

TRUCK, AIR DEFENCE, LAND ROVER 6 X 6, FFR, W/WINCH, TARGET SENSOR VEHICLE (TSV)

TECHNICAL DESCRIPTION

This instruction is authorised for use by command of the Chief of Army. It provides direction, mandatory controls and procedures for the operation, maintenance and support of equipment. Personnel are to carry out any action required by this instruction in accordance with EMEI General A 001.

INTRODUCTION

1. This EMEI contains the technical description of the Truck, Air Defence, Land Rover 6 X 6, FFR, W/Winch, Target Sensor Vehicle (TSV) shown in Figure 1. All relevant weights, dimensions and performance figures are detailed in the Data Summary, EMEI Vehicle G 400. Except for the rear body assembly, the mechanical characteristics are the same as the Truck, Cargo, Light, Winch, MC2, therefore, for further information relating to the mechanical functions of this vehicle, refer to EMEI Vehicle G 202.

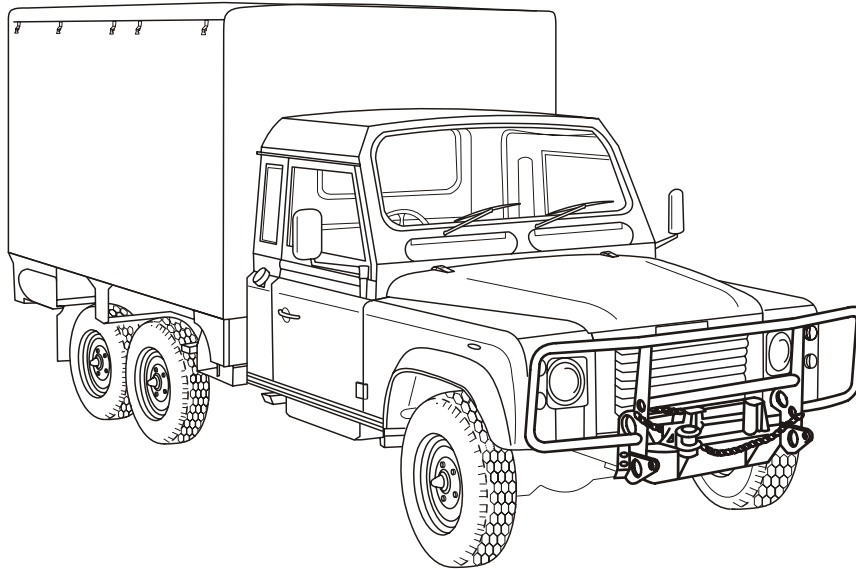


Figure 1 Truck, Air Defence, Land Rover 6 X 6, FFR, W/Winch, Target Sensor Vehicle (TSV)

GENERAL INFORMATION

Cargo Area Lighting

2. Lighting is provided in the cargo area by nine white and nine blue LED lights (Figure. 2). Lights are mounted in brackets attached to the interior roof assembly. Each bracket houses one white and one blue LED light fitting. A three-position switch, fitted above the cable reel stowage, enables either white or blue LED lights to be selected for loading/unloading operations during normal or blackout conditions. Cargo area lighting will not operate in either reduced or blackout mode.

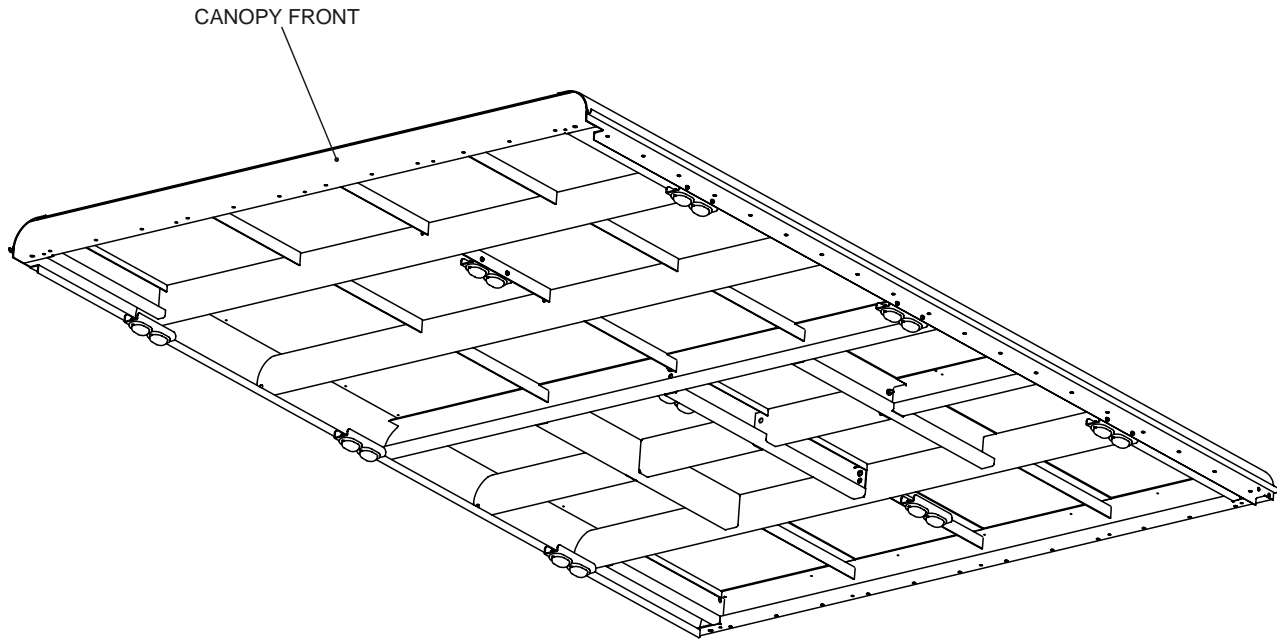


Figure 2 Cargo Area Lighting Layout

Rear Body

3. The vehicle's rear body utilizes a modified cargo tray (Figure 3) with stowage provided for all equipment required to operate as a Target Sensor Vehicle. A solid roof covers the complete cargo area and is fitted with soft sides.
4. Equipment stowage is provided for (Figure. 4):
 - a. target sensor radar antenna;
 - b. pedestal and side lobe canceller antenna;
 - c. Identifier Friend or Foe (IFF).
 - d. generators;
 - e. computer (TaCR); and
 - f. cable reel and operator's console.
5. The under tray stowage module is located at the rear and underneath the vehicle. The tray provides stowage for camouflage net poles, Clark Masts and Omni Directional Antennas. It is mounted on rollers and can be pulled out halfway for ease of access. The spring loaded shot bolt and anti-luce fittings provide the locking mechanism. A flap fitted at the rear of the tray provides a safety guard for the tray for personnel closing the tray and can be utilised as an administration table.

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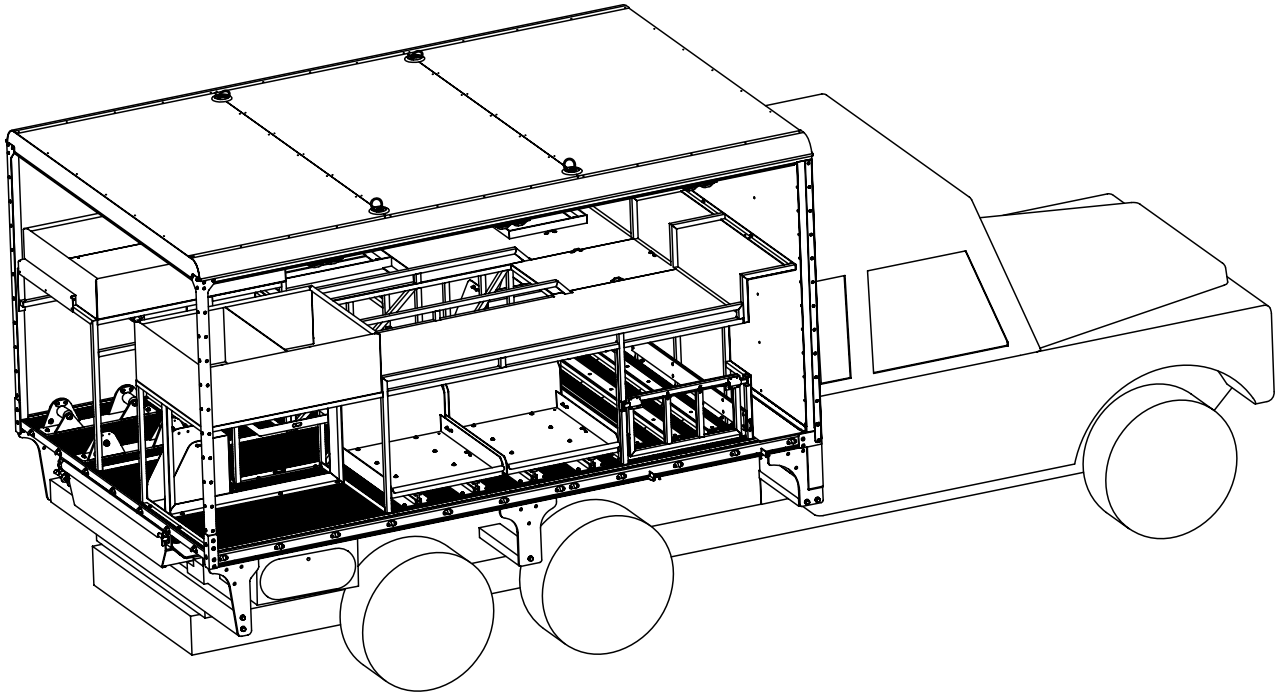


Figure 3 Cargo Tray Assembly

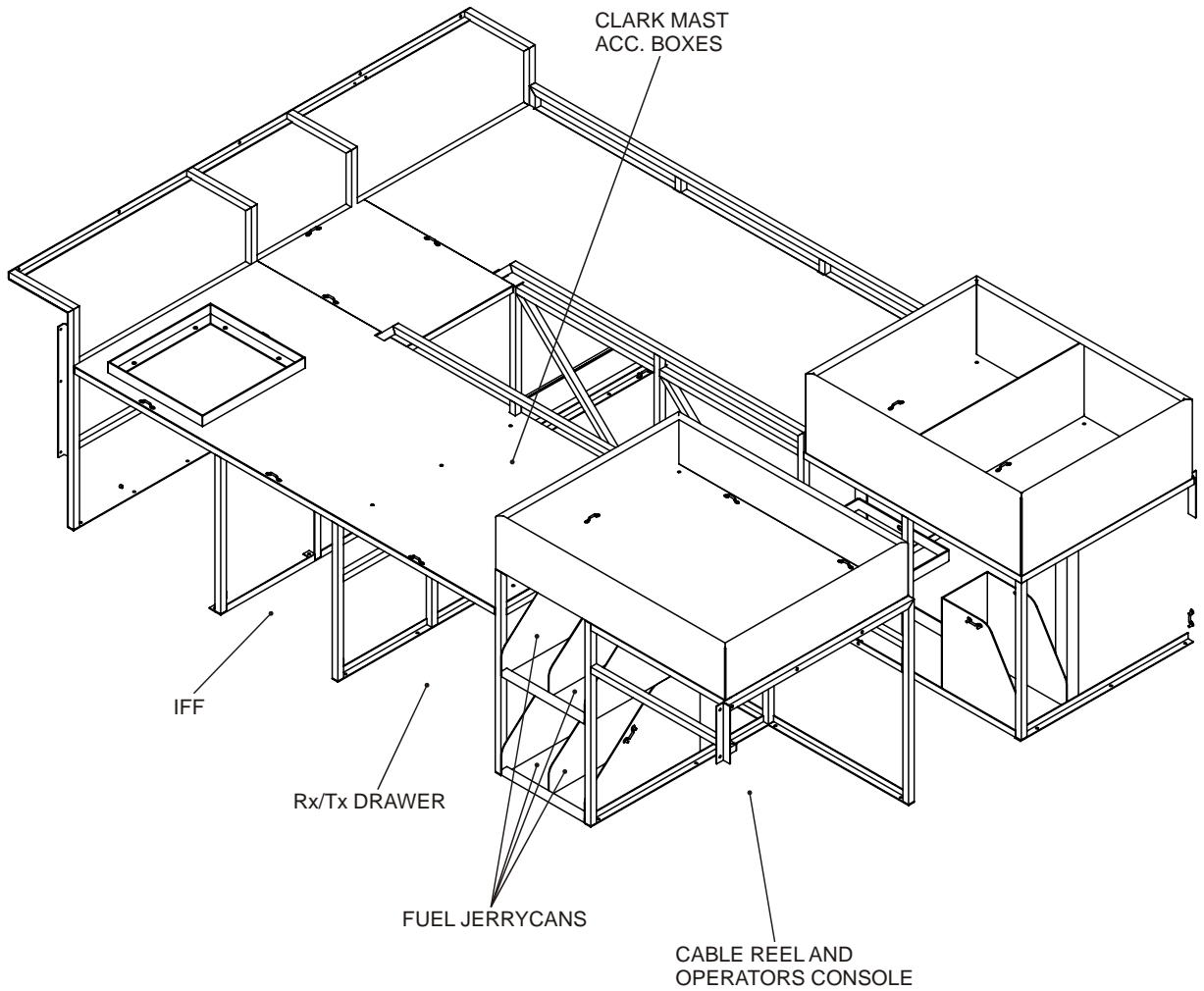


Figure 4 TSV Racking Framework

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DETAILED DESCRIPTION

Rear Body

6. The rear body comprises: a cargo tray, a headboard, canopy and modules for the Target Sensor Vehicle comprising that part of the RBS 70 missile system.

Cargo Tray

7. The frame of the cargo tray (Figure. 5) is constructed of aluminium (6063 series) components and consists of: two side coamings, end coamings and flooring. The side and end coamings are secured with angle brackets to form a rectangular shape. The flooring is mounted within the frame. Two rails, under the flooring, provide the support for the under tray stowage module.

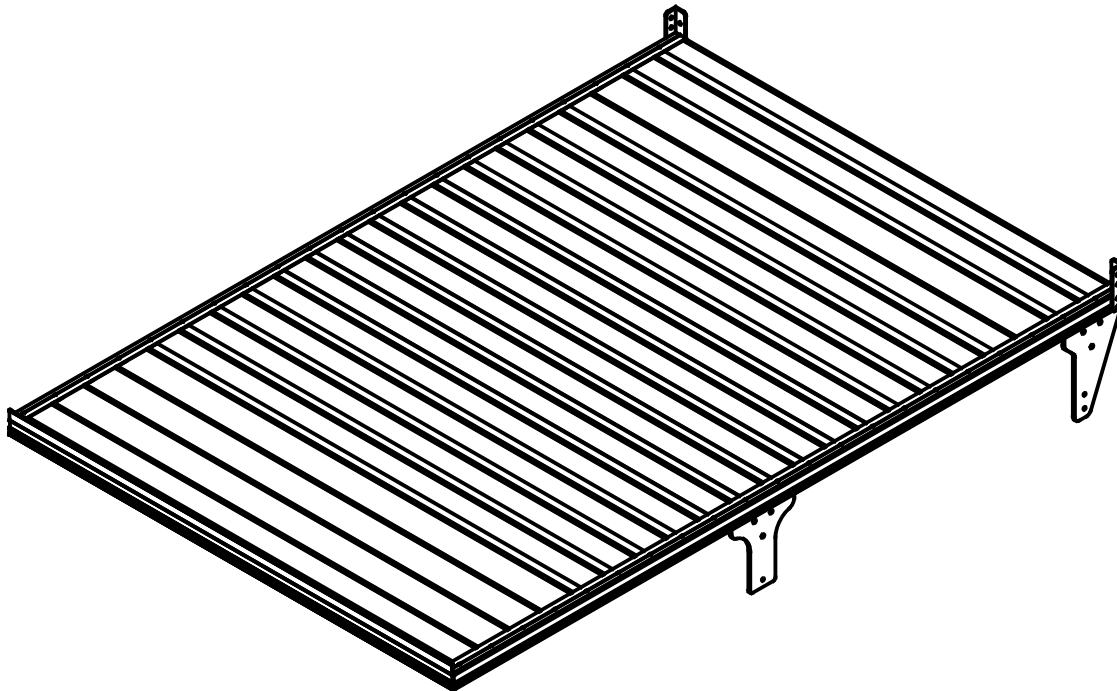


Figure 5 Common Cargo Tray

Canopy Assembly

8. The canopy assembly comprises of a roof assembly and two roof supports (Figure 6). The front of the canopy assembly is supported by the headboard assembly and the rear of the canopy is supported by the two supports. The roof assembly comprises of a series of support beams welded to form the roof shape and covered by three roof plates. Four tie down points allow for equipment to be secured on the top of the canopy. Three roll down barracuda panels are attached to the canopy for weather protection. Securing clips allow these panels to be either be rolled up to the top of the canopy or be rolled up and positioned on the top of the canopy.

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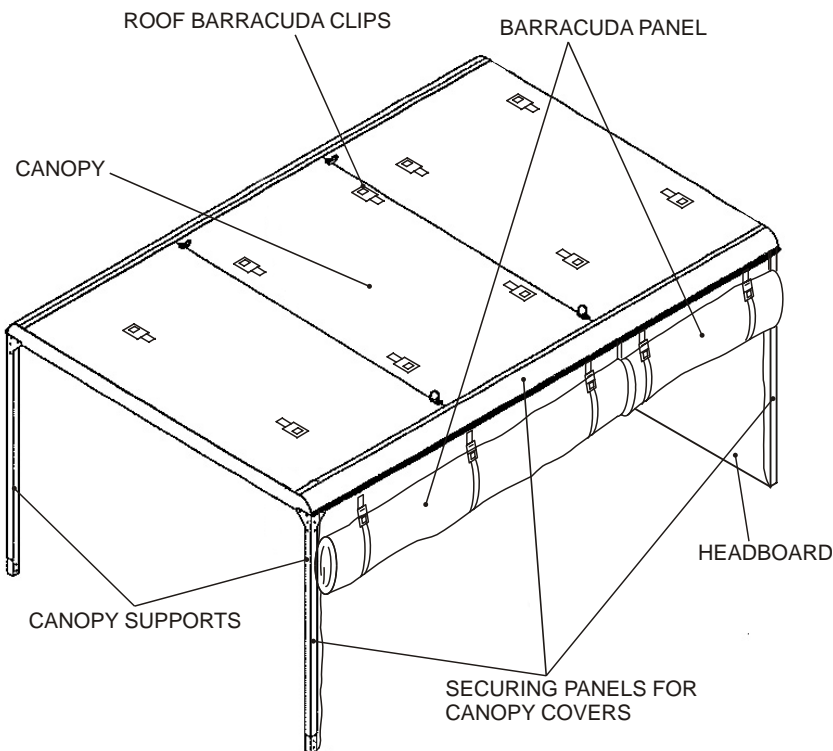


Figure 6 Canopy Assembly

Equipment and Configuration

9. **Equipment Stowed in the TSV Stowage Rack System Assembly.** Figures 7 and 8 illustrate the stowage on the passenger side module and the driver's side module respectively. The following lists all equipment carried in the two modules:

- a. target sensor radar antenna (accessible from both sides);
- b. Barracuda camouflage nets x 2 (box on both sides);
- c. computer at the radar (TaCR) (accessible on left hand side);
- d. 4 water Jerricans (accessible on left hand side);
- e. TAC box (accessible on left hand side);
- f. receive/transmit assembly (accessible on left hand side);
- g. radio shacks (accessible on left hand side);
- h. Identification Friend or Foe (IFF) unit (accessible on left hand side);
- i. 4 fuel Jerricans (accessible on right hand side);
- j. rations & MLS (accessible on left hand side);
- k. cable reel and operators console (accessible on left hand side);
- l. pedestal and side lobe canceller antenna (accessible on right hand side);
- m. generators x 2 (accessible on right hand side);
- n. fuel Jerricans x 2 on slide out trays (accessible on right hand side);
- o. fuel Jerricans x 2 under tray (accessible on right hand side);
- p. cable bag x 2 (accessible on right hand side); and
- q. battery and power distribution boxes (accessible on right hand side).

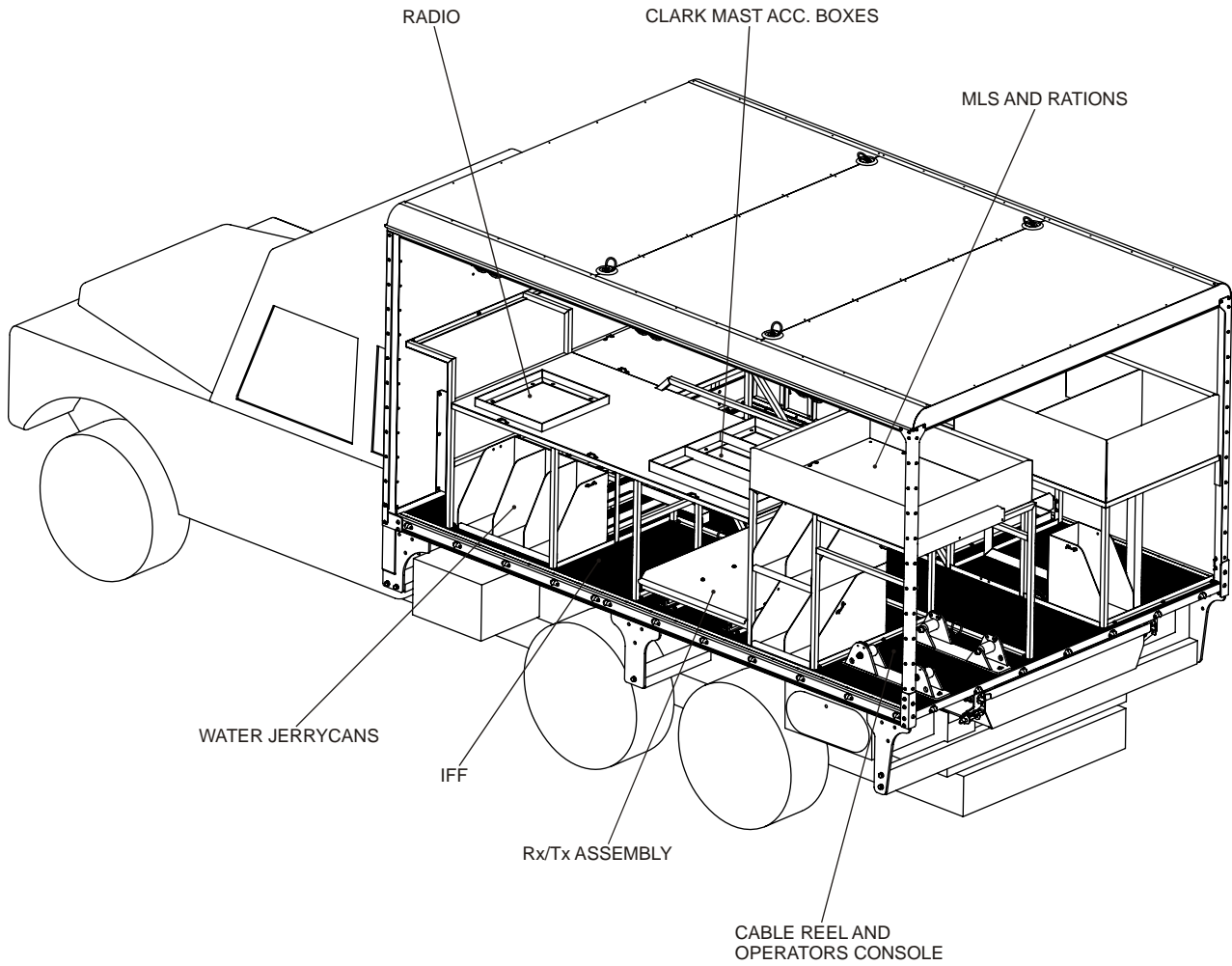


Figure 7 TSV Left-hand Side Module

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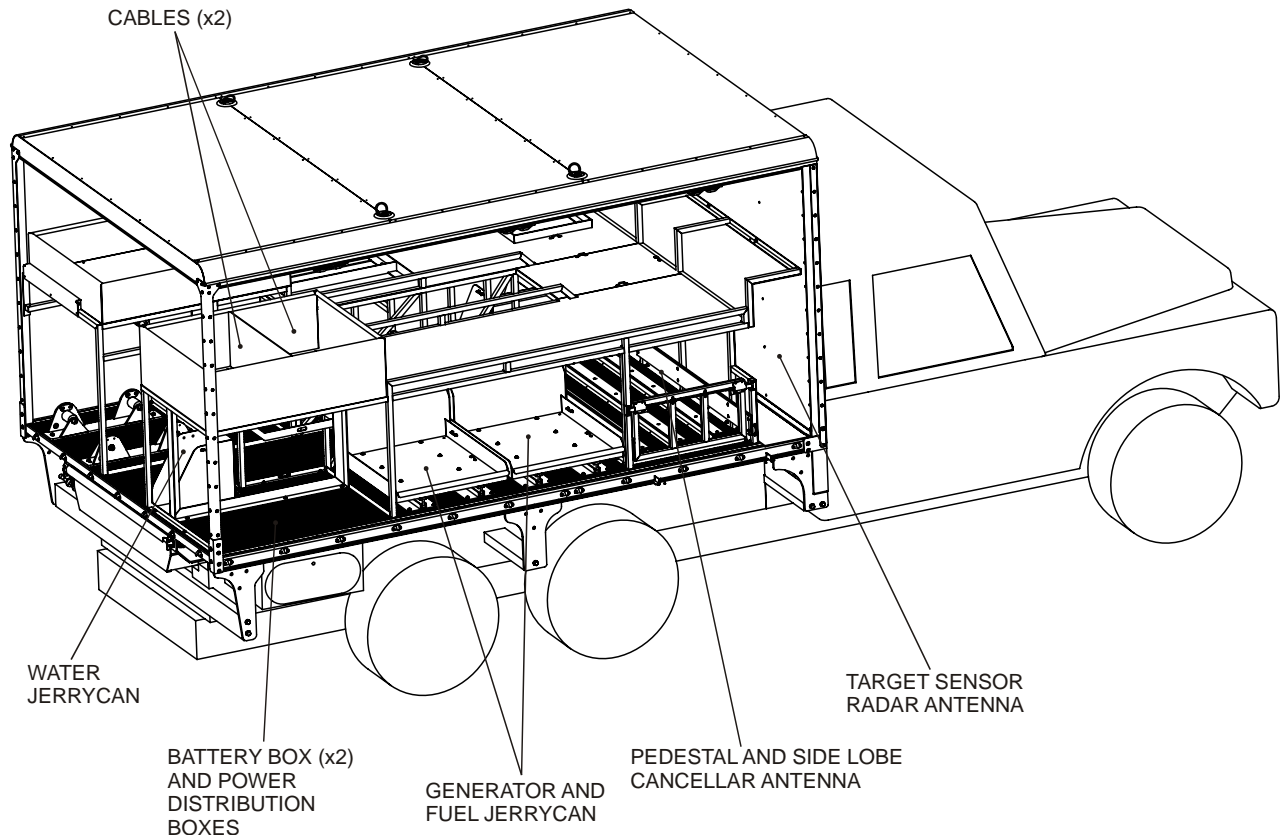


Figure 8 TSV Right-hand Side Module

Under Tray Stowage

10. The under tray stowage module is located at the rear and underneath the vehicle (Figure 9). The tray provides stowage for camouflage net poles, Clark Masts and Omni Directional Antennas. A two fold flap fitted at the rear of the tray provides a safety guard for personnel closing the tray and can also be used as an administrative table. The tray is mounted on rollers. The spring loaded shot bolt and two anti-luce fittings provide the locking mechanism. The shot bolt locks the storage tray in three positions for closed, fully open and in position for using the administrative table function.

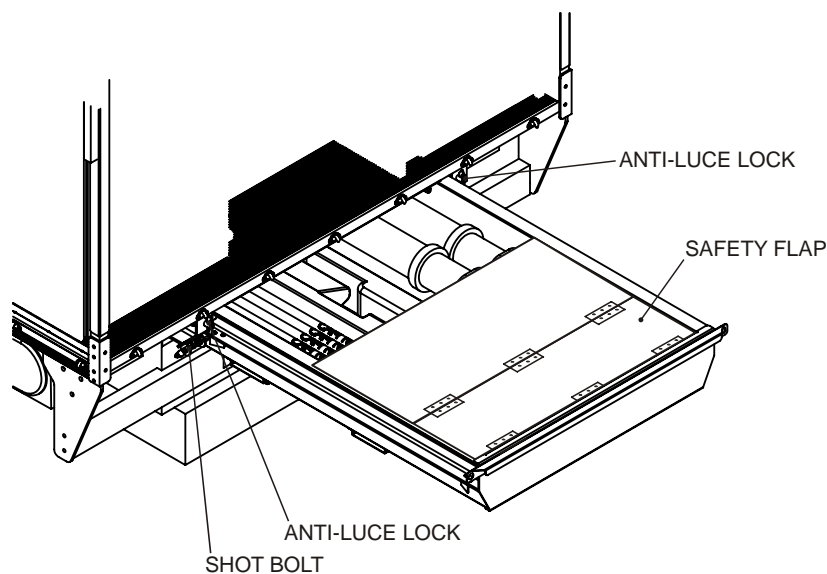


Figure 9 Under Tray Stowage

END

Distribution List: **VEH G 21.3 – Code 2** (Maint Code)
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