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**TRUCK UTILITY LIGHT (TUL)HS, TRUCK UTILITY
MEDIUM (TUM)HS AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTIONS INDEX

BY COMMAND OF THE DEFENCE COUNCIL

Ministry of Defence
Issued by
ARMY TECHNICAL SUPPORT AGENCY
DIRECTORATE OF TECHNICAL SERVICES

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PREFACE

Sponsor: SUVIPT
File ref: SUV/8/25/1 B

Publication Agency: TES TI Andover

INTRODUCTION

- 1 The Publication agency is responsible for the allocation of instruction numbers.
- 2 All instructions (when issued) issued are to be recorded in manuscript by the recipient on the Numerical Instruction Index provided. Amendments to individual instructions are to be recorded on the Instruction Amendment record. All extant instructions and amendments can be found in the main AESP index.

NOTE

The Publication Agency is responsible for the preparation and maintenance of the instruction Index and will advise the Distribution Authority on the issue of completed and subsequent blank index.

- 3 Service users should forward any comments on this publication through the channels prescribed in AESP 0100-P-001-013. An AESP Form 10 is provided after the preliminary pages of the publication; it should be photocopied and used for forwarding comments on this AESP.

- 4 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.

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**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 1

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52c/4596/(233)
File Ref: DE CH/LVG/4118B/218

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SUBJECT: Cylinder head gasket

(MAE 12-6607)

INTRODUCTION

1 The cylinder head gasket has three thickness options to cater for 'stack up' of tolerances within the engine.

APPLICABILITY

2 Land Rover TUL(HS), TUM(HS).

INTERCHANGEABILITY

3 Fully interchangeable. New item preferred fit in all circumstances.

REASON FOR CHANGE

4 Code 5 - to conform to changes in pattern of commercial spares.

5 Items affected.

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Gasket cylinder head 1.5	ER5263	
2	Gasket cylinder head	ERR7154	

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 2

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52c/4596/(234)
File Ref: DE CH/LVG/4118B/220

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SUBJECT: Improvement to front cover breather system
(MAE 12-6609)

INTRODUCTION

1 The introduction of a new pattern front timing case in production now negates the use of the lower drain plug in the casing. There is now a 2 mm breather hole drilled directly into the lower boss of the new casing. The pressure pipe has also been repositioned and is now secured to the front of the timing case cover.

APPLICABILITY

2 Land Rover TUL(HS), TUM(HS).

INTERCHANGEABILITY

3 Fully interchangeable. As a set new plate and pipe.

REASON FOR CHANGE

4 Code 3 - to improve reliability.

5 Items affected.

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Pipe	MSP100990	ERR7329
2	Seal	ERR7143	ERR4576
3	Cover plate	ERR7144	ERR3805
4	Assy, cover plate	ERR7145	
5	Cover plate	ERR7146	ERR4578
6	Cover plate	ERR7147	ERR4578

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 3

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52c/4596/(235)
File Ref: DE CH/LVG/4118B/219

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SUBJECT: Differential bevel pinion internal thread
(MAE 12-6611)

INTRODUCTION

1 To improve the manufacturing conformity of production. The bevel pinion external thread is to be replaced with an internal thread.

APPLICABILITY

2 Land Rover TUL(HS), TUM(HS).

INTERCHANGEABILITY

3 Fully interchangeable. Pinion and bevel fixing as a matched set.

REASON FOR CHANGE

4 Code 5 - to conform to changes in pattern of commercial spares.

5 Items affected.

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Pinion (FRT TUL/TUM and RR TUL)	FTC5326	FTC3569
2	Pinion (RR TUM)	FTC5337	FTC4628
3	BoltM12	FS112301P	
4	Nut		NY116041
5	Washer	FTC5413	513454

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 4

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52c/4584/(236)
File Ref: DE CH/LVG/4118B/216

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SUBJECT: Sump drain plug

(MAE 12-6612)

INTRODUCTION

1 The replacement of the sump plug and boss with a more durable assembly. Thread changed from 1/4 bsp to 14 mm. Boss depth increase from 8 mm to 18 mm.

APPLICABILITY

2 Land Rover TUL(HS), TUM(HS).

INTERCHANGEABILITY

3 Sump as an assembly. Plug to suit sump.

REASON FOR CHANGE

4 Code 5 - to conform to changes in pattern of commercial spares.

5 Items affected.

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Sump	LSB102610	ERR4696
2	Sump plug	LSF100040	UAM2957
3	Sealing washer	ALU1403	UAM2857L

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 5

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52c/4585/(237)
File Ref: DE CH/LVG/4118B/215

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SUBJECT: Panhard rod

(MAE 12-6614)

INTRODUCTION

1 The panhard rod has been changed to improve clearance between the differential bowl and the panhard rod.

APPLICABILITY

2 Land Rover TUL(HS), TUM(HS).

INTERCHANGEABILITY

3 Interchangeable only on RHD not LHD.

REASON FOR CHANGE

4 Code 5 - to conform to changes in pattern of commercial spares.

5 Items affected.

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Panhard rod	RBI1000000	
2	Panhard rod		NRC9729

**TRUCK UTILITY LIGHT (TUL) HS, TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 6

SUBJECT: Improve timing belt

CANCELLATION

INTRODUCTION

1 Modification Instruction No 6 dated Nov 97 is hereby cancelled. Redesigned cam belt and tensioner, have been incorporated into engine build. Early engines in VIN range TA981898 to TA999991, VA100000 to VA101256 and VA101257 to VA116899 can be upgraded by units taking vehicles to LandRover dealers and requesting Service Action AD271 be actioned. Any further information regarding this cancellation, contact SUV IPT on Andover (██████████)

ACTION

2 File this Page 1/2 in place of General Instr No 6 dated Nov 97, all pages of which are to be destroyed.

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 7

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52C/4598/LVG(253)
File Ref: DE CH/LVG/418B/224

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SUBJECT: Gearbox mainshaft and seal improvement.
(MAE 12-6602)

INTRODUCTION

1 To introduce modifications to the gearbox to reduce stress concentration points at splines and thrust washer fitment face. The input shaft oil seal has been changed from a bi-directional to a unidirectional seal to improve the sealing qualities.

APPLICABILITY

2 Land Rover, TUL (HS), TUM (HS) and TUM) Ambulance (HS).

INTERCHANGEABILITY

3 As a kit mainshaft and washers.

REASON FOR CHANGE

4 Code 3 - to improve reliability.

ITEMS AFFECTED

5

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Mainshaft.	FTC5287	FTC3707
2	Washer thrust.	FTC5288	FTC4989
3	Seal front cover	FTC5303	UKC1060

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 8

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52C/4600/LVG(256)
File Ref: DE CH/LVG/418B/223

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SUBJECT: Rationalisation of connectors on electrical harnesses.
(MAE 12-6604)

INTRODUCTION

1 Rationalisation of the latching connectors on the Defender product range has enabled the column switch gear for the direction indicators/wipers to be brought into line with those connectors used on the remainder of the harness giving a waterproof connection with improved reliability.

APPLICABILITY

2 Land Rover. TUL (HS), TUM (HS) and Ambulance HS.

INTERCHANGEABILITY

3 As a matched harness switch.

REASON FOR CHANGE

4 Code 3 - to improve reliability.

ITEMS AFFECTED

5

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Switch gear steering column mil.	AMR6367	PRC8048

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 9

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No.: 97/52C/4599/LVG(257)
File Ref: DE CH/LVG/418B/222

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SUBJECT: Quality improvement to transfer box.

(MAE 12-6603)

INTRODUCTION

1 To improve the torque capacity and durability of the LT230T transfer box, the mainshaft bearings, transfer gear and casing have been modified.

APPLICABILITY

2 Land Rover. TUL (HS). TUM (HS) and (TUM) Ambulance HS.

INTERCHANGEABILITY

3 Along with mating components the transfer box is interchangeable as a complete unit.

REASON FOR CHANGE

4 Code 3 - to improve reliability.

ITEMS AFFECTED

5

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Transfer gearbox - comprising..	STC3609	FRC9470
2	Transfer case.	FTC5489	FTC1784
3	Mainshaft bearing housing.	FTC4866	FRC6943
4	Mainshaft transfer gear.	FTC4962	FTC5089
5	Cup-inter gear bearing.	FTC4999	FRC7435
6	Cone-inter gear bearing.	FTC5000	FRC7436
7	High gear bush.	FTC4955	FRC7441

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 11

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No. 98/52c/4913(537)
File Ref: CH/LVG/4118/225

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SUBJECT: Introduction of MTF94 oil for R380 gearbox.
(APPROVAL NO. MAE 12-6634)

INTRODUCTION

1 Introduction of MTF94 oil for R380 gearbox, suitable for 96,000 miles/5 years service.

APPLICABILITY

2 TUL/TUM (HS) and Battlefield Ambulance (HS) All Variants.

INTERCHANGEABILITY

3 Fully interchangeable.

REASON FOR CHANGE

4 Code 3 - to improve reliability.

5 Items affected

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New parts (3)	Replaced parts (4)
1	Oil MTF 94	9150-99-450-5605	9150-99-869-4114

Sequence of operations

6 Carry out the instruction as follows:

6.1 Non cooled R380 gearbox.

6.1.1 From cold and whilst stationary, remove the drain plug from the gearbox maincase.

6.1.2 Allow the lubricant to drain as normal for at least 25 minutes.

6.1.3 Reseal and refit drain plug.

6.1.4 Remove gearbox filler plug.

6.1.5 Fill gearbox with 2.38 litres of MTF94 (NSN 9150-99-450-5605).

6.1.6 Reseal and replace filler plug.

6.1.7 Run the vehicle on the road until normal operating temperature is achieved and return to point of service.

6.1.8 Remove the drain plug from the gearbox maincase.

6.1.9 Allow the lubricant to drain as normal for at least 25 minutes.

6.1.10 Reseal and refit drain plug.

6.1.11 Remove gearbox filler plug.

6.1.12 Fill gearbox with 2.38 litres of MTF94 (NSN 9150-99-450-5605).

6.1.13 Reseal and replace filler plug.

6.2 Cooled R380 gearbox.

6.2.1 From cold and whilst stationary, remove the drain plug from the gearbox maincase.

6.2.2 Allow the lubricant to drain as normal for at least 25 minutes.

6.2.3 Undo and disconnect the upper and then lower cooler pipes from the thermostat housing and allow to drain for at least 25 minutes.

6.2.4 Reseal and replace the upper and lower cooler pipes to the thermostat housing.

6.2.5 Reseal and refit drain plug.

6.2.6 Remove gearbox filler plug.

6.2.7 Fill gearbox with 2.90 litres of MTF94 (NSN 9150-99-450-5605).

6.2.8 Reseal and replace filler plug.

6.2.9 Run the vehicle on the road until normal operating temperature is achieved and return to point of service.

6.2.10 Remove the drain plug from the gearbox maincase.

6.2.11 Allow the lubricant to drain as normal for at least 25 minutes.

- 6.2.12 (See note) Undo and disconnect the upper and then lower cooler pipes from the thermostat housing and allow to drain for at least 25 minutes.
- 6.2.13 Reseal and replace the upper and lower cooler pipes to the thermostat housing.
- 6.2.14 Reseal and refit drain plug.
- 6.2.15 Remove gearbox filler plug.
- 6.2.16 Fill gearbox with a minimum of 2.90 litres of MTF94 (NSN 9150-99-450-5605).
- 6.2.17 Reseal and replace filler plug.

SERVICING

7 Check and **top** up with MTF94 only, at 12,000 miles (see note) service intervals, replace bulk lubricant after 96,000 miles/5 years or at major rectification/repair and rebuild points.

NOTE

If during flushing cycle for cooled units no lubrication is evident in the cooler pipe system after running the vehicle, then the check (and subsequent top up) interval must be reduced to a maximum of 6,000 miles until the cooler has 'opened*' and refilled the system. This will be apparent by a **top** up requirement of greater than 0.45 litres to bring the lubricant level back up to filler plug level in the main gearbox casing.

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS**

GENERAL INSTRUCTION NO. 12

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No. 98/52c/5262/LVG(39)
File Ref: DE CH/LVG/4118B

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SUBJECT: Changing the side of stowage bin stickers

INTRODUCTION

1 To improve the operational performance of the vehicle, by placing the fuel jerry cans on the same side as the fuel filler.

1.1 Limitations on use of equipment: Nil.

APPLICABILITY

2 Land Rover TUM (HS) all variants.

REASON FOR MODIFICATION

3 Code 2 - to improve operational performance.

PRIORITY

4

4.1 ARMY: Routine.

4.2 RAF: Class 3.

ESTIMATED TIME REQUIRED

5 Embodiment: 0.5 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This instruction is to be implemented by:

6.1.1 ARMY - Units authorized to carry out levels 2, 3 or 4 maintenance.

6.1.2 RAF - Units not later than the next maintenance and Vehicle Depots before issue of vehicle.

Action required by

7

7.1 Units and establishments holding equipment:

7.1.1 ARMY - On receipt of stores, request REME to modify equipment.

7.1.2 ARMY - Record the AESP and instruction number in equipment documents.

7.1.3 RAF - Record modification details on AF G1084A and Form 4870. Units operating STAMA are also to record modification details on ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP100C-08A.

7.2 Army units authorized to carry out levels 2, 3 and 4 maintenance and RAF units:

7.2.1 ARMY - When requested by units or during overhaul of equipment on charge without REME Level 2 Support, obtain the items listed in Para 8 and carry out this modification.

7.2.2 Record completion details of modification against appropriate entry in vehicle documents.

7.2.3 All recipients of this instruction. Add particulars to AESP 2320-D-128-821 Instr Index.**Stores, tools and equipment**

8

8.1 Stores to be demanded:

8.1.1 The following items are to be demanded quoting this instruction as the authority.

Item No.	DMC	NSN/PartNo.	Designation	Qty per eqpt
1	7XD	7690-99-810-4781	Label, water stowage.	1
2	7XD	7690-99-305-3592	Label, fuel stowage.	1

8.2 Stores to be removed and reduced to scrap:

Item No.	DMC	NSN/PartNo.	Designation	Qty per eqpt
1	7XD	7690-99-810-4781	Label, water stowage.	1
2	7XD	7690-99-305-3592	Label, fuel stowage.	1

Sequence of operations

9 Carry out the instruction as follows:

9.1 Remove stickers from the inside of both stowage locker doors.

9.2 Renew the stickers, the fuel stowage sticker on the right hand side and the water stowage sticker on the left hand locker doors.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Nil.

**TRUCK UTILITY LIGHT (TUL) HS
TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS
GENERAL INSTRUCTION No. 15**

Sponsor:

DGSE9(A)

Publication Agency:

DLO Andover
Project No: CSVS17
File ref: PFO3D2

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SUBJECT: Fitting of a stop clip to soft top escape hatch zip

INTRODUCTION

1 This instruction details the fitting of a stop clip to the escape hatch zip of Soft Top Winter/water vehicles to improve the open and closing operation of the zip.

APPLICABILITY

2 Truck Utility Light (TUL) HS and Truck Utility Medium (TUM) HS Soft Top Winter Water vehicles only.

INTERCHANGEABILITY

3 None.

REASON FOR MODIFICATION

4 Code 2 – To improve operational performance.

ITEMS AFFECTED

5

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New Part (3)	Replaced parts (4)
1	Stop clip	MSP 0127	-

IMPLEMENTATION

- 6 Carry out the modification as follows:
 - 6.1 Park vehicle on a level surface and apply hand brake.
 - 6.2 Switch off engine and remove ignition key.
 - 6.3 With canopy fitted to vehicle, open escape hatch zip until approximately 150mm from the zip closed end (refer to Fig 1).
 - 6.4 Place stop clip (Serial No 1) over closed part of zip (150mm from closed end) and using a suitable pair of pliers between the open parts of the zip, crimp stop clip in position over zip.
 - 6.5 Move zip against stop clip to ensure the clip remains in position.
 - 6.6 If stop clip moves, apply further crimping pressure with the pliers.
 - 6.7 Close escape hatch zip and secure canopy.

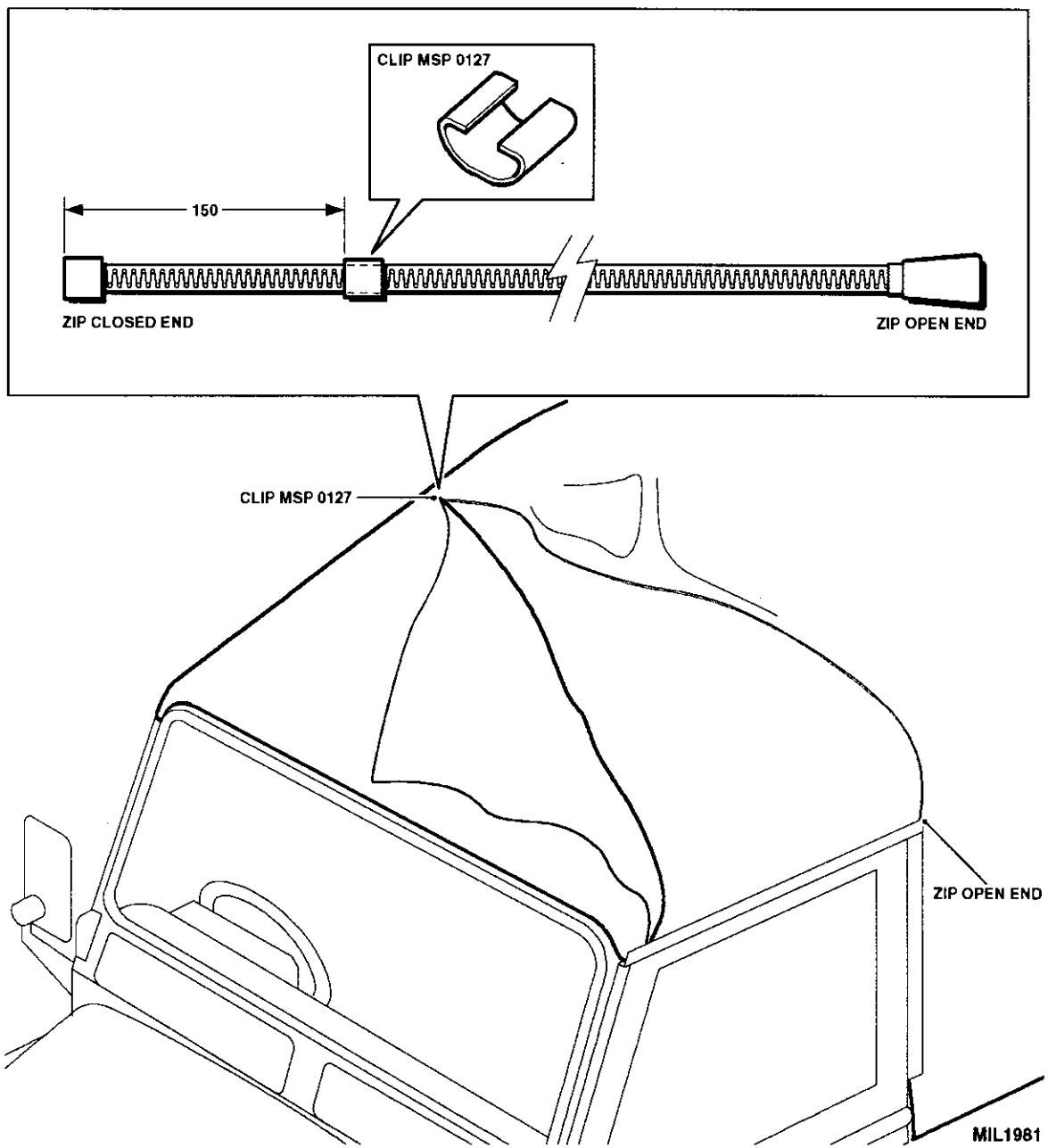


Fig 1. Fitting the stop clip

**TRUCK UTILITY LIGHT (TUL) HS
TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS
GENERAL INSTRUCTION No. 16**

Sponsor:

DGSE9(A)

Publication Agency:

DLO Andover
Project No: CSVS27
File ref: PFO6D2

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SUBJECT: Improvement of the clip, wire and tag assembly fitted to the rotating towing hook

INTRODUCTION

1 This instruction introduces a new design of the Clip, Wire and Tag Assembly fitted to the Rotating Towing Hook replacing the existing Pin and Chain Assembly.

APPLICABILITY

2 Truck Utility Light (TUL) HS and Truck Utility Medium (TUM) vehicles.

INTERCHANGEABILITY

3 Fully interchangeable.

REASON FOR MODIFICATION

4 Code 3 – To improve reliability.

ITEMS AFFECTED

5

TABLE 1 NEW AND REPLACED PARTS

Serial (1)	Description (2)	New Part (3)	Replaced parts (4)
1	Clip, Wire, Tag assembly	6MT1/4010-99-314-3093	7RU 4010-99-738-3174

**TRUCK UTILITY LIGHT (TUL) HS
TRUCK UTILITY MEDIUM (TUM) HS
AND (TUM) AMBULANCE HS
GENERAL INSTRUCTION No. 17**

Sponsor:

DGSE9(A)

Publication Agency:

DLO Andover
Project No: CSVS27
File ref: PFD7D2

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SUBJECT: Fitting of a modified tailgate cable assembly

INTRODUCTION

1 This instruction details the fitting of a modified tailgate cable assembly to prevent the cable from jamming on the tailgate seal when the tailgate is open and under a heavy load.

APPLICABILITY

2 All variants of Truck Utility Light (TUL) HS and Truck Utility Medium (TUM) HS Soft Top vehicles fitted with a drop down tailgate.

INTERCHANGEABILITY

3 This item is interchangeable.

REASON FOR MODIFICATION

4 Code 3 – To improve reliability.

ITEMS AFFECTED

5

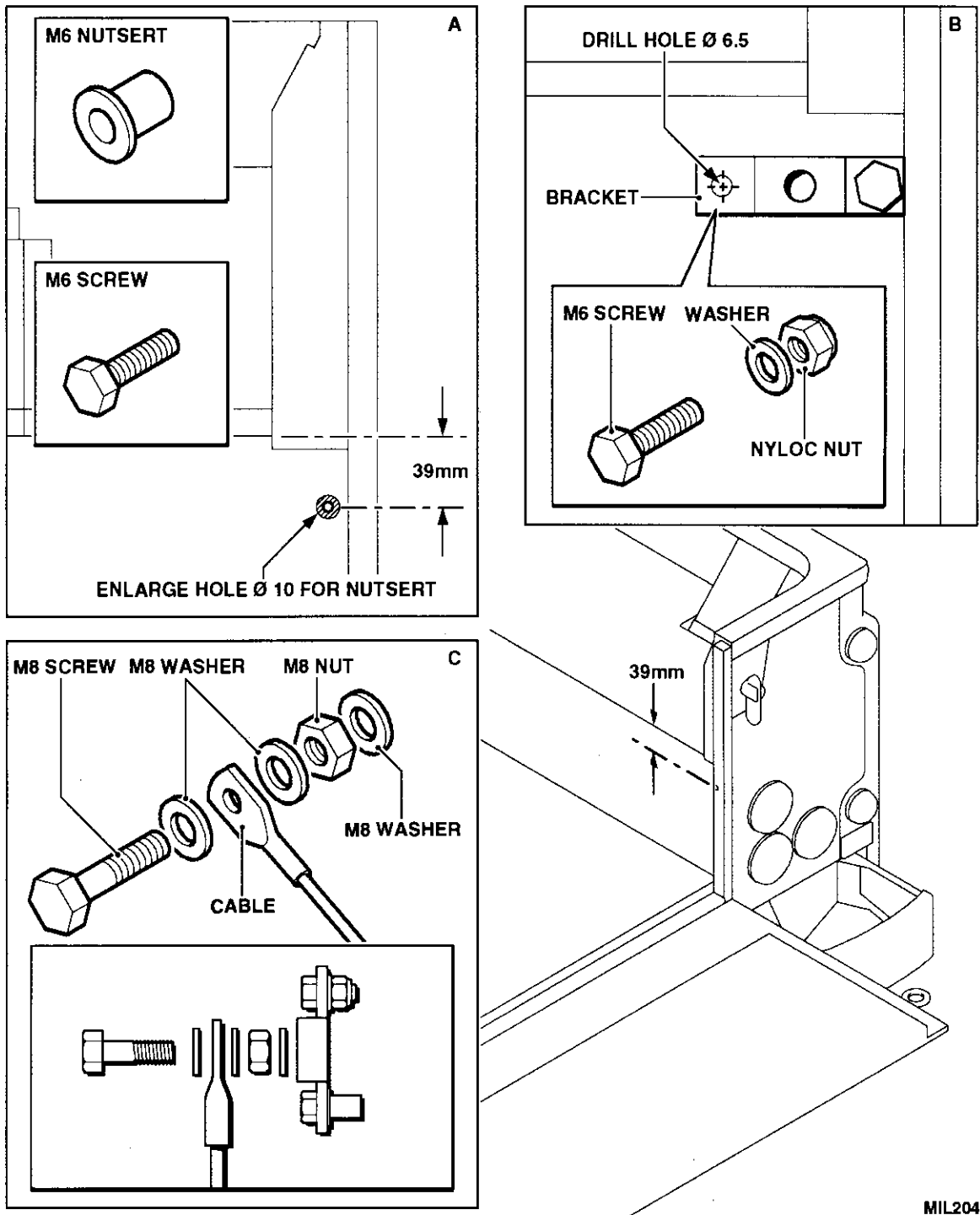
TABLE 1 NEW PARTS

Serial (1)	Description (2)	New Part (3)	Quantity (4)
1	Cable	7RU 2540-99-737-8664	2
2	Bracket	7XD 5340-99-739-0607	2
3	Screw - M6 x 20mm	G1 5305-99-122-5366	4

Serial (1)	Description (2)	New Part (3)	Quantity (4)
4	AVK nutsert - M6	7XD 5310-99-126-4176	2
5	Washer - M6	P 5310-99-977-1695	2
6	Nyloc nut - M6	G1 5310-99-139-5313	2
7	Screw - M8 x 25mm	7XD 5305-99-454-3492	2
8	Nut - M8	G1 5310-99-139-0313	2
9	Washer - M8	G1 5310-99-138-7965	6

IMPLEMENTATION

- 6 Carry out the modification to both sides of the vehicle as follows:
- 6.1 Park vehicle on a level surface and apply hand brake.
 - 6.2 Switch off engine and remove ignition key.
 - 6.3 Open tailgate and support to prevent damage with cables removed.
 - 6.4 Remove existing cables.
 - 6.5 Drill out the upper rivet on each wheel arch box (39 mm below top face of wheel arch box) and enlarge holes to 10 mm diameter. (refer to Fig 1)
 - 6.6 Fit M6 nutserts (item 4) into 10 mm holes and secure.
 - 6.7 Fit brackets (item 2) horizontally using screws (item 3) and secure rear of brackets to nutserts (refer to Fig 1).
 - 6.8 Using bracket as a guide, drill forward hole (6.5 mm dia) into wheel arch.
 - 6.9 Using screws (item 3), plain washers (item 5) and nyloc nuts (item 6) secure the forward end of the brackets to wheel arch boxes.
 - 6.10 Torque fixings to 6Nm.
 - 6.11 Assemble cables to brackets (refer to Fig 1) using nuts (item 8) and washers (item 9) to adjust clearance so that cable ends are free to rotate on screws (item 7).
 - 6.12 Torque fixings to 12Nm.



MIL2046

Fig 1. Fitting the tailgate cable assembly

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND TUM BATTLEFIELD AMBULANCE HS**

**GENERAL INSTRUCTION NO. 18
(Completely revised)**

Sponsor: SUV IPT
Project No.:
File Ref: SUV/8/25/1 B

Publication Authority: TES TIG Andover

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1	Completely Revised	Jan 07
2		
3		

Amdt No.	Incorporated By (Signature)	Date
4		
5		
6		

SUBJECT: Replacement door mounted rear view mirror.

INTRODUCTION

1 A replacement rear view mirror has been introduced for the TUL (HS), TUM (HS). On failure of the original mirror, replacement mirror NSN: 7RU 2540-99-666-4847 is to be demanded, with adaptor NSN: 7Ru 2590-99-837-1076; this will enable the mirror to be correctly fitted. The adaptor will not be required for subsequent replacement mirrors. The Battlefield Ambulance (BFA) employs a tubular mounting arm that does not require the adaptor.

APPLICABILITY

2

- 2.1 TUL (HS), TUM (HS), BFA, WMIK, all variants.
- 2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

3

- 3.1 Code 2 - to improve operational performance.

PRIORITY

4

- 4.1 ARMY: Routine.
- 4.2 RAF: Class 3.

ESTIMATED TIME REQUIRED

5 Embodiment: 0.25 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

- 6.1 This instruction is to be implemented by:
 - 6.1.1 ARMY - Units authorized to carry out levels 2, 3 or 4 maintenance.
 - 6.1.2 RAF - Units not later than the next maintenance and Vehicle Depots before issue of vehicle.

Action required by

7

- 7.1 Units and establishments holding equipment.
 - 7.1.1 ARMY - On receipt of stores, request REME to modify equipment.
 - 7.1.2 ARMY - Record the AESP and instruction number in equipment documents.
 - 7.1.3 RAF - Record modification details on AF G1084A and Form 4870. Units operating STAMA are also to record modification details on ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.
- 7.2 Army units authorized to carry out levels 2, 3 and 4 maintenance and RAF units.
 - 7.2.1 ARMY - When requested by units or during overhaul of equipment on charge without REME 1st Line Support, obtain the items listed in Para 8 and carry out this modification.
 - 7.2.2 Record completion details of modification against appropriate entry in vehicle documents.
 - 7.2.3 Complete AF G1084A when reporting completion of the modification to FORWARD (RAF) using the following code:

RAF: MODIFICATION CODE: AFN 178

NOTE

RAF units operating STAMA are also to complete ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.

- 7.3 All recipients of this instruction. Add particulars to AESP2320-D-128-821 Instr Index.

Stores, tools and equipment

8

- 8.1 Stores to be demanded.
 - 8.1.1 The following items are to be demanded quoting this instruction as the authority.

Item No.	DMC	NSN/PartNo.	Designation	Qty per eqpt
1	7RU	2540-99-666-4847	Mirror - Rear view	2 (as req)
2	7RU	2590-99-837-1076	Adaptor - TUL/TUM; initial fit only	2 (as req)

Sequence of operations

NOTE:

The item numbers of Para 8 are used as reference throughout this instruction.

9 Carry out this instruction as follows:

9.1 Remove old mirror assembly from mirror arm.

9.2 TUL/TUM: Remove the two Allen headed socket clamping screws from the mirror (item 1) retaining clamp/cap. Install the adaptor (item 2) into the mirror head, ensuring the two lugs on the adaptor fit into the recesses. Fit mirror head onto mirror arm; replace the retaining clamp/cap and screws. Lightly tighten the clamping screws, and move the mirror into the correct position. Tighten the clamping screws fully to retain mirror position.

9.3 BFA: Remove the two Allen headed socket clamping screws from the mirror (item 1) retaining clamp/cap. Position the mirror head on the mirror support arm, and replace the retaining clamp/cap and screws. Lightly tighten the clamping screws, and move the mirror into the correct position. Tighten the clamping screws fully to retain mirror position.

9.4 The mirror/s will now have enough built-in movement to allow adjustment from the drivers seating position.

9.5 Future replacement of the mirror head (item 1) will **not** require the adaptor (item 2) (TUL/TUM variants) to be demanded, which can be re-used from the old assembly.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

11 Nil.

PUBLICATION AMENDMENTS

12 AESP 2320-D-128-711 will be amended to include NSN: Seat Belt Extension.

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND TUM BATTLEFIELD AMBULANCE HS**

GENERAL INSTRUCTION NO. 19

Sponsor: SUV IPT
Project No.:
File Ref: SUV/8/25/1 B
Publication Authority: DGS&E TIG Andover

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
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Amdt No.	Incorporated By (Signature)	Date
4		
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6		

SUBJECT: Rear light repair kit.

INTRODUCTION

1 SUV IPT is aware of rear light connectors (side, brake, direction, reverse and fog) failing; resulting in sections or the complete loom being replaced due to the lamp connector being unavailable as a stand alone item. To address this issue SUV has sourced a repair kit which provides a replacement connector with cable pigtailed that can be spliced onto the existing loom. Although this repair kit will affect a repair to all the rear lamps, it is only supplied with two common coloured cables (red/feed and black/earth).

APPLICABILITY

2

- 2.1 TUL (HS), TUM (HS), BFA and WMIK (all variants).
- 2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

3 Code 4. To improve Maintainability. On failure of light connector, repair can be affected without replacing the loom, or sections of.

PRIORITY

4

- 4.1 ARMY: Routine as required.
- 4.2 RAF: Class 3 as required.

ESTIMATED TIME REQUIRED

5

- Embodiment 0.5 man hours.
- 5.1 All recipients of this instruction. Add particulars to AESP2320-D-128-821 Instr Index.

Stores, tools and equipment

6

6.1 Stores to be demanded.

6.1.1 The following items are to be demanded quoting this instruction as the authority.

Item No.	DMC	NSN/PartNo.	Designation	Qty per eqpt
1	7XD	6150-99-613-2856	Rear Lamp Repair Kit (one required per lamp)	As required

Sequence of operations

NOTE:

The item numbers of Para 6 are used as reference throughout this instruction.

7 Carry out this instruction as follows:

7.1 Remove the affected lamp(s) from the vehicle.

7.2 Cut the defective connector from the loom. Dress cables of repair connector and loom to suit application; bare cables and using the two connectors provided, crimp repair connector (item 1) onto the main loom, see note. Heat seal the connectors to provide a waterproof seal.

NOTE:

Repair connector only supplied with red/black cables, red to be used for supply irrespective of original colour coding, black to be used for earth.

7.3 Replace lamp.

TESTING AFTER EMBODIMENT

8 Nil.

EFFECT ON WEIGHT

9 Nil.

PUBLICATION AMENDMENTS

NOTE:

Necessary amendments will be issued separately.

10 AESP 2320-D-128-711 will be amended to include NSN for the repair kit.

**TRUCK UTILITY LIGHT (TUL) HS TRUCK UTILITY MEDIUM (TUM) HS
AND TUM BATTLEFIELD AMBULANCE HS**

GENERAL INSTRUCTION NO. 20

Sponsor: SUV IPT
Project No.:
FileRef: SUV/8/25/1 B
Publication Authority: DGS&ETIG Andover

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Front seat, seat belt extension.

INTRODUCTION

1

1.1 Personnel travelling in the front of vehicles and wearing body armour have reported difficulty in using the seat belt/s due to the restricted length of the seat belt webbing.

1.2 To overcome this problem a seat belt extension can be attached to the original belt length to accommodate the larger dimension of personnel wearing body armour.

1.3 The seat belt extension clips into the existing vehicle seat belt and can be used on an 'as required' basis being stored within the vehicle when not in use.

1.4 Limitations on use of equipment. Nil.

APPLICABILITY

2 TUL (HS), TUM (HS), BFA and WMIK, all variants.

REASON FOR MODIFICATION

3 Code 1 - to improve safety.

PRIORITY

4

4.1 ARMY: As required by user.

4.2 RAF: As required by user.

Action required by

5

- 5.1 All recipients of this instruction. Add particulars to AESP2320-D-128-821 Instr Index.

Stores, tools and equipment

6

- 6.1 Stores to be demanded.

- 6.1.1 The following items are to be demanded quoting this instruction as the authority.

Item No.	DMC	NSN/PartNo.	Designation	Qty per eqpt
1	7XD	2540-99-364-0779	Seat Belt Extension	As required

Sequence of operations

NOTE:

SEAT BELT EXTENSION ONLY TO BE USED WHEN THE NORMAL VEHICLE BELT LENGTH IS INSUFFICIENT.

The item numbers of Para 6 are used as reference throughout this instruction.

- 7 Carry out this instruction as follows:

- 7.1 Clip buckle end of seat belt extension (item 1) on to existing seatbelt.
7.2 Fasten seat belt in the normal way.
7.3 When not in use the seat belt extension should be stored with the vehicle.

TESTING AFTER EMBODIMENT

- 8 Nil.

EFFECT ON WEIGHT

- 9 Nil.

PUBLICATION AMENDMENTS

- 10 AESP 2320-D-128-711 will be amended to include NSN: Seat Belt Extension.

TRUCK UTILITY LIGHT (TUL) HS
TRUCK UTILITY MEDIUM (TUM) HS
AND TUM AMBULANCE HS
GENERAL INSTRUCTION No. 21

Sponsor:

SUV IPT

Publication Agency:

SUV IPT, Abbey Wood
Project No: LR060
File ref: SUV/8/25/1B

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Wheel (front & rear) bearing adjustment set up.

INTRODUCTION

1 A limited number of early production TUM (HS) and BFA (HS) (Battle Field Ambulance) vehicles were fitted with the earlier Defender 90/110 wheel bearing assembly and the adjustment procedure is not covered in the AESP.

1.1 Later vehicles employed a revised method of adjustment which is detailed in AESP 2320-D-128-522, chap 5-1, para 6.7 and chap 6-1, para 10.7.

1.2 The AESP assumes that the correct bearing set up has already been fitted and as such it does not include the detail of the reason for change, but it details the correct process for fitting.

1.3 The early type can be identified by having two retaining locknuts and the later type only one.

1.4 AESP: 2320-D-128-711, chap 2-4-3, page 17/18 and chap 2-4-5, page 11/12 details the bearings and adjustment shims for front and rear bearing respectively.

APPLICABILITY

2

2.1 TUM (HS), BFA only.

2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

3 Code 2 - to improve operational performance.

PRIORITY

4

4.1 ARMY: Routine

4.2 RAF: Class 3.

ESTIMATED TIME REQUIRED

5 N/A

MODIFICATION IMPLEMENTATION PLAN

6 N/A

Action required by

7

7.1 Units and establishments holding equipment.

7.1.1 ARMY - Record the AESP and instruction number in equipment documents.

7.1.2 RAF - Record modification details on AF G1084A and Form 4870. Units operating STAMA are also to record modification details on ADP MTMS Job Certification Sheet and to follow the procedures laid down in AP 100C-08A.

7.2 All recipients of this instruction. Add particulars to AESP 2320-D-128-821 Instr Index.

Stores, tools and equipment

8 N/A

Sequence of operations

N/A

9 Carry out this instruction as follows:

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

11 Nil.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

**TRUCK UTILITY LIGHT (TUL) HS
TRUCK UTILITY MEDIUM (TUM) HS
AND TUM AMBULANCE HS
GENERAL INSTRUCTION No. 22**

Sponsor:
SUV IPT

Publication Agency:
SUV IPT, Abbey Wood
Project: LLVUty-20
File ref: SUV/8/25/1

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Mod Inst No16. Input/Export cable

INTRODUCTION

1 AESP: 2320-D-128-811, Mod Inst No 16, Fig 12 details the items required to make up the Generator connector cable assembly. This cable has proved difficult for units to manufacturer for various reasons. The cable is now available as a complete assembly under a stand alone NSN.

APPLICABILITY

2 TUL (HS) FFR, TUM (HS) FFR

REASON FOR MODIFICATION

3 Code 2 - to improve operational performance.

PRIORITY

4

4.1 ARMY: as required.

4.2 RAF: Class 3 as required.

Stores, tools and equipment

5

5.1 Stores to be demanded.

5.1.1 The following items are to be demanded quoting this instruction as the authority.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	7XD	5995-99-400-7297	Input / Export cable assembly	A/R

Sequence of operations

NOTE

The item numbers of Para 5 are used as reference throughout this instruction.

6 Carry out this instruction as follows:

6.1 Connect item 1 as instructed in AESP 2320-D-128-821, Mod Inst No 16.

EFFECT ON WEIGHT

7 Nil.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

8 AESP 2320-D-128-821; No 16 will be amended to include NSN for the cable assy.

COMMENT(S) ON AESP*

To: FRACAS
 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):		

Signed: Telephone No:.....

Name (Capitals): Rank/Grade: Date:.....

✕

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Thank you for commenting on AESP*

Your reference..... Dated:.....

Action is being taken to:	Tick	Tick
Issue a revised/amended AESP*		Under investigation
Incorporate comment(s) in future amendments		No action required
Remarks		

Signed: Telephone No:.....

Name (Capitals): Rank/Grade: Date:.....

* AESP or EMER

AESP Form 10 (Issue 5 dated Feb 01)