

Bomb Disposal Vehicle, completely equipped

Art.Nr. 4400100



The vehicle

- I. Mercedes-Benz Sprinter 416 (4x2) high roof 4250mm wheel base.

Modifications and special adjustment:

- I.1. Automated brake system
- I.2. Enhanced back axle stabilizer.
- I.3. Off-road capability.
- I.4. Enhanced accumulators.
- I.5. Central accumulator switch.
- I.6. Heated windows.
- I.7. Fog lights.
- I.8. Differential blocka
- I.9. Hydraulic seat for the driver.
- I.10. Air condition system.
- I.11. Light desk.

Modification of the robot compartment

1 Air condition operation options

- I.1 24V vehicles electric system.
- I.2 Generator or 220V external source.

2 Plating

2.1.1 The Floor

- 2.1.1.1 The floor of the vehicle is assembled as follows:
- 2.1.1.2 A 10-18 mm layer of plywood, coated with 2-3 mm layer of PVC.
- 2.1.1.3 The entire upper PVC layer consists of one piece which will "climb" up all the walls to a height of about 50 mm

2.1.2 Roof and Walls

2.1.2.1.1 The entire roof of the vehicle will be coated with the following layered structure:

2.1.2.1.2 First layer: 25-30 mm insulation.

2.1.2.1.3 Second layer: 4-6 mm plywood covered with “sky”, including the rear and side doors, the internal wheel housing, including covering the door frames and corners and separate openings for the rear lights, so as to enable replacement of rear lights from inside the vehicle.

2.1.2.1.4 The roof sections (as few as possible) will be joined with metal strips.

2.2 Seats

2.2.1 Rotating central chair

New upholstered vehicle chair including: chair cover, the possibility to move the chair backwards and forward, turning aside around the axis, adjustable back, adjustable and folding handles, safety belt.

3 Equipment Storage Cabinets

3.1 Cabinets for storage of the equipment and tools. Their dimensions and location are according to the needs and parts to be stored.

3.2 The cabinets will be constructed of Aluminium 1.2 to 1.5 mm, and will be attached to the structure by a thrust or regular screw, at minimum intervals of every 12 cm.

3.3 The panels of the drawers - 3 mm aluminium.

3.4 The drawers in the cabinet will move on a metal track. The movement of the tracks will be by means of ball bearings (not a smooth track), with a stop device at the forward end

3.5 Each drawer will be designed for a weight of at least 50 KGs.

3.6 Each cabinet or drawer will have an opening handle a lock and key. There will be a master key which will and locker all cabinet and drawers in the vehicle.

3.7 The interiors of the cabinets and drawers will be covered with carpeting to prevent noise and friction.

3.8 The cabinets should be anchored to the vehicle according to the strength required by the type of the work, as well as in the case of a head-on collision.

3.9 The cabinets will be installed so that it will be possible to transfer them to another vehicle of the same type without difficulty (modular design).

3.10 All closets and devices shall be painted with grey electrostatic paint

3.11 The place intended for explosives will be an internal box made of aluminium 2 mm wide, with the external dimensions of 700X290X100 mm, with the following internal division:

3.12 At the place intended for the cartridge cases, there will be an internal box, similar to the one without the internal division.

List of Cabinets:

3.12.1 Equipment cabinet.



3.12.2 The “explosives and cartridge” cabinet.



4 Back ramp:



- 4.1 The back ramp should be “folded type” (see pictures): Inclined ramp for climbing, folded for transportation (while folded, acting as a rear stop to the robot).

5 Robot device



- 5.1 **Anchoring robot in a vehicle:** fixing inside a vehicle is executed by means of a front stopping device or a robot and the rear device for fastening a robot.



- 5.1.1 **Robot operating station:** Robot operating station will be on the operator table or on the left equipment cabinet.

6. Hanging devices For one (1) Bomb Disposal Division suit (on one of the rear doors).

7. Light bar 24V light bar, 2 rotators, 3 step cascade mirrors.

Rear lights:

2 Hide – A – Way clear strobe tubes installed in the vehicles rear lights.

Perimeter lights:

2 strobe perimeter lights installed in the front grill.

Speakers:

2 Z100 speakers

8. Siren Vicon 24V/100W

Vehicle refrigerator

A 40 liters, product of WAECO – GERMANY

“Coolmatic” RPD-40 or similar, according to the following data:

- Operational power 12/24V
- Temperature range at least –15 to +5°C
- Low voltage protection (against emptying the vehicle battery)
- The emphasis is on the refrigerator having compressor, etc, and not on the cool box.

9. Electricity

- 9.1 Two main switches for 24V systems and for 12V systems will be installed, which will disconnect the systems. The switches will be accessible to the driver upon entering and exiting the vehicle.
- 9.2 Electric box contains one master fuse for 24V in the working compartment.
- 9.3 Electric box contains one master fuse for 220v in the working compartment.
- 9.4 Charging of a robot in a vehicle while parked: with the help of a “Hella” charging plug upon starting of a vehicle.
- 9.5 The system for charging the robot’s batteries while the vehicle is in motion shall be installed in the vehicle. Such system shall use power supplied from the additional alternator 28V DC installed in the vehicle, while in motion. This will happen only after the alternator feeds the communication system batteries. When the communication system batteries are full, the feeding will be transferred to the charging of a robot.

- 9.6 „The energy channel” shall be installed on the two upper sides of the vehicle for all electric and communication installations and preparations for future reserve.
- 9.7 Main electric switches for entire the modelling will be installed in the driver’s cabin.



- 9.8 Two sunken lights will be installed in the roof (large, round, inset model with a light of at least 21W), instead of the 2 original lights in the vehicle.
- 9.9 Two rectangular lights (halogen), to be installed inside the vehicle at both sides of the rear door, with switch near the door.
- 9.10 Multiple sockets shall be installed at both sides of every rear or side door and adjusted to 25A current. (Six multiple sockets).



- 9.11. Multiple sockets (220V) shall be installed at the operator table.
- 9.12 All push buttons and switches shall be of IP66 level.
- 9.13 The two main electric boards (12V and 24V), with half automatic fuses (S191 or similar).
- 9.14 At the beginning of each line there will be an automatic electrical fuse in the fuse box.

Additional Installations:

1. Radio system + antenna
2. Flash light charging devices +charging able Flash light.
3. Receiver tape recorder.
4. Intercommunication between driver’s cabin and work compartment.
5. Extra electric accumulator the robot compartment.
6. First aid kit.
7. Digital camcorder with video equipment (monitor).
8. 1500 kg winch anchoring to the front bumper
9. Water tank (on one of the rear doors), equipped with faucet for hand washing with place for soap and tower.
10. Generator: Honda EP3800CX
11. Spherical towing hook.
12. Fire extinguisher.
13. Standard equipment.
 - 13.1. 4 spare 10L containers.
 - 13.2 Special purpose ladder.
 - 13.3 Megaphone.
 - 13.4. Shovel.

- 13.5. 40 m cable reel.
- 13.6. Protective net.
- 13.7. Protective net pegs.
- 13.8. Hammer (1 kg).
- 13.9. Crow bar.
- 13.10. Chargeable drilling machine.
- 13.11. Screw clamp.
- 13.12. Electrician tool box.
- 13.13. Set of lightening fixtures.
- 13.14. Set of consumables (gloves, sack bags etc').



Additional Equipment

Art.No.

1. Bomb disposal suit, heavy	4700100
2. Bomb blanket	0203500
3. Fragment protection shield	4700200
4. Telescopic manipulator	4700300
5. Mine detector	3000100
6. Bomb locator	3000200
7. Portable stethoscope	4800100
8. Mirror search kit	0202900
9. Videoscope	1400100
10. Hook and line kit	0200700
11. Search tool kit	0201600
12. Response kit for hazardous devices	0203100
13. EOD response toolkit R.S.P.	0204300
14. EOD tool set, non magnetic	1600100
15. Demolition kit	0202100
16. EOD tripod	0201500
17. Bomb basket	0500600
18. Water disrupter set complete	0201100
19. Rocket wrench	0205500
20. EOD marking set	0203603

Option

Bomb trailer

0205600

