

**TRUCK, FLATBED, HEAVY, MC3, GUN TRACTOR/AMMO TRANSPORTER,
W/CRANE, W/WINCH, MACK**

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.

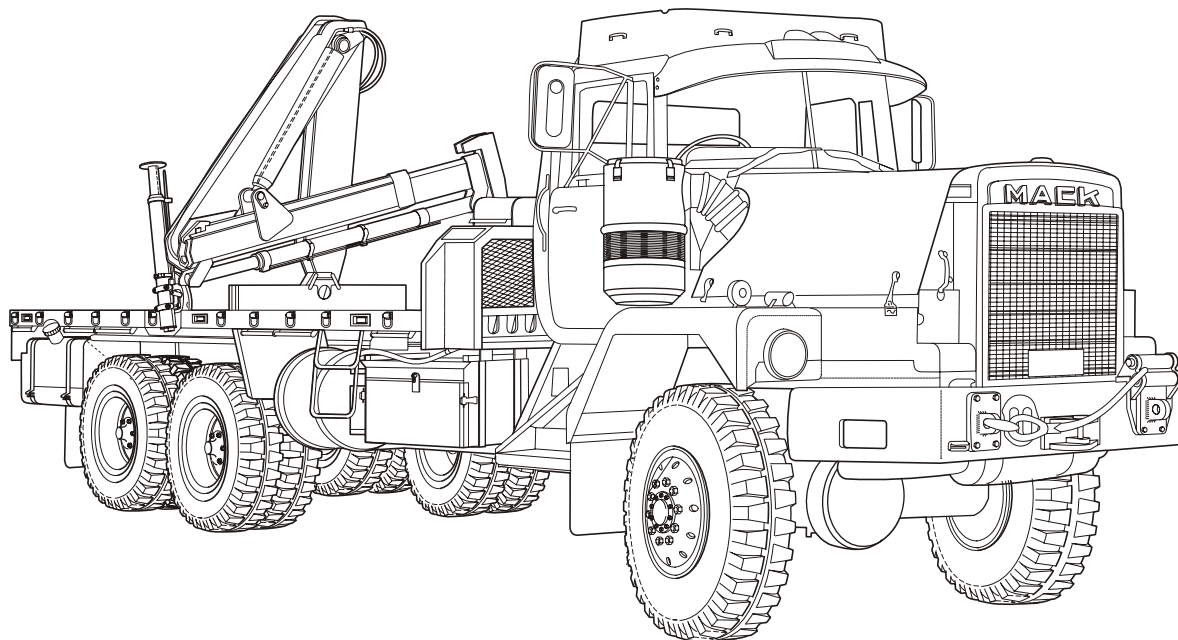


Figure 1 Truck, Flatbed, Heavy, MC3, Gun Tractor/Ammo Transporter, W/Crane, W/Winch, Mack

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GENERAL

1. This EMEI lists data relevant to the Truck, Flatbed, Heavy, MC3, Gun Tractor/Ammo Transporter, W/Crane, W/Winch, Mack.
2. **Role.** The primary role of the vehicle is the movement of a 155 mm medium gun, crew and ammunition on sealed and second class roads and under most cross country conditions.
3. **Description.** The Truck, Flatbed, Heavy, MC3, Gun Tractor/Ammo Transporter, W/Crane, W/Winch, Mack, is a 6 × 6 vehicle designed to negotiate any terrain or gradient that will allow wheel traction. The vehicle incorporates a hydraulic crane (with tilt facilities) which is mounted above the rear bogie and a winch for recovery purposes. Both cargo trays are fitted with twist locks for securing TRICON containers and/or Gun Tractor Personnel / Cargo Modules. Vehicles used in the Gun Tractor role have also been fitted with a front mounted tow hitch for moving the gun into position. The vehicle is transportable by RAAF C130 Hercules aircraft when reduced in height by removal of the cab roof and tilting of the crane. For air transportation when used in the Gun Tractor role, the Personnel Module must be lowered and the Stores Container removed.

Physical Data

4. Mass:

- a. Unladen, Tare Weight:
 - (1) Front Axle 5 400 kg
 - (2) Rear Bogie 8 610 kg
 - (3) Total 14 010 kg

- b.** Maximum Highway Loading (in accordance with Intersate Road Transport Regulations, Amendment 2006, No 2):
 - (1)** Front Axle 6 000 kg
 - (2)** Rear Bogie..... 16 500 kg
 - (3)** Total 22 500 kg
- c.** Manufacturer’s Maximum Design Loading, GVM:
 - (1)** Front Axle 6 000 kg
 - (2)** Rear Bogie..... 20 500 kg
 - (3)** Total 26 500 kg

NOTE

The manufacturer’s Maximum Design Loading may only be used whilst under operational conditions. At all other times, whilst on public roads, all local laws and regulations are to be followed.

5. Dimensions:

- a.** Length Overall..... 9600 mm
- b.** Width Overall 2500 mm
- c.** Height Overall 3450 mm
- d.** Height Reducible 2620 mm
- e.** Shipping Cubage:
 - (1)** Overall..... 79.92 m3
 - (2)** Reducible 62.9 m3
- f.** Internal Tray Dimensions:
 - (1)** Length (front section)..... 2814 mm
 - (2)** Length (rear section) 2322 mm
 - (3)** Width..... 2390 mm
- g.** Height of Tray Above Ground Level:
 - (1)** Unladen:
 - (a)** Front..... 1498 mm
 - (b)** Rear..... 1450 mm
 - (2)** Cross Country Laden:
 - (a)** Front..... 1489 mm
 - (b)** Rear..... 1450 mm
 - (3)** Reduced Height (air springs deflated):
 - (a)** Front..... 1455 mm
 - (b)** Rear..... 1333 mm
- h.** Wheel Base..... 5465 mm
- i.** Track:
 - (1)** Front..... 1911 mm
 - (2)** Rear 1810 mm
- j.** Ground Clearance:
 - (1)** Unladen..... 273 mm

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- (2) Cross Country Laden 273 mm
- k. Towing Pintle Height:
 - (1) Unladen 875 mm
 - (2) Cross Country Laden 865 mm
 - (3) Reduced Height (air springs deflated) 755 mm
- 6. **Bridge Classification** 28
- 7. **Wheels and Tyres:**
 - a. Wheels 8.00 × 20, 3 piece
 - b. Tyre Size 12.00 by 20
 - c. Tyre Load/Speed Rating 154/150K
 - d. Tyre Pressures (cold) refer to EMEI Vehicle A 291-5
- 8. **Electrical System:**
 - a. Type of System 24 V dc
 - b. No. of Batteries two 12 V dc
 - c. Capacity 60 Ah
 - d. Terminal Grounded negative
 - e. Radio Suppression DEF (AUST) 172, MIL STD 461A RE 05
- 9. **Fuels and Lubricants** refer to Table 1

Table 1 Fuel, Lubricants and Coolant

Assembly	Type/Grade	Capacity
Fuel	Diesel	500 L (250 L per tank)
Cooling System	Anti Freeze/Anti Boil	54 L
Engine	SAE Grade 40 (OMD 115)	55.3 L
Transmission	NATO 0-226 (OEP 220)	10.4 L
Transfer Case (with oil cooler)	NATO 0-226 (OEP 220)	11.5 L
Transfer Case (without oil cooler)	NATO 0-226 (OEP 220)	9.5 L
Power Steering	SAE Grade 40 (OMD 115)	7.5 L
Front Axle (differential)	NATO 0-226 (OEP 220)	11.4 L
Front Wheel Bearings	NATO 0-226 (OEP 220)	fill to level plug (level plug horizontal with centre of hub)
Intermediate Axle	NATO 0-226 (OEP 220)	12.0 L
Rear Axle	NATO 0-226 (OEP 220)	11.2 L
Power Divider	NATO 0-226 (OEP 220)	fill to level plug
Winch Case	NATO 0-226 (OEP 220)	2.5 L
Crane Hydraulic Tank	ISO Grade 68	105 L

- 10. **Brakes:**
 - a. Parking and Emergency (hand operated) spring brakes on all rear wheels
 - b. Service (foot operated) two-line, air operated, wedge actuated
- 11. **Vehicle Performance:**
 - a. Fording Depth (unprepared) 800 mm
 - b. Turning Circle (between curbs) 24 100 mm

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- c. Approach and Departure Angle:
 - (1) Cross Country Laden Approach Angle 33 degrees
 - (2) Unladen Approach Angle..... 33 degrees
 - (3) Cross Country Laden Departure Angle 28 degrees
 - (4) Unladen Departure Angle..... 28 degrees
 - (5) Cross Country Laden Approach Angle (air springs deflated) 36 degrees
 - (6) Unladen Approach Angle (air springs deflated)..... 36 degrees
 - (7) Cross Country Laden Departure Angle (air springs deflated) 23 degrees
 - (8) Unladen Departure Angle (air springs deflated) 23 degrees
- d. Maximum Gradeability 1 in 2

12. Winch Data:

- a. Manufacturer Ateco (Golden Olding)
- b. Type..... 24 L horizontal drum
- c. Winch Capacity:
 - (1) First Layer of Rope 10 575 kg
 - (2) Second Layer of Rope..... 7666 kg
 - (3) Third Layer of Rope..... 5118 kg
- d. Rope Length..... 60 m

13. Crane Data:

- a. Manufacturer HIAB
- b. Model 090 AW
- c. Lifting Capacity..... refer to Table 2

Table 2 Crane Lifting Capacity

Outreach	Capacity
1.8 m	4500 kg
3.5 m	2400 kg
5.2 m	1620 kg
7.0 m	1170 kg

- d. Recommended Towed Load:
 - (1) Highway 17 000 kg
 - (2) Cross Country 10 000 kg
- e. Fuel Consumption Target..... 47 L/100 km
- f. Range..... approx 1050 km

14. Air Conditioner:

- a. Manufacturer Crisp Air
- b. Model KTMA 0701
- c. Refrigerant..... R 134a

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15. Trailer Facilities:

- a. Socket Type..... NATO 12 pin
- b. Pintle Hook fully rotating, lockable
- c. Brakes twin line compressed air

16. Manufacturer's Details:

Mack Trucks
20 Westgate Street
WACOL QLD 4076
PO Box 364
RICHLANDS QLD 4077
Tel: (07) 3376 6233
Fax: (07) 3376 6244

17. Point of Contact:

ADFLM MDM HVY B VEH
LV SPO, DMO, Level 7
Defence Plaza, 661 Bourke Street
MELBOURNE
VICTORIA 3000

18. Associated Information:

- a. SIGC 2320-0054
- b. NSN..... 2320-66-104-2878
- c. Repair Parts Scale (RPS)..... 02164
- d. SCES:
 - (1) Basic Truck 11848
 - (2) Equipment Kit..... 12104
- e. User Handbook..... 7610-66-115-4737
- f. Technical Description (Cargo) EMEI Vehicle G 702
- g. Technical Description (Gun/Ammo)..... EMEI Vehicle G 722
- h. Light Grade Repair (Cargo) EMEI Vehicle G 703
- i. Light Grade Repair (Gun/Ammo) EMEI Vehicle G 723
- j. Unit Repair (Cargo)..... EMEI Vehicle G 703-1
- k. Medium Grade Repair (Cargo) EMEI Vehicle G 704
- l. Heavy Grade Repair (Cargo)..... EMEI Vehicle G 704-1
- m. Medium and Heavy Grade Repair (Cargo) EMEI Vehicle G 704-2
- n. Medium and Heavy Grade Repair (Gun/Ammo) EMEI Vehicle G 724
- o. Servicing Instruction (Truck, Cargo Heavy, MC3-Mack, All Variants) EMEI Vehicle G 709
- p. General Service B Vehicles Tyre Guide EMEI Vehicle A 291

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END

Distribution List: **VEH G 56.0 – Code 1** (Maint Level)
(Sponsor: LV SPO, Mdm/Hvy B Veh Sect)