2330-E-202-111 July 2005



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TRAILER LIGHTWEIGHT GS CARGO EQUIPMENT SUPPORT POLICY DIRECTIVE

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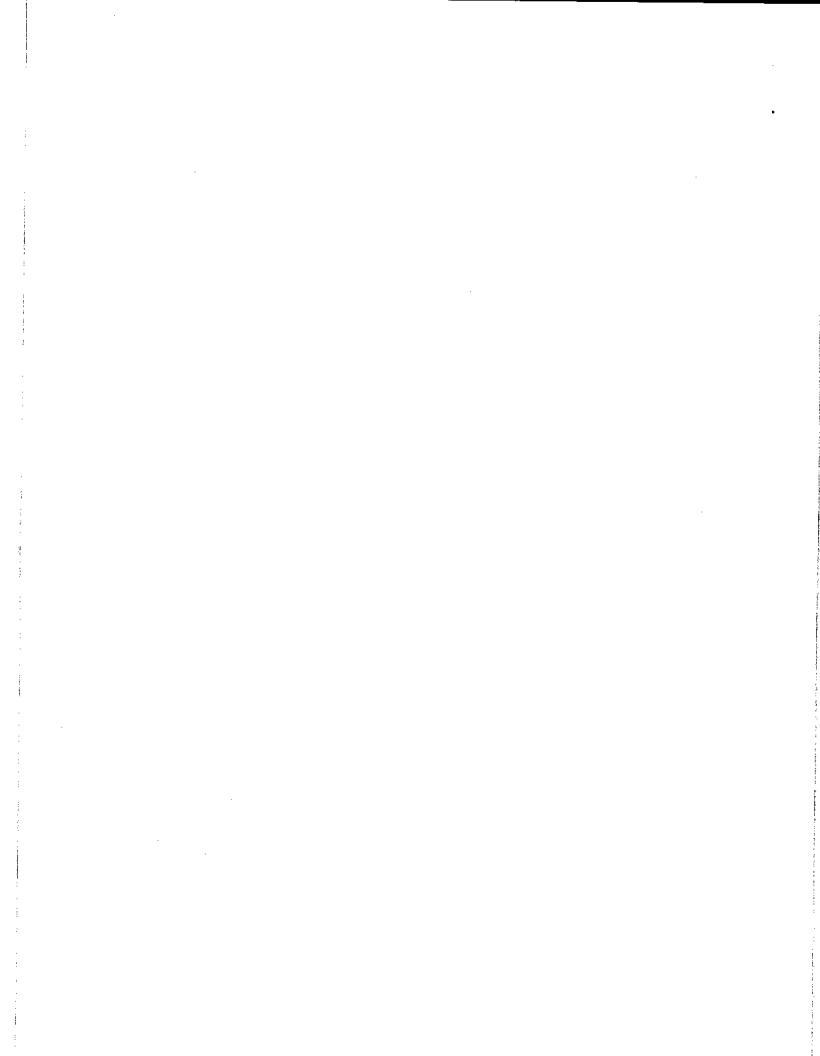
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PREFACE

Sponsor: SUV IPT Project No.: 1624 File ref: SUV8/29/2

Publication Authority: TES TI Andover

INTRODUCTION

1 Service users should forward any comments on this publication through the channels prescribed in 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), Standing Operating Procedures (SOPs) or by local regulations. When any such instruction, order or regulation contradicts any portion of this publication it is to be taken as the overriding authority.

RELATED AND ASSOCIATED PUBLICATIONS

R lat d publications

4 The Octad for the subject equipment consists of the publications shown opposite. 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 (see AESP 0100-A-001-013).

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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 Directives	111	117	111	•
	2	Purpose and Planning Information, Medical and Dental	•		*	•
	0	Operating Information	201	•	•	•
2	1	Aide-Memoire	. •	*	*	•
	2	Training Aids	•	•	-	•
3		Technical Description	201	302	302	•
_	1	Installation Instructions	411	411	411	•
4	2	Preparation for Special Environments	421	421	421	•
	1	Failure Diagnosis	201	512	512	•
5	2	Maintenance Instructions	201	522	522	
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	4	Calibration Procedures	*	*	•	•
6		Maintenance Schedules	601	601	601	•
	11	Illustrated Parts Catalogues	711	711	711	
	2	Commercial Parts Lists	+	*	•	+
7	3	Complete Equipment Schedule, Production	•	•	•	•
•	4	Complete Equipment Schedule, Service Edition (Simple Equipment)	741	741	741	•
	5	Complete Equipment Schedule, Service Edition (Complex Equipment)	•	•	•	• .
	1	Modification Instructions	•	•	•	•
8	2	General Instructions, Special Technical Instructions and Servicing Instructions	٠	821	821	•
	3	Service Engineered Modification Instructions (RAF only)	•	•	•	*

*Category/Sub-category not published

Associated publications

5	<u>Reference</u>	Title
	AESP 0200-A-221-013	Painting of Service Equipment
	AESP 0200-A-308-013	REME Recovery Manual
	AESP 2320-a-310-201	B Vehicle Corrosion Prevention
	AESP 2300-A-110	Vehicle and Trailer Electrical Circuits Installation Checks
	AESP 2300-A-310-201	B Vehicle Corrosion Prevention
	AESP 2300-A-050-013	B Vehicle Test, Inspection and Certification
	AESP 2300-A-500	Material Quality Assessment - Principles and Practices in REME
	AESP 2300-A-600	Waterproofing Regulations - Vehicles and Equipment
	EMER T & M A208 Chap 155	Inspection of Waterproofing Materials and Kits
	JSP 336	Defence Supply Chain Manual

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ARMY EQUIPMENT SUPPORT PUBLICATION

JSP 341	Road Transport Regulations
JSP 371	Transport Diagrams of Wheeled and Tracked Vehicles
JSP 445	Transit of Dangerous Goods by Road, Rail and Sea (The Transport of Ammunition, Explosives and Other Dangerous Goods)
JSP 481	General Service Vehicle Familiarisation Package

ABBREVIATIONS:

AESP	Army Equipment Support Publication
Ah	Ampere House
CES	Complete Equipment Schedule
dB	Decibel
dc	Direct Current
DCI	Defence Council Instruction
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

EQUIPMENT SUPPORT POLICY DIRECTIVE (ESPD)

INTRODUCTION

General

- This Equipment Support Policy Directive (ESPD) is concerned with: 1
 - 1.1 Vehicle designation: Trailer Lightweight GS Cargo.
 - 1.2 Asset code: NB 2853 3107.

1.3 Complete Equipment Schedule (CES) No.: The CES list is incorporated within 2330-E-202-741.

MANAGEMENT INFORMATION

2 The management information relating to this equipment is as follows:

2.1	Equipment sponsor:	DEC ELS.
2.2	Equipment manager:	SUV IPT.
2.3	<u>Main contractor</u> :	Penman Engineering Ltd Heathhall Dumfries Scotland DG1 3NY
2.4	Requisition quantity:	6194.
2.5	Contract no.:	LLV/DBG/424.
2.6	Engineering support:	SUV/IPT.
2.7	Supply manager:	SUV IPT.

2.8 Planned role: The Trailer Lightweight GS Cargo is a general service trailer designed to be towed behind the following GS vehicles:

TUL/TUM - Land Rover 4x4 Defender TUL/TUM - Land Rover 4x4 High Specification TUM (HD) - Pinzgauer 4x4 TUH - Reynolds Boughton RB44 4x4 Benford Dump Truck

2.9 Deployment: These trailers can be deployed worldwide in climatic conditions A1 to C1 inclusive in accordance with Def Stan 00-35. The trailers have been introduced to Army, Navy and **RAF Units.**

- 2.10 Planned life: 20 years.
- 2.11 In-service date: Feb 04.
- 2.12 Planned utilisation:
 - 2.12.1 Average: 7,500 km per year
 - 2.12.2 Maximum: 12,000 km per year

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TECHNICAL DESCRIPTION

3 The trailers have the following specification:

3.1 <u>Tow hitch</u>. The tow hitch is of a standard NATO type with the addition of a safety breakaway landyard. The trailers must only be drawn by vehicles equipped with a suitable attachment for the breakaway landyard.

3.2 <u>Wheels and hubs</u>. The hubs are machined to accept the TUL/TUM - Land Rover (high specification) wheel and tyre assemblies, such that prime mover spare wheel assemblies can be utilised. A spare wheel carrier will be available as an installation for use with trailers drawn behind other prime movers.

3.3 <u>Axte</u>. The beam axle is of hollow tube construction.

3.4 <u>Suspension</u>. The trailer is equipped with leaf spring suspension, telescopic hydraulic dampers and transverse anti-roll bar.

3.5 <u>Wheels and tyres</u>. All trailers are fitted with 6.5QJ x R16 drop centre rims and 7.50R16 XZL. Michelin tyres.

3.6 <u>Braking system</u>. The trailer prime braking system is a hydraulically operated overrun type acting on disc brakes incorporating an auto-reverse system. A ratchet action handbrake operates the parking brake via the brake calfipers. The safety breakaway system operated by the breakaway landyard applies the handbrake should the trailer become detached from the prime mover.

3.7 <u>Bodywork</u>. The trailer has stainless steel sides, floor (with wooden duck-board) and drop down tailgate. The trailer has stabilising legs, external rope cleats for the weather resistant cover and the trailer floor is equipped with load securing points.

3.8 <u>Electrical equipment</u>. The trailer lighting equipment is 24 V negative earth return type and conforms to Def Stan 25 - 5/3 'Road Lighting of Military Vehicles' and UK Lighting Regulations. The trailer utilises the NATO 12 pln electrical socket and cable. The bulbs will need to be changed to 12 V when towed by RB44 or any vehicle with 12 V systems.

PHYSICAL DATA

4 The following is the physical data for the base trailer.

4.1 <u>Dimensions</u>.

4.1.1	Overall length	2800 mm.
4.1.2	Overall width	1780 mm.
4.1.3	Overall height (unladen)	1520 mm.
4.1.4	Overall height (laden)	1155 mm.
4.1.5	Wheel track	1520 mm.
4,1.6	Ground clearance (axle centre)	345 mm.
4.1.7	Load bed height	661 mm.
4.1.8	Body side panel height	465 mm.

4.2 Weights.

4.2.1 Unladen

4.2.2 Gross trailer weight

MAINTENANCE POLICY

Organisation and manpower

5 Deployment of this vehicle will not require any changes to support organisation or manpower.

5.1 Periodic maintenance and routine repair of the equipment is to be carried out in accordance with JSP 336 Vol 12, Part 2, Part 4, Equipment Support Repair Procedures. AESP 2330-E-202-601 contains the Maintenance Schedule for this equipment.

5.2 The maintenance policy follows normal B Vehicle Maintenance Policy; current in-service oils and lubricants are to be used.

REPAIR PROCEDURES

6 The following tables show the repair procedures:

TABLE 1 LEVELS OF REPAIR

Repair level (1)	Detail (2)
1	Day to day maintenance preparation. It may include such operations as functional testing, replenishment, servicing, role changing, minor modification, fault diagnosis and corrective maintenance by replacement, adjustment or minor repair.
2	Maintenance by replacement, adjustment or minor repair including fault diagnosis and minor authorised modifications, within times detailed or by operational constraints, using generally provisioned resources.
3	Maintenance in greater depth than level 2. It includes such operations as repair, partial reconditioning modification requiring special skills or special equipment; but which is short of complete strip, reconditioning and re-assembly.
4	Maintenance that is full reconditioning, major conversions, or major repairs.

6.1 Levels of repair are subject to operational constraints and should be used in conjunction with ADC/P (01) 04 dated 05 Jun 01, Battlefield Maintenance Doctrine for the Army and AP3260 Book 1, Mechanical Transport Maintenance Regulations for the Royal Air Force.

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TABLE 2 SCHEDULED MAINTENANCE

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ARMY EQUIPMENT SUPPORT PUBLICATION

TABLE 3 MAJOR ASSEMBLY REPLACEMENT

Repair level	1	2	3	4	
Axle assembly.		•			

TABLE 4 MAJOR ASSEMBLY REPAIR

Repair level	1	2	3	4
Axle assembly.				*

6.2 Periodic specialist inspection and certification: inspection and certification requirements for this trailer are detailed in AESP 2300-A-050-013 'B' Vehicle Test, Inspection and Certification.

RECOVERY PROCEDURES

7 <u>Recovery procedures</u>. User recovery details are given in the All Arms Recovery Manual, AESP 0200-A-308-013.

TABLE 5 TOWING PRECAUTIONS

Ser (1)	Towing precautions (2)		
1	The preferred method of recovery is by loading the trailer on to a suitable flat bed vehicle or trailer.		
	NOTE		
	JSP 341, Part 4, Chap 9, Para 9.262(a) states that the towing vehicle is to be of the same or a greater weight category than the disabled vehicle.		

SUPPLY POLICY

8 Spare parts should be demanded through the Army Supply System in accordance with JSP 336 Vol 12, Part 1, Pam 1 Part 2, Unit Guide for Demanding Materiel from Army Stores. The complete spare parts listing is available under cover of AESP 2330-E-202-721. Further information and support is available from Equipment Manager and Supply and Repair Branch SUV IPT. The back-loading of major components and repairables should be completed in accordance with JSP 336 Vol 12, Part 1 Pam 7 and the Stores System User Guide, Part 37. An AF G8621 is to be raised against such items.

PUBLICATIONS

9 This equipment will be supported by Army Equipment Support Publications (AESP) and distributed by:

DSDC (L) Mwrwg Road Llangennech Llanelli Carmarthenshire SA14 8YP

10 The AESP Octad for this equipment is 2330-E-202, information is divided into the following categories:

- 10.1 Category 1 Planning and Support Information.
- 10.2 Category 2 Operating and Training Information.

- 10.3 Category 3 Technical Instructions.
- 10.4 Category 4 Preparation for Special Environments.
- 10.5 Category 5 Failure Diagnosis, Repair and Inspection Standards.
- 10.6 Category 6 Maintenance Schedule.
- 10.7 Category 7 Illustrated Parts Catalogue and Complete Equipment Schedule.
- 10.8 Category 8 Modification Instruction.

SPECIAL TOOLS AND TEST EQUIPMENT

11 The West Scale number for the Tlr (LW) is 06346.

TRAINING

12 Training requirement for this vehicle for Artificer Vehicles and Vehicle Mechanics will be by field experience. Driver training is by normal unit driver training and additional familiarisation training. Driver training requirements are to be requested through HQ Land/HQ Strike Command as applicable.

WARRANTY

13 The trailer has been procured with a 60 month reliability warranty only. For the first 60 months of life of each trailer 100% Equipment Failure Reporting must be observed as per current procedures. Routine maintenance by trained service personnel using the approved parts list does not invalidate the warranty. The warranty does not covar tyres or damage through accident, incorrect maintenance, misuse, fair wear and tear or neglect.

14 In the event of a warranty repair being required, the repair must be reported to SUV IPT using Form F/INS/777. Procedures for reporting using this form are detailed within JSP 336 Vol 12 Part 2 Part 3 Sect 2. A copy of the job card for the repair detailing the work done and spares consumed must accompany the F/INS/777. In the event of a suspected warranty issue, contact should be made with SUV IPT before repairs are made. The contact details of SUV IPT are:

Asset Manager:	
Project Manager:	
Fax:	

CONFIGURATION MANAGEMENT

15 Configuration Management (CM) for this equipment is to be in accordance with Land Systems Procedure No. 123, Procedure for the Configuration Management of Land Service Equipment Projects. Management of a complete equipment system involves ensuring that its parts, spares, test equipment, tools, software, ancillaries and support documentation remain compatible and fit for purpose during development, subsequent manufacture, Service use and after repair.

15.1 <u>Modifications</u>. Modifications must only be carried out when approved and authorised by SUV JPT and Instructions are issued in the AESP Cat 8.

15.2 <u>Post Design Services (PDS)</u>. PDS will be contracted for as and when required and authorised by SUV IPT.

15.3 <u>Reporting</u>. Recording of modifications embodied should be carried out as appropriate. Embodiment of modifications should be recorded on the Field Equipment Management Information System (FEMIS) or AF G1084A. Embodiment details should also be entered on AB 562 or FMT 1004 as applicable. RAF units carrying out embodiment should record the relevant information on the Station Transport ADP Management Aid (STAMA) or AF G1084A and AB 562 or FMT 1004 as appropriate.

STORAGE

16 The equipment should be stored wherever possible under cover and protected from the elements.

DISPOSAL

17 Equipment disposal is to be in accordance with AESP 0200-A-062-013, Management and Control of Equipment Support Units, Casting and Damage Reporting Procedures for all equipment. Vehicles that fall within the Special Casting Range under Chap 7 of this publication may only be cast with the Equipment Support Manager's authority.

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COMMENT(S) ON AESP*

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Sender's Reference B	IIN Number	Date	
AESP* Title:			
Chapter(s)/Instruction P	age(s)/Parag	raph(s)	
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