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# **TRUCK, 4 TONNE, 4x4 BEDFORD MJ, ALL VARIANTS**

## **PURPOSE AND PLANNING INFORMATION**

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### PURPOSE AND PLANNING INFORMATION

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## **PREFACE**

### **INTRODUCTION**

1. Service Users should forward any comments concerning this publication through the channel prescribed in AESP 0100-P-011-013.
2. The subject matter of this publication may be affected by Defence Council Instructions. If possible, amendments are issued to correct this publication accordingly. When an instruction contradicts any portion of this publication the Instruction is to be taken as the overriding authority.



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Three quarter front view



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Three quarter rear view





## **PURPOSE AND PLANNING INFORMATION**

### **EQUIPMENT IDENTITY**

#### **1. Designation**

TRUCK, CARGO 4t, 4 x 4, W/TURBO CHARGED ENGINE BEDFORD MJP 2BMO  
Vehicle Asset Code No B36-2025-3100 NSN 2320-99-893-5954

TRUCK, CARGO 4t, 4 x 4 LHD W/TURBO CHARGED ENGINE BEDFORD MJP  
2BMO  
Vehicle Asset Code No B36-2025-8100 NSN 2320-99-893-6142

TRUCK, CARGO W/WINCH 4t, 4 x 4 W/TURBO CHARGED ENGINE BEDFORD  
MJP 2WMO  
Vehicle Asset Code No B36-2050-3100 NSN 2320-99-893-6141

TRUCK, CARGO W/WINCH 4t, 4 x 4 LHD W/TURBO CHARGED ENGINE  
BEDFORD MJP 2WMO  
Vehicle Asset Code No B36-2050-8100 NSN 2320-99-893-6143

TRUCK FLAT PLATFORM 4t, 4 x 4 W/TURBO CHARGED ENGINE BEDFORD MJP  
2BMO  
Vehicle Asset Code No B36-2091-3100 NSN 2320-99-893-6137

TRUCK, FLAT PLATFORM 4t, 4 x 4 LHD W/TURBO CHARGED ENGINE BEDFORD  
MJP 2BMO  
Vehicle Asset Code No B36-2091-8100 NSN 2320-99-893-6138

TRUCK, CARGO W/3t CRANE 4t, 4 x 4 ARMAMENT SUPPORT W/TURBO  
CHARGED ENGINE BEDFORD MJP 2BMO  
Vehicle Asset Code No B36-2038-3100 NSN 2320-99-893-6146

TRUCK, CARGO W/3t CRANE 4t, 4 x 4 ARMAMENT SUPPORT LHD W/TURBO  
CHARGED ENGINE BEDFORD MJP 2BMO  
Vehicle Asset Code No B36-2038-8100 NSN 2320-99-893-6147

Manufacturer:      BEDFORD COMMERCIAL VEHICLES

Contract No: FVE 21B/234

**ROLE**

2. A General Purpose Medium Mobility Load Carrier for the conveyancing of equipment and personnel on cross-country as well as normal roads.

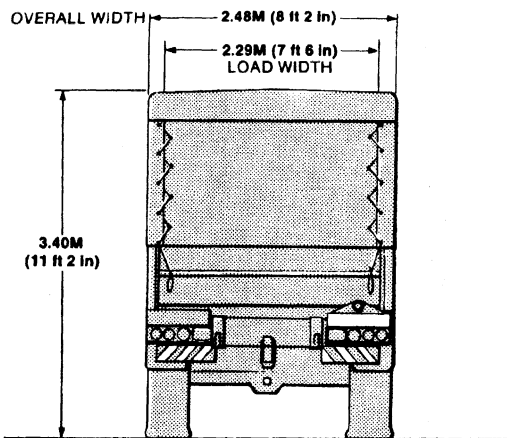
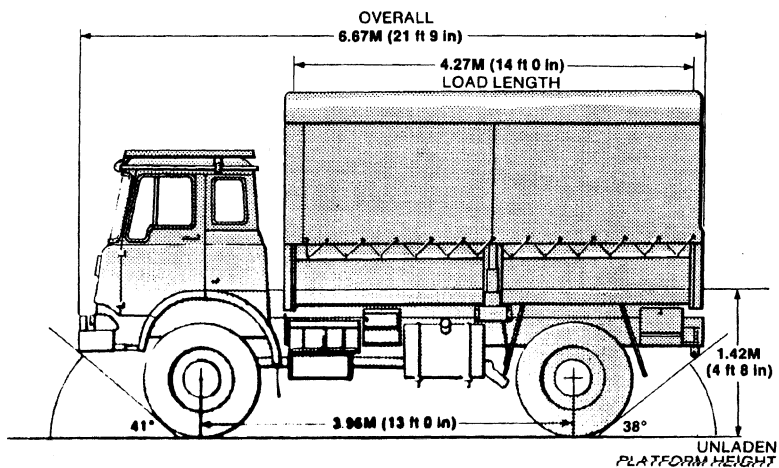
**DESCRIPTION**

3. The vehicle has an all steel, open type, cargo body with a removable waterproof canvas tilt cover. Drop sides and removable posts allow an open, flat platform to carry containers etc. The cab has a roof hatch with hip ring.

4. All four wheels can be driven from a transfer box which also incorporates a power-take-off. The power-take-off is used on some vehicles to drive the winch cable drum. The winch has a capacity of 6.5 tonnes. Fairleads are fitted front and rear to enable winching to be carried out in both directions.

**PHYSICAL DATA****5 Dimensions**

Length overall	6.67 m (2 ft 9 in)
Width overall	2.48 m (8 ft 2 in)
Height overall	3.40 m (11 ft 2 in)
Ground clearance	32.5 mm (12.75 in)
Wheel track (front)	2.05 m (6 ft 9 in)
Wheel track (rear)	2.03 m (6 ft 8 in)
Wheelbase	3.96 m (13 ft 0 in)
Platform height (Unladen)	1.42 m (4 ft 8 in)



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Fig 1 – Vehicle main dimensions – Truck, Cargo

**6. Capacities (Nominal)**

Cooling System	23.9 litres (42 pints)
Fuel Tank	150 litres (33 galls)
Engine oil (including element)	11.75 litres (20.6 pints)
Main Gearbox	3.7 litres (6.5 pints)
Transfer Box	3.12 litres (5.5 pints)
Rear Axle	
Hubs	1.25 litres (2.2 pints)
Differential	3.4 litres (6.0 pints)
Front Axle	
Hubs	1.25 litres (2.2 pints)
Differential	3.7 litres (6.5 pints)
Steering Box	1.3 litres (2.3 pints)
Winch Gearbox	9 litres (16.0 pints)

**7. Engine**

Bedford 6 cylinder in line diesel unit of 5.40 litres (330 in<sup>3</sup>) capacity. It is direct injection turbo-charged with a compression ratio of 16.1 producing 80 kW (108 Bhp). The engine is water cooled and pressurized at 0.44 - 0.53 bar (6¼ - 7¾ lbf/in<sup>2</sup>).

**8. Clutch**

Borg and Beck, single drg plate 0.33 m (13 in) dia, Multi-coil spring, rod operated.

9. **Gearbox** Four speed (close ratio) and one reverse synchromesh on 2nd, 3rd and 4th gears. A power take-off is provided.
10. **Transfer box** Transmits drive either to rear axle (high ratio only), or to both front and rear axles in either high or low ratio as required. A power take-off is provided.
11. **Axles**
- Front Drive to front wheels through hypoid gears the differential unit being similar to that used on the rear axle apart from having the pin above the axle centreline.
- Rear Drive to rear wheels through hypoid gears and fully floating axle shafts.
12. **Suspension** Road springs semi-elliptic leaf and hydraulic double-acting telescopic shock absorbers.
13. **Steering** Semi-irreversible worm and sector. Column with fabric universal joint.
14. **Brakes**
- Foot Operates an air-hydraulic system on all four wheels. The system incorporates 3-line connections for trailer-brake operation.
- Hand-brake Horizontal pull up type operating a drum type independent transmission brake.

**15. Wheels and tyres**

Wheel type	3 piece rims with 10 bolts.
Wheel size	B80 x 20.
Tyre size	12.00 x 20 Cross-ply. 14 ply non-directional.

**EQUIPMENT LOADING**

16. Floor shackle assembly	SWL 1.36 tonne (3.000 lb) any angle.
Side lashing ring	SWL 1.0 tonne (2.200 lb) upwards.
Side shackle assembly	SWL 1.27 tonne (2.800 lb) upwards.

**ELECTRICAL DATA**

17. The vehicle has a 24 volt negative earth return system, with suppression.

**PERFORMANCE**

18. Average safe cruising speed	72km/h (45 mile/h)
Approach angle	41°
Departure angle	38°
Fuel consumption	4.5km/litre (13 mile/gal) (Target)
Turning circle dia	18.28 m (60 ft 0 in)

**ENVIRONMENTAL DATA**

19. Temperature range	-32°C (-25°F) to +52°C (125°F)
Terrain	Within the parameters of medium mobility criteria.

## TRANSPORTATION DATA

20. Airportability	Not yet approved	
Shipping tonnage	54 m <sup>3</sup> (46 tons 30 ft <sup>3</sup> )	
Bridge classification	9	
Fording depth	762 mm (30 in)	
Axle loading	Laden	Unladen
Front axle	4060 kg (8951 lb)	2660 kg (5864 lb)
Rear axle	6101 kg (13451 lb)	2001 kg (4411 lb)
Gross vehicle laden-plated weight	9650 kg (21274 lb)	
Gross train weight	14730 kg (32474 lb)	

## TOWING EQUIPMENT

21. Front	NATO towing pintle
Rear	NATO towing pintle. Service and emergency line brake connections.
	NATO multi-pin and 2 pin electrical socket.

## WINCH DATA

22. Type	Turner Drum winch
Capacity	64.7 kN (6.5 tonf)

Rope pull angles	Front	Rear
Either side	20°	90° (horizontal) 45° (Compound)
Up	15°	15°
Down	45°	45°

**ASSOCIATED PUBLICATIONS AND REFERENCES**

23.

Type	Code No	Title
EMER	Power J 330	Lead Acid Battery Maintenance.
EMER	Workshop N 111	Preservation, Identification and Packaging of Assemblies.
EMER	Workshop N 345	Assembly Techniques, Split Shell Bearings using Plastigage Method.
EMER	Workshop C 010	Hydraulic Equipment Introduction to A, B and C Vehicle Hydraulic Systems.
EMER	Workshop C 011	BS Symbols used in diagrams for Hydraulic and Pneumatic
EMER	Workshop C 171	Plessey Hydraulic Pumps, Beta and Gamma Range.
-	Test and Measurement	A028
CES	31496	Complete Equipment Schedule (Truck Cargo)
CES	31497	Complete Equipment Schedule (Truck Cargo W/winch).





