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TRAILER LIGHTWEIGHT GS CARGO

PURPOSE AND PLANNING INFORMATION

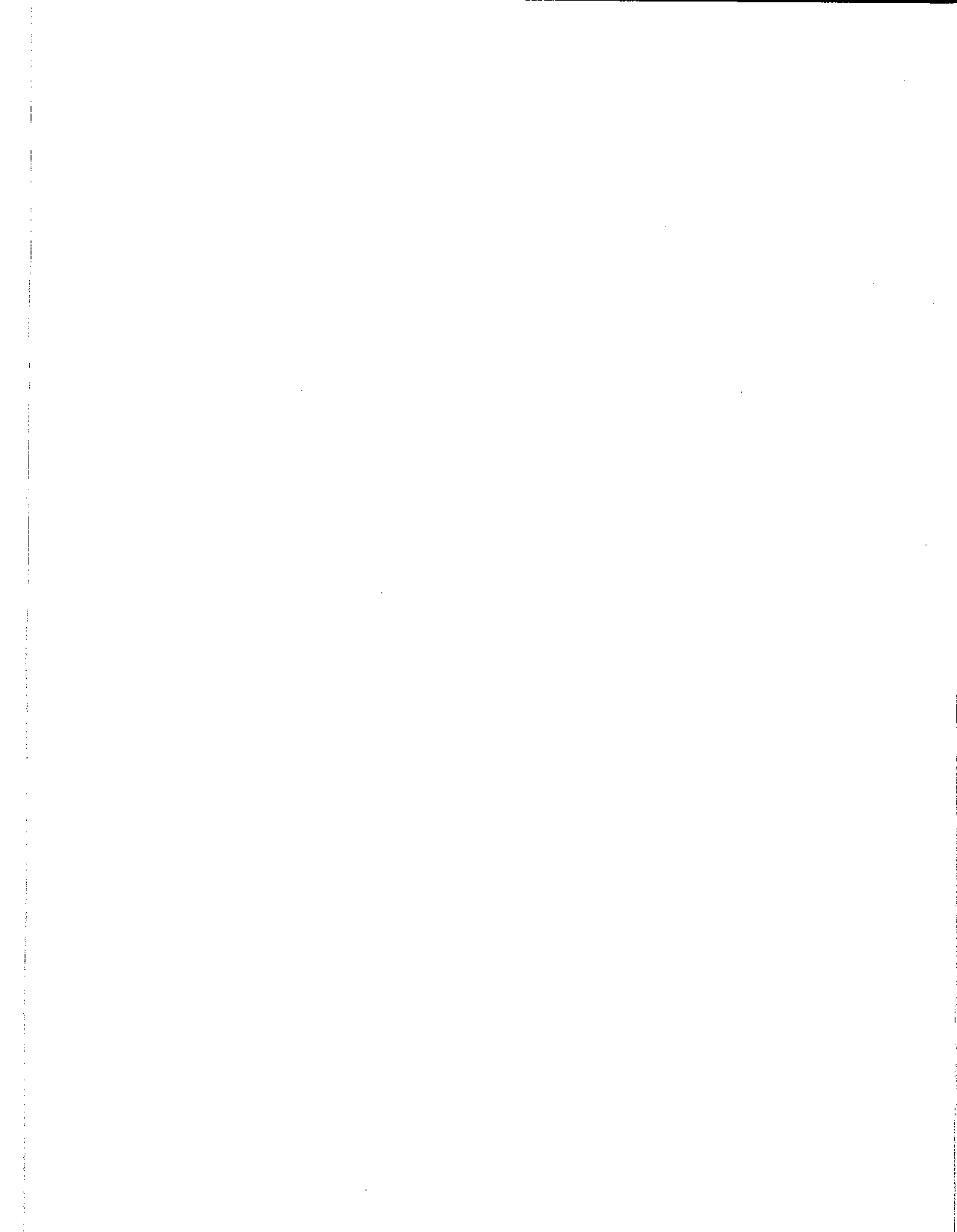
This publication contains information covering the requirements of levels 1, 2 and 3.

BY COMMAND OF THE DEFENCE COUNCIL

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Ministry of Defence
Issued by
DEFENCE LOGISTICS ORGANISATION

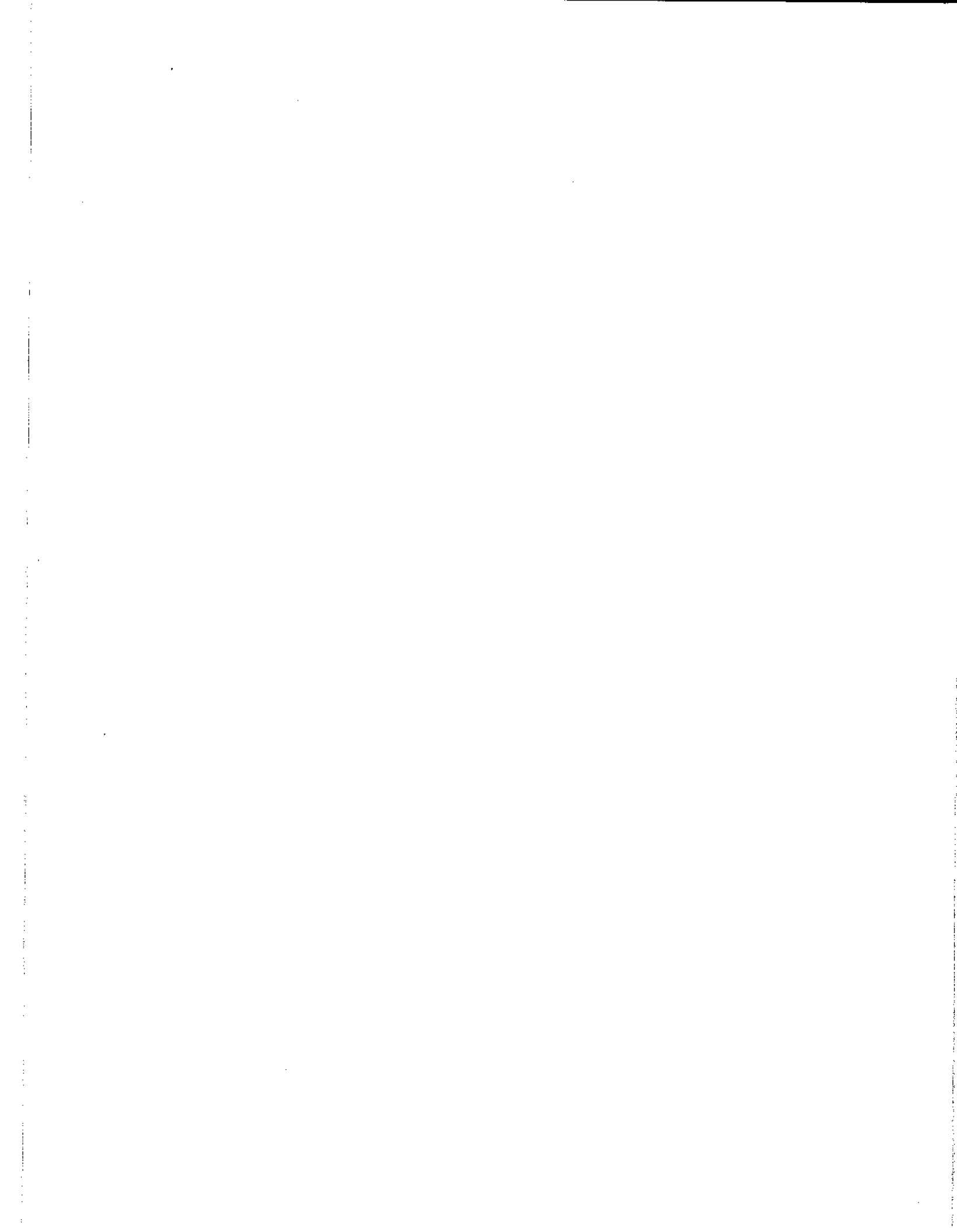
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PURPOSE AND PLANNING INFORMATION

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PREFACE**Sponsor: DEC ELS****INTRODUCTION**

1 Service users should forward any comments concerning this Publication through the channels prescribed in Army Equipment Support Publication (AESP) 0100-P-011-013. An AESP Form 10 is provided at the end of this publication; it should be photocopied and used for forwarding comments on this AESP.

2 AESPs are issued under Defence Council authority and, where AESPs specify action to be taken, the AESP will of itself be sufficient authority for such action and also for the demanding of the necessary stores, subject to the provisions of Para 3 below.

3 The subject matter of this publication may be affected by Defence Council Instructions (DCIs), Standard Operating Procedures (SOPs) or by local regulations. When any such Instruction, Order or Regulation contradicts any portion of this publication they are to be taken as the overriding authority.

RELATED AND ASSOCIATED PUBLICATIONS**Related publications**

4 The Octad for the subject equipment consists of the categories as detailed overleaf. All references are prefixed with the first eight digits of this publication. The availability of the publications can be checked by reference to the relevant Group Index (refer to AESP 0100-A-001-013).

Category/Sub-category			Information Level			
			1 User/ Operator	2 Unit Maintenance	3 Field Maintenance	4 Base Maintenance
1	0	Purpose and Planning Information	101	101	101	*
	1	Equipment Support Policy Directive	111	111	111	*
	2	Equipment Support Policy Directive	*	*	*	*
2	0	Operating Information	201	*	*	*
	1	Aide Memoire	*	*	*	*
	2	Training Aids	*	*	*	*
3		Technical Description	201	302	302	*
4	1	Installation Instructions	411	411	411	*
	2	Preparation for Special Environments	421	421	421	*
5	1	Failure Diagnosis	201	512	512	*
	2	Maintenance Instructions	201	522	522	*
	3	Inspection Standards	*	532	532	*
	4	Calibration Procedures	*	*	*	*
6		Maintenance Schedules	601	601	*	*
7	1	Illustrated Parts Catalogues	711	711	711	*
	2	Commercial Parts Lists	*	*	*	*
	3	Complete Equipment Schedule, Production	*	*	*	*
	4	Complete Equipment Schedule, Service Edition (Simple Equipment)	741	741	741	*
	5	Complete Equipment Schedule, Service Edition (Complex Equipment)	*	*	*	*
8	1	Modification Instructions	*	*	*	*
	2	General Instructions, Special Technical Instructions and Servicing Instructions	*	821	821	*
	3	Service Engineered Modification Instructions (RAF only)	*	*	*	*

* Category/sub-category not published

Associated publications

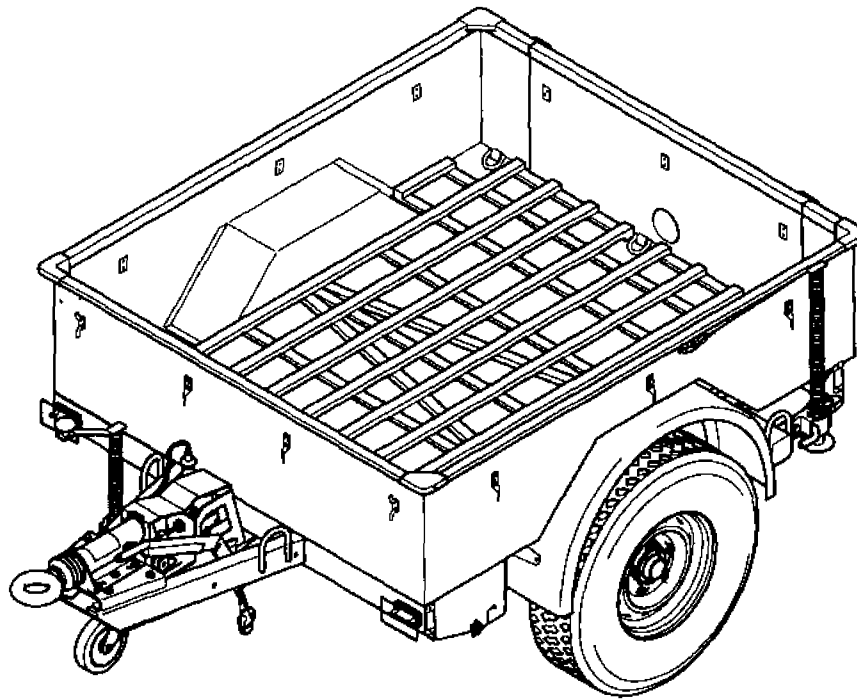
5 A full list of associated publications is as follows:

<u>Reference</u>	<u>Title</u>
AESP 0200-A-221-013	Painting of Service Equipment
AESP 0200-A-308-013	REME Recovery Manual
AESP 2300-A-050-013	B Vehicle Test, Inspection and Certification
AESP 2300-A-110	Vehicle and Trailer Electrical Circuits Installation Checks
AESP 2320-A-300-532	B Vehicle Cab Corrosion Inspection Standards
AESP 2300-A-310-201	B Vehicle Corrosion Prevention
AESP 2300-A-500	Material Quality Assessment - Principles and Practices in REME
AESP 2300-A-600	Waterproofing Regulations-Vehicles and Equipment
EME T & M A028 Chap 155	Inspection of Waterproofing Materials and Kits
JSP 371	Transportation Diagrams for Wheeled and Tracked Vehicles

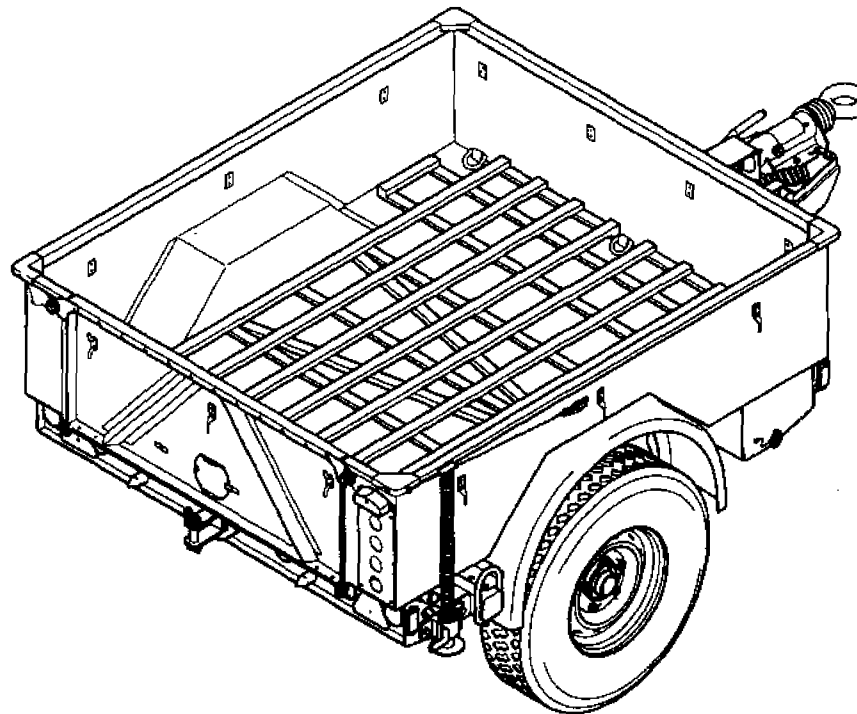
LIST OF ABBREVIATIONS

6 The following abbreviations are used in this publication:

AESP	Army Equipment Support Publication
Ah	Ampere Hour
CES	Complete Equipment Schedule
dB	Decibel
dc	Direct Current
DCIs	Defence Council Instructions
EMER	Electrical Mechanical Engineering Regulation
GIE	Government Issued Equipment
LCT	Landing Craft Tank
LST	Landing Ship Tank
NATO	North Atlantic Treaty Organisation
NSN	Nato Stock Number
SOPs	Standard Operating Procedures
UK	United Kingdom



3/4 View Front



3/4 View Rear

TRL/024

Trailer Lightweight GS Cargo - Three quarter front and rear view

FRONTISPIECE

WARNINGS

7 The following WARNINGS are applicable to this equipment.

(1) **PERSONAL SAFETY.** WHEN PARKING THE TRAILER ENSURE THAT THE PARKING AREA IS AS FLAT AS POSSIBLE, THAT THE HANDBRAKE IS APPLIED FIRMLY, THAT THE REAR SUPPORT LEGS ARE LOWERED AND THE CLAMPING BOLTS ARE TIGHT, AND THAT THE JOCKEY WHEEL IS CLAMPED FIRMLY BEFORE BEING WOUND DOWN.

(2) **PERSONAL SAFETY.** OBSERVE ALL SAFETY INSTRUCTIONS CONCERNING JACKING AND SCOTCHING WHEN CHANGING WHEELS OR EXAMINING BRAKE PADS.

(3) **PERSONNEL HAZARD.** ENSURE THE JOCKEY WHEEL IS LOWERED BEFORE COUPLING TO OR UNCOUPLING FROM THE PRIME MOVER.

(4) **PERSONAL HAZARD.** BEFORE DRIVING THE PRIME MOVER WITH THE TRAILER ATTACHED, ENSURE THAT THE JOCKEY WHEEL AND REAR STANDS ARE SECURED IN THE STOWED POSITION.

(5) **TRAILER LOADING.** ENSURE THAT THE TRAILER PAY LOAD IS CORRECTLY DISTRIBUTED AND THAT THE DRAWBAR PREPONDERANCE IS STRICTLY OBSERVED.

(6) **PERSONNEL HAZARD.** WHEN PARKING THE TRAILER, ENSURE THAT THE PARKING AREA IS AS FLAT AS POSSIBLE, THAT THE HANDBRAKE IS FULLY APPLIED, THAT THE REAR STANDS ARE DOWN AND LOCKED AND THAT THE JOCKEY WHEEL IS DOWN AND LOCKED.

(7) **PERSONAL HAZARD.** OBSERVE ALL APPROPRIATE SAFETY INSTRUCTIONS CONCERNING JACKING AND SCOTCHING WHEN REMOVING AND REFITTING ROAD WHEELS.

(8) **PERSONAL HAZARD.** DUE CONSIDERATION SHOULD BE GIVEN TO THE HIGHLY FLAMMABLE NATURE OF GASOLINE AND ITS VAPOUR. CARELESSNESS IN ITS USE MAY RESULT IN PAINFUL BURNS. GASOLINE SHOULD ALWAYS BE HANDLED IN ACCORDANCE WITH THE REQUIREMENTS OF JSP 317.

(9) **PERSONAL HAZARD.** FIRING ARTILLERY AT RANGES OF 500 YARDS OR LESS SHOULD BE FROM COVER. FIRING RIFLE GRENADES OR ANTI-TANK ROCKETS SHOULD BE FROM COVER.

(10) **PERSONAL INJURY.** THE TRAILER BODY WEIGHS 120KG. CARE MUST BE TAKEN WHEN LIFTING OR REPLACING THE BODY.

(11) **PERSONAL INJURY.** ENSURE THE TRAILER IS CHOCKED WHILST WORK IS BEING CARRIED OUT ON THE HUBS.

(12) **HEALTH RISK.** NEVER USE AN AIR LINE TO REMOVE BRAKE DUST, IF INHALED, BRAKE DUST CAN DAMAGE YOUR HEALTH

(13) **DRAUGHT EYE.** THIS TRAILER HAS A DRAUGHT EYE OF THE NON ROTATING TYPE, IT IS NOT TO BE COUPLED TO A VEHICLE WITH A FIXED TOWING PINTLE.

(14) HEALTH AND SAFETY. MATERIALS USED IN WATERPROOFING ARE REQUIRED TO MEET OBLIGATIONS INTRODUCED UNDER THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 1994 (COSHH). SAFETY INFORMATION RELATING TO MATERIALS USED IS CONTAINED IN JSP (F) 395 CATALOGUE OF HAZARDOUS STORES.

(15) PERSONNEL HAZARD. ENSURE THE REAR STANDS ARE LOWERED BEFORE COMMENCING ANY WATERPROOFING PREPARATION.

(16) PERSONAL SAFETY. THE TOWING VEHICLE IS TO BE OF THE SAME OR A GREATER WEIGHT CATEGORY THAN THE DISABLED VEHICLE AND TOWING SPEEDS REDUCED TO AN APPROPRIATE LEVEL.

(17) SAFETY HAZARD. AFTER CROSS-COUNTRY USE, ENSURE THAT THE TRAILER IS THOROUGHLY CLEANED WITH PARTICULAR REGARD TO THE HANDBRAKE LEVER MECHANISM AND BRAKING SYSTEM.

CAUTIONS

8 The following CAUTIONS are applicable to this equipment.

(1) EQUIPMENT DAMAGE. If the towing vehicle has a 12V electrical system, the 24V lamps on the trailer must be changed to 12V lamps of an equivalent type and wattage. Additionally, an indelible and legible label must be fitted to the trailer, adjacent to the lighting cable, stating '12 VOLT SYSTEM'.

(2) COUPLING/UNCOUPLING. Always use the front jockey wheel when coupling/uncoupling the trailer.

(3) EQUIPMENT DAMAGE. Ensure the rear support legs and front jockey wheel are stowed prior to moving off.

(4) EQUIPMENT DAMAGE. Only variants with the Equipment Asset Code (EAC) listed on page 1 are suitable for waterproofing kits. The equipment must not be deep forded until Stage B Special Environment Waterproofing Kit is fitted as instructed in this AESP.

(5) VEHICLE RECORD BOOK. This instruction AESP 2330-E-202-421 must be retained with the equipment record book.

(6) EQUIPMENT PREPARATION. Waterproofing demands maximum efficiency of equipment performance. Ensure that the equipment is 100% fit for the task.

(7) TIME LIMITATION. The following Tasks must be carried out within 15 minutes of leaving the water.

(8) EQUIPMENT DAMAGE. The caliper locating pin and locking R clip can be subject to damage during vehicle use. The caliper locating pin, R clip and spring clip are to be replaced whenever the brake pads are removed.

(9) MILEAGE LIMITATION AFTER DISEMBARKATION. Tasks 16, 17 and 18 must be carried out within 25 miles (40 km) from point of disembarkation if operationally possible. The remaining Tasks should be carried out as soon as conditions permit but within 250 miles (400 km) of landing.

(10) EQUIPMENT DAMAGE. The front lifting loops are not to be used for a direct lift. Attach recovery equipment around the chassis rails and then through the lifting loops.

(11) EQUIPMENT DAMAGE. Do not winch the trailer with the prime mover still connected. Always disconnect and recover each vehicle separately.

(12) EQUIPMENT DAMAGE. Extreme care is to be exercised to avoid damage to the trailer body when lifting onto a flatbed vehicle.

PURPOSE AND PLANNING INFORMATION

EQUIPMENT IDENTITY

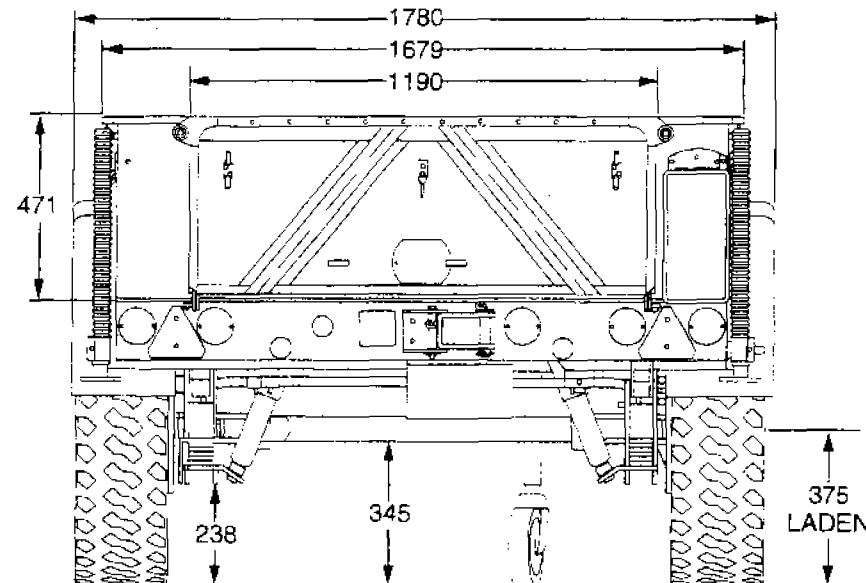
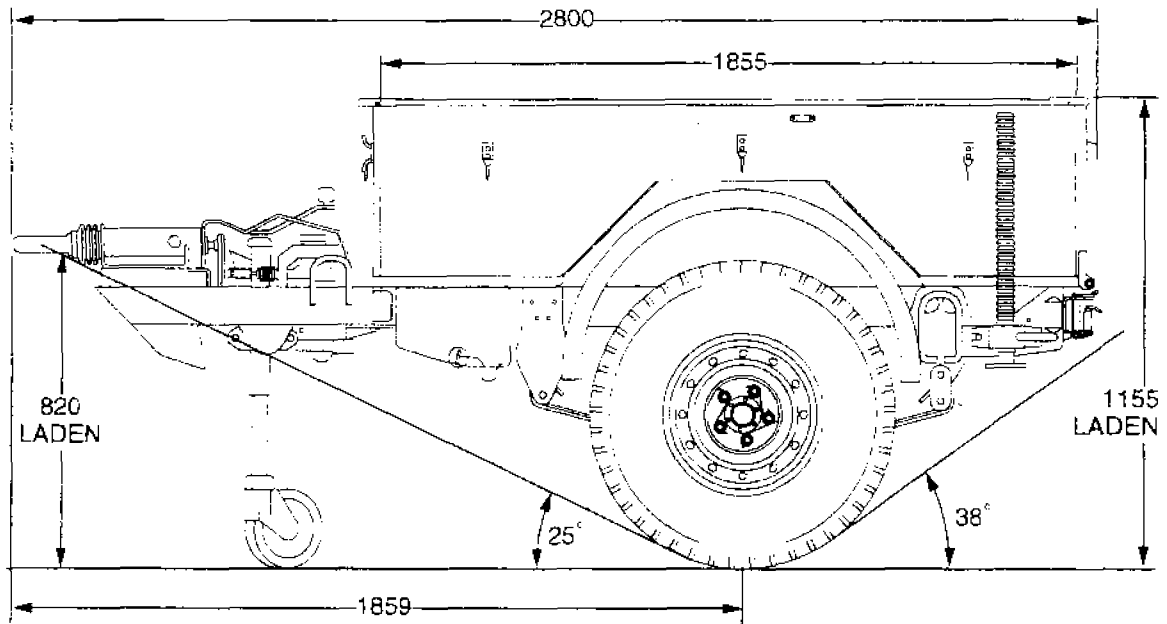
- 1 Trailer Lightweight, GS, Cargo
 - 1.1 NSN 2330-99-908-6472
 - 1.2 Asset Code NB 2853-3107

ROLE

- 2 The trailer is used for carrying cargo loads of up to 1.13 tonne (1.11 ton). The trailer is designed to be towed by CLV, TUL, TUM, TUM HD (4x4), TUH and TUH 6x6.

BRIEF DESCRIPTION

- 3 The trailer has a steel chassis and a stainless steel cargo body with a wooden duckboard. There is a hinged tailgate at the rear of the body. Six load securing shackles are provided in the cargo body. The cargo body is secured to the chassis by ten bolts, washers and locknuts. The trailer has a two wheeled beam axle suspended by two semi-elliptical leaf springs with Aeon springs, two shock absorbers and a transverse anti-roll bar. Hydraulically operated disc brakes are applied through the coupling damper when the towing vehicle applies its brakes. An auto-reversing valve disengages the braking system when the trailer is being reversed. A mechanical handbrake is also fitted, and a breakaway cable for automatic handbrake application in the event of vehicle breakaway. A jockey wheel and two rear mounted support legs provide stability when the trailer is parked. A pintle is fitted on the rear cross member for manoeuvring empty trailers only, it is not for recovery purposes.



TRL/020

Fig 1 Trailer dimensions

PHYSICAL DATA

Weights

4	Unladen	0.62 tonne (0.61 ton)
	Laden (maximum)	1.75 tonnes (1.72 tons)
	Capacity	1.13 tonne (1.11 tons)
	Drawbar preponderance (laden), based upon the lightest towing vehicle	75 kg (165 lbs)

Bridge classification

5	Unladen	1
	Laden	4

NOTE

The bridge classification does not include the prime mover.

Fording depth

6	Without preparation - fresh or sea water	0.75 m (29.5 in.)
	With preparation - fresh or sea water	1.5 m (59.10 in.)

Shipping tonnage

7	Shipping tonnage	0.62 tonne (0.61 ton)
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Performance

8	Towing speeds - fully laden Metalled roads	80 kph (50 mph)
---	---	-----------------

Retardation

9

Parking

10	Held in both directions	Gradient up to 33%
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Tyres

11	Size	7.50 x R16C Michelin
	Pressure	3.2 bar (46 psi)

Wheels

12	Type	7XD 2530-99-244-7869
----	------	----------------------

Brakes

13	Type	Disc brakes hydraulically operated Mechanical parking handbrake
----	------	--

Suspension

14 One pair of longitudinal semi-elliptical springs, Aeon rubber springs, telescopic shock absorbers and transverse anti-roll bar.

Electrical equipment

15 As supplied all lamps are 24 Volts dc working.

CAUTION

EQUIPMENT DAMAGE. If the towing vehicle has a 12V electrical system, the 24V lamps on the trailer must be changed to 12V lamps of an equivalent type and wattage. Additionally, an indelible and legible label must be fitted to the trailer, adjacent to the lighting cable, stating '12 VOLT SYSTEM'.

ENVIRONMENTAL DATA

16 The trailer may be operated in ambient air temperature in the range -40°C to $+49^{\circ}\text{C}$ without modification. Storage temperature range is -40°C and $+71^{\circ}\text{C}$. It is capable of shallow fording to a depth of 0.75 m (29.5 in.) in fresh or salt water without preparation.

TRANSPORTATION DATA

17 The shipping tonnage of the trailer is 0.62 tonne. The bridge classification of the trailer is 1 (unladen), 4 (laden). The bridge classification figures are for the trailer only and do not include the towing vehicle. The trailer, when coupled to its prime mover, is capable of being embarked and disembarked from LCT 8 and 9 and LST 3 VESSELS. The trailer may be transported by air in all types of transport aircraft currently in service use. For full details of transportability, see JSP 71 (Transportation Diagrams for Wheeled and Tracked Vehicles).

MANNING REQUIREMENTS

18 The trailer may be coupled and uncoupled to and from a prime mover by one person.

COMMENT(S) ON AESP*

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BFPO 794

From:
.....
.....

Sender's Reference	BIN Number	Date
AESP* Title:		
Chapter(s)/Instruction	Page(s)/Paragraph(s)	
If you require more space, please use the reverse of this form or a separate piece of paper. Comment(s):		

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