

**TRUCK, AIR DEFENCE, LAND ROVER 6X6, FFR, W/WINCH,
FIRE UNIT VEHICLE (FUV)**

DATA SUMMARY

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.

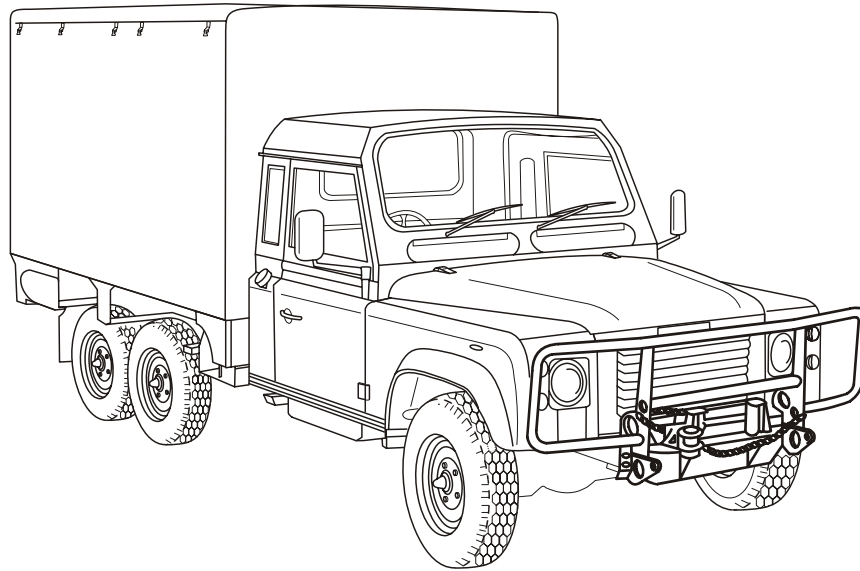


Figure 1 Truck, Air Defence, Land Rover 6X6, FFR, W/Winch, Fire Unit Vehicle (FUV)

General

1. This EMEI contains the relevant information pertaining to the Truck, Air Defence, Land Rover 6X6, FFR, W/Winch, Fire Unit Vehicle (FUV).
2. An additional racking module is provided for the carriage of support equipment required for the RBS 70 missile system.

Role

3. To transport two personnel (including the driver) and up to eight RBS 70 missiles, plus associated support equipment up to a total of two tonnes.

Detail

4. Dimensions

- a. Length..... 6 001 mm
- b. Overall Width:
 - (1) Over Mirrors 2 430 mm
 - (2) Reduced 2 072 mm
- c. Overall Height:
 - (1) Laden 2 480 mm
 - (2) Unladen..... 2 550 mm

UNCONTROLLED IF PRINTED

- d. Reduceable Height:
 - (1) Laden.....2 480 mm
 - (2) Unladen.....2 550 mm
- e. Shipping Cubage 25.5 m³
- f. Module Tray:
 - (1) Length3 192 mm
 - (2) Width.....2 128 mm
 - (3) Height of Cargo Tray from Ground
 - (a) Laden960 mm
 - (b) Unladen.....1 030 mm
- g. Wheelbase:
 - (1) Front Axle to Intermediate Axle3 040 mm
 - (2) Front Axle to Rear Axle3 940 mm
- h. Track:
 - (1) Front.....1 698 mm
 - (2) Rear1 698 mm
- i. Ground Clearance:
 - (1) Unladen.....215 mm
 - (2) Limiting Feature..... rear differential housings
- j. Pintle Hook Height:
 - (1) Unladen710 mm
 - (2) Laden.....640 mm

5. Mass

- a. Unladen (with FUV module):
 - (1) Front Axle1 660 kg
 - (2) Intermediate Axle.....1 100 kg
 - (3) Rear Axle1 000 kg
 - (4) Total3 940 kg
- b. Maximum Loading:
 - (1) Front Axle1 650 kg
 - (2) Intermediate Axle.....1 960 kg
 - (3) Rear Axle1 950 kg
 - (4) Total5 550 kg
- c. Design Limit Loading:
 - (1) Front Axle1 900 kg
 - (2) Intermediate Axle.....2 050 kg
 - (3) Rear Axle2 050 kg
 - (4) Total5 600 kg

UNCONTROLLED IF PRINTED

6. Performance

- a. Fording Depth (unprepared) 500 mm
- b. Turning Circle 17.2 metres
- c. Ramp Breakover Angle:
 - (1) Unladen 148°
 - (2) Laden 152°
- d. Angle of Approach 45°
- e. Angle of Departure 30°
- f. Maximum Gradient..... 60%
- g. Fuel Consumption Target:
 - (1) Highway Laden..... 22 litres per 100 km
 - (2) Second Class Laden 27 litres per 100 km
- h. Maximum Towed Load 1 500 kg
- i. Maximum Speed Permitted 80 kph

7. Wheels and Tyres

- a. Wheels 6F by 16, 1-piece 5-stud ventilated disc
- b. Tyres and Tyre Pressures..... in accordance with EMEI Vehicle A 291-5

8. Bridge Classification 6

9. Engine

- a. Manufacturer/Type..... Isuzu 4BD1 TRB-G series
- b. No. of Cylinders 4 (in-line)
- c. Power (Nett)..... 90 kW at 3 000 rpm
- d. Torque (Nett) 314 N.m at 2 200 rpm
- e. Firing Order 1-3-4-2
- f. Capacity 3.856 litres
- g. Compression Ratio 17:1
- h. Turbocharger..... water-cooled, Garret, model ATD-T25

10. Transmission

- a. Manufacturer Land Rover
- b. Type..... model LT95A
- c. Ratios:
 - (1) First Gear 4.069:1
 - (2) Second Gear 2.448:1
 - (3) Third Gear..... 1.505:1
 - (4) Fourth Gear 1.000:1
 - (5) Reverse Gear 3.664:1

UNCONTROLLED IF PRINTED

11. **Transfer Case**
- a. Manufacturer..... Land Rover
 - b. Typetwo-speed
 - c. Ratios – High Range 0.996:1
 - d. Low Range..... 3.321:1
12. **Front Axle**
- a. Manufacturer..... Land Rover
 - b. Typeheavy-duty, spiral bevel
 - c. Ratio..... 4.70:1
13. **Intermediate Axle**
- a. Manufacturer..... GKN/Salisbury
 - b. Type heavy-duty, Salisbury 8HA
 - c. Ratio..... 4.70:1
14. **Rear Axle**
- a. Manufacturer..... GKN/Salisbury
 - b. Type heavy-duty, Salisbury 8HA
 - c. Ratio 4.70:1
15. **Steering**
- a. Manufacturer..... Adwest
 - b. Typeintegral power-assisted worm and roller
 - c. Ratio 17.50:1
 - d. Lock to Lock..... 3.5 turns
 - e. Power Steering Pump..... Isuzu gear-driven
16. **Winch**
- a. Manufacturer..... Winch Industries
 - b. Type Thomas T9000M
 - c. Reduction Ratio 45:1
 - d. Winch Rope:
 - (1) Length 45 m
 - (2) Diameter..... 11 mm
 - e. Maximum Load:
 - (1) Top Layer..... 2 434 kg
 - (2) Bottom Layer 4 077 kg
 - f. Torque Limiter Setting 155 N.m
17. **Electrical System**
- a. Type of System (vehicle)..... 12 V
 - b. Type of System (FFR) 24 V
 - c. No. of Batteries (vehicle)..... one 12 V
 - d. No. of Batteries (FFR) two 12 V
 - e. Capacity (nominal – vehicle)..... 98 Ah

- f. Capacity (nominal – FFR) 93 Ah
- g. Terminal Grounded negative
- h. Radio Suppression DEF(AUST)172, MIL-STD-461A, RE05, CE07
- i. Distribution Box Location behind front passenger seat
- j. FFR Connecting Plug Type Cannon 3-pin

18. Fuels and Lubricants

- a. Fuel:
 - (1) Type Diesel
 - (2) Capacity two 62 L tanks
- b. Cooling System:
 - (1) Type water (8% Nalcool Maximum Inhibitor)
 - (2) Capacity 12.8 L
- c. Engine (Including Filters):
 - (1) Type SAE Grade 40 (OMD-115)
 - (2) Capacity 8.5 L
- d. Axles:
 - (1) Front Swivel Pin Housing:
 - (a) Type EP-00
 - (b) Capacity 375 mL
 - (2) Front Axle:
 - (a) Type OEP-220
 - (b) Capacity 1.7 L
 - (3) Intermediate Axle:
 - (a) Type OEP-220
 - (b) Capacity 2.3 L
 - (4) Rear Axle:
 - (a) Type OEP-220
 - (b) Capacity 2.6 L
- e. Transmission:
 - (1) Type SAE Grade 40 (OMD-115)
 - (2) Capacity 2.7 L
- f. Transfer Case (With Power Take-off):
 - (1) Type SAE Grade 40 (OMD-115)
 - (2) Capacity 5.8 L
- g. Brake and Clutch Fluid:
 - (1) Type OX(Aust)-8
 - (2) Capacity fill to level

UNCONTROLLED IF PRINTED

- h.** Steering Box (Including reservoir):
 - (1) Type OX46
 - (2) Capacity 1.25 L
- i.** Chassis Lubrication:
 - (1) Type XG-291
 - (2) Capacity as required
- j.** Wheel Bearings:
 - (1) Type XG-291
 - (2) Capacity as required
- k.** Winch:
 - (1) Type OEP-220
 - (2) Capacity 2.1 L

19. Brakes

- a.** Parking Brake..... cable-operated, transmission drum brake
- b.** Foot Brake..... servo-assisted hydraulic dual system with front and rear disc brakes

20. Trailer Facilities

- a.** Socket Type..... NATO 12-pin
- b.** Pintle Hook fully-rotating
- c.** Brakes..... no facility

21. Manufacturer's Details (Module)

- a.** Manufacturer:
G.H. Varley Pty Ltd
21 School Drive
TOMAGO NSW 2322

22. Point of Contact

National Fleet Manager (NFM)
Lt B Vehicles, CGSVSPO
DPM 7, Defence Plaza Melbourne
661 Bourke Street
MELBOURNE VIC 3000
Tel: (03) 9282 7391

23. Associated Information

- a.** SIGC..... 2320-0110
- b.** NSN..... 2320-66-156-2529
- c.** RPS 02262
- d.** SCES 10864
- e.** ILSI ALI MM 10-29
- f.** User Handbook..... 7610-66-156-5445
- g.** EMEI Vehicle A 291-5 General Service B Vehicle Tyre Guide
- h.** EMEI Vehicle G 282..... Technical Description
- i.** EMEI Vehicle G 203..... Light Grade Repair

UNCONTROLLED IF PRINTED

- j.** EMEI Vehicle G 204-1 Medium Grade Repair
- k.** EMEI Vehicle G 204-2Heavy Grade Repair
- l.** EMEI Vehicle G 283 Light Grade Repair
- m.** EMEI Vehicle G 284-1 Medium Grade Repair
- n.** EMEI Vehicle G 209Servicing Instruction

UNCONTROLLED IF PRINTED

END

Distribution List: **VEH G 21.2 – Code 1** (Maint Code)
(Sponsor: CGSVSPO, Light B Vehicle Section)
(Authority: ECO CGSVSPO 120/10)