TRUCK, UTILITY, LIGHTWEIGHT, AND TRUCK, UTILITY, LIGHTWEIGHT, WINCH, MC2 – LAND ROVER 110 4X4

CARGO

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.

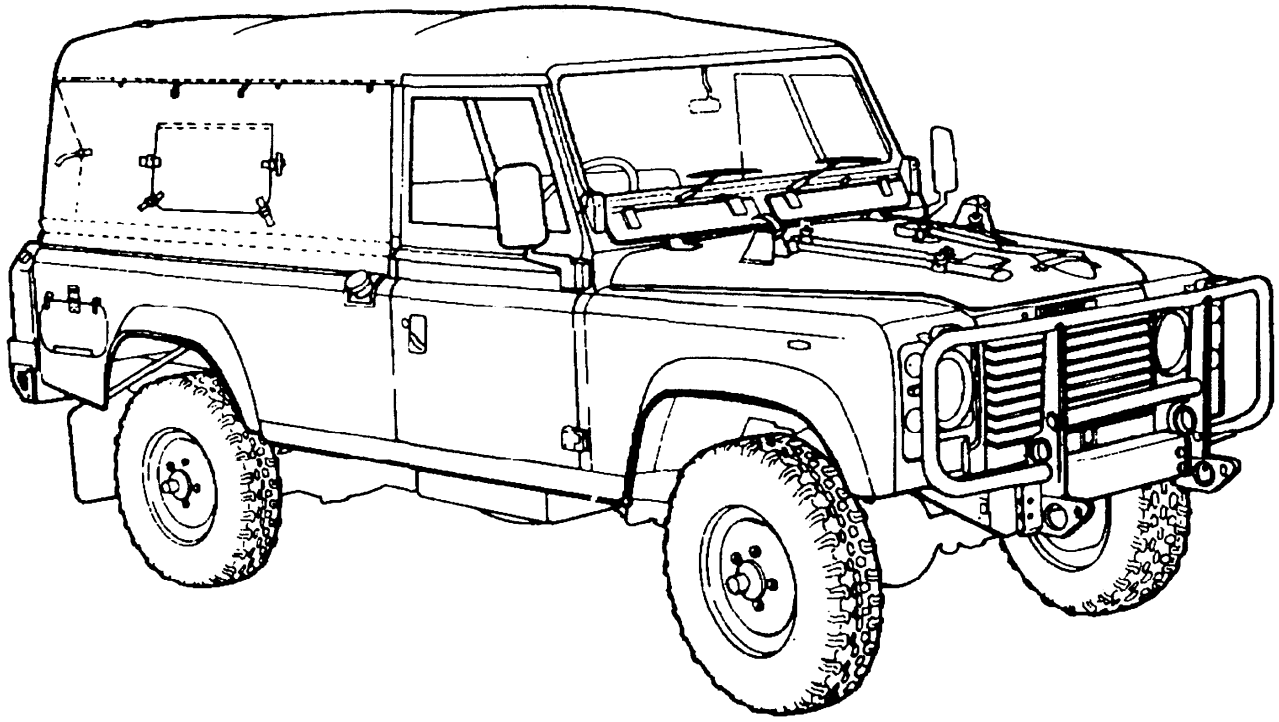

Figure 1 Truck, Utility, Lightweight, MC2 – Land Rover 110 4x4

General

1. This EMEI lists basic data for the Truck, Utility, Lightweight, MC2 – Land Rover 110 4x4, (as shown in Figure 1) and the Truck, Utility, Lightweight, Winch, MC2 – Land Rover 110 4x4.

Role

2. The role of the equipment is to transport up to eight personnel (including driver) or up to one tonne of cargo.

Physical Data

3. Mass

a. Unladen (without winch):

(1) Front axle ..... 1 250 kg

(2) Rear axle ..... 1 000 kg

(3) Total ..... 2 250 kg

b. Unladen (with winch):

(1) Front axle ..... 1 300 kg

(2) Rear axle ..... 1 000 kg

(3) Total ..... 2 300 kg

c. Maximum loading:

(1) Front axle ..... 1 300 kg

(2) Rear axle ..... 1 900 kg

(3) Total ..... 3 200 kg

4. Tyres and Tyre Pressures. For details of tyres and tyre pressures, reference shall be made to EMEI Vehicle A 291-5.

5. Dimensions

a. Length ..... 4 830 mm

b. Overall width:

(1) Over mirrors ..... 2 058 mm

(2) Reduced ..... 1 800 mm

c. Overall height:

(1) Laden ..... 1 953 mm

(2) Unladen ..... 2 040 mm

d. Reducible height:

(1) Laden ..... 1 490 mm

(2) Unladen ..... 1 530 mm

e. Shipping cubage ..... 13 m^3

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 ..... 710 mm

(b) Unladen ..... 825 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

j. Pintle hook height (unladen) ..... 640 mm

6. Bridge Classification 4

7. Engine

a. Manufacturer/Type ..... Isuzu 4BD1

b. No. of cylinders ..... 4 (in-line)

c. Power (Net) ..... 66 kW at 3 200 rpm

d. Torque (Net) ..... 245 N.m at 1 900 rpm

e. Firing order 1-3-4-2

f. Capacity ..... 3.856 litres

g. Compression ratio 17:1

8. 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

9. Transfer Case

a. Manufacturer ..... Land Rover

b. Type ..... two-speed

c. Ratios

(1) High range 0.996:1

(2) Low range 3.321:1

10. Front Axle

a. Manufacturer ..... Land Rover

b. Type ..... Spiral Bevel

c. Ratio 3.54:1

11. Rear Axle

a. Manufacturer ..... GKN/Salisbury

b. Type ..... Salisbury 8HA

c. Ratio 3.54:1

12. Steering

a. Manufacturer ..... Gemmer

b. Type ..... worm and roller

c. Ratio 20.55:1

d. Lock to lock ..... 4.4 turns

13. Winch

a. Manufacturer ..... Winch Industries

b. Model ..... Thomas T8000M

c. Reduction ratio 50:1

d. Rope length 45m

e. Rope diameter ..... 10 mm

f. Maximum load:

(1) First layer ..... 3 636 kg

(2) Second layer ..... 3 024 kg

(3) Third layer ..... 2 589 kg

(4) Fourth layer ..... 2 263 kg

g. Torque limiter setting ..... 112 N.m

14. Electrical System

a. Type of system ..... 12 V

b. No. of batteries ..... one by 12 V

c. Capacity (nominal) ..... 98 A.h

d. Terminal grounded ..... negative

e. Radio suppression DEF(AUST) 172, MIL-STD-461A ..... RE 05

15. Fuels and Lubricants

a. Fuel:

(1) Type ..... diesel (automotive)

(2) Capacity ..... 68 L

b. Cooling system (water with 8% Nalcool Maximum Inhibitor) ..... 12.5 L

c. Engine (with filter):

(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 differential:

(a) Type OEP-220

(b) Capacity ..... 1.7 L

(3) Rear differential:

(a) Type OEP-220

(b) Capacity ..... 2.3 L

e. Transmission:

(1) Type ..... SAE Grade 40 (OMD-115)

(2) Capacity ..... 2.7 L

f. Transfer case:

(1) Type ..... SAE Grade 40 (OMD-115)

(2) Capacity (wo/winch) ..... 3.2 L

(3) Capacity (w/winch) ..... 5.8 L

g. Brake and clutch fluid (fill to level) ..... OX (Aust) 8

h. Steering box:

(1) Type OEP-220

(2) Capacity ..... 0.45 L

i. Chassis lubrication XG-291

j. Wheel bearings XG-291

k. Winch:

(1) Type OEP-220

(2) Capacity ..... 1.3 L

16. Brakes

a. Parking brake ..... cable-operated, transmission drum brake

b. Footbrake ..... servo-assisted hydraulic dual system with front disc and rear drum brakes

17. Performance

a. Fording depth (unprepared) ..... 500 mm

b. Turning circle (nominal) ..... 13.0 metres

c. Ramp breakover angle:

(1) Unladen ..... 148°

(2) Laden ..... 154°

d. Angle of approach ..... 45°

e. Angle of departure ..... 33°

f. Maximum gradient 60%

g. Fuel consumption target:

(1) Highway Laden ..... 12 litres per 100 km

(2) Second Class Laden ..... 15 litres per 100 km

h. Maximum towed load ..... 1 200 kg

18. Trailer Facilities

a. Socket type ..... NATO 12-pin

b. Pintlehook ..... fully rotating

c. Brakes ..... no facility

19. 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

20. Associated Information

a. NSN ..... 2320-66-128-4218 (wo/winch)

b. NSN ..... 2320-66-128-4219 (w/winch)

c. SCES ..... 12035 (wo/winch)

d. SCES ..... 12037 (w/winch)

e. RPS ..... 02188 (wo/winch)

f. RPS ..... 02189 (w/winch)

g. ILSI ..... ALI MM 10-29

h. User Handbook ..... 7610-66-128-4345 (wo/winch)

i. User Handbook ..... 7610-66-128-4346 (w/winch)

j. EMEI Vehicle A 291-5 ..... General Service B Vehicle Tyre Guide

k. EMEI Vehicle G 102 ..... Technical Description

l. EMEI Vehicle G 103 ..... Light Grade Repair

m. EMEI Vehicle G 104-1 ..... Medium Grade Repair

n. EMEI Vehicle G 104-2 ..... Heavy Grade Repair

o. EMEI Vehicle G 109 ..... Servicing Instruction

END

Distribution List: **VEH G 16.1 – Code 1** (Maint Level)
(Sponsor: CGSVSPO, Light B Vehicle Section)
(Authority: ECO CGSVSPO 120/10)