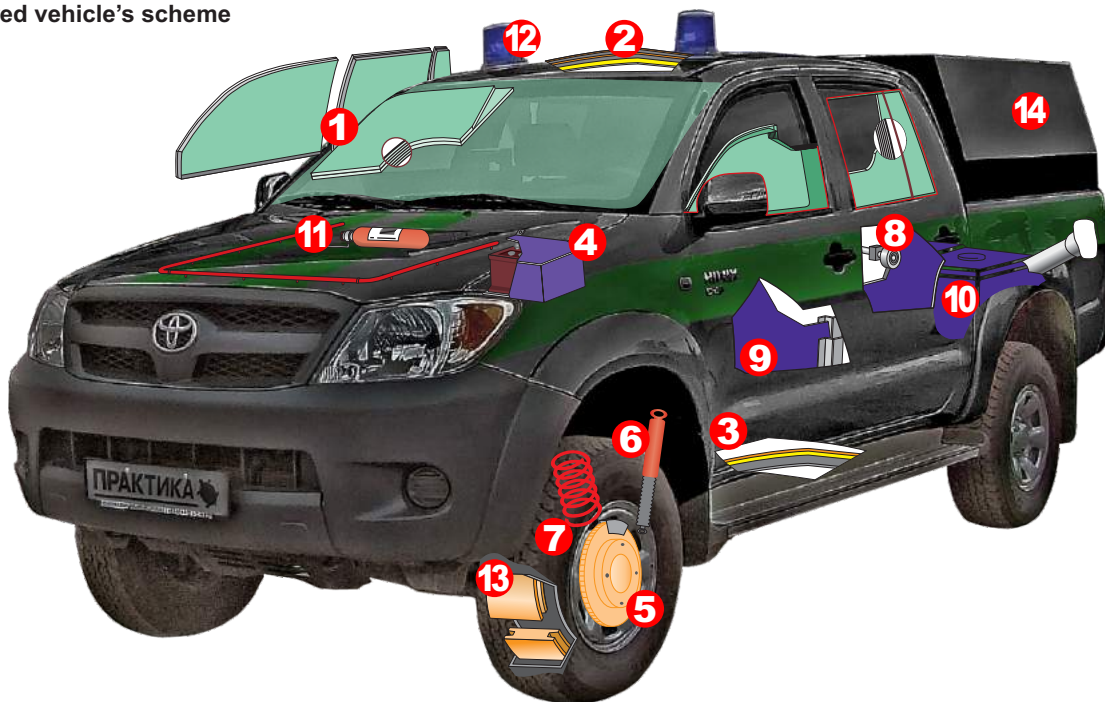
- Is of improved protection class. In case special subdivision fighters are supposed to be in the body, viewing bulletproof windows and hidden gun slots are installed in the walls of the body. The body can as well be equipped for transporting the apprehended or prisoners both with and without guards, located directly in the body (folding seats are facilitated for the guards).
- Cross-bar door locking system.

### Additional equipment:

- Signal-loudspeaking system installation.



Armoured vehicle's scheme



- |   |   |
|---|---|
| <b>1</b> – Armored sagging glass with anti-splinter layer polycarbonate | <b>8</b> – The loopholes for firing from the cabin        |
| <b>2</b> – Reinforced roof  | <b>9</b> – Doors  |
| <b>3</b> – Reinforced bottom  | <b>10</b> – Reservations pallet fuel tank                 |
| <b>4</b> – Armored battery  | <b>11</b> – Fire extinguishing system engine compartment  |
| <b>5</b> – Reinforced brake discs                                       | <b>12</b> – Signal loudspeaker installation               |
| <b>6</b> – Heavy-duty shock absorbers                                   | <b>13</b> – The system of progress on the tires punctured |
| <b>7</b> – Heavy-duty springs   | <b>14</b> – Armored module                                |

**Protection from:**

- |  |  |
|--|--|
| – AK-74 gun (5.45 mm bullet, 7H6 cartridge)    | – SVD rifle (7.62 mm bullet 57-H-323c cartridge) |
| – AKM gun (7.62 mm bullet 57-H-323c cartridge) | – Mines, improvised explosive devices            |







## Cash in transit vehicles

### Specification

Armored vehicle is divided into two compartments:

1. Armored cash in transit compartment
2. Not armored cargo compartment

### I. Armoring

- Internal “capsule type” armoring for all vertical surfaces and roof
- The space from the engine partitition to rear axle is protected with armor.
- All armored element are installed in the overlap
- Armored steel frames are installed along the counters of armored doors
- Additional reinforcement of all door pillars, door hinges, bearing elements
- Sliding armored side door of cash in transit compartment is equipped with mechanical locking system.
- Two bulletproof viewing windows in a crew compartment.
- Armored glasses
- Hidden embrasure – 2
- Armored evacuation– vent hatch
- Soft interior coating – carpeting
- Wear– tear resistance floor
- Modified vehicle has now difference from not armored one.

### II. Equipment

- Unloading elements of front doors
- Cross bar door locking system
- Limiters opening of front doors
- There are 5 seats in the vehicle: 2 staff seats, 3 additional seats. All seats are equipped with seat belts.
- Intercom system
- Siren. Blue lights
- Distinctive lines on the vehicle body

### III. Cargo prepetition:

- In a basic equipment cargo compartment is not armored





- 1** – Armored sagging glass with anti-splinter layer polycarbonate
- 2** – Armored evacuation and ventilation hatch
- 3** – Armored door
- 4** – Armored battery
- 5** – The loopholes for firing from the cabin
- 6** – Internal Capsule book on all planes, including the roof
- 7** – Signal loudspeaker unit

**Levels of armored protection**

Level of armored protection PZSA -2, PZSA-3 in accordance with DSTU – 3975 “Armored protection of special vehicles”.

**Protection from:** Tokarev Handgun (TT), bullet 9 mm, 57-H-181c; Kalashnikov AKM, bullet 7,62 mm, 57-h-231; Kalashnikov AK-74, bullet 5,45 mm, 7H6.

**Certificates**

- Certificate of conformance of the production quality of armored vehicles in compliance with norms of International standard ISO 9001:2000
- Certificate of conformance, confirmed the conformity of armored protection of vehicles, in accordance with norms DSTU 3975-200 “Armored protection of special vehicles”, issued the Government Certification Centre of Security Appropriation Means of the State Security Service of the Ministry of Internal Affairs of Ukraine.
- Certificate # 2131 of concordance of the vehicle construction for traffic accident prevention, issued the Research Centre of road safety of the Ministry of Internal Affairs of Ukraine.

**Purpose**

**Cash in transit vehicles of such level are intended to fulfill collection function in urban and intercity conditions.**

Cash in transit vehicles intended to collect and to transport cash ( or other valuables - precious metals, documents) for example transportation cash from some shop to bank.





## Audio surveillance vehicles and modules

### Application

Despite the stereotype, listening is not a purely "spy" operation aimed at criminal theft of audio information. In everyday life, wiretapping is used in quite "peaceful purposes" - for audio monitoring.

Audio surveillance is a system of measures aimed at ensuring the acoustic control over certain objects. This control acts primarily as a preventive measure to ensure the safety of the controlled object.

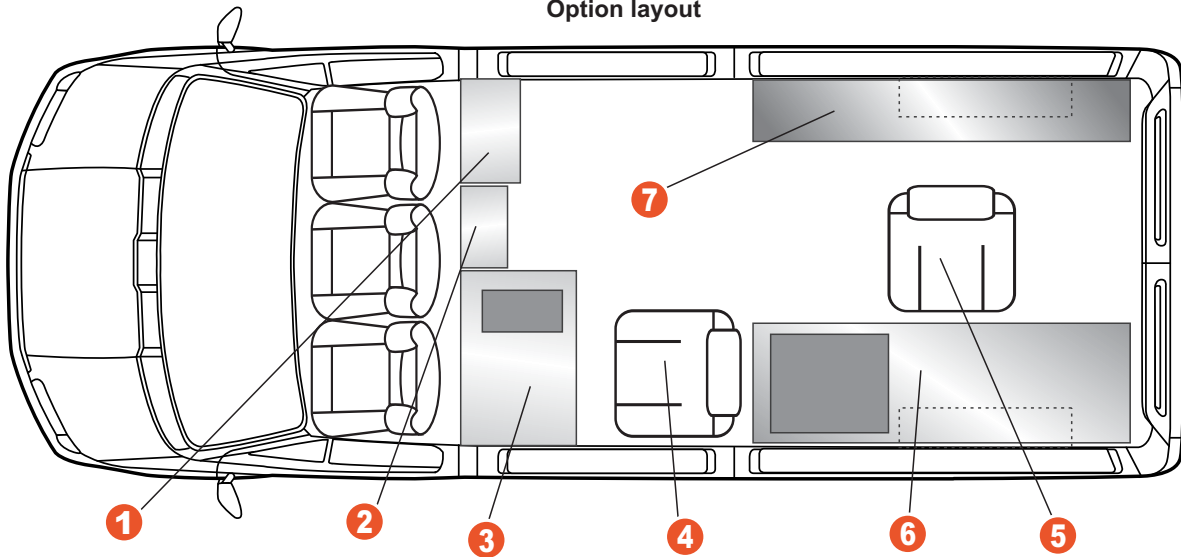
Audio Monitoring is carried out with the help of directional microphones, provided with respective amplifiers. Network microphone enables audio monitoring successfully meet the challenges and respond, if necessary, to the situation. Each audio channel has the function of fine-tuning to set the desired noise floor inclusion record that allows you to reduce the noise level when listening.

In many cases, audio surveillance system used in sync with the video through a hidden camera installed.

Typically, audio control exercised over static objects. However, occasionally there are situations where such control is necessary to hold on to some (sometimes very large) area or move objects. In this situation, special vehicles used for wiretapping. Such cars outside are no different from the usual, but inside are equipped with full-time jobs for operators and are equipped with all the necessary equipment complex. Depending on the number of jobs and the size of the equipment it can be machines of various sizes - up to a rather bulky minivans.



Option layout



- ❶ – Optional battery and charger
- ❷ – Block switching voltages
- ❸ – Desk
- ❹ – Workplace №1

- ❺ – Workplace №2
- ❻ – Desk
- ❼ – Shelves for hardware

**1. Passenger saloon**

- sound, heat, vibration insulation of the saloon
- special waterproof antistatic floor covering
- multi-positional roof hatch for ventilation and evacuation
- glass coating or installation of mask blinds on windows
- box for extra electric and antenna-filling cables

**2. Climatic equipment**

- self-contained heater
- additional thermal ventilator
- ceiling intake-exhaust ventilator
- high power conditioner (in the minivan)

**3. Electric equipment**

- LED lamps for the work saloon
- special "navigator" lamps for every work station
- additional helium battery
- 220 V sockets
- electro distributive unit

**4. Furniture**

- tables (folding and stationary)
- armchairs with rotation and fixing in several positions
- cabinets for consumable materials
- background for PC, cameras and other equipment for audio and video surveillance





## Vehicles for alerts and agitation

### Appointment

Car alarm is designed to inform the public, the transfer of special light and sound signals, voice commands and messages within a radius of 2 km

### 1. Work on the re-equipment

- Sound and vibration isolation
- Insulation
- Installation of partitions between the equipment and receiver compartment cover (only for version 2)
- Lining the floor anti-slip linoleum
- Walls and ceiling decorative carpet
- Ceiling Fixtures
- Heating
- Supply and exhaust fan
- Optional air conditioning (only for version 2)
- Grab the door for visitors
- Stand-alone generator
- 220 V

### 2. Furniture

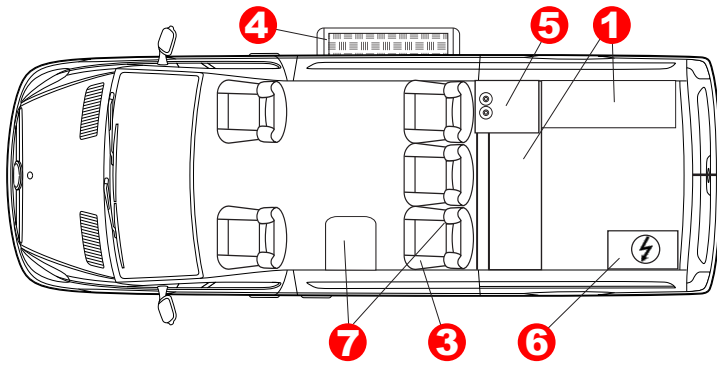
- Folding Table
- Hinged and fixed seats
- RACK-rack with anti-vibration to be placed inside sound equipment
- Shelves

### 3. External operation

- Installing the speakers on a special frame nakryshnyuyu
- Tripping side doors
- Tripping the rear doors (for option 2) or side doors (option 2)
- Pasting on a special campaign colors of the sides and roof of the car



**Option 1. «Agitation car»**



**Possible basic cars for Option 1:**

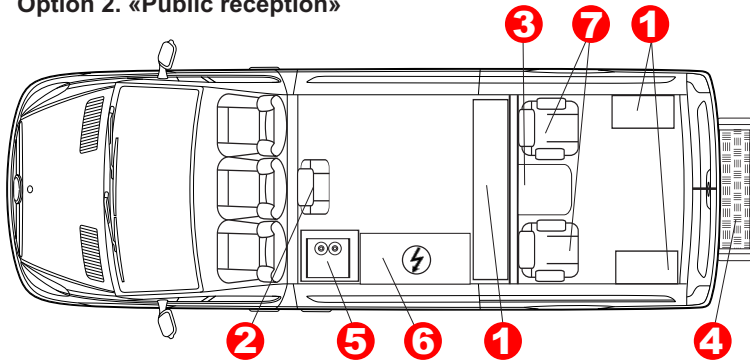
Mercedes Sprinter, Mercedes Vario, VW Crafter, VW T5, Peugeot Boxer, Ford Transit, Iveco Daily, Gazel 27057-38

**Possible basic cars for Option 1 and Option 2:**

Mercedes Sprinter, Mercedes Vario, VW Crafter, Peugeot Boxer, Ford Transit, Iveco Daily

	Option 1. «Agitation car»	Option 2. «Public reception»
Minimum internal length, mm	2700	3500
The minimum internal width, mm	1600	1750
The minimum internal height, mm	1600	1900

**Option 2. «Public reception»**



- 1** – Shelving
- 2** – Folding seats
- 3** – Folding Table
- 4** – Tripping
- 5** – Stand with sound equipment
- 6** – Generator
- 7** – Fixed seats

**Recommended sound equipment set**



**Weatherproof Speaker (8 pieces)**

5 "3" Street music speaker 3.5W-4.5Vt-9W-25W-12.5Vt-50W, 100V, ABS structure, metal mount, IP66



**Headphones for monitoring**

Dynamic closed type headphone, which are intended for the quality control of sound and music.



**Amplifier Mixer**

Mixer and amplifier with USB, 6 input channels, 320W



**Standard microphone**

Number of frequency 1680. The frequency bandwidth, 42 MHz, 20 fixed frequency banks. The scan function to search for free channels.



**Radio with mp3 support reading or laptop (the source of the recorded signal)**

2-DIN CD-receiver with a large two-line display allows you to connect and manage iPhone / iPod ..



**Microphone headset (a headset)**

Sound frequency range: 40-18000 Hz



## Mobile laboratories

**Mobile laboratories** are to carry out inspections and examinations without delivery of the object of research (which is often physically impossible) in the stationary laboratory.

**Typical mobile laboratory** consists of three sections: the cab driver compartment laboratory and the cargo compartment. The driver's cabin has three seats, bay-laboratory - from two to four specially equipped places. The cargo compartment separated from the passenger compartment laboratory solid wall. It placed containers for the transport of samples, special tools, remote generator and so on.

In some cases (as in the case of laboratories to diagnose infectious agents or epidemiological laboratories) may also be equipped with sanitary inspection, gateways for transmitting and receiving the test material, etc.

All mobile laboratories equipped with heating and air conditioning to maintain a comfortable (or required for research) microclimate inside the workroom. Water System: water dispenser and water tanks (clean and waste) is located in a heated area. The power supply system provides energy independence and autonomy of research anywhere regardless of stationary power as parking, and during their journey. In case of on-site investigation of a stable source of electricity in mobile laboratories provide external power supply modules.

The composition of special tools and instruments depends on the purpose of the lab, and all devices are also available in the so-called "Transport performance" and secured with special brackets in the workplace.

### TYPES OF PROPOSED LABORATORY:

#### 1. Fire Technology Laboratory

Designed for rapid technical and forensic support detection and investigation of crimes related to fires, and ensure the formation of the evidence base on the fact of fire.

#### 2. Crime Laboratory

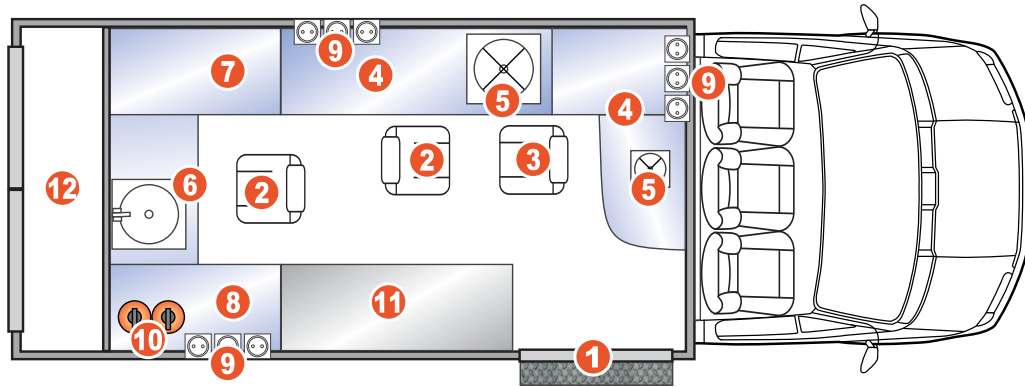
Designed for going operational staff at the venue of investigative actions, providing a qualified inspection of the scene using a set of scientific, technical and aids.

#### 3. Chemical and radiometric laboratory

Designed for conducting radiation and chemical reconnaissance in areas of radiation and chemical pollution of the radiation monitoring, sampling and transport of samples, rapid determination of density and gamma contamination filming contaminated area.



Option layout



- 1** – Entrance door with metal footrest
- 2** – Seats laboratory
- 3** – Seats patient
- 4** – Desktops with cabinet
- 5** – Exhaust devices
- 6** – Wash
- 7** – Drawers sample
- 8** – Refrigerator sample
- 9** – Sockets for 220 and 12 Volt
- 10** – Fire extinguishers
- 11** – Wardrobe & accessories
- 12** – Cargo bay

**4. Mobile para medical examination**

Designed for a medical examination on the state alcohol and drug intoxication persons to drive vehicles.

**5. Quality Control Laboratory of petroleum products**

Designed for operational quality control of petroleum products at gas stations, fuel depots and terminals with the departure of inspectors on-site inspections.

**6. Laboratory quality control of food products**

Designed for operational quality control of food raw materials and food products, the identification of hazardous and toxic substances sold in food markets and eating places.

**7. Laboratory Energy Audit**

Designed for energy audit of energy use and evaluation of the energy saving potential.

**8. Laboratory of air pollution monitoring**

Designed to measure the concentration of pollutants in the atmosphere and for measuring meteorological parameters during the route observations

**9. Laboratory for quality control of pipelines**

Designed to control the quality of welds, as well as conducting research, maintenance and repair works on the pipelines.

**10. Laboratory diagnosis of infectious agents**

Intended to identify infectious agents of I-IV pathogenicity groups express methods methods of isolation and determination of bacterial cultures of pathogens in the field.

**11. Laboratory explosive-examination**

Designed for departures Bomb experts, providing expert works on the site of the explosion, the examination of explosives and, if necessary, their transportation.







## Vehicles for Emergency Response

### Appointment

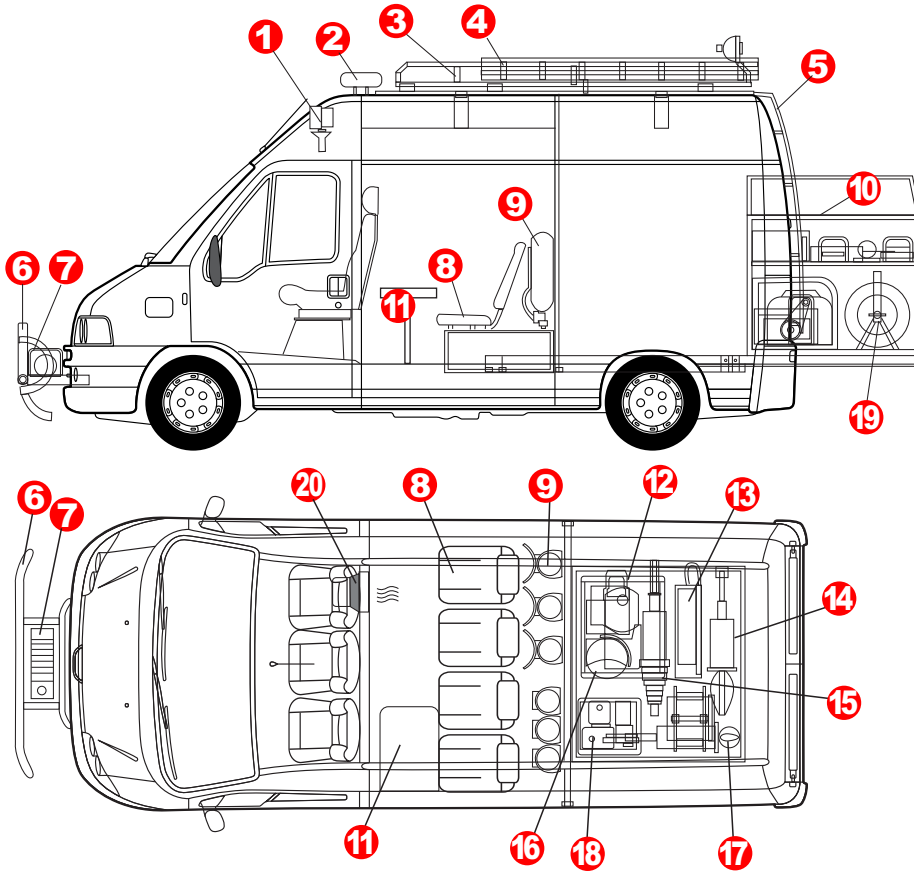
Operational emergency vehicles designed for fast delivery of rescuers and special equipment to the place of occurrence of natural and man-made disasters, and perform on-site rescue operations (lifting of reinforced concrete and steel structures using pneumatic jacks, displacement and destruction of Structures, snacking metal rods , the expansion of the narrow openings in the rubble, fire local fires, cutting steel sheets and strips), event search and medical assistance to victims, the organization of radio in the UHF band using mobile radio, the elimination of local sources of ignition reference radiation and chemical reconnaissance t etc.

### Car emergency small class.

It is intended for timely delivery of the calculation of 4 people. Equipment is placed on the sliding container and secured by a quick-brackets and lodgements. This machine is used to equip rescue units having reduced duty shifts.



**Equipment rescue vehicle emergencies (middle class)**



- 1 – Spotlight
- 2 – SSU
- 3 – Trunk
- 4 – Ladder Fire (three sections)
- 5 – Stairway to the roof
- 6 – Buffer
- 7 – Winch
- 8 – Seats autonomous (4 pcs.)
- 9 – Breathing apparatus
- 10 – Rack withdrawable
- 11 – Table
- 12 – Hydraulic pump station
- 13 – Hand pump
- 14 – Hydraulic shears
- 15 – Hydraulic expander
- 16 – Cutter Gasoline
- 17 – Hydraulic cutting pliers
- 18 – Gasoline Generator
- 19 – Coil with a working cable
- 20 – Fan

**Vehicle emergencies (middle class)**

It is intended for timely delivery teams of 5-6 people. Equipment is placed on the sliding platform and connected in a single chain for lighting and power tools. The presence of free space in the technical compartment allows the machine to stack additional large equipment.

**Car emergency (heavy class)**

It is intended for timely delivery team of 7-9 people. Equipment placed on special shelves. On the front wall of the van mounted telescopic mast with power floodlights. If there is a sleeping compartment has ability to work offline in remote areas within a radius of 500 km without refueling.



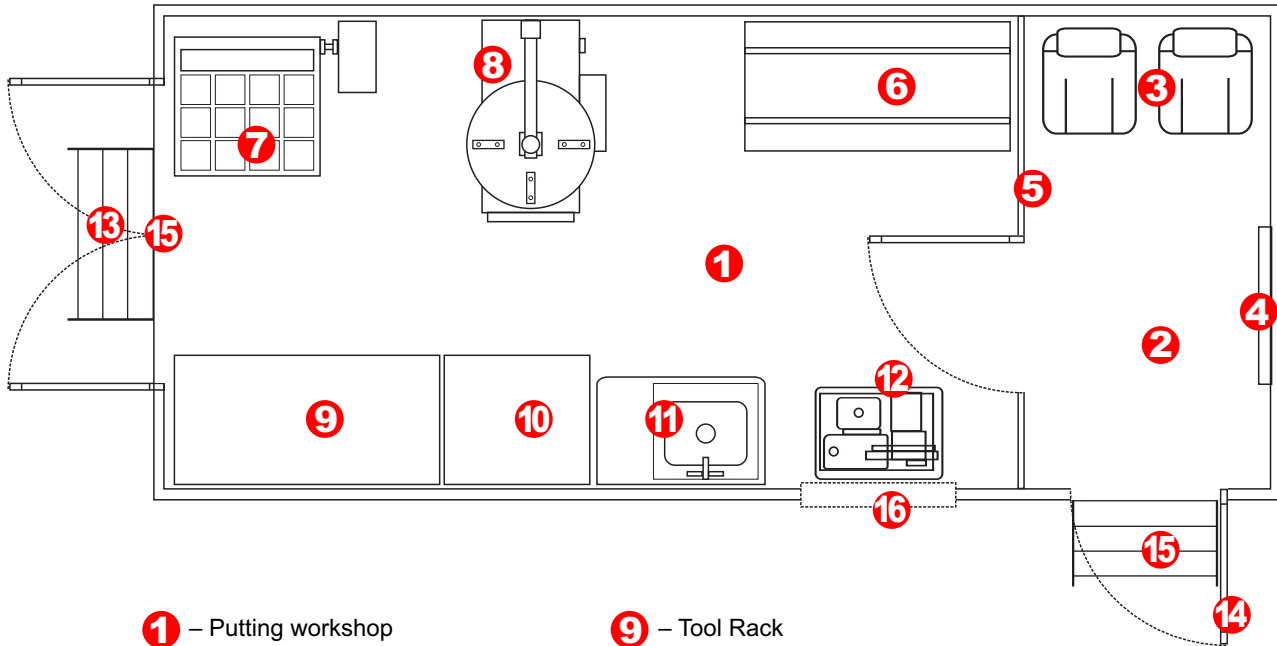


## Mobile Service Stations

### Specification

- Anti-slid floor covering
- Interior decoration of the compartment with plastic panels
- Left side shelves for instruments
- Right side shelves for overalls
- Lighting in a cabin
- Cabin heater
- Workbench
- Glassing rear swing doors
- utility module with locker and table
- Diesel and fuel generator
- Electric skidding door
- Welder
- Additional automatic salon hitting
- Roof rack and stairs on the rear door
- Hitch
- Noise and thermal insulation
- Spotlights on the roof
- Compressor
- Side footstep
- Bench tools
- Lengthener (25 m)
- Emery and vice
- High roof
- electric hoist
- ventipane
- Air-condition installed in the ceiling
- Gas-cylinder equipment
- Engine preheated
- Pre-Charger
- Spark testing instrument
- Diagnostic equipment
- Washstand





- 1** – Putting workshop
- 2** – Dressing room
- 3** – Waiting chairs
- 4** – Information stand
- 5** – Partition
- 6** – The rack on the left side
- 7** – Balancer
- 8** – Workbench
- 9** – Tool Rack
- 10** – Lockers for clothing
- 11** – Wash
- 12** – Generator
- 13** – Rear-hinged doors
- 14** – Side-hinged doors
- 15** – Steps
- 16** – Luke



**Mobile Services Center**

can be equipped with different equipment depending on customer's wants and needs and vehicle's exploitation scope. Installed equipment modification:

**Stand for diagnostic and repeating of fuel equipment**

**Tire fitting equipment**

**Emergency repair shops acquisition**





## Mobile kitchen

### Appointment

Mobile kitchen is designed for high-grade preparation, transportation and delivery of hot food (first and second courses), hot (or cool) drinks.

### Application

Mobile kitchen is not only a profitable business, but also a necessary element in the care of the disadvantaged sections of the population – the ability to prepare and distribute the freshly prepared food to needy in every corner of the country.

Today in Ukraine a lot of elderly people living in a semi-abandoned and remote from civilization villages. They are not able to cook their own food and they just needed visits the mobile kitchen.

### Technical description

Kitchen equipment may be installed in all-metal isothermal van or a special wireframe isothermal module.

The body has windows that open (on the right, left or in the front wall), the front door, lighting, natural ventilation, air conditioning, if necessary – the system of communication with the driver. On the right side of the body located hatch for the issue of food. On the roof can be mounted removable chimney with a deflector.

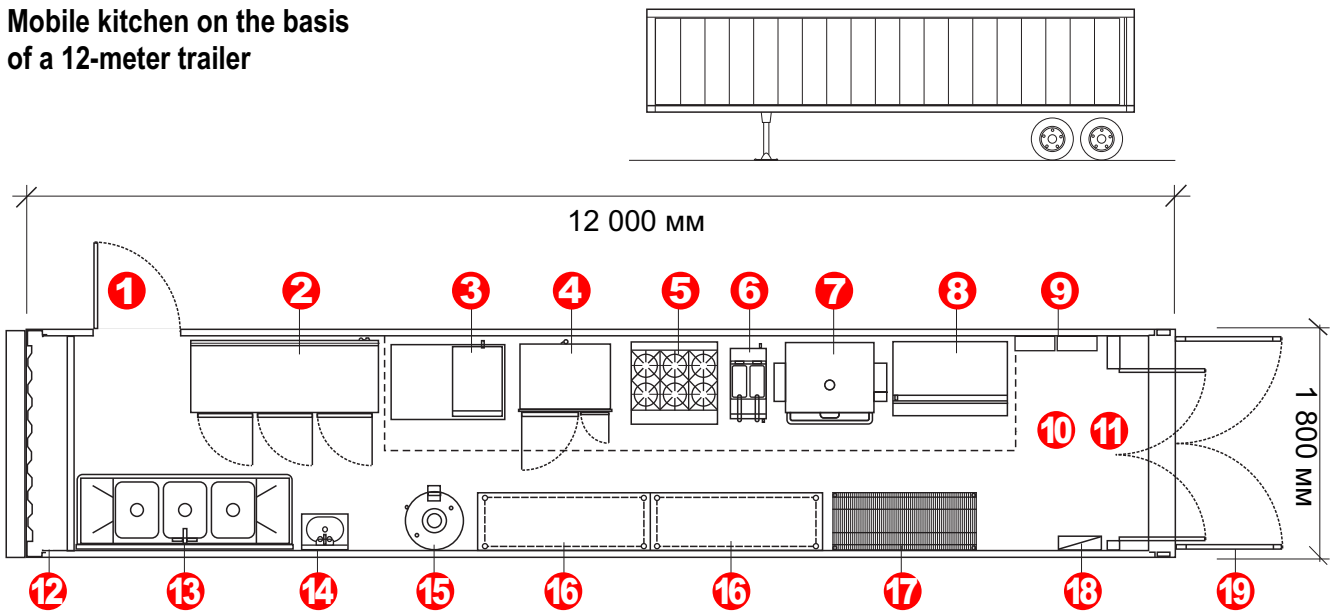
All kitchen equipment is divided into primary, which includes thermal devices and systems that support their operation, and support, which includes storage containers transported supply of food and equipment for food processing.

### Basic equipment:

- Thermal equipment, combined in a thermal unit (gas (electric) stoves, heating systems (boiling) water, broiler (microwaves), center (if necessary with the chimney and the pallet);
- Box for gas cylinders, gas pipeline,
- Water system (water tank, hand pump and hoses);
- The ventilation system
- Refrigeration equipment
- Power supply system (battery, electric)
- Control panel



## Mobile kitchen on the basis of a 12-meter trailer



- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><b>1</b> – Side door (width– 90 cm)</li> <li><b>2</b> – 3-door refrigerator</li> <li><b>3</b> – Steamer (bottom), top– freezer for drinks with air temperature sensor in the camera</li> <li><b>4</b> – Oven</li> <li><b>5</b> – Stove 6 burners</li> <li><b>6</b> – Fryer to 110 liters</li> <li><b>7</b> – Fryer with movable tray</li> <li><b>8</b> – Elektrogrile with a smooth cooking surface, freezer for drinks with air temperature sensor in the camera</li> <li><b>9</b> – Remote special extinguishing systems located in cooker hoods.</li> </ul> | <ul style="list-style-type: none"> <li><b>10</b> – System Kitchen Hood Side Discharge</li> <li><b>11</b> – Internal hinged doors with viewing windows</li> <li><b>12</b> – Built-in refrigeration equipment</li> <li><b>13</b> – Wash 3 sinks</li> <li><b>14</b> – Water Dispenser</li> <li><b>15</b> – Electric water heater to 250 liters</li> <li><b>16</b> – Work table with bottom shelf</li> <li><b>17</b> – Metallic shelves (for dishes, cruets, trays, etc.)</li> <li><b>18</b> – Control panel power wagon</li> <li><b>19</b> – Exterior hinged doors of the van.</li> </ul> |
|---|--|

### Accessory:

- Tables, cupboards for storing bread, dry food, vegetables and cooking
- Shelves for storing tools and utensils
- Sink
- Uniform storage cabinet and personal belongings

All kitchen equipment is mounted along the walls of the body. The heat unit is arranged in front of the body along the front wall and is surrounded by a metal plate. Under the thermal unit is a water tank. Above him on the bulkhead wall cabinets arranged for equipment and utensils. Box for gas cylinders mounted on the outside of the body.

Auxiliary equipment made of stainless steel. Wall cabinets for tools – made of aluminum.

Cooking in the kitchen can be operated as stationary and in motion.





## Refrigerators and glaciers

**Refrigerator** - a vehicle with an isothermal bodywork and refrigeration unit, which allows, at an average ambient temperature of +30 °C, lower and maintain the temperature inside the empty body as follows:

**\* Class A (FRA)**

Refrigerator equipped with a refrigeration unit, the temperatures between +12 °C and 0 °C inclusive.

**\* Class B (FRB)**

Refrigerator equipped with a refrigeration unit, the temperatures between +12 °C and -10 °C inclusive.

**\* Class C (FRC)**

Refrigerator equipped with a refrigeration unit, the temperatures between +12 °C and -20 °C inclusive.

Cars, refrigerators MPV with a coefficient of thermal conductivity of 0,4 (W \* m-2 \* K-1) designed to carry both frozen and refrigerated foods in the temperature range from -20 °C to +12 °C.

Use of mobile partitions and multi-refrigeration units can divide the body into several sections and transported at the same time as products with different temperature regimes and with the same partition at elevated (lifted and fixed to the ceiling).

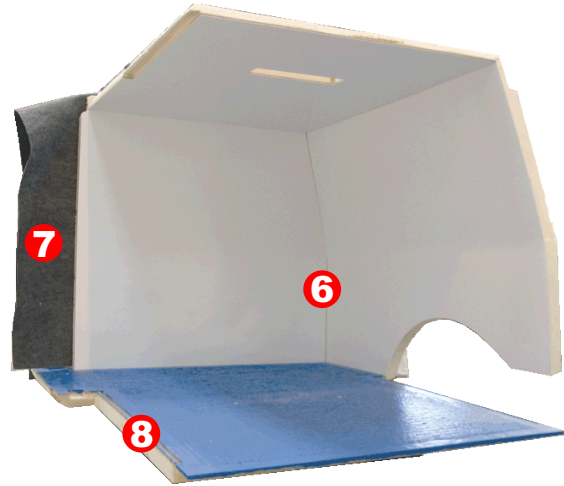
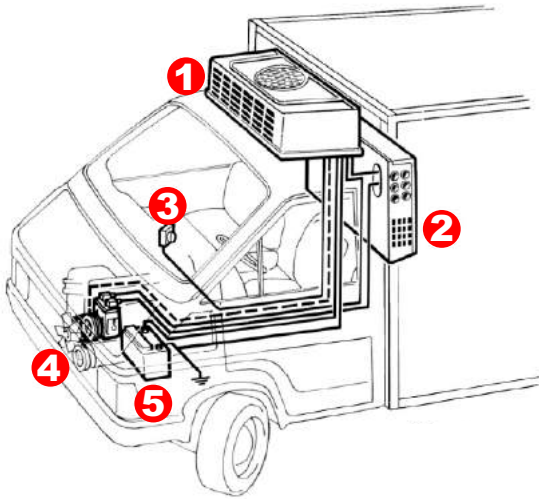
Body made of monolithic multi-layer sandwich panels. As used extruded polystyrene insulation, which has stable thermal technical indicators, an unusually high compressive strength and practically no water absorption.

Insulation from both sides faced with high-impact plastic, made on the basis of UV-resistant polyester resin with high chopped fiberglass.

**Additional options:**

- Vents
- Multi-partition
- Second floor level;
- Vertical protective shutters
- Elements of the load securing
- Colored plastic
- Side protection
- Stairs to lift into the truck and refrigeration servicing





- |                         |                                |  |                               |
|-------------------------|--------------------------------|--|-------------------------------|
| <b>1</b> – Refrigerator | <b>4</b> – Compressor          | <b>6</b> – Lining multilayer sandwich panels | <b>8</b> – Second floor level |
| <b>2</b> – Evaporator   | <b>5</b> – The vehicle battery | <b>7</b> – Extruded polystyrene              |                               |
| <b>3</b> – Control unit |                                |  |                               |

**Eutectic (multidoors van)**

Multisection insulated bodies intended for distribution raznosortnyh frozen food products that require air conditioning during the transportation.

The body structure has several equally spaced side door 600 x 900 mm or 700 x 1100 mm. Inside the body is divided into sections of aluminum baffles that prevent the movement of the load and allows to decompose the product of varieties.

In front of a floor of the available drainage devices to remove excess water during defrost board refrigeration unit and washing the body. Refrigeration unit freezing cold batteries inside the body to -32 ° C during the parking lot (about 8 hours) of electricity network of 380 V. During operation, subzero temperature is maintained by the recoil from the cold cold battery and provides extremely high insulating capacity of the body.

Doorways and face the plane doors are inclined, thus avoiding unnecessary friction seals, greatly facilitates the opening and closing doors, and also reduces wear on seals. Door frame is made of the same technology with Kraftband seals from frost-proof rubber.

**Standard Equipment Body:**

- Marker lights;
- Interior lighting;
- Back buffer;
- Plastic wings;
- Internal aluminum partitions (with the container schema is not installed);
- Drainage device in front of the sex body.

**Additional options:**

- Lateral protection for the chassis;
- Stairs;
- Shelves;
- Colored plastic;
- Rubber mud flaps;
- Heating the doorway.







## Ambulances

### Vehicle re-equipment (main positions)

#### 1. Medical saloon

- Sound, heat, vibration insulation
- Walls and ceiling reinforcement
- Ceiling reinforcement for evacuation-ventilating hatch
- Embedded elements installation for fibreglass panels
- Embedded elements installation for brackets and medical instruments brackets installation
- Installation of location bracketry for spinal board
- Installation of holders for bucket stretcher
- Installation of brackets for doctors' seats

#### 2. Medical saloon floor

- Floor covering with waterproof plywood
- Waterproof antistatic non-slip resistant to disinfectants floor covering
- Border on the lower part of side panels with seam sealing

#### 3. Medical saloon ceiling

- Ceiling panel of fibreglass with low burning rate (100 mm/min)
- Ceiling handrail
- Dropping bottles holders on the ceiling

#### 4. Partition

- Partition between cabin and saloon with movable window

#### 5. Medical saloon glazing

- Back door glazing
- Saloon side door glazing with movable window
- Glass coating to provide privacy of the patient

#### 6. Handrails, steps and foot bars

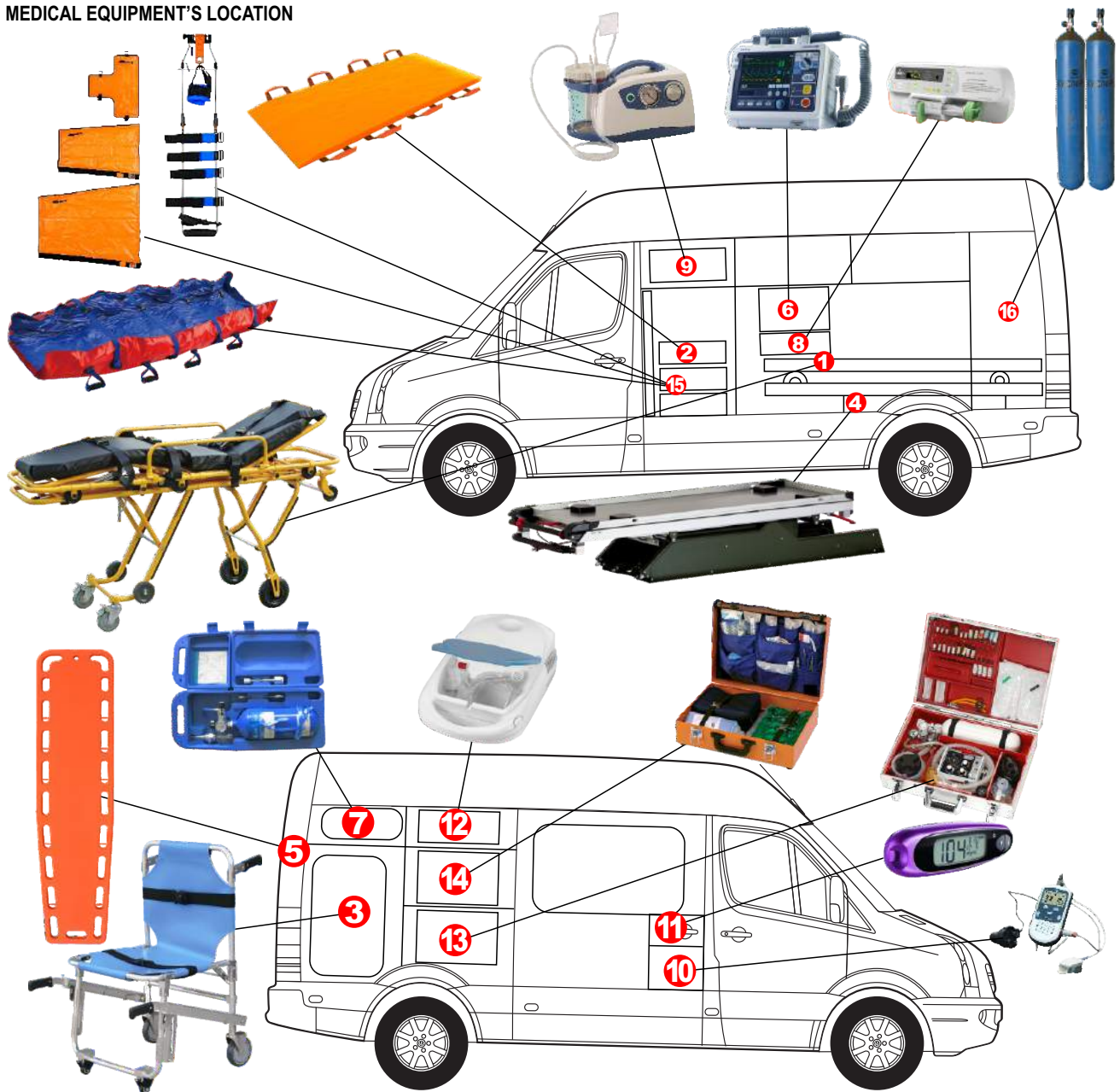
- Handrail at movable door and back door aperture
- Back door foot bar
- Pulled out side door foot bar

#### 7. Heating and ventilation

- multi-positional roof hatch for ventilation and evacuation
- Input-exhaust ceiling ventilator
- Self-contained heater
- High power conditioner for medical compartment



## MEDICAL EQUIPMENT'S LOCATION



### Patient handling equipment

- ① – Main Stretcher
- ② – Soft Stretcher
- ③ – Chair Stretcher
- ④ – Main Stretcher's Platform
- ⑤ – Spine board

### Medical devices

- ⑥ – Defibrillator
- ⑦ – A portable oxygen cylinder with a respiratory mask
- ⑧ – Infusion Pump
- ⑨ – Aspirator

### 8. Individual disinfection facilities

- Washstand
- 5 l. fresh water tank
- 7 l. used water tank
- Electric water pump

### 9. Medical saloon seats

- Seat at head of stretcher with safety belts
- Rotating seat at the side of stretcher with safety belts
- Additional side bench

- ⑩ – Pulseoximeter
- ⑪ – Glucosemeter
- ⑫ – Nebulizer

### Kits

- ⑬ – Emergency Kit
- ⑭ – Emergency Childbirth Kit
- ⑮ – Immobilization Kit (vacuum mattress, splints, collar-set, extractor)
- ⑯ – Oxygen cylinder (2 items)

### 10. Medical cabinets, furniture

- Panel of fibreglass along the left side with low burning rate (100 mm/min.)
- Panel of fibreglass along the right side with low burning rate (100 mm/min.)
- Niche for cylinders with fasteners in the back of the saloon
- Roller covered shelves in the side panels
- Niches for bags storage



## Mobile diagnostic medical centers

The mobile diagnostic complex (laboratory) is the vehicle with specially designed compartment, where all medical actions and procedures are carried out. Depending on dimensions it can be set on the truck chassis or on the automobile trailer or the semi-trailer. In such booth it is made the thermal and sound insulation, walls are sheathed within individually developed plastic panels; the floor is covered with medical antiskid linoleum; all joints and corners are trimmed by the aluminum shape.

**Mobile complexes can be of different function:**

- Computer tomography
- X-ray
- Dental
- Gynecologic
- Mammography

### MOBILE MAMMOGRAFY

#### 1. ACCIDENT ROOM

##### Furniture

- Reception (rack table for registration with shelves for documents)
- Office chair
- Blinds on a window

##### Electrical equipment

- Ceiling lamps with opaque plafonds (220V, 60W)
- Sockets 220V
- Wall convector heater (220V, 1kW)
- Switches
- LCD 32"
- Electrical wiring
- Desk lamp
- Distributive board

##### Other

- Fire extinguisher
- Fastening for LCD

#### 2. LOCKER ROOM

##### Furniture

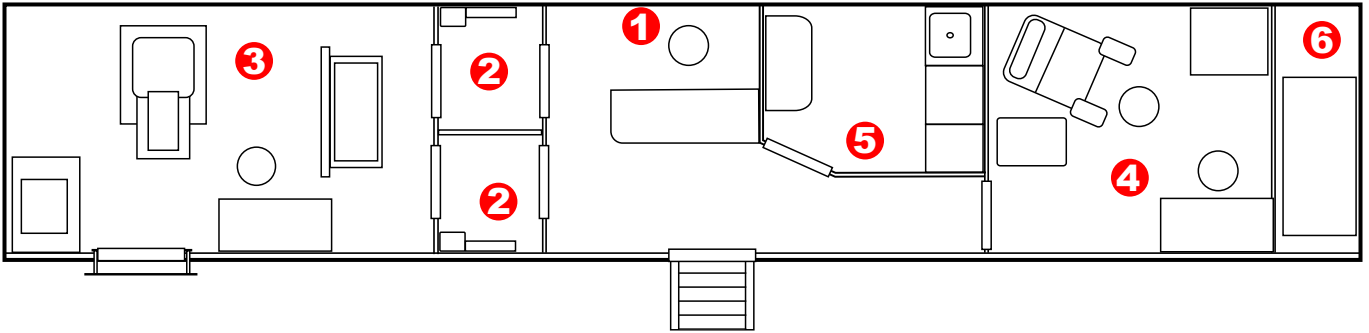
- Mirror
- Coupled hooks for clothes
- Locked metal box
- The shelf under the mirror

##### Electrical equipment

- Ceiling lamps with opaque plafonds (220V, 60W)
- Alarm lamp "DO NOT ENTER!" (220V)



## Disposition of the module



- 1** – Emergency room      **3** – X-ray room      **5** – Lounge  
**2** – Dressing      **4** – Gynecological surgeries      **6** – Technology compartment

### 3. X-RAY ROOM

#### Medical equipment

- Mammographic device
- Control panel of mammographic device
- X-ray protective a partition with a window
- Digitizer
- Printer for X-ray pictures

#### Furniture

- Desk with lockers
- Medical chair
- Tub for printer

#### Electrical equipment

- Wall convector heater (220V, 1kW)
- Ceiling lamps with opaque plafonds (220V, 60W)
- Sockets 220V
- Electrical wiring
- Distributive board
- Bactericidal lamp
- Switches
- Fan of channel type

#### Other

- Fire extinguisher
- X-ray protection plates in walls
- X-ray protection curtain on doorway

### 4. GYNECOLOGY ROOM

#### Medical equipment

- Gynecologic chair with accessories
- Portable ultrasonography device on a mobile table
- Rotary medical chair
- Medical tub
- Box for used materials
- Binocular colposcope

#### Furniture

- Desk with lockers

#### Electrical equipment

- Wall convector heater (220V, 1kW)
- Ceiling lamps with opaque plafonds (220V, 60W)
- Sockets 220V
- Bactericidal lamp
- Switches
- Electrical wiring
- Fan of channel type
- Distributive board
- Reverse device

#### Other

- Fire extinguisher
- Blinds on a window

### 5. RESTROOM

#### Furniture

- Stool
- Kitchen table
- Kitchen lockers
- Cut-in sink of stainless steel

#### Electrical equipment

- Ceiling lamps with opaque plafonds (220V, 60W)
- Sockets 220V
- Wall convector heater (220V, 0,5 kW)
- Microwave oven
- Electric teapot
- Mini-refrigerator
- Switches
- Electrical wiring
- Distributive board

#### Other

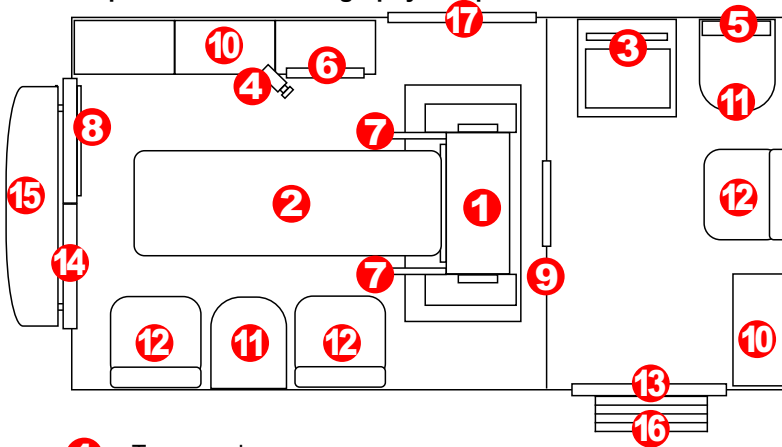
- Fire extinguisher
- Blinds on a window
- Wall hanger for clothes

### 6. EXTERNAL ELEMENTS

- Step-ladder
- Lift for disabled people
- Shaped sections with niches
- Conditioners on roof
- Three-phase generator
- Ladder to the roof
- Awnings
- External lamps
- Socket for external power supply



## Disposition of the tomography complex



- 1** – Tomograph
- 2** – Stretcher with the receiving device
- 3** – Remote control tomograph
- 4** – The camcorder
- 5** – Monitor camcorder
- 6** – General control panel
- 7** – Established shutters
- 8** – Mirror on the back door to monitor the scanning process
- 9** – Lead a baffle plate with rentgensteklom
- 10** – Lockers
- 11** – Folding Table
- 12** – Folding seat
- 13** – The doors to the operator's compartment
- 14** – Rear-hinged doors
- 15** – Tripping
- 16** – Ladder
- 17** – The door to the dismantling of the imager with a hydraulic platform lift

### Re-equipment. Basic positions.

#### Module

- Floor covering water-resistant, anti-static, anti-slip
- Side fiberglass panel
- Ceiling fiberglass panel
- Additional door for unloading the imager
- Glazing and tinted side and rear doors
- Lead a baffle plate with rentgensteklom
- Mirror on the back door to monitor the scanning process

#### Heating and ventilation

- Air Conditioning
- Supply and exhaust fan
- Heater

#### Electrical equipment

- Stand-alone generator
- Converter 12 / 220V
- The converter 220 / 12V
- External power jack with cable
- Interior lighting (LED strip)
- Sockets 12
- Sockets 220
- Preparation for radio
- Thermo box





## Mobile computed tomography

Navigation-guided procedure has been widely conducted in the neurosurgical field to perform anatomy-oriented approach. However, the approach cannot reflect the real-time intracranial image due to differential spatial displacement caused by cerebrospinal fluid drainage, volume change after surgical evacuation or newly developed lesions such as aggravation of brain edema or increased hematoma. Therefore, intraoperative scanning including computed tomography (CT), magnetic resonance imaging (MRI) and ultrasound sonography have been adapted to obtain real-time findings for operators to minimize invasion of normal brain tissue.

Considering consumed time, mobility, without major reconstruction of current facility in operative room (OR) or intensive care unit (ICU), objectivity and costs, mobile CT (mCT) can be a more appropriate method.

Mobile complex computed tomography (mini-CT) is a specialized vehicle equipped with spiral computed tomography. This product is a highly reliable, simple to use and maintain cost-effective system of computer tomography, which allows to obtain the relevant essential requirements of image tissues of the head, neck and other body parts, as well as to carry out the CT X-ray of the blood vessels and CT brain perfusion.

According to the concept of "mobile medical cabinet" CT-complex undertakes a detour certain territory. In every village complex remains for a time sufficient to provide services to all corners tomography.

A feature of this scanner is battery-powered and low radiation dose, thereby possible to obtain high quality images with minimal exposure to the patient. During the procedure tomography stretcher with the patient pushes directly to the scanner, then the scanner scanner performs motion along the patient's head.

Imaging can be easily dismantled and pulled out through a special door on the left side of the car. To facilitate the dismantling of the boot provides a lift platform. This will allow, if necessary, deliver it directly to the House health care facilities where the critically ill patients, which is difficult to transport to diagnose.

The car is equipped with a specially designed booth, which made all the medical events and procedures. Booth thermal, noise and vibration-isolated and ennobled inside plastic panels. As the climate control air conditioning, and heater. For consultation with the patient or his family to settle corner with a table and comfortable chairs.

In addition to the main compartment has a secure lead booth operator, which at the time of imaging assumes all present. To monitor the process of scanning provides an overview window in the wall and a video camera.





## Vehicles for people with disabilities

### To help people

Unfortunately, our country is just on its way to making full accommodations and transporting conditions for people with disabilities. So, there is a big demand for such vehicles, so we decided to offer buses of world manufacturers' that is re-equipped in vehicle for people with disabilities transportation.

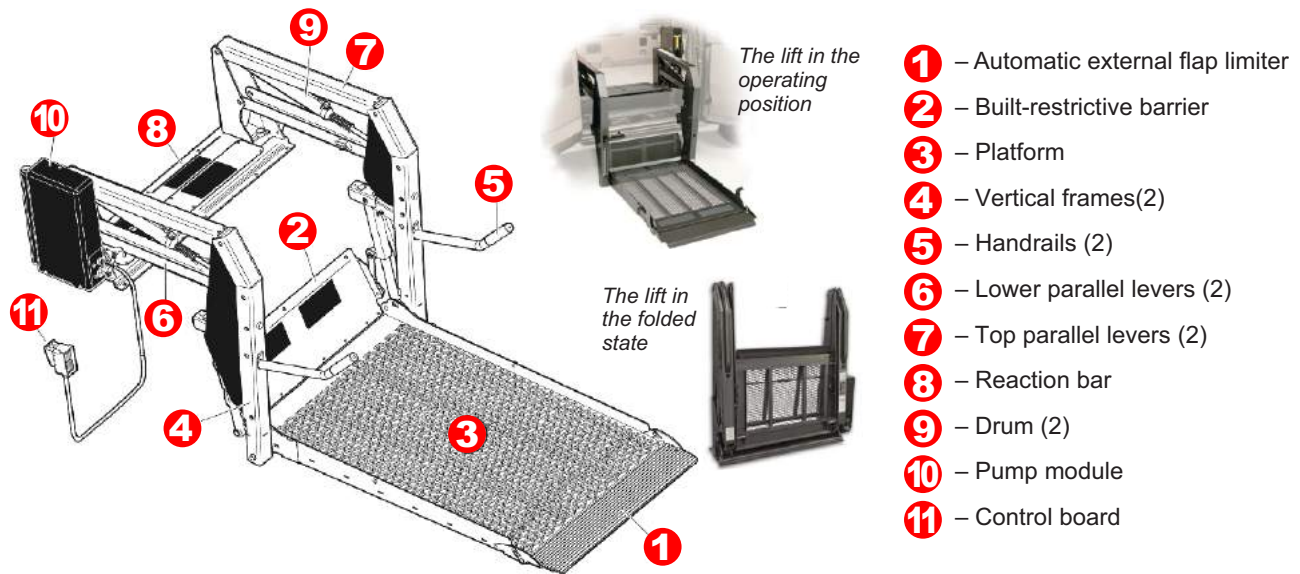
Passenger compartment is equipped with all necessary stuffs. Hydraulic lift with control board provides free boarding and drop-off of passenger that have to move on wheelchairs. Seats with armrests and seat belts developed for comfortable sitting for people who needs care.

### Basic equipment

- Vibration, noise and thermal insulation of the vehicle body
- Abrasion-resistant easy to clean most non-skid, antistatic floor covering
- Full vehicle body glassing
- Rear-view mirror in a passenger prepetition
- Interior decoration of the compartment with plastic panels
- Handrails in the passenger compartment
- Passenger compartment Heater
- Passenger compartment lighting
- Translucent multi hatch
- Hammer for emergency escape
- Footstep of a sliding door
- Hydraulic lift with control board provides free boarding and drop-off of passenger
- 2 seats for transportation passengers in wheelchairs
- Holders for wheelchairs
- Buttons for communication with the driver on every seat



## A device for lifting people in wheelchairs in vehicles



### Features lift

Electro-hydraulic, with power lifting / lowering by gravity. Driven pump with two hydraulic lift cylinders.  
Controlled by manual control panel.

- Fully automatic lift operated accompanying
- Parallel arm lift with hydraulic cylinders
- Hand control for easy control of lift
- Applicability to the side and rear doors
- Availability of models with folding lift
- New design reduces the weight of the base plate lift and provides a fast and easy service of hydraulic hoses
- Pump design prevents the platform from falling laden
- Dual handrails for security and convenience
- Spring-loaded hinged external limiter
- Automatic mechanical built-restrictive barrier that provides additional security for the passenger in a wheelchair
- Combined emergency manual pump—equipped with anti-vibration pads to prevent unpleasant noise in motion
- Wear-resistant powder-coated surface
- Locking mechanism holds the platform safely while the car is in motion
- Removable cover of the pump makes it easy to get to all components
- Switch on/off the lift







## ABOUT THE COMPANY

*«Practika» company was founded in 1988. At present it is the market leader in production of security facilities, special equipment and specialized motor vehicles.*

*The company structure contains: headquarters located in the centre of Kiev; own modern complete cycle plant with total area of over 7000 square metres, situated in Kiev as well; powerful design department, testing laboratory, experimental manufacture and other units. «Practika» also has several foreign branch offices.*

*The total number of the company's employees is more than 300 people.*

*Since 2002 a quality control system in compliance with ISO 9001 requirements has been used in the «Practika» company, which guarantees high quality of the products.*

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