ELECTRICAL AND MECHANICAL
ENGINEERING INSTRUCTIONS

VEHICLE G 090
Issue 1, Oct 09

TRUCK, SURVEILLANCE, LIGHTWEIGHT, W/WINCH, W/SIDE STOWAGE,
W/REAR SEAT, MC2 – LANDROVER 110 4X4

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, Surveillance, Lightweight, W/Winch, W/ Side stowage, W/ Rear seat,
MC2 – Land Rover 110 4x4

General

1. This EMEI lists basic data for the Truck, Surveillance, Lightweight, W/Winch, W/ Side stowage, W/ Rear seat, MC2 – Land Rover 110 4x4 (RFSV), as shown in Figure 1.

2. Role. The role of the RFSV is to transport up to three personnel (including driver) and surveillance equipment.

3. Description. The vehicle has been modified, from the Truck, Utility, Lightweight, Winch, MC2 – Land Rover 110 4X4, to incorporate heavy duty front and rear axles with higher spring rates, revised transfer case gearing, increased capacity fuel tanks, power steering, air compressor and accommodation for two spare wheels on the rear of the vehicle.

4. Storage areas have been added for special equipment, rations, jerry cans and vehicle spares. The storage areas consist of bins mounted internally either side of the cargo tray, side storage baskets mounted on the exterior of the cargo tray, under tray storage, storage for camouflage poles and cargo restraint loops and straps. A rearward facing seat is mounted in the cargo tray.

5. The rollover protection system provides protection to the operators and provides storage for camouflage nets. A camouflage canopy can be fitted over the rollover protection system.

6. The mechanical characteristics of the remaining components are the same as the Truck, Cargo, Lightweight, Winch, MC2, therefore, for further information relating to characteristics or mechanical functions of this vehicle, refer to the EMEI Vehicle G 100 decade.

Detail

7. Dimensions:

   a. Overall Height:
      
      (1) Laden .......................................................................................................................... 2 200 mm
      (2) Unladen ..................................................................................................................... 2 300 mm
b. Reducible Height:
   (1) Laden.......................................................... 1 500 mm
   (2) Unladen..................................................... 1 600 mm

c. Length.......................................................... 5 160 mm

b. Overall Width:
   (1) Over Mirrors .............................................. 2 380 mm
   (2) Reduced.................................................... 2 055 mm

e. Shipping Cubage ............................................ 17 m³

f. Cargo Tray:
   (1) Length – Internal ...................................... 1 835 mm
   (2) Width – Internal ....................................... 1 440 mm
   (3) Height of Body Sides (From Tray) .............. 265 mm
   (4) Height of Cargo Tray from Ground:
       (a) Laden ................................................... 770 mm
       (b) Unladen................................................. 870 mm

g. Wheelbase .................................................... 2 794 mm

h. Track:
   (1) Front ....................................................... 1 498 mm
   (2) Rear ....................................................... 1 498 mm

i. Ground Clearance:
   (1) Unladen .................................................. 215 mm
   (2) Limiting Feature ...................................... rear differential housing

j. Pintle Hook Height (Unladen) ......................... 710 mm

k. Fording Depth (Still Water)........................... 1 000 mm

8. Mass:

   a. Unladen:
      (1) Front Axle ............................................. 1 340 kg
      (2) Rear Axle ............................................. 1 400 kg
      (3) Total ..................................................... 2 740 kg

   b. Maximum Loading:
      (1) Front Axle ............................................. 1 500 kg
      (2) Rear Axle ............................................. 2 100 kg
      (3) Total ..................................................... 3 600 kg

9. Steering:

   a. Manufacturer ............................................. Adwest
   b. Type........................................................ power-assisted worm and roller
   c. Ratio .......................................................... 17.5:1
   d. Lock to Lock ............................................. 3.5 turns
   e. Power Steering Pump ................................ Isuzu, gear driven
10. Electrical System:
   a. Type of System ................................................................. 12 V
   b. No of Batteries ................................................................. two 12 V
   c. Capacity (Nominal) ........................................................... 93 A.h
   d. SAE Cranking Current .................................................... 560 A
   e. Maximum Sustained Charging Current (Battery Charger) ..... 6.5 A
   f. Terminal Grounded ............................................................. negative

11. Fuels and Lubricants:
   a. Fuel:
      (1) Type ................................................................. diesel (automotive)
      (2) Capacity ................................................................. 112 litres
   b. Transfer Case with PTO:
      (1) Type ................................................................. OMD-115
      (2) Capacity ................................................................. 5.8 litres


13. Point of Contact:
    Australian Defence Force Logistics Manager Light B Vehicles
    CGSVSPO, LSD, DMO
    Level 7
    Defence Plaza Melbourne
    661 Bourke St
    MELBOURNE VIC 3000

14. Associated Information:
    a. SIGC ................................................................. 2320-0109
    b. NSN ................................................................. 2320-66-157-6941
    c. RPS ................................................................. 02290
    d. SCES ................................................................. TBA
    e. Equipment Kit SCES ....................................................... 12036
    f. Maintenance Kit SCES .................................................... 12142
    g. User Handbook .............................................................. 7610-66-128-5938
    h. Other EMEI:
       (1) EMEI Vehicle G 100 Decade ................................................................. base vehicle
       (2) EMEI Vehicle G 092 ................................................................. Technical Description
       (3) EMEI Vehicle G 093 ................................................................. Light Grade Repair
       (4) EMEI Vehicle G 094-1 ................................................................. Medium and Heavy Grade Repair
       (5) EMEI Vehicle G 098-1 ................................................................. Inspection for Useability
    i. ILSI ................................................................. ALI MM 10-29

END

Distribution List: VEH G 16.7 – Code 1 (Maint Level)
(Sponsor: CGVSPO, Lt B Veh Section)
(Authority: LVSPC DAC 085/07 and 021/08)