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DEFENCE LOGISTICS ORGANISATION CHOBHAM LANE, CHERTSEY SURREY KT16 0EE



15550

QLIS
11 DEC 2001
DLO Chertsey

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CARRIER, INSTALLATION, FULL TRACKED, MKs 2 AND 2/1 (FV439)

MODIFICATION INSTRUCTIONS AND INDEX

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BY COMMAND OF THE DEFENCE COUNCIL

Kevin Trewin

Ministry of Defence
Issued by
DEFENCE LOGISTICS ORGANISATION

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
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PREFACE

Sponsor:
DGES(A)
File ref:

Publication Agency:
DLO Chertsey
Project No: 97/41c/217(237)
File ref: Admin 281

INTRODUCTION

- 1 The Publication Agency is responsible for the allocation of instruction numbers.
- 2 All modification instructions as issued are to be recorded in manuscript by the recipient on the Numerical Modification Instruction Index provided. Amendments to individual instructions are to be recorded on the instruction amendment record. All extant instructions and amendments can be found listed 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 pages necessary.

- 3 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 after the preliminary pages of this publication; it should be photocopied and used for forwarding comments on this AESP to DLO DTS.
- 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.

MODIFICATION INSTRUCTION INDEX

Priority (Pty) is shown as: Immediate: I Routine: R

Instr No. (1)	Pty (2)	Page Nos. (3)	Amend-ment No. (4)	Subject (5)	Approval No./Remarks (6)
1	(See Col 6)			EMER TV E 107/9 Mod Instr No. 1 to No. 8	Priority as detailed in each instruction <i>Cancelled 29/10/00</i>
2	R	1-4		FUEL TANK FILTER	43/0/0046
3	I	1-6		DRIVER & COMMANDERS SA80 ^{HR} STOWAGE	43/9/0010
4	I	1-6		DRIVER & CMDR SA80 STOWAGE SAS/AC	43/9/0003
5	I	1-4		HIGH VISIBILITY MARKER BOARDS	43/2/0017
6		-		BV POWER HARNESS.	
7					
8					
9					
10					

(continued)

MODIFICATION INSTRUCTION INDEX (continued)

Instr No. (1)	Pty (2)	Page Nos. (3)	Amend- ment No. (4)	Subject (5)	Approval No./ Remarks (6)
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CARRIER, INSTALLATION, FULL TRACKED, MKs 2 AND 2/1 FV439

MODIFICATION INSTRUCTION NO. 1

Sponsor:
DGES(A)

Publication Agency:
ATSA Chertsey
Project No: 97/41c/217
File ref: Admin 281

AMENDMENT RECORD

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

SUBJECT: EMER TV E107/9 Modification Instructions No. 1 to No. 8

INTRODUCTION

1

- 1.1 The EMER decade (TV E100/9 to E109/9) that supports the FV439 is to be cancelled and replaced by AESP 2350-T-254-octad.
- 1.2 This AESP Modification Instruction No.1 is a complete issue of Modification Instructions E107/9 No. 1 to No. 8 that have been issued under the EMER system.
- 1.3 Subsequent Modification Instructions will be issued in AESP format, starting with Modification Instruction No. 2.
- 1.4 Where the EMER E 107/9 Modification Instructions refer to an associated EMER TV E100 series publication, this information will be incorporated within the appropriate Modification Instruction.
- 1.5 Remove and retain EMER TV E107/9 Modification Instructions No. 1 to No. 8 from the EMER folder.
- 1.6 Place this instruction in front of Modification Instructions removed at para 1.5 above.
- 1.7 Open a new folder numbered 2350-T-254-811 and titled CARRIER, INSTALLATION, FULL TRACKED, MK's 2 AND 2/1 (FV439).
- 1.8 Limitations on use of equipment: As detailed within each Modification Instruction.

APPLICABILITY

2

- 2.1 FV439.

REASON FOR MODIFICATION

3

- 3.1 Publications change form EMER to AESP format.

PRIORITY

4

4.1 Information only.

PUBLICATION AMENDMENTS**NOTE**

Necessary amendments will be issued separately.

5 Nil.

TABLE 1 MODIFICATION INSTRUCTION INDEX

Priority (Pty) is shown as: Immediate: I Routine: R

Mod No. (1)	Pty (2)	Subject (5)	Approval No./ Remarks (6)
1	R	Rear floor plate, access to fuel system	33261
2	I	2kg Dry powder fire extinguisher	43/0/0013
3	R	Concealment set array brackets	43/9/0002
4	I	Amber rotating beacon	43/9/0004
5	I	Driver's and commanders SA80 stowage <i>CANCELLED</i>	43/9/0003
6	I	Crew SA80 stowage, in the SAS/MC	43/9/006
7	I	Crew SA80 stowage, radio relay	43/9/007
8	R	SAS/MC Diesel Conversion	20/9/0012 20/9/0016

COMMENT(S) ON AESP*

To: DLO DTS 3.2
Ha-Ha Road
Woolwich
LONDON SE18 4QF

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:

✕

DLO DTS 3.2 USE ONLY

To:
.....
.....
.....

From: DLO DTS 3.2
Ha-Ha Road
Woolwich
LONDON SE18 4QF

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 4.2 dated Apr 00)

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CARRIER, INSTALLATION, FULL TRACKED, FV 439

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION INDEX

Note ...

This Index is to be kept up to date by the User entering instructions issued under the above designation as and when they are published.

Instr No	Issue No	Pages	Subject	Applicability	Approval No/Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1	1	1-4	Rear floor plate, access to fuel system	0765-0172 (Auto-exch)	33261
2	1	1-6	2 kg Dry Powder Fire Extinguishers		43/9/0013
3	1	1-6	CONCOMITANT SET ARMY AXES		43/9/0012
4	3	1-8	ARMOUR ROTATING BARRICADES		43/9/0014
5	2	1-6	DRIVER & COMMANDERS SAFETY STOWAGE		43/9/0013
6			SAS/TC SAFETY STOWAGE		43/9/0016

(continued)

Instr No	Issue No	Pages	Subject	Applicability	Approval No/ Remarks
(1)	(2)	(3)	(4)	(5)	(6)
7			RADIO AGLAY CREW SEWAGE SASO		43/9/007
8	1	38	SAS/AC DIESEL CONVERSION	SAS/ME ONLY	20 9/0012 + 0016
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TELEPHONE EXCHANGE, CARRIER MOUNTED, FULL TRACKED,
FV 439, MK 2/1 VEHICLES ONLY

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION

SUBJECT: Rear floor plate, access to fuel system

INTRODUCTION

1. To improve access to the fuel pump and filter units, the rear floor plate is to be modified.

APPLICABILITY

2. Plate floor rear 9ACR/2510-99-867-4642 fitted to subject vehicles (Code No 0765.0172) held by user units.

REASON FOR MODIFICATION

3. Code 4 - to improve maintainability

PRIORITY

4. Routine (Mgmt N 097 refers).

ESTIMATED TIME REQUIRED

5. Stripping and assembling:	1 man-hour
Embodiment:	3 man-hours

MODIFICATION IMPLEMENTATION PLAN

6. a. This modification may be carried out by units authorized to carry out base repairs.
- b. Associated modifications: Nil

7. Action required by:-

a. Units authorized to carry out base repairs

- (1) During overhaul obtain the items listed in para 8.a. and carry out this modification.
- (2) Record completion details of modification in equipment documents.
- (3) Complete AF G1084A (Mgmt J 020 refers) when reporting completion of the modification to Data Centre. The exact FORWARD coding to be used is as follows:-

EQUIPMENT CODE S 059 A 999
ARMY MODIFICATION CODE J 00746

8. Stores, tools and equipment

a. Stores to be obtained locally

<u>Item</u>	<u>VAOS Section</u>	<u>Part No</u>	<u>Designation</u>	<u>Qty per eqpt</u>
1	LV6MT6	9320-99-805-8377	Rubber sheet, 1/16 in. thk x 36 in. w. (Approx 6 in. length required, to be cut into 2 in. strips)) Demand as reqd
2	G1	5305-99-941-1750	Screw, steel, csk hd, 1/4 in. UNF - 4 x 3/4 in. lg	
3			Bostik 'C' or approved equivalent	

b. Stores to be removed and reduced to produce

<u>Item</u>	<u>VAOS Section</u>	<u>Part No</u>	<u>Designation</u>	<u>Qty per eqpt</u>
4		FV 584145	Sponge, rubber pad	1
5		FV 584146	Sponge, rubber pad	1

c. Stores to be modified

<u>VAOS Section</u>	<u>Part No</u>	<u>Designation</u>	<u>Qty per eqpt</u>
9 ACR	2510-99-867-4642 (FV 585921)	Plate, floor, rear	1

9. Sequence of operations

- a. Remove rear floor plate from vehicle.
- b. See Fig 1.
 - (1) Remove and discard both rubber sponge pads (items 4 and 5).
 - (2) Cut floor plate as indicated in l.h. view ensuring that the r.h. 'cut' line passes equidistant between the two bosses as shown.
 - (3) Drill the two cut pieces of floor plate as shown in centre view and section 'A-A'.
 - (4) Fit the two pieces of floor plate and secure using some of the existing fixings. Spot through the four new holes in the floor plates on to the under-floor structure. Drill and tap four, $\frac{1}{4}$ in. UNF holes in under-floor structure.
 - (5) Cut rubber sheet (item 1) into appropriate lengths of 2 in. strips and affix to aperture of main floor plate as shown in r.h. view and section 'B-B'.
 - (6) Fit both parts of floor plate to vehicle and secure using retained fixings and the additional qty four $\frac{1}{4}$ in. UNF screws (item 2).

10. Testing after embodiment:

Nil

EMER AMENDMENTS

11. Nil

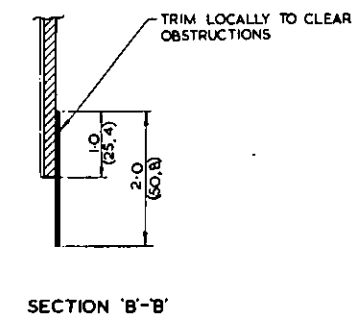
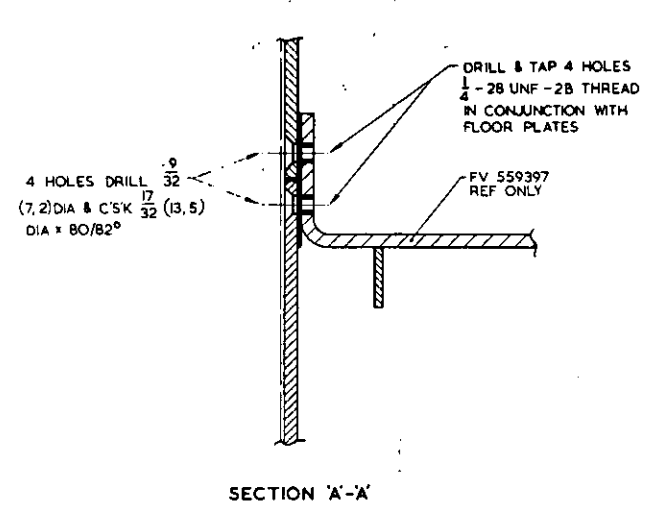
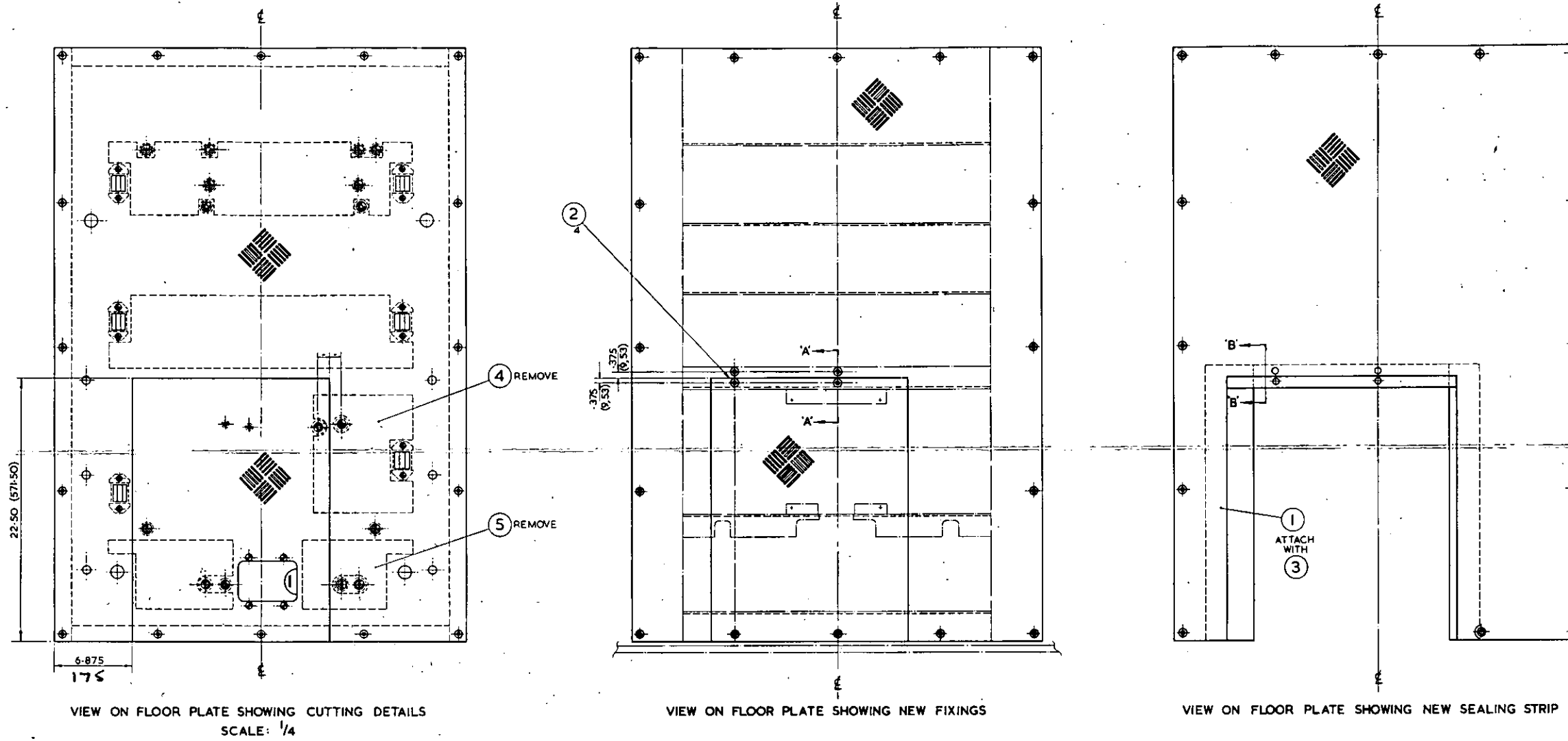


Fig 1 - Rear floor plate (FV 585921) modification detail
(FV 439 Mk 2/1 vehicles only).

DIMENSIONS IN INCHES

V 1362/1

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CARRIER, INSTALLATION, FULL TRACKED

Mk 1 and 2/1 FV 439

TECHNICAL HANDBOOK – MODIFICATION INSTRUCTION

SUBJECT: 2 Kg Dry Powder Fire Extinguisher

(MAE 43/0/0013)

INTRODUCTION

1 This instruction details additional external fittings for the Amerex fire extinguisher which replaces the BCF type.

1.1 Limitations on use of equipment. Nil

APPLICABILITY

2

2.1 Front plate upper and rear door of vehicles (Code No 0735-3000, ~~0735-3001~~, 0736-3000) held by user units.

0736-3001 Super High frequency.

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

REASON FOR MODIFICATION

3 Code 1 – to improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

5 Embodiment: 1.5 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

- 6.1 This modification is to be implemented by units authorised to carry out Unit, Field and Base repairs.
- 6.2 Associated modification instructions. Nil
- 6.3 Modification plate strike action: N/A

Action required by

7

- 7.1 Units and establishments holding equipment.
 - 7.1.1 Examine equipment to see if modification is embodied and where necessary demand the stores required.
 - 7.1.2 On receipt of stores, request REME to modify equipment.
 - 7.1.3 Record the modification Subject and EMER Number in equipment documents.
- 7.2 Units authorised to carry out Unit, Field or Base repairs.
 - 7.2.1 When requested by users or during overhaul, obtain the modification sets and local stores items listed in Para 8 and carry out this modification instruction..
 - 7.2.2 Record completion details of modification against appropriate entry in equipment documents.
- 7.3 All recipients of this instruction. Add particulars to EMER Tracked Vehicles E 107/9 Mod Instr Index.

Stores, tools and equipment

8

- 8.1 Stores to be demanded.
 - 8.1.1 The following modification set is to be demanded quoting this instruction as authority for demand, and
 - 8.1.2 Registration number of vehicle for equipment held by user units.
 - 8.1.3 Registration number of vehicle for unmodified stock held at all levels of technical storage.

NOTE

These Pages 3 to 6, Issue 2 supersede Pages 3 to 6, Issue 1 dated Jan 94. Text and figures have been amended.

Item No	DMC	NSN/Part No	Designation	Qty per eqpt
	9ACR	2540-99-876-0078 (FV 952588)	Mod Set: External Fire Extinguisher Replacement Scheme comprising:	1
1	9ACR	4210-99-441-4701 (FV 952591)	Mounting plate rear door	(1)
2	9ACR	4210-99-736-3532 (FV 952586)	Mounting plate front glaxis l.h.	(1)
3	G1	5305-99-122-5360	Screw hex hd M6 x 16 mm lg	(11)
4	G1	5305-99-941-9918	Screw c/sk hd 2BA x 3/8 in. lg	(6)
5	G1	5305-99-122-5361	Screw hex hd M6 x 20 mm lg	(6)
6	G1	5306-99-122-2792	Bolt hex hd M12 x 70 mm lg	(2)
7	G1	5310-99-101-3428	Washer shakeproof c/sk	(6)
8	G1	5310-99-137-9232	Washer s/coil lock M6	(17)
9	G1	5310-99-138-9229	Washer s/coil lock M12	(2)
10	G1	5310-99-122-5295	Nut plain hex M6	(17)
11	G1	5310-99-122-5298	Nut plain hex M12	(2)
8.2 <u>Stores to be manufactured.</u>				
12		FV 2200586	Spacer	2
8.3 <u>Stores to be removed and discarded.</u>				
13	G1	5306-99-941-0343	Bolt hex hd UNF 1/2 in. x 2 in. lg	2
14	G1	5310-99-941-0917	Nut plain hex UNF 1/2 in.	2
15	G1	5310-99-941-6658	Washer lock s/coil lock 1/2 in.	2

Sequence of operations

NOTE

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

9 Carry out this instruction as follows:

Refer to Fig 1 and 2 to fit brackets (items 1 to 12 inclusive) as detailed.

9.1 Remove existing extinguishers and brackets from rear door (2 off) and front plate upper (1 off). Return extinguishers to stores, to be used for replacement of internal hand extinguishers.

9.2 Attach fire extinguishers brackets (6MT1/4210-99-839-9904) to mounting plate (item 2) using screws, washers and nuts (items 5, 8 and 10).

NOTE

See Fig 1 for manufacture details of spacer (item 12).

9.3 Remove bolts, nuts and washers (items 13, 14 and 15) from smoke discharger (Fig 1), and attach mounting plate and spacers (item 2 and 12) to smoke discharger brackets using bolts, washers and nuts (items 6, 9 and 11).

9.4 Attach fire extinguisher brackets (6MT1/4210-99-839-9904) to mounting plate (item 1) see Fig 2, using screws, washers and nuts (items 3, 8 and 10) and weld on nuts.

9.5 After welding on nuts remove fire extinguisher brackets from mounting plate (item 1).

9.6 Repair paint, finish to DTD5555 and Def Stan 03-32.

9.7 Attach mounting plate (item 1) to existing tapped pads in rear door using screws and washers (items 4 and 7).

9.8 Attach fire extinguishers brackets (6MT/4210-99-839-9904) to mounting plate (item 1) using (items 3, 8 and 10).

9.9 Clip on 'Amerex' extinguishers Qty 3 (6MT1/4210-99-839-9905).

Testing after embodiment

10 Nil.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Army Code No 14693 User Handbook.

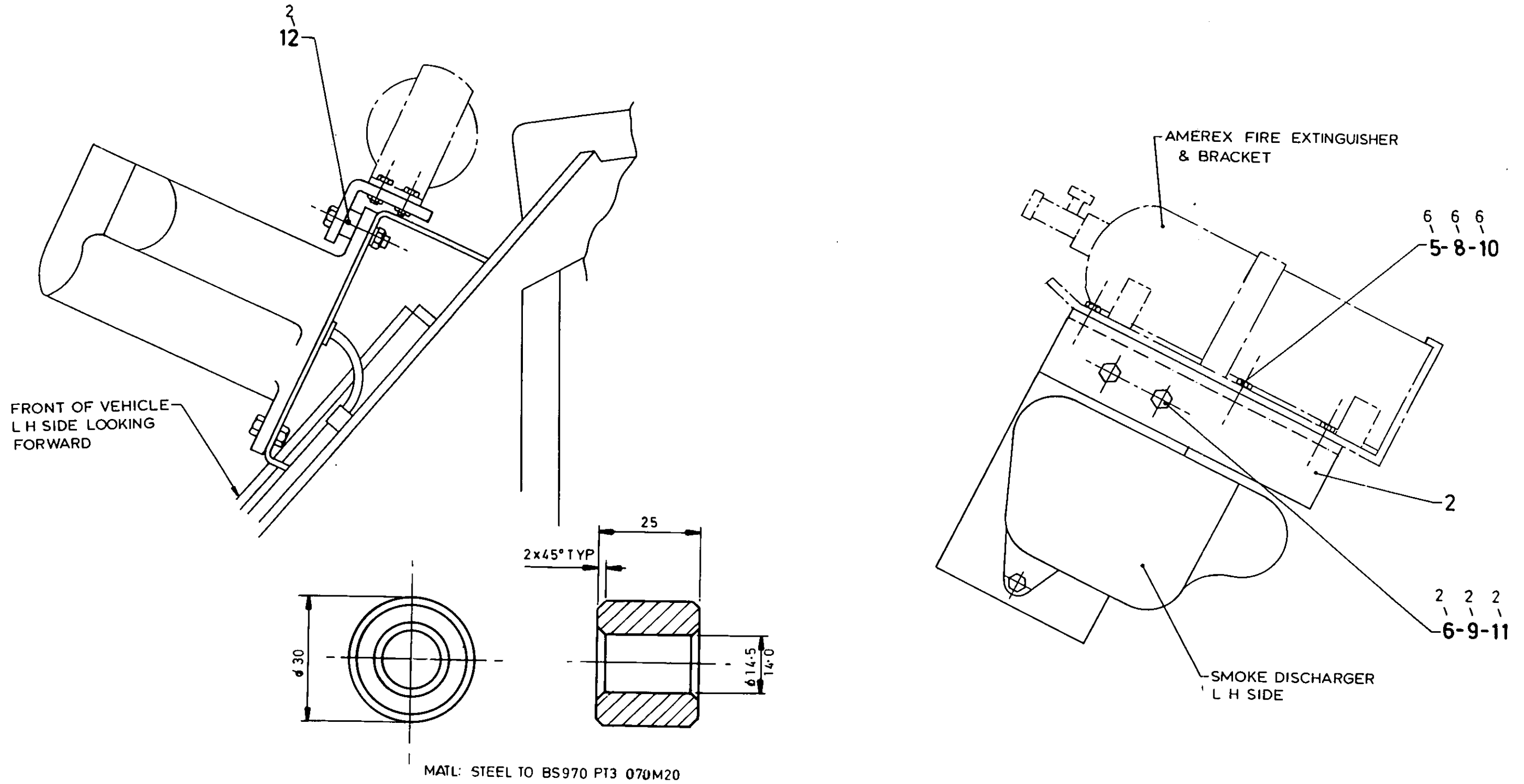


Fig 1 Fire extinguisher mounting front

V10924/3

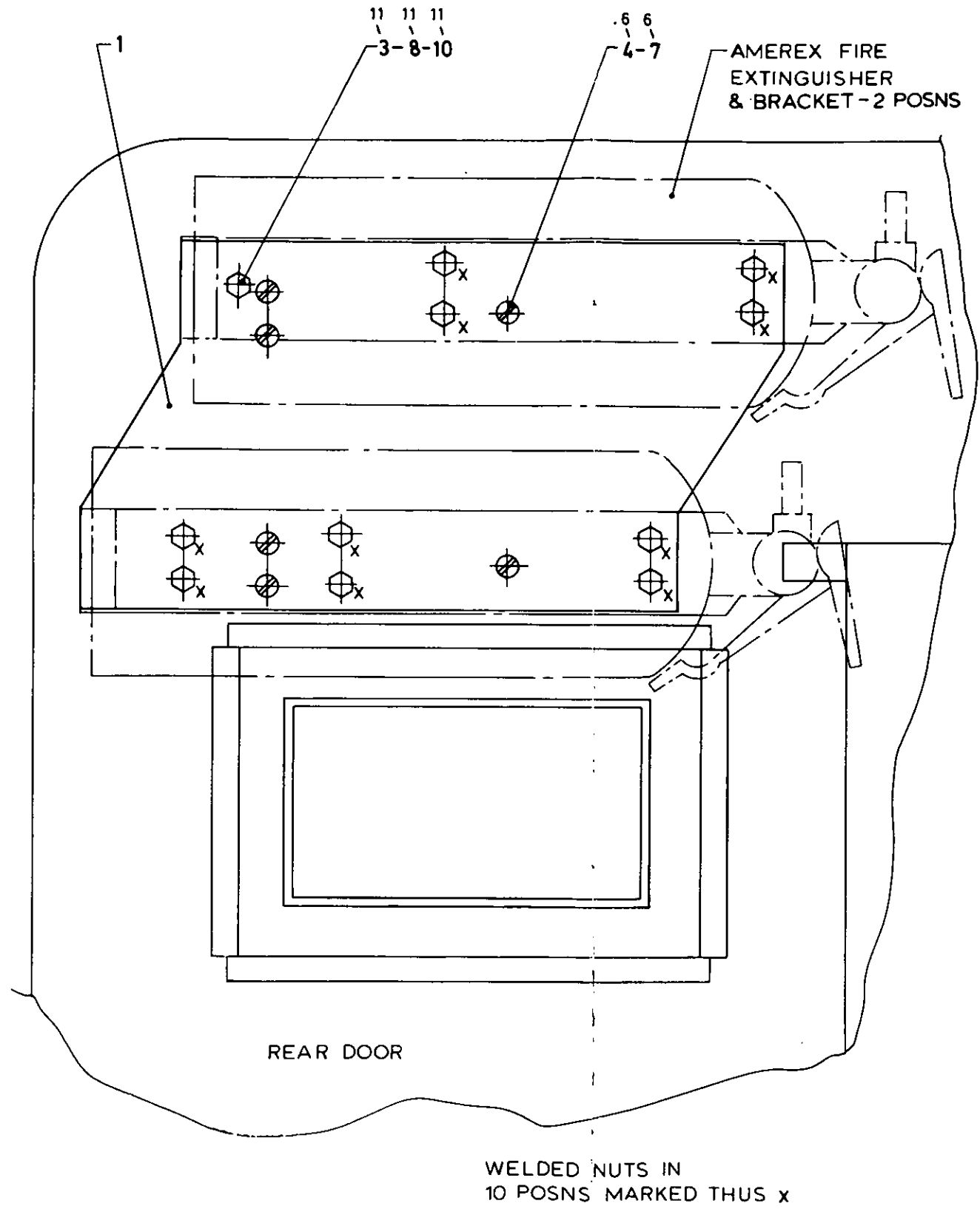


Fig 2 Fire extinguisher rear door

V10924/4

LOOSE MINUTE

8th June 99

D/DGES(A)426/6/16

ATSA DE LASG (FAO Mr T Tarrant) 

FV 439 AMBER ROTATING LIGHTS - PDS1a/524

Reference:

A. 430/43900 dated 3 Sept 98.

1. At reference A, this branch was advised of the problem of the 439 Amber Rotating Beacons. The harness and poles were too short.
2. This problem was investigated and it was found that the incorrect items were requested at the procurement stage.
3. This problem has now been addressed and the correct items (see below) procured. These items will be put into the Mod kits held at Donnington. The removed items will be placed in to stock.

FV2200641	9ACR/2590-99-968-0045	Harness
FV2200645	9ACR/6220-99-879-5085	Mounting Assy

4. Qty 47 of the original Mod kits were procured in Jan 98 of which qty 15 have been issued. The qty 32 mod kits held in stock are to be changed by SID at Donnington. The units that received the original Mod kits will be sent the new Mounting Assy (Pole) & harness with an instruction on the issue order stating:

Mod kit 9ACR/2540-99-173-0384 – Amber Rotating Beacons. This mod kit has been issued with two incorrect items. These items are too short in length for the FV439's requirement. Please take the following action:

Remove items a & b. These items can be locally disposed of.
Fit items c & d.
Check correct working of Rotating Beacon.

Items to be removed: a. 9ACR/2590-99-580-3019 Harness (FV 2200654)
b. 9ACR/6220-99-895-7727 Mounting Assy (FV 2059252)

Items to be fitted: c. 9ACR/2590-99-968-0045 Harness (FV 2200641)
d. 9ACR/6220-99-879-5085 Mounting Assy (FV 2200645)

5. If you require further information do not hesitate to contact this branch.

See note
[Handwritten scribbles]

RICHARD WALKER 8/6/99

R Walker
HPTO(2) ESM
FV430, CET, SAXON

TRIAL FIT MOUNTINGS TO CHECK FIT/POULING.
WILL RING BACK TO CONFIRM.
POSS TRIAL FIT BOVI/WAR DEPENDANT ON ↑

REF: 43/96004
430/43900

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CARRIER, INSTALLATION, FULL TRACKED, FV439 MK 2/1

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION

SUBJECT: Amber Rotating Beacon

(Approval No. 43/9/0004)

INTRODUCTION

1 This instruction details the fitment of an amber rotating beacon to warn other road users of a slow moving vehicle.

APPLICABILITY

2

2.1 Carrier, Installation, FV439.

2.2 Unmodified stock held at all levels of technical storage.

REASON FOR MODIFICATION

3 Code 1 - to improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

5 Embodiment: 2 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This modification is to be implemented by units authorized to carry out levels 2, 3 and 4 maintenance.

Action required by:

7

7.1 Units and establishments holding equipment:

7.1.1 Examine documents to see if modification is applicable.

7.1.2 Examine equipment or modification record plate to see if modification is embodied.

7.1.3 Record the modification subject and EMER number in equipment documents.

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

7.2.1 When requested by users or during overhaul of equipment, 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.

7.3 All recipients of this instruction. Add particulars to EMER E 107/9 Mod 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 authority for demand.

8.1.2 Registration/Serial number of vehicle held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
	9ACR	2540-99-173-0384 FV 2200652	Mod set comprising:	1
1	9ACR	2540-99-319-8607	Beacon amber rotating.	(1)
2		FV 2200644	Base assy rotating.	(1)
3		FV 2200642	Harness ext lead.	(1)
4		FV 2200653	Socket beacon rotating.	(1)
5				
6				
7	6MT4	5340-99-838-1364	Tie cable releasable.	(8)
8	G1	5306-99-122-5253	Screw hex hd M8 x 30 lg 8.8 zp.	(4)
9		5310-99-139-0313	Nut thin hex M8.	(4)
10		5310-99-138-7965	Washer plain M8 large o.d.	(4)

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
11	G1	5310-99-138-9227	Washer spring s/coil M8.	(4)
12				
13				

8.2 Stores or suitable equivalent to be obtained locally:

14	G1	5305-99-122-5273	Screw machine, flat, c/sk, slotted hd, M3 X 12.	(4)
15	G1	5310-99-135-0754	Nut, plain, hex M3.	(4)
16	G1	5310-99-138-9224	Washer lock, M3.	(4)
17	G1	5305-99-135-0424	Screw machine, pan hd, M4 x 16.	(1)
18	G1	5310-99-135-0755	Nut plain, hex, M4.	(1)
19	G1	5310-99-138-9225	Washer lock, M4.	(1)
20	G1	5310-99-396-0691	Washer flat, M4.	(1)
21	G1	5315-99-139-5252	Pin 6 mm x 40.5 lg	(1)
22	6MT4	5340-99-801-4092	Sealing cone Lucas No 806445.	(1)

8.3 Stores to be discarded:

23	6MT4	5340-99-881-2217	Sealing cone (FV(S) 6/83/1)	1
----	------	------------------	-----------------------------	---

8.4 Items/stores to be modified.

24		FV560655	Lamp support	(1)
----	--	----------	--------------	-----

8.5 Stores to be removed and retained. All units that have a beacon fitted that is not Design Authority (DA) approved should remove the beacon and fit the approved modification, retaining locally all those parts that are compatible for use as spares.

Sequence of operations

9 Carry out the modification as follows:

NOTE

The item numbers quoted in brackets refer to those listed in Para 8 of this instruction.

Refer to Fig 1 and 2

9.1 Remove right hand rear, lamp support (item 24).

9.2 Disconnect and remove turn and rear light clusters.

9.3 Mark out and drill holes in lamp support, to accept socket assembly (item 4).

9.4 Repair paint finish to Def Stan 03-02.

- 9.5 Fit socket assembly, to lamp support using (items 14, 15 and 16).
- 9.6 Attach socket blanking cap to lamp support using (items 17, 18, 19 and 20).
- 9.7 Replace existing sealing cone (item 23) with (item 22) in the rear light assembly.
- 9.8 Refit and rewire rear light incorporating new cables from socket assy.
- 9.9 Reassemble lights and refit to vehicle.

Refer to Fig 3 and 4

- 9.10 Drill floatation platform to accept beacon base.
- 9.11 Bolt beacon base (item 2) onto platform, using (items 8, 9, 10 and 11).
- 9.12 Fit roll pin (item 21) in pre-drilled hole, in bracket base (item 2).
- 9.13 Fit amber beacon (item 1).
- 9.14 Route and secure cable (item 3) in position with straps (item 7), connect to beacon and supply socket.

TESTING AFTER EMBODIMENT

- 10 Switch on lights and check that amber beacon is operating correctly.

EFFECT ON WEIGHT

- 11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

- 12 Nil.

CONDITIONS OF RELEASE

- | | | | |
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CARRIER, INSTALLATION, FULL TRACKED FV 439 MK 2/1

AMENDMENT

ACTION

Removal and insertion of leaves

1 Remove

1.1 Remove pages 1-8 dated Jul 97 (4 leaves).

Insert

Pages 1-8 dated Nov 97 (4 leaves).

Amendment record

2 Record the incorporation of this Amendment and destroy this instruction sheet and the pages removed.

Reason for amendment

3 Beacon base requires roll pin to be fitted.

CONDITIONS OF RELEASE

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CARRIER, INSTALLATION, FULL TRACKED, FV439 MK 2/1

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION

SUBJECT: Amber Rotating Beacon

(Approval No. 43/9/0004)

INTRODUCTION

1 This instruction details the fitment of an amber rotating beacon to warn other road users of a slow moving vehicle.

APPLICABILITY

2

2.1 Carrier, Installation, FV439.

2.2 Unmodified stock held at all levels of technical storage.

REASON FOR MODIFICATION

3 Code 1 - to improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

5 Embodiment: 2 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This modification is to be implemented by units authorized to carry out levels 2, 3 and 4 maintenance.

72211(240)
ATSA Chertsey

9707WCP-2403
Nov 97, Issue 2 (24T)

Action required by:

7

7.1 Units and establishments holding equipment:

- 7.1.1 Examine documents to see if modification is applicable.
- 7.1.2 Examine equipment or modification record plate to see if modification is embodied.
- 7.1.3 Record the modification subject and EMER number in equipment documents.

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

- 7.2.1 When requested by users or during overhaul of equipment, 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.

7.3 All recipients of this instruction. Add particulars to EMER E 107/9 Mod 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 authority for demand.

8.1.2 Registration/Serial number of vehicle held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
	9ACR	2540-99-173-0384	Mod set	1
1	9ACR 6MT3	2540-99-319-8607 622 J-99-358-5677 FV 2200650	comprising: Beacon amber rotating.	(1)
2		NO NSN FV 2200644	Base assy rotating.	(1)
3		2540-99-442-0427 FV 2200642	Harness ext lead.	(1)
4		NO NSN FV 2200653	Socket beacon rotating.	(1)
5				
6				
7	6MT4	5340-99-838-1364	Tie cable releasable.	(8)
8	G1	5306-99-122-5253	Screw hex hd M8 x 30 lg 8.8 zp.	(4)
9	G1	5310-99-139-0313	Nut thin hex M8.	(4)
10	G1	5310-99-138-7965	Washer plain M8 large o.d.	(4)

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
11	G1	5310-99-138-9227	Washer spring s/coil M8.	(4)
12				
13				
8.2 Stores or suitable equivalent to be obtained locally:				
14	G1	5305-99-122-5273	Screw machine, flat, c/sk, slotted hd, M3 X 12.	(4)
15	G1	5310-99-135-0754	Nut, plain, hex M3.	(4)
16	G1	5310-99-138-9224	Washer lock, M3.	(4)
17	G1	5305-99-135-0424	Screw machine, pan hd, M4 x 16.	(1)
18	G1	5310-99-135-0755	Nut plain, hex, M4.	(1)
19	G1	5310-99-138-9225	Washer lock, M4.	(1)
20	G1	5310-99- ³⁹⁶⁻⁰⁶⁹¹ 759-2084	Washer flat, M4.	(1)
21	G1	5315-99-139-5252	Pin 6 mm x 40.5 lg	(1)
22	6MT4	5340-99-801-4092	Sealing cone Lucas No 806445.	(1)

8.3 Stores to be discarded:

23	6MT4	5340-99-881-2217	Sealing cone (FV(S) 6/83/1)	1
----	------	------------------	-----------------------------	---

8.4 Items/stores to be modified.

24		FV560655	Lamp support	(1)
----	--	----------	--------------	-----

8.5 Stores to be removed and retained. All units that have a beacon fitted that is not Design Authority (DA) approved should remove the beacon and fit the approved modification, retaining locally all those parts that are compatible for use as spares.

Sequence of operations

9 Carry out the modification as follows:

NOTE

The item numbers quoted in brackets refer to those listed in Para 8 of this instruction.

Refer to Fig 1 and 2

9.1 Remove right hand rear, lamp support (item 24).

9.2 Disconnect and remove turn and rear light clusters.

9.3 Mark out and drill holes in lamp support, to accept socket assembly (item 4).

9.4 Repair paint finish to Def Stan 03-02.

- 9.5 Fit socket assembly, to lamp support using (items 14, 15 and 16).
 - 9.6 Attach socket blanking cap to lamp support using (items 17, 18, 19 and 20).
 - 9.7 Replace existing sealing cone (item 23) with (item 22) in the rear light assembly.
 - 9.8 Refit and rewire rear light incorporating new cables from socket assy.
 - 9.9 Reassemble lights and refit to vehicle.
- Refer to Fig 3 and 4
- 9.10 Drill floatation platform to accept beacon base.
 - 9.11 Bolt beacon base (item 2) onto platform, using (items 8, 9, 10 and 11).
 - 9.12 Fit roll pin (item 21) in pre-drilled hole, in bracket base (item 2).
 - 9.13 Fit amber beacon (item 1).
 - 9.14 Route and secure cable (item 3) in position with straps (item 7), connect to beacon and supply socket.

TESTING AFTER EMBODIMENT

- 10 Switch on lights and check that amber beacon is operating correctly.

EFFECT ON WEIGHT

- 11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

- 12 Nil.

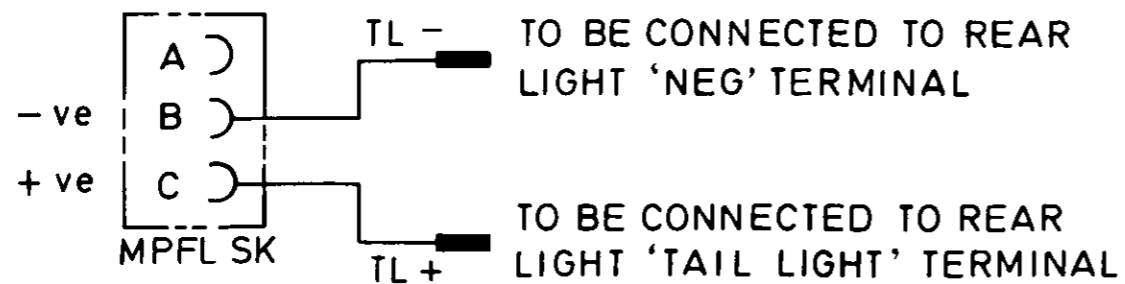
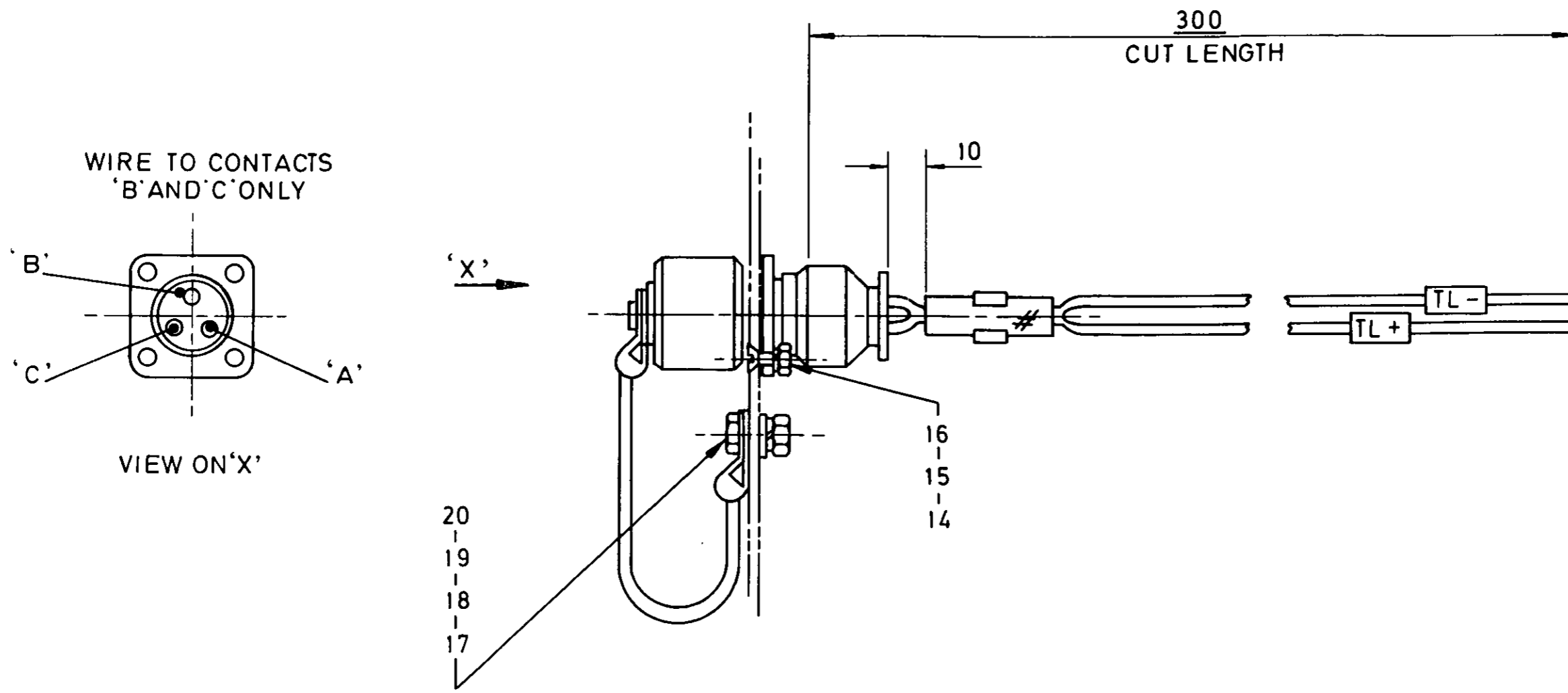


Fig 1 Socket assy

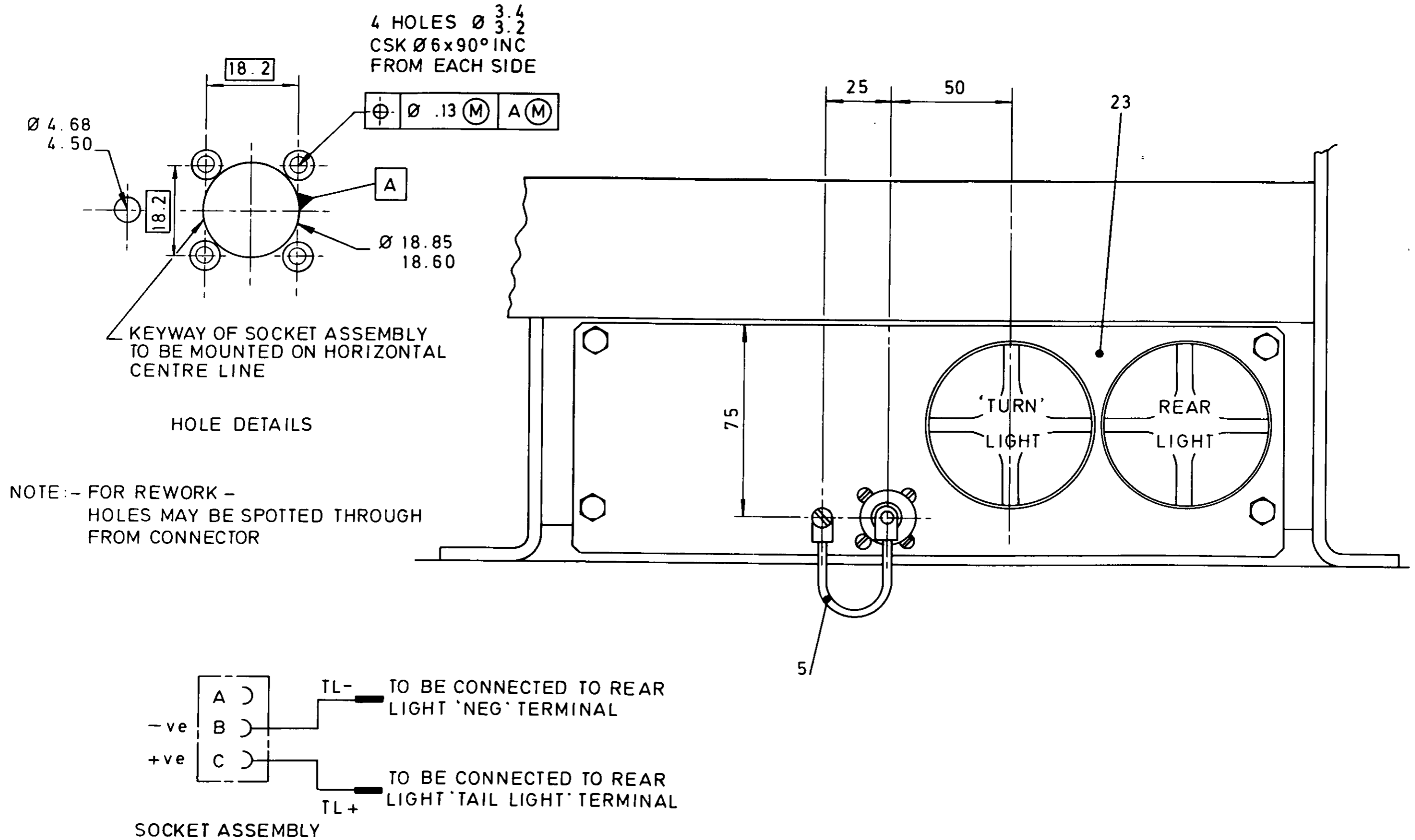


Fig 2 Rear light

V13883/2

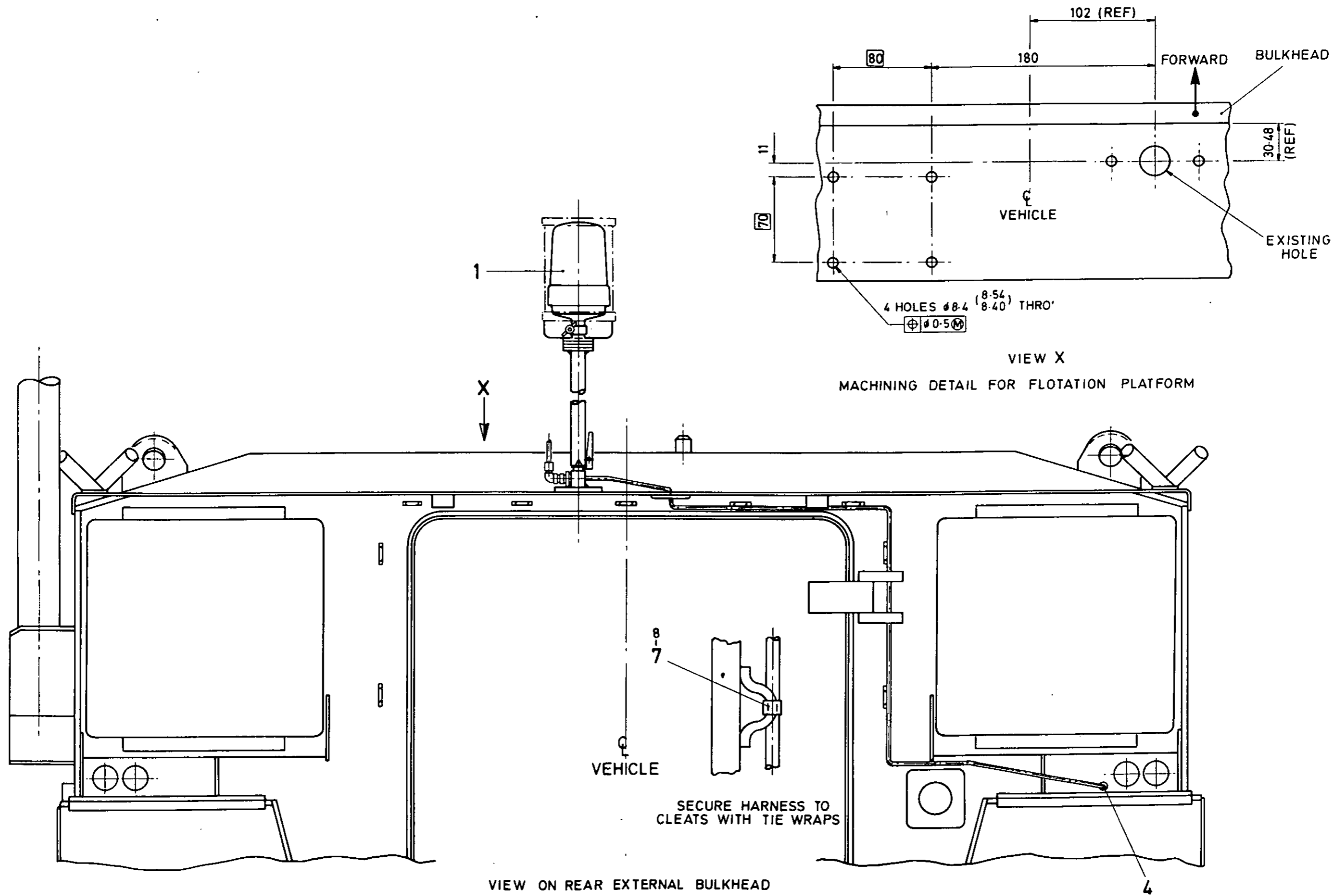


Fig 3 Machining details

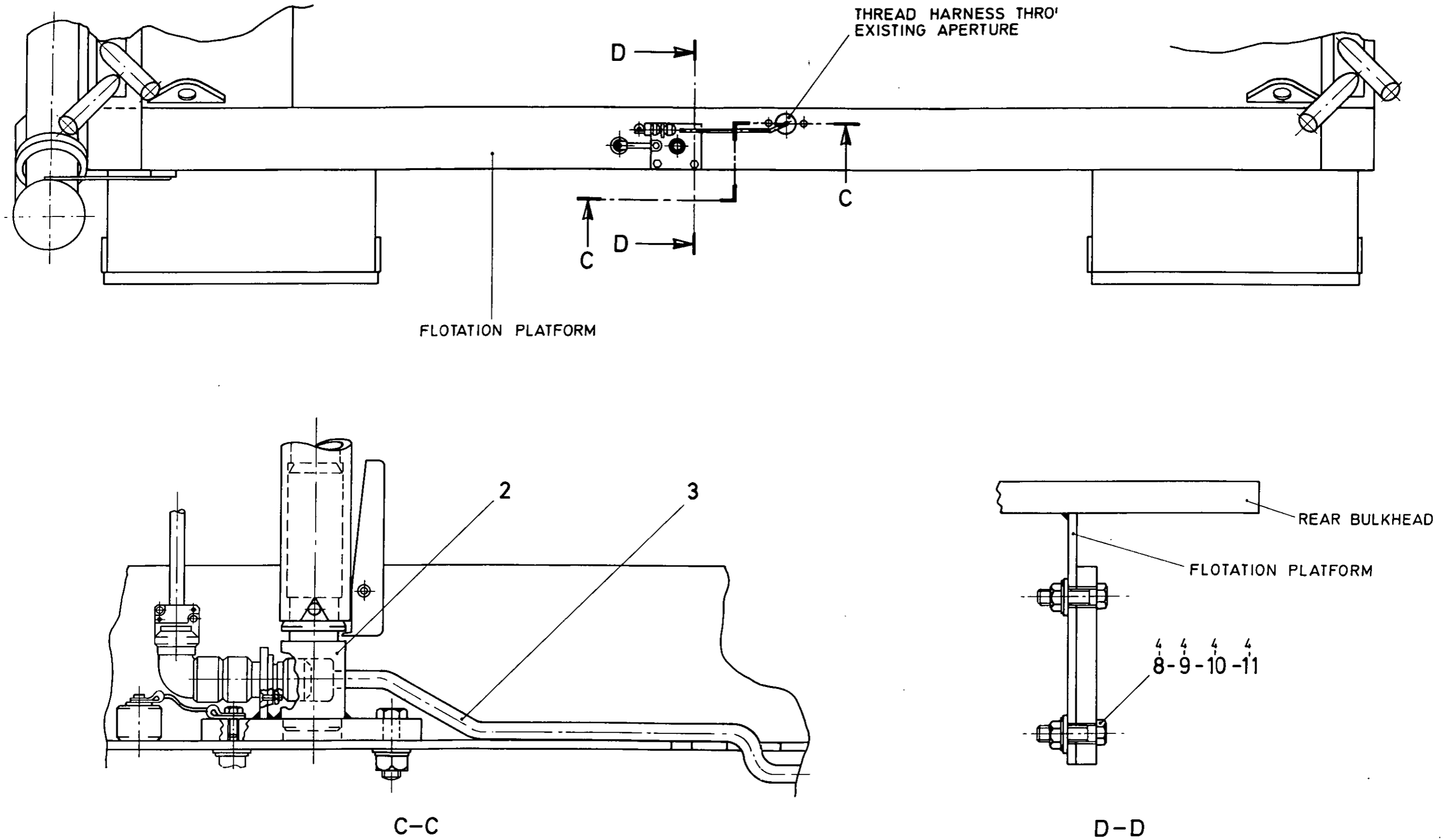


Fig 4 Assembly details

V13889/1

CONDITIONS OF RELEASE

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CARRIER, INSTALLATION, FULL TRACKED, FV 439 MK 2/1

MODIFICATION INSTRUCTION NO. 1

SUBJECT:

CANCELLATION

INTRODUCTION

- 1 AESP 2350-T-254-811 Mod Instr No. 1, EMER E 107/9 Mod Instr No. 5 is hereby cancelled. The engine covers are different in the Radio Relay and SAS/MC variants, preventing embodiment.
- 2 A revised Mod Instruction for each variant will be issued in AESP 2350-T-254-811.

ACTION

- 3 Amend AESP 2350-T-254-811 Mod Instr No. 1, EMER E 107/9 modification index accordingly.
- 4 File this Page 1/2 in place of AESP 2350-T-254-811 Mod Instr No. 1, E 107/9 Mod Instr No. 5 all pages of which are to be destroyed.

S01008(56)
DLO Chertsey

0103\NTCP-1302
Apr 01

Tarrant, Mr.Trevor (E22A04 @ Chertsey)
From: Walker, Richard (LASS)
Sent: 01 March 2001 08:42
To: Tarrant, Mr.Trevor (E22A04 @ Chertsey)
Subject: RE: E107/9 Mod 5

Trevor,

Please take this e-mail as authority to cancel EMER E107/9 Mod Instr 5. When cancelling this Mod it should be mentioned that a new Mod Instr will be forthcoming in AESP format.

Regards

Richard

-----Original Message-----

From: Tarrant, Mr.Trevor (E22A04 @ Chertsey)
Sent: 26 January 2001 13:05
To: Walker, Richard (LASS)
Cc: Dixon, Alan (LASS); Poulter Ian (LASS)
Subject: E107/9 Mod 5

Richard,

Further to Telecon 26/01/01, Mod Instr 5 cannot be successfully installed in FV439 vehicles. This modification is currently being revised for both FV439 variants, and a separate Mod Instruction will be issued for each variant in AESP format.

Authority is therefore requested to cancel EMER E107/9 Mod Instr 5.

Regards,

Trevor.

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**CARRIER, INSTALLATION FULL TRACKED
FV 439, MK 2/1**

COMPLETELY REVISED

ACTION

Removal and insertion of leaves

1 Remove

1.1 Pages 1 to 6 dated Sep 97
(three leaves).

Insert

Pages 1 to 6 dated Dec 97
(three leaves).

Amendment record

- 2 Record the incorporation of this amendment and destroy this instruction sheet and the pages removed.

REASON FOR AMENDMENT

- 3 Incorrect drawings reproduced in first issue.

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**CARRIER, INSTALLATION FULL TRACKED
FV 439, MK 2/1**

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION

SUBJECT: Driver and commander's SA80 stowage.

(MAE 43/9/0003)

INTRODUCTION

1 This instruction details the internal fittings for the stowage of the SA80:

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

2

2.1 FV 439 held by user units.

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

REASON FOR MODIFICATION

3 Code 1 - to improve safety.

RADIO REPAIR

PRIORITY

4 Immediate.

HAS DIFFERENT ENGINE

ESTIMATED TIME REQUIRED

COVER. LETTER TO PDS 18/1/98

5 Embodiment: 1 1/2 man-hours.

72211(241)
ATSA Chertsey

9708WMP1908
Dec 97, Issue 2 (24T)

MODIFICATION IMPLEMENTATION PLAN

- 6
- 6.1 This modification is to be implemented by units authorized to carry out Unit, Field or Base repairs.
 - 6.2 Associated modification instructions: Nil.
 - 6.3 Modification strike plate action: N/A.

Action required by:

- 7
- 7.1 Units and establishments holding equipment:
 - 7.1.1 Examine equipment to see if modification is embodied and where necessary demand the stores required.
 - 7.1.2 On receipt of stores request REME to modify equipment.
 - 7.1.3 Record the modification Subject and EMER Number in equipment documents.
 - 7.2 Units authorized to carry out Unit, Field or Base repairs:
 - 7.2.1 When requested by users or during overhaul, obtain the items listed in Para 8 and carry out this modification instruction.
 - 7.2.2 Record completion of this modification against appropriate entry in equipment documents.
 - 7.3 All recipients of this instruction. Add particulars to EMER Tracked Vehicles E 107/9 Mod 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 authority for demand.
 - 8.1.2 Registration number of vehicle for equipment held in user units.
 - 8.1.3 Registration number of vehicle for unmodified stock held at all levels of technical storage.

Item No.	DMC	NSN/Part No.	Designation	STOCK	Qty per eqpt
1	9ACR	⁵³⁴⁰ 2540-99-500-7161 (FV 2200515)	Bracket mounting	92	1
2	9ACR	⁵³⁴⁰ ⁰⁷⁰⁵ 2540-99-818-0305 (FV 2200516)	Bracket mounting	14	1
8.2 <u>Stores to be obtained locally:</u>					
3	6MT1	2540-99-740-7338 (FV 952299)	Barrel clip assy	9296	2
4	6MT1	2540-99-724-5832 (FV 952327)	Butt clip	2558	2
5	G1	5305-99-122-5360	Screw hex hd M6 x 16 mm lg		4 ✓
6	G1	5305-99-122-5366	Screw hex hd M8 x 20 mm lg		4 ✓
7	G1	5305-99-759-2086	Screw pan hd M8 x 18 mm lg		3 ✓
8	G1	5310-99-137-9232	Washer s/coil lock M6		4 ✓
9	G1	5310-99-138-9227	Washer s/coil lock M8		7 ✓
10	G1	5310-99-122-5295	Nut plain hex M6		4 ✓
11	G1	5310-99-122-5296	Nut plain hex M8		7 ✓
12	G1	5310-99-122-6475	Washer flat M8		6

8.3 Stores to be modified:

12 13 WARNING	FV 847342	Cover assy (lower)	1
	FV	COIL ASSY UPPER	2

ASBESTOS. DUE TO THE POSSIBILITY OF ASBESTOS ON THE INTERNAL SURFACE (ENGINE SIDE) OF COVER FV 559953. PROTECTIVE CLOTHING MUST BE WORN, ESPECIALLY GLOVES AND FACE MASK WHEN DRILLING AND HANDLING DURING THE MODIFICATION.

Sequence of operations

NOTE

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

9 Carry out the modification as follows:

Refer to Fig 1 and 2

9.1 Remove engine cover (FV 847342) mark out and drill holes in cover refer to Fig 1.

9.2 Attach barrel and butt clips (items 3 and 4) to brackets (items 1 and 2) using (items 5, 6, 8, 9, 10 and 11) see Fig 2 for location and quantity required.

- 9.3 Attach brackets (items 1 and 2) to engine cover using (items 7, 9 and 11) see Fig 2 for location and quantity required.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Nil.

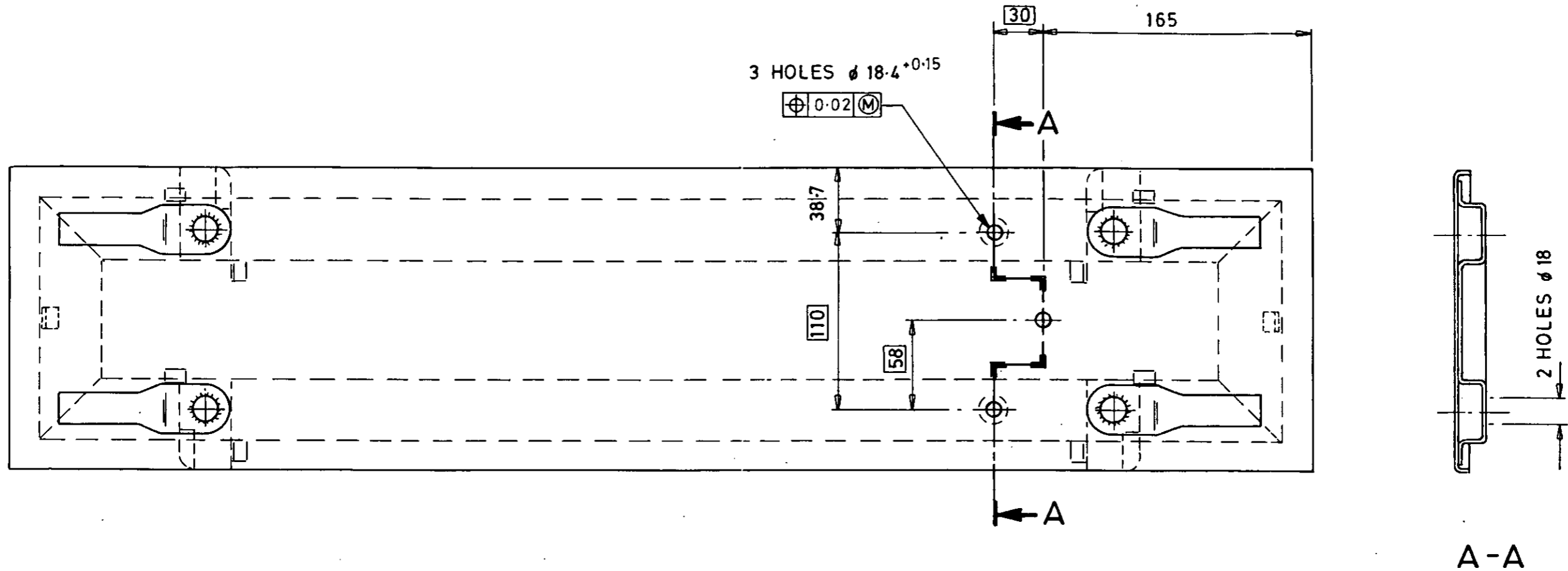


Fig.1 Engine cover (FV 847342)

V13952/1

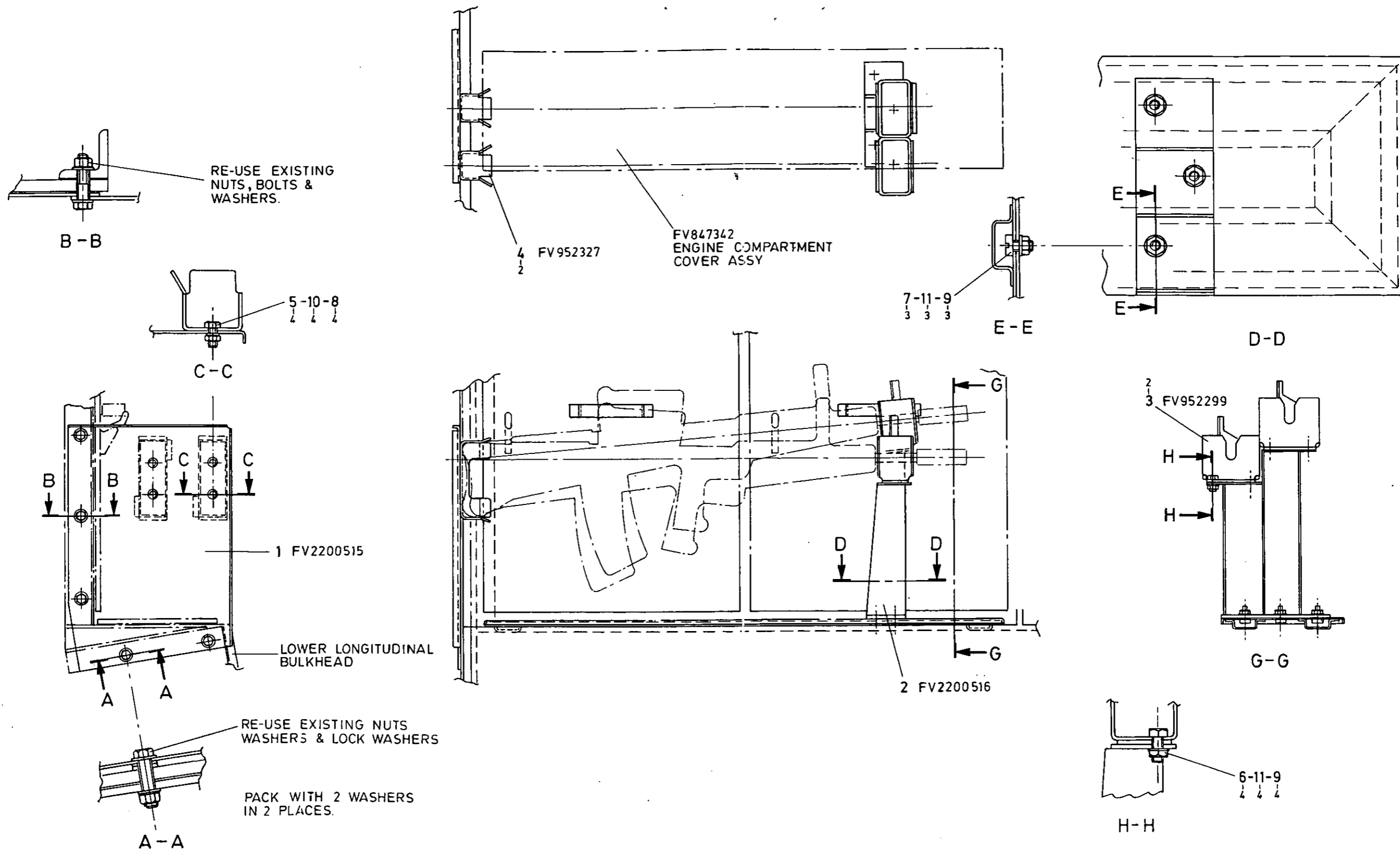


Fig 2 General arrangement of brackets and clips

V13952/2

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CARRIER, INSTALLATION, FULL TRACKED
FV 439 SAS/MC

TECHNICAL HANDBOOK -- MODIFICATION INSTRUCTION NO. 6

SUBJECT: Crew SA 80 stowage, in the SAS/MC
(MAE 43/9/006)

INTRODUCTION

- 1 This instruction details the internal fittings for the crew stowage of the SA 80.

APPLICABILITY

- 2
- 2.1 Fitted to subject equipment held by user units.
- 2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

- 3 Code 1 - to improve safety.

PRIORITY

- 4 Immediate.

ESTIMATED TIME REQUIRED

- 5 Embodiment: 1.0 man-hour.

MODIFICATION IMPLEMENTATION PLAN

- 6
- 6.1 This modification is to be implemented by units authorized to carry out levels 2, 3 and 4 maintenance.
- 6.2 Associated modification instructions: E 107/9 No. 5.

43/9/006(882)
ATSA Chertsey

9811\NTCP-1806
Dec 98, Issue 1 (24T)

~~UK RESTRICTED~~

Mod Instr No. 6
Page 1

Action required by:

7

7.1 Units and establishments holding equipment:

7.1.1 Examine documents to see if modification is applicable.

7.1.2 Examine equipment or modification record plate to see if modification is embodied.

7.1.3 Record the modification subject and EMER number in equipment documents.

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

7.2.1 When requested by users or during overhaul of equipment, obtain the items listed in Para 8 and carry out this modification.

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

7.3 All recipients of this instruction. Add particulars to EMER E 107/9 Mod 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 authority for demand.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
		2540-99-131-1862	Mod set: comprising:	1
1		FV 2219277	Rifle butt retaining assy.	(1)
2		FV 2219275	Mounting bracket.	(1)
3	6MT1	2540-99-724-5832 FV 952327	Butt clip.	(2)
4		FV 2219278	Rifle mounting bracket.	(1)
5		FV 2219276	Plate adaptor.	(1)
6	6MT1	2540-99-740-7338 FV 952299	Barrel clip assy.	(2)

8.2 Stores to be removed and discarded.

7 FV 2048288 Rifle butt retaining tray.

8 FV 2048581 Rifle mounting bracket assembly.

Sequence of operations

9 Carry out the modification as follows:

NOTE

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

Refer to Fig 1 and 2

9.1 Remove original rifle mounting brackets (item 7 and 8) and reduce to scrap, retaining the fixings.

9.2 Fit the SA 80 mounting brackets (item 1 and 4) complete with the butt clips (item 3) and barrel clip assy (item 6) using the retained fixings.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

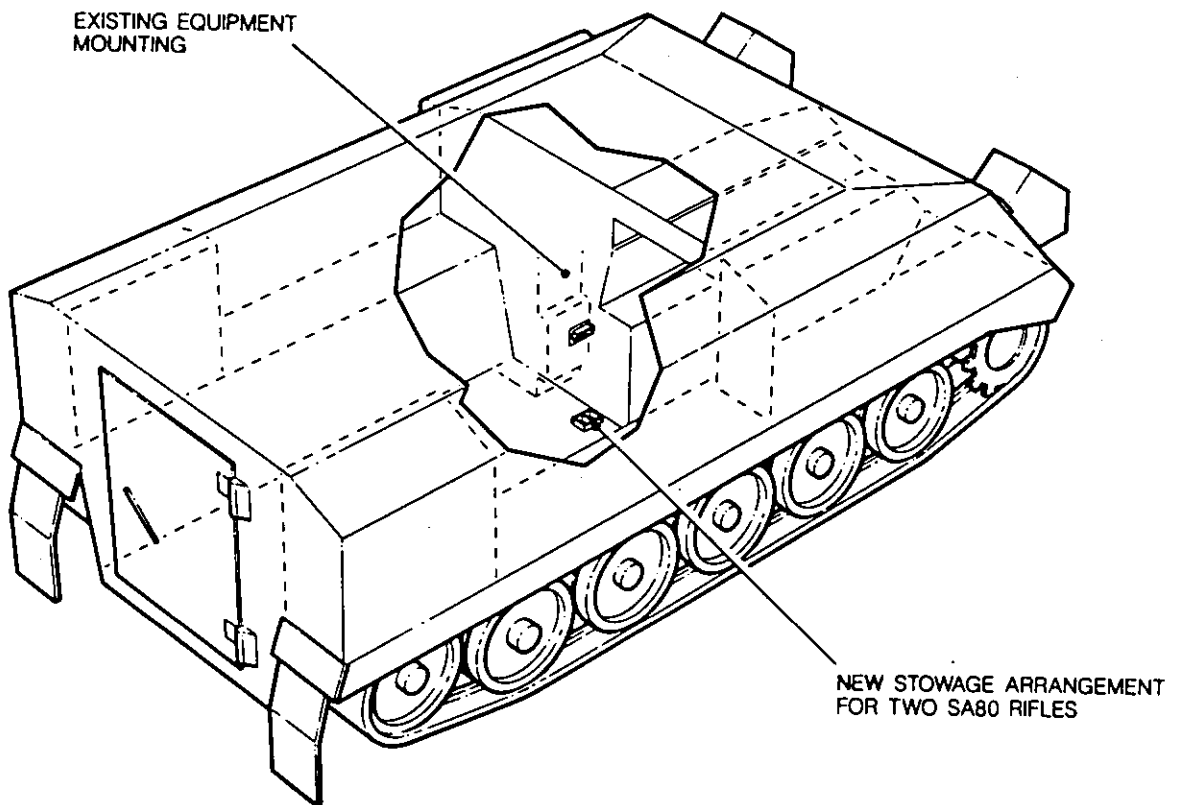
11 Negligible.

PUBLICATION AMENDMENTS

NOTE

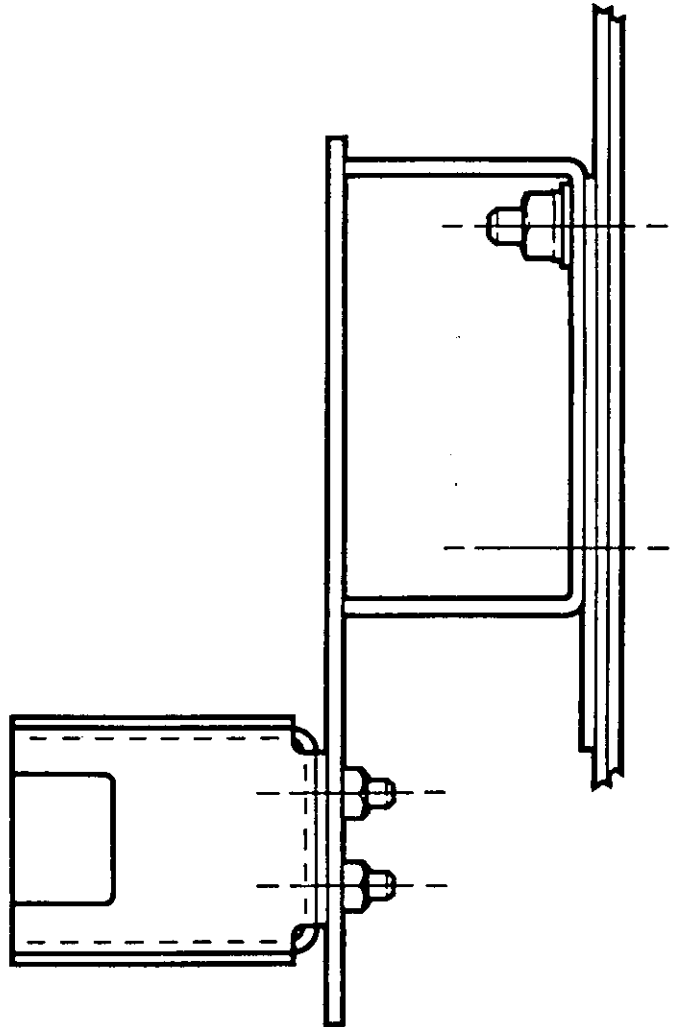
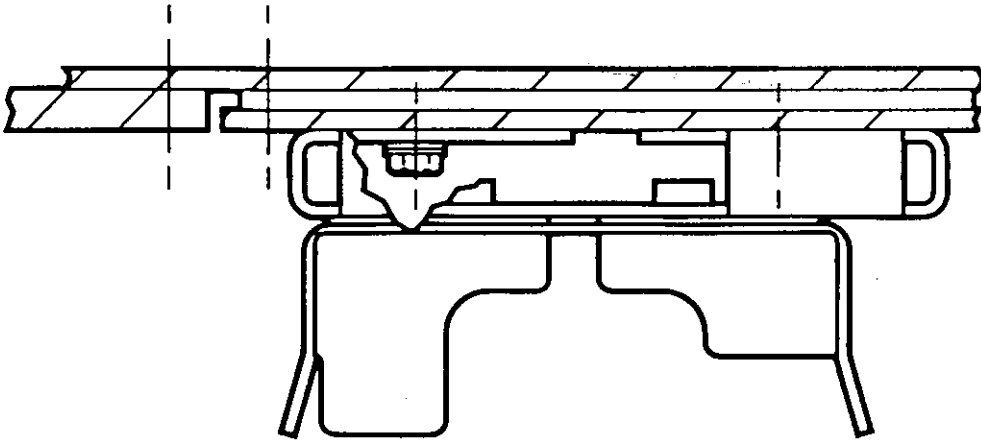
Necessary amendments will be issued separately.

12 Nil.



V13963/1

Fig 1 Location diagram



V13963/2

Fig 2 Arrangement

CONDITIONS OF RELEASE

- | | |
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**CARRIER, INSTALLATION, FULL TRACKED
FV 439, RADIO RELAY**

TECHNICAL HANDBOOK – MODIFICATION INSTRUCTION NO. 7

SUBJECT: Crew SA 80 stowage, radio relay
(MAE 43/9/007)

INTRODUCTION

- 1 This instruction details the internal fittings for the crew stowage of the SA 80.

APPLICABILITY

- 2
- 2.1 Fitted to subject equipment held by user units.
- 2.2 Unmodified stock, held at all levels of technical storage.

REASON FOR MODIFICATION

- 3 Code 1 - to improve safety.

PRIORITY

- 4 Immediate.

ESTIMATED TIME REQUIRED

- 5 Embodiment: 1.0 man-hour.

MODIFICATION IMPLEMENTATION PLAN

- 6
- 6.1 This modification is to be implemented by units authorized to carry out levels 2, 3 and 4 maintenance.
- 6.2 Associated modification instructions: E 107/9 No. 5.

95/41c/05(840)
ATSA Chertsey

Action required by:

7

7.1 Units and establishments holding equipment:

- 7.1.1 Examine documents to see if modification is applicable.
- 7.1.2 Examine equipment or modification record plate to see if modification is embodied.
- 7.1.3 Record the modification subject and EMER number in equipment documents.

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

- 7.2.1 When requested by users or during overhaul, 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.

7.3 All recipients of this instruction. Add particulars to EMER E 107/9 Mod 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 authority for demand.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
	9ACR	2540-99-219-3536 FV 221974	Mod set: Forward r.h. rifle stowage assy comprising:	1
1		FV 2219273	Mounting bracket.	(1)
2	6MT1	2540-99-724-5832 FV 952327	Butt clip.	(2)
3	6MT1	2540-99-740-7338 FV 952299	Barrel clip assy.	(2)
4		2590-99-220-7004 MMPN: SDA/208537	Rifle stowage assy.	(1)

Sequence of operations

9 Carry out the modification as follows:

NOTE

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

Refer to Fig 1

9.1 Remove and discard the original rifle stowage assy (item 4), retaining the fixings.

9.2 Fit the SA 80 mounting bracket (item 1) complete with the butt (item 2) and barrel clips (item 3) using the retained fixings.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

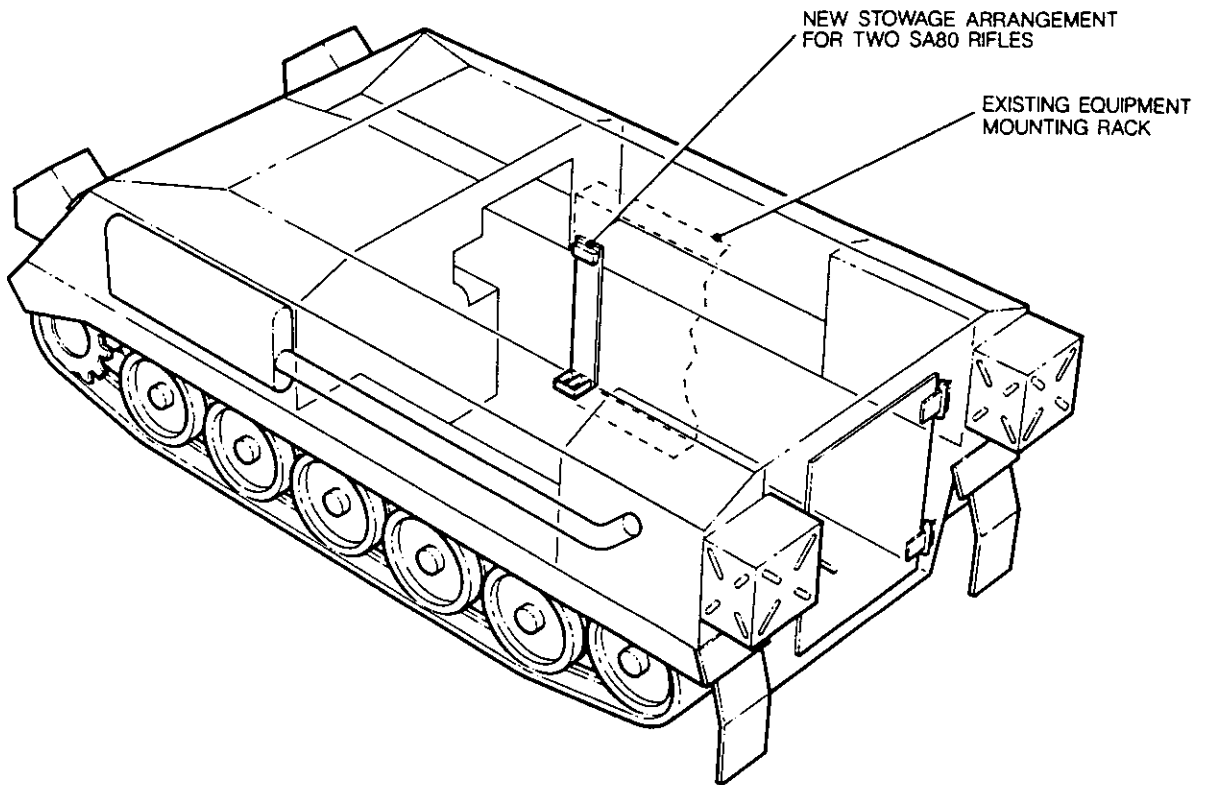
11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Nil.



V13962/1

Fig 1 Location diagram

Mod Instr No 8

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Carrier, Installation, Full Tracked FU 439
SECONDARY ACCESS SWITCH/MESSAGE
CENTRE (TRACKED) IN AFV 439
MK 2/1

TECHNICAL HANDBOOK - MODIFICATION INSTRUCTION ~~1128~~

SUBJECT: Diesel generators

(Approval No. MAE No 20/9/0012 and 20/9/0016)

INTRODUCTION

1 Two 3.0 kW diesel generators installed integral with vehicle fuel system, are to replace the original petrol generators.

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

2 Secondary access switch/message centre (tracked) in AFV 439 vehicles (Code No 0736 3000).

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

REASON FOR MODIFICATION

3 Code 2 - to improve operational performance.

PRIORITY

4 Routine.

ESTIMATED TIME REQUIRED

5 Embodiment: 80 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This ^{MODIFICATION} ~~workshop planning~~ instruction is to be implemented by units authorized to carry out Level 4 maintenance.

72212(384)
ATSA Chesters
9909/NTRP2303
Sep 99, Issue 1 (24T)

oek
... throughout.

6.2 Associated modification instructions. Nil

6.3 Modification strike plate action: N/A

Action required by

7

7.1 Units authorized to carry out level 4 maintenance:

7.1.1 When requested by users or during overhaul of equipments, obtain the items listed in Para 8 and carry out this modification.

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

7.2 All recipients of this instruction. Add particulars to EMER E107/9 Mod Instr Index

Stores, tools and equipment

8

8.1 Stores to be demanded:

8.1.1 The following modification sets are to be demanded quoting this instruction as the authority for demand, and

8.1.2 Registration number of vehicle for equipment held by user units.

8.1.3 Registration number of vehicle for stock held at all levels of technical storage.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
	288	6115-99-998-8636	Mod set: Fuel system comprising:	1
1	9ACR	4710-99-513-7365 (FV 952446) x	Pipe assembly.	(1)
2	9ACR	2910-99-700-4561 (FV 2068814) ✓	Pump electric.	(1)
3	9ACR	2590-99-220-6079 (FV 2068812) ✓	Valve multiway, 1/4 in. BSP. 4	(1)
4	6MT12	2910-99-441-4975 (FV 2068876) x	Camp stop, sub assy.	(1)
5		FV 2068871 x	Plate, nomenclature.	(1)
6	9ACR	4710-99-001-5515 (FV 952444) x	Pipe assembly.	(1)
7	6MT1	4730-99-255-3136 (FV 2027258) ✓	Coupling quick release. 1/4	(3)
8	9ACR	4730-99-435-4923 (FV 952440) x	Coupling male half, quick release.	(1)

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
9	9ACR	4730-99-609-8489 \times (FV 952441)	Coupling female half, quick release.	(1)
10	9MCV	5310-99-257-5967 \checkmark (FV 2026106)	Nut plain hex 1/4 in. BSP. 4 ⁷²	(2)
11	6MT1	4730-99-257-5966 \times (FV 2023298)	Adaptor straight pipe.	(2)
12	9ACR	4730-99-449-1765 \times (FV 952439)	Elbow pipe.	(1)
13	9ACR	4730-99-277-6193 \times (FV 2068834)	Adaptor.	(2)
14	6MT1	4730-99-831-1725 \checkmark	Adaptor, straight pipe 1/4 in. BSP. 13	(3)
15	6MT1	4730-99-831-1742 \times	Adaptor pipe, elbow 1/4 in. BSP.	(1)
16	6MT1	4730-99-831-1737 \times	Adaptor pipe, elbow 1/4 in. BSP.	(1)
17	6MT1	4730-99-257-5971 \checkmark (FV 2027105)	Adaptor, straight. 79	(1)
18	6MT1	4730-99-826-1160 \checkmark (FV 865072-3)	Tee, pipe 1/2 in. BSP. 20	(1)
19	G1	5340-99-768-0908 \times (FV 964639/5)	Clip, cable.	(2)
20	H1	8030-99-225-0468 \checkmark	Sealant Silastic 730 RTV 78	A/R
21	G1	5305-99-941-0524 \checkmark	Screw, hex hd, 5/16 - 24 UNF x 1137 5/8 in. lg, St Zn Pltd.	(1)
22	G1	5305-99-122-5356 \checkmark	Screw, flex hd, M5 x 16 mm lg, 5805 St Zn Pltd.	(4)
23	G1 C	5306 ⁵ -99-122-5249 \checkmark	Bolt, hex hd, M6 x 55 mm lg, 500 St Zn Pltd.	(2)
24	G1 A	5306-99-122-5251 \checkmark	Bolt, hex hd, M6 x 65 mm lg, 600 St Zn Pltd.	(2)
25	G1 C	5310-99- ^{956 1786} 941-8608 \checkmark	Washer, flat, 5/16 in., St Zn Pltd.	(1)
26	G1 C	5310-99-122-3032 \checkmark	Washer, flat, M5, St Zn Pltd.	(4)
27	G1 C	5310-99-122-6474 \checkmark	Washer, flat, M6, St Zn Pltd.	(4)
28	G1	5310-99-941-8638 \checkmark	Washer, flat, 9/16 in. St Zn Pltd.	(6)

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
29	6MT1	5330-99-881-4517 ✓ (FV(S) 108/10)	Washer, seal, flat, 7/16 in.	(2)
30	6MT1	5330-99-881-4514 ✓ (FV(S) 108/11)	Washer, sealing flat, 1/4 in. BSP.	(3)
31	G1	^{941 6655} 5310-99- 124-3480 ✓	Washer, lock, s/coil 5/16 in. St Zn Pltd.	(1)
32	G1	5310-99-138-9226 ✓	Washer, lock, s/coil, M5, St Zn Pltd.	(4)
33	Z1	5310-99-138-9232 ✓	Washer, lock, s/coil, M6, St Zn Pltd.	(4)
34	9ACR	5995-99-796-7345 × (FV 2050233/6)	Cable assembly.	(1)
35		FV 952437	Bracket assembly.	(1)
36		FV 952434	Pipe assembly.	(1)
37	9ACR	4720-99-152-3245 (FV 952447)	Hose.	(1)
38		FV 952435/1	Hose.	(1)
39		FV 952435/2	Hose.	(1)
40		FV 952436	Hose.	(1)
41		Not used		
42		Not used		
43		Not used		
			Mod set: APU Enclosure comprising:	1
44		Not used		
45		Not used		
46	Z1	5820-99-793-9799 ✓ (FV 2048991)	Clamp assembly.	(4)
47	Z1	5820-99-600-0578 ✓ (FV 2048990)	Clamp, tee piece.	(4)
48	Z1	⁵³⁴⁰ 5820-99-829-3319 ✓ (FV 2049882)	Clamp, block.	(8)
49		FV 2048999	Plate, door blanking.	(2)
50	X2	6115-99-609-8490 ✓ (FV 2048986)	Bracket, filter.	(1)

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
51	X2	6115-99-452-5481 ✓ (FV 2068823)	Filter.	(1)
52	9ACR	4730-99-988-3565 ✕ (FV 2049006)	Tee piece, 1/4 in.	(1)
53	9ACR	4730-99-957-6126 ✕ (FV 2049007)	Tee piece, 7/16 in.	(1)
54	X2	6115-99-570-0661 ✕ (FV 2049008)	Adaptor bulkhead.	(2)
55	6MT1	5330-99-618-3072 ✓ (FV 2049011)	Washer, seal, flat.	(4)
56	9ACR	5365-99-840-2346 ✓ (FV 2049012)	Plug, 1/2 UNF.	(2)
57	9ACR	4720-99-803-0098 ✕ (FV 2049002/1)	Hose.	(1)
58	9ACR	4720-99-951-6165 ✕ (FV 2049002/2)	Hose.	(1)
59	9ACR	4720-99-398-6100 ✕ (FV 2049016/1)	Hose.	(1)
60	9ACR	4720-99-513-2458 ✕ (FV 2049016/2)	Hose.	(1)
61	9ACR	4720-99-853-3001 ✕ (FV 2049003)	Hose.	(1)
62	9ACR	4720-99-299-8956 ✕ (FV 2049004)	Hose.	(1)
63	9ACR	4720-99-352-7663 ✕ (FV 2049005)	Hose.	(1)
64	Z99	5340-99-744-9002 ✓ (FV 964639/3)	Clip, cable.	(20)
65	Z42	5995-99-346-8729 ✕ (FV 2050680/1)	Cable assembly.	(1)
66	Z42	5995-99-918-3214 ✓ (FV 2050680/2)	Cable assembly.	(1)
67	Z42	5995-99-149-2728 ✕ (FV 2052142/1)	Cable assembly, harness branch.	(1)
68	Z42	5995-99-768-9598 ✕ (FV 2052142/2)	Cable assembly, harness branch.	(1)

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
69	G1	5305-99-122-5366 ✓	Screw hex hd, M8 x 20 mm lg, St Zn Pltd.	(2)
70	G1	5310-99-122-6476 ✓	Washer, flat, M10, St Zn Pltd.	(2)
71	G1	5310-99-138-9228 ✓	Washer, lock, s/coil, M10, St Zn Pltd.	(2)
72	G1	5310-99-122-6475 ✓	Washer, flat, M8, St Zn Pltd.	(2)
73	G1	5310-99-138-9227 ✓	Washer, lock, s/coil, M8 St Zn Pltd.	(2)
74	G1	5310-99-122-5297 ✓	Nut, plain, M10, St Zn Pltd.	(2)
75	Z 37	5940-99-537-6840 ✓ (FV 2042260/47)	Terminal ring, tongue hole, 4 mm Bicon Ct No BG-R4.	(24)
76	9ACR	4730-99-051-0813 ✗ (FV 2049015)	Adaptor, 1/4 BSP to 1/2 UNF.	(2)
77	Z42	5995-99-749-8790 ✗ (FV 2052154/1)	Harness, branch assembly.	(1)
78	Z42	5995-99-277-6190 ✗ (FV 2052154/2)	Harness, branch assembly.	(1)
79	G1	5305-99-139-5682 ✓	Screw, hex hd, M4 x 45 lg, St Zn Pltd.	(4)
80	G1	5310-99-122-3031 ✓	Washer, flat, M4, St Zn Pltd.	(4)
81	G1	5310-99-138-9225 ✓	Washer, lock, s/coil, M4, St Zn Pltd.	(4)
82	G1	5310-99-135-0755 ✓	Nut, plain, M4, St Zn Pltd.	(4)
			Mod set: Generator comprising:	1
83	X2	6115-99-759-1490 ✓	Generator diesel 3 kW.	(2)
84	X2	6115-99-752-5446 ✗ (FV 2048998)	Cowl assembly.	(2)
85	X2	6115-99-522-7193 ✗ (FV 2048995)	Clamp.	(4)
86	X2	6115-99-007-9893 ✗ (FV 2048989)	Flange coupling.	(2)
87	G1	5305-99- ^{724 4724} 135-1321 ✓	Screw, st hd, M5 x 25 mm lg, St Zn Pltd.	(4)
88	G1	5310-99-138-9226 ✓	Washer, lock, s/coil, M5, St Zn Pltd.	(4)
89	G1	5305-99-135-1361 ✓	Screw skt hd, M5 x 10 mm lg, St Zn Pltd.	(4)
90	G1	5310-99-122-3032 ✓	Washer, plain, M5, St Zn Pltd.	(4)
91	G1	5310-99-138-9226 ✓	Washer, lock, s/coil, M5, St Zn Pltd.	(4)



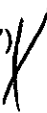
Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
			Mod set: Exhaust system comprising:	1
91 2	X2	6115-99-654-5306 ✓	Flange coupling.	(2)
92 3	X2	6115-99-916-9415 ✓ (FV 2049009)	Clamp bellows.	(4)
93 4	9AHY	5340-99-867-36 68 ⁸ ✓ (FV 473187)	Clamp.	(2)
94 5	Z2	5330-99-730-1336 ✓ (FV 2048839)	Gasket.	(2)
95 6	X2	6115-99-386-6548 ✓ (FV 2048987)	Bellows.	(2)
96 7	X2	6115-99-810-0471 × (FV 2040913)	Flange plate.	(2)
97 8			Ties, cable.	(20)
98 9		Not used		
99 100		Not used		

8.2 Stores to be removed and returned through normal channels:

NOTE

The figures in brackets (under designation) are given to help identify the items listed using AESP 5895-H-514-304.

Item No.	DMC	NSN/Part No.	Designation	Replaced by item	Qty per eqpt
101	X2	6115-99-661-6478 503-1-13200-001	Generator, petrol 3.0 kW. (Table 2, item 34)	83	2
102	Z2	5805-99-723-7670 (FV 2048446)	Clamp assembly. (Table 2, item 1)	46	4
103	Z2	5805-89-723-7673 (FV 2048804)	Coupling assembly, flange.	86	2
104		FV 2048418	Clamp block. (Table 4, item 14)	48	8
105		FV 2048419	Clamp, tee piece. (Table 2, item 1)	47	4
106	Z88	2805-99-254-9246 (FV 2048813)	Duct, air intake. (Table 2, item 20)		2
107	Z88	2805-99-254-9247 (FV 2048814)	Duct, air outlet. (Table 2, item 21)		2

Item No.	DMC	NSN/Part No.	Designation	Replaced by item	Qty per eqpt
108	Z88	2805-99-254-9248 (FV 2048815)	Duct, air outlet. (Table 2, item 22)		2
109	Z88	5340-99-254-9258 (FV 2048849)	Bracket, air outlet duct. (Table 2, item 29)		2
110	Z88	2805-99-254-9261 (FV 2048857)	Cover, air intake – generator. (Table 2, item 32)		2
111	Z99	2910-99-728-7563 (FV 2048837)	Fuel line assembly. (Table 2, item 23)		2
112	Z88	5340-99-254-9262 (FV 2048858)	Guide strip. (Table 2, item 42)		2
113			Screw, hex hd, M4 x 12 mm lg, St Zn Pltd. (Table 2, item 91)		14 
114	Z88	5340-99-254-9264 (FV 2048950)	Clamp, exhaust, 1 1/2 x 1 1/2 in. (Table 2, item 109)		2
115	Z88 Aeroquip	4730-99-524-2845 HD 1260-4	Adaptor, BSP/BSP. (Table 2, item 114)		2
116	9ACR	4730-99-831-9999 (FV 651473)	Pipe assembly, main tank r.h. to 3/4 in. tee union.	1, 6, 8	1
117	X2	7240-99-102-3366	Holder, fuel can. (Table 3, item 25)		6 
118	J1	7240-99-802-2405	Fuel can. (Table 3, item 26)		6
119	Z88	2910-99-794-7222 (FV 2048859)	Line, fuel. (Table 3, item 27) 		2
120	Z2	5805-99-730-1337	Clamp set, split. (Table 3, item 35)	94	2
121	6MT1	4730-99-420-3088	Clamp, hose 3 1/2 in. (Table 3, item 58)		2
122	Z2	5340-99-423-3445	Padlock. (Table 3, item 63)		6
123	Z1	5820-99-851-7809 (FV 2048039)	Stowage rack, fuel. (Table 1, item 10)		1
124	Z42	5995-99-728-7544 (FV 2050335/1)	Cable assembly. (Table 2, item 185)	65	1
125	Z42	5995-99-728-7542 (FV 2050335/2)	Cable assembly. (Table 2, item 187)	66	1
126	Z42	5995-99-728-7543 (FV 2050387/1)	Cable assembly. (Table 2, item 193)	67	1

Item No.	DMC	NSN/Part No.	Designation	Replaced by item	Qty per eqpt
127	Z99	5995-99-728-7519 (FV 2050387/2)	Cable assembly, branched. (Table 2, item 195)	68	1
128	Z2	5805-99-730-1333 (FV 2048807)	Bellow, exhaust assembly. (Table 3, item 13)	92, 96, 97	2
129	6MT1 Aeroquip	4730-99-208-4354 B5602-4-4	Coupling, quick release. (Table 2, item 116)		2
130	Z99	5340-99-744-9003 (FV 964639/4)	Clamp, loop. (Table 2, item 200)	64	14
131	Z42	5995-99-728-7545 (FV 2050358/1)	Cable assembly . (Table 2, item 189)	77	1
132	Z42	5995-99-728-7533 (FV 2050358/2)	Cable assembly. (Table 2, item 191)	78	1
133			Screw, hex hd, M4 x 35 mm lg, St Zn Pltd. (Table 2, item 100)	79	4
134			Plug, blanking.		2
135		Not used			
136		Not used			
137		Not used			
138		Not used			
139		Not used			
140		Not used			

8.3 Items to be modified:

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
141		FV 2047987	Plate, cover assembly.	1
142	Z88	2805-99-254-9244 (FV 2048749)	Baffle plate r.h. assy.	1
143	Z88	2805-99-254-9245 (FV 2048751)	Baffle plate l.h. assy.	1
144	Z2 Graviner	5940-99-749-5541 53182-136	Detector unit, overheat.	6
145	Not used			

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
146	Z99	2910-99-728-7562 (FV 2048836)	Hose.	2
147		FV 2048779	Door front assy r.h.	1
148		FV 2048778	Door front assy l.h.	1
149		Not used		
150		Not used		
8.4 <u>Items to be locally manufactured:</u>				
151	X2	6115-99-007-9894 (FV 2043499)	Boss tapped.	1
152	X2	6115-99-398-0301 (FV 2068816)	Boss tapped.	1

Sequence of operations

9 Carry out this instruction as follows:

NOTES

- (1) The item numbers of Para 8 are used as reference throughout this instruction.
- (2) Other sections of this ~~workshop planning instruction~~ ^{MODIFICATION INSTRUCTION} should be referred to as required during the embodiment of this modification.
- (3) Removed and replaced cables and hoses are to be routed as before unless otherwise stated.

WARNING

Personal Injuries.

THE VOLTAGES USED IN THIS EQUIPMENT CAN ENDANGER HUMAN LIFE. REPAIRS AND MODIFICATIONS ARE TO BE CARRIED OUT BY QUALIFIED TRADESMEN ONLY, USING AUTHORIZED TOOLS AND TEST EQUIPMENT.

9.1 Dismantling, external: Refer to AESP 5895-H-514-522 Chap 5.

9.1.1 Remove from the roof of the vehicle the following:

Fuel cans (item 118)	Qty 6
Holders, fuel cans (item 117)	Qty 6
Fuel line (item 119)	Qty 2
Fuel, stowage rack (item 123)	Qty 1
Padlocks (item 122)	Qty 6

9.1.2 Open the hatch sub-assembly l.h. and r.h. on the armoured enclosure, and from within the armoured enclosure separate the exhaust system to both APUs prior to opening the door assemblies l.h. and r.h. Remove the exhaust system, comprised of the following items, from both APU compartments and retain all fixings.

Coupling flange assy (item 103)	Qty 2
Exhaust clamp (item 114)	Qty 2
Split clamp set (item 120)	Qty 2
Hose clamp (item 121)	Qty 2
Exhaust bellows assy (item 128)	Qty 2

9.1.3 Unclamp the APU generators by removing the following items retaining fixings and cable assy Avdel Ltd 1504-C8-10, refer to Fig 1a.

Clamp assy (item 102)	Qty 4
Clamp, tee piece (item 105)	Qty 4

9.1.4 Fit outriggers FV 2048785, Fig 2 slide forward the APUs and remove fire detectors (item 144) Qty 4 and detach cable assemblies (item 131) and (item 132), refer to Fig 1b.

9.1.5 Disconnect the following electrical connectors from the rear of the APUs and retain with all fixings.

Cable assy	FV 2050218/2/3
Cable assy	FV 2050208/4/5
Cable assy	FV 2050208/6/7
Cable assy	FV 2050218/4/5
Cable assy	FV 2050269/1/2
Leads electrical	FV 2053563/15

9.1.6 From rear of APUs remove fuel hoses (item 146) Qty 2. Also remove cable trough FV 2048830 and retain with clamp and fixings.

9.1.7 Remove APUs (item 101) Qty 2, from the armoured enclosure together with clamp blocks (item 104) Qty 8 retaining fixings, refer to Fig 1a.

9.1.8 Open the centre hatch and remove the following cable assemblies from the fire extinguishers, and detectors (item 144) Qty 2 retaining all fixings and cable clips.

Cable assy (item 124)
Cable assy (item 125)
Cable assy (item 126)
Cable assy (item 127)

Detach detector unit (item 144) from cable assy (items 126 and 127) and retain, Fig 1b.

9.1.9 Remove fuel line assys (item 111) Qty 2, and adaptors (item 115) Qty 2, together with couplings (item 129) Qty 2 from rear wall of enclosure.

9.2 Dismantling, internal. The following equipment and fixings are to be removed from within the vehicle and retained, disconnect plugs, sockets and earth straps. Refer to AESP 5895-H-514-522 Chap 6, refer to Fig 3 for location of equipment.

9.2.1 From r.h. side:

Teleprinter	(Y2/5815-99-658-3064)
Unit DC switching	(Z88/5820-99-728-7958)
SEOW	(Z88/5841-99-758-0252)
Static sub-set	* Z88 (- /5805-99-649-4377)
SPS Equipment	(Z88/5820-99-661-7469)
Unit control and distribution	(Z42/5820-99-728-7957)

9.2.2 From rear bulkhead:

- | | | |
|--------------------------------|------|------------------------|
| Data adaptor | Z 88 | (- /5805-99-649-4370) |
| Unit, printer alarm | | (Z42/5995-99-728-7961) |
| Static sub-set | Z 88 | (- /5805-99-649-4377) |
| Unit, fire suppression control | Z 99 | (- /4210-99-728-7564) |

Author to provide.

9.2.3 Ensure all fuel is drained from the vehicle, then remove the following equipment and fixings and retain:

- | | |
|-----------------------------|--|
| Stowage box assy | FV 2048903 complete with Seat FV 2048336 |
| Teleprinter mounting frame | FV 2048580 |
| Mounting plate | FV 2048543 |
| Mounting frame data adaptor | FV 2048418 |
| Cover assy | FV 2048600 |
| Notice board | FV 2048715 |
| I/F Plate notice board | FV 2048572 |
| Cover assy | FV 2048612 |
| Trunking cable | FV 2048470 |

9.2.4 Remove the following cable trunking covers running between the notice board and the power control unit:

- | | |
|------------|------------|
| Cover assy | FV 2048595 |
| Cover assy | FV 2048596 |
| Cover assy | FV 2048597 |
| Cover assy | FV 2048598 |

9.2.5 Slacken off the bolts retaining the trunking cable FV 2048473; this will allow cover plate fuel tank right hand to be removed in Para 9.2.8

9.2.6 Remove the following cables:

- | | |
|----------------|------------|
| Trunking cable | FV 2048494 |
| Trunking cable | FV 2048462 |

9.2.7 Remove the duct air vehicular right rear FV 524955.

9.2.8 Remove the following items from the right hand fuel tank:

- | | |
|---|----------------------|
| Pipe assy main tank r.h. to 3/4 in. tee union | FV 651437 (item 116) |
| Cover plate fuel tank r.h. | FV 2068813 |

9.2.9 Remove the cover assy cable trunking FV 2048608 mounted on the cross bulkhead to the left of the unit control and distribution unit.

9.3 Modification to fuel tank and cover.

9.3.1 Modify fuel tank (FV 2068815) as shown in Fig 4 using (items 151 and 152) (if not already modified).

9.3.2 Modify fuel tank cover (FV 2068813) as shown in Fig 5.

9.4 Modifications, armoured enclosure.

9.4.1 Modify baffle plates r.h. (item 142) and l.h. (item 143) as shown in Fig 6. These modifications can be carried out in-situ.

9.4.2 Modify plate cover assy (item 141) as shown in Fig 7. It may be necessary to temporarily remove some connectors from the unit APU interface FV 2047957 to obtain better access.

9.4.3 Modify door assy l.h. (item 148) and r.h. (item 147) as shown in Fig 8 using door blanking plates (item 49) Qty 2.

9.5 Modifications, fuel system.

9.5.1 Install adaptors straight pipe (item 11) Qty 2, in roof plate cover assy (item 141) using nut and washer (items 10 and 28) Qty 2, and sealant (item 20) refer to Fig 9.

9.5.2 Remove blanking plugs (item 134) Qty 2, if fuel tank is already modified, and fit adaptors (items 14,15 and 16), to modified fuel tank using Loctite 572, refer to Fig 11.

9.5.3 Replace modified cover plate fuel tank r.h. FV 2068813 using original fixings and tighten fixings of trunking cable FV 2048463.

9.5.4 Loosely assemble valve multiway (item 3), cam stop (item 4) and plate (item 5) onto bracket assy (item 35) using fasteners (items 23, 24, 27 and 33), refer to Fig 10 and 11.

9.5.5 Loosely assemble pump (item 2) onto bracket assy (item 35) using fasteners (items 22, 26 and 32), refer to Fig 12.

9.5.6 Attach adaptor (item 14) to valve multiway (item 3) and tighten, refer to Fig 11.

9.5.7 Attach adaptor (item 13) to electric pump (item 2) and tighten, refer to Fig 12.

9.5.8 Attach pipe assy (item 36) between adaptors (item 14) and (item 13) and tighten, refer to Fig 12.

9.5.9 Fully tighten bolts and screw (items 23, 24 and 22).

9.5.10 Mount bracket assy (item 35) (complete with pump (item 2), valve multiway (item 3) and pipe assy (item 36) on the side of fuel tank using the existing screw 1/2 in. UNC x 1 in. lg, washer and spacer together with fasteners (items 21, 25 and 31), refer to Fig 11 and 12.

9.5.11 Loosely assemble pipe assy (item 1), pipe assy (item 6) and tee pipe (item 18), position as indicated in Fig 13, tighten ends of pipe assy (item 1) and (item 6) only.

9.5.12 Connect couplings (item 7) Qty 2 complete with washers (item 30) Qty 2, into valve multiway (item 3), refer to Fig 11.

9.5.13 Connect adaptor (item 17) to tee pipe (item 18) and fit hose (item 40), route as shown running between the gap in vehicle cladding, using clip (item 19). Connect other end to coupling (item 7), refer to Fig 11 and 13.

9.5.14 Tighten pipe assy (items 1 and 6) on tee pipe (item 18), refer to Fig 13.

9.5.15 Connect hose (item 37) between coupling (item 7) and adaptor (item 16), refer to Fig 11.

9.5.16 Attach couplings (items 8 and 9) to adaptor elbow (item 15) on fuel tank r.h., connecting coupling (item 9) to adaptor straight (item 14) fit hose (item 39). Route as shown in front of pipe assy (item 1) and behind hose (item 40), feed alongside the cable running between the fuel tank and the NBC unit and up to the roof and then along the underside of the roof using the existing cable cleats. Loosely attached the far end to adaptor (item 11), ensuring that there are no kinks or twists, refer to Fig 9 and 13.

9.5.17 Attach hose (item 38) to pump (item 2), route upwards and towards the side of the vehicle to run alongside hose (item 39) (installed as in the previous Para) using the same cable cleats and ensuring that there are no twists or kinks. Connect elbow pipe (item 12) to adaptor (item 11) and attach coupling (item 7). Attach hose (item 38) to coupling (item 7), refer to Fig 9 and 11.

9.5.18 When satisfied with the completed routing and cleating of hoses (items 38 and 39) tighten hoses (items 38 and 39) at adaptor (item 11) Qty 2.

9.5.19 Attach cable assy (item 34) to pump (item 2) and route this up and along cable trunking FV 2048468 and down into cable trunking FV 2048501 following the main cable runs which end at the foot of the unit control and distribution. Connect cable assembly (item 34) to control box fuel pump connection.

9.5.20 Replace the following trunking cable covers, ensuring that the cables are properly dressed within:

Cover assy	FV 2048608
Cover assy	FV 2048596
Cover assy	FV 2048595
Cover assy	FV 2048597

9.5.21 With the duct air vehicular right rear FV 524955 fitted loosely, cut away a small portion of the cladding to enable the fuel hoses (items 38 and 39) to fit snugly below it, then bolt firmly in position.

9.6 Installation, internal.

9.6.1 Position and fix trunking cable FV 2048462 into trunking and dress, fit cover assy FV 2048598.

9.6.2 Position and fix trunking cable FV 2048470 into trunking and dress, fit cover assy FV 2048600.

9.6.3 Position and fix trunking cable FV 2048494 into trunking and dress, fit cover assy FV 2048612.

9.6.4 The following equipment and fixings are to be re-installed in the vehicle. It is recommended that the fixtures and equipments are installed in a logical sequence beginning with the most forward; unit control and distribution, and working towards the rear of the vehicle. Connect all plugs sockets and earth straps. Refer to AESP 5895-H-514-522:

Unit control and distribution	(Z42/5820-99-728-7957)
SPS Equipment	(Z88/5820-99-661-7469)
Static subset	Z88 (-/5805-99-649-4377)
SEOW	(Z88/5841-99-758-0252)
Unit DC switching	(Z88/5820-99-728-7958)
Stowage box assy	FV 2048903 <i>clw seat</i>
	FV 2048336
I/F Plate notice board	FV 2048572
Notice board	FV 2048715
Mounting plate	FV 2048463
Printer mounting frame and stowage box	FV 2048580
Data adaptor	(-/5805-99-649-4370)
Data adaptor	Z88 (-/5805-99-649-4370)
Unit printer alarm	(Z42/5995-99-728-7961)
Static subset	Z88 (-/5805-99-649-4377)
Teleprinter	(Y2/5815-99-658-3064)
Unit fire suppression control	Z99 (-/4210-99-728-7564)

?

~~PALATE~~

9.7 Installation, armoured enclosure.

9.7.1 Fit bulkhead adaptors (item 54) Qty 2, into the holes drilled in baffle plate r.h. (item 142) and l.h. (item 143), refer Fig 9 and 14.

9.7.2 Between bulkhead adaptors (item 54) Qty 2, connect tee piece (item 52) and hose (item 57) as shown. Connect hose (item 58) between tee piece (item 52) and adaptor (item 11) (return to fuel tank), refer to Fig 9 and 14.

9.7.3 Connect hoses (items 59 and 60) to bulkhead adaptors (item 54) Qty 2, as shown and dress across the rear of the APU enclosures l.h. and r.h., to await the installation of the APUs, refer to Fig 14.

9.7.4 Between retained 90 degrees bulkhead adaptors loosely connect tee piece (item 53) and hose (item 63), refer to Fig 14.

9.7.5 Fit filter bracket (item 50) using fasteners (items 69, 72 and 73) Qty 2, to the bosses below the fire warning junction box, refer to Fig 15 and 16.

9.7.6 Fit filter (item 51) to filter bracket (item 50) using fasteners (items 70, 71 and 74) Qty 2, refer to Fig 16.

9.7.7 To filter (item 51) connect adaptors (item 76) Qty 2, using washers (item 55) Qty 2, to ports 2 and 4. Also fit plugs (item 56) Qty 2, using washers (item 55) Qty 2, to ports 1 and 3, refer to Fig 16.

9.7.8 Connect hose (item 62) between adaptor (item 76) port 4 and tee piece (item 53) (fitted Para 9.7.4), dressing as shown, refer to Fig 17). Tighten fixings fitted in Para 9.7.4.

9.7.9 Connect hose (item 61) between adaptor (item 76) port 2 and adaptor straight (item 11) (to filter) dressing as shown, refer to Fig 9, 15 and 16.

9.7.10 Connect fire detectors (item 144) to the harness branches listed below, using terminal rings (item 75) as shown, refer to Fig 1b.

Harness branch (item 67)	1 detector each
Harness branch (item 68)	1 detector each
Harness branch (item 77)	2 detectors each
Harness branch (item 78)	2 detectors each

9.7.11 Mount the fire detectors as shown, refer to Fig 17. There are two detectors each, for APU compartments 1 and 2 (fitted with harness branches (items 77 and 78)). Two other detectors are mounted in the centre compartment back to back with one of the detectors mounted in APU compartments 1 and 2 (fitted with harness branches (items 67 and 68)). These use fasteners (items 79, 80, 81 and 82) Qty 4. Item 79 may need to be replaced by a longer screw of the same specification (locally). The detectors not mounted back to back reuse the fixings retained in Para 9.1.8.

9.7.12 Dress harness branches (items 77 and 78) using cable clips (item 64) and retained fixings, connect to SK4 on the fire wall.

9.7.13 Dress harness branches (items 67 and 68) using cable clips (items 64) and retained fixings, connect to SK2 and SK4 on the fire warning junction box.

9.7.14 Connect cable assemblies (items 65 and 66) between fire warning junction box SK1 and SK2 and fire extinguishers, routing and clipping as discarded cable assy (items 124 and 125).

- 9.7.15 Using the fixings and cable assy Avdel Ltd 1504-C8-10 retained from Para 9.1.3, install clamp block (item 48) Qty 8, in eight positions as shown, refer to Fig 15 and 18.
- 9.7.16 Assemble clamp assy (item 46) Qty 4, and clamp tee piece (item 47) Qty 4, using the retained parts from Para 9.1.3, also connect leads electrical FV 2053563/15 disconnected in Para 9.1.5, refer to Fig 15 and 18.
- 9.7.17 Connect cable through FV 2048830 and clamp to the rear of each APU (item 83) Qty 2, refer to Fig 1a.
- 9.7.18 Loosely attach to each APU (item 83) Qty 2, the cowl assy (item 84) Qty 2, using fasteners (items 89, 90 and 91) Qty 4, and the larger part of clamp (item 85) Qty 4. Using the other half of clamp (item 85) Qty 4, loosely attach to frame of APU (item 83) Qty 2, using fasteners (items 87 and 88) Qty 4.
- 9.7.19 Centralise cowl assy (item 84) Qty 2, around fan blades and tighten screws (item 87) Qty 4.
- 9.7.20 Slide cowl assy (item 84) as far forward as possible ensuring that there is clearance between the rear of it and the APU (item 83). Open the top flap of the cowl assy (item 84) and ensure that it does not foul on the silencer. When positioned correctly tighten screws (item 89).
- 9.7.21 Position APU 1 (item 83) on outriggers, connect lead electrical FV 2053563/15 to the rear of the generator junction box, refer to Fig 18.
- 9.7.22 Connect to APU 1 the following:
- | | |
|------------|--------------|
| Cable assy | FV 2050218/2 |
| Cable assy | FV 2050208/5 |
| Cable assy | FV 2050208/7 |
| Cable assy | FV 2050218/4 |
| Cable assy | FV 2050269/1 |
- 9.7.23 Fit fuel hose (item 60) and FV 2048834 to couplings on APU 1, strap together using cable ties (item 98) as required.
- 9.7.24 Strap cable assy FV 2050269/1 to the top of APU 1 frame, using cable ties (item 98) as required.
- 9.7.25 Attach flange coupling (item 86) Qty 1, to the silencer on APU 1, refer to Fig 15. Slide APU 1 back into its compartment.
- 9.7.26 Position APU 2 (item 83) on outriggers. Connect lead electrical FV 205363/15 to the rear of the generator junction box, refer to Fig 18.
- 9.7.27 Connect to APU 2 the following:
- | | |
|------------|--------------|
| Cable assy | FV 2050218/3 |
| Cable assy | FV 205028/4 |
| Cable assy | FV 2050208/6 |
| Cable assy | FV 2050218/5 |
| Cable assy | FV 2050269/2 |
- 9.7.28 Fit fuel hose (item 59) and FV 2048835 to couplings on APU 2, strap together using cable ties (item 98) as required.
- 9.7.29 Strap cable assy FV 2050269/2 to the top of APU 2 frame, using cable ties (item 98) as required.

9.7.30 Attach flange coupling (item 86) Qty 1, to the silencer on APU 2, refer to Fig 15. Slide APU 2 back into its compartment.

9.7.31 Remove outriggers and stow in box indicated.

9.7.32 Bolt APUs in place using clamp assy (item 46) Qty 4, and tee pieces (item 47) Qty 4, as shown, refer to Fig 18.

9.7.33 Attach flange plates (item 97) Qty 2, to side doors of APU enclosures using the fixings retained in Para 9.1.2, refer to Fig 19.

9.7.34 Loosely attach bellows (item 96) Qty 2, to flange coupling (item 92) Qty 2, using clamps (item 93) Qty 4. Close and bolt doors, align flange couplings (items 92 and 86) Qty 2, and tighten clamps (item 93) Qty 4, refer to Fig 19.

9.7.35 Place gasket (item 95) Qty 2, between flange couplings (items 92 and 86) Qty 2, and fasten using clamp (item 94) Qty 2, ensuring quick release coupling can be used without fouling.

9.7.36 Bolt down top hatches of APU enclosures.

TESTING AFTER EMBODIMENT

10 Inspect and test all equipment disturbed while embodying this modification to AESP 5895-H-514-532. Inspect and test generators to AESP 6115-G-251-532.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

12 Necessary amendments will be issued separately.

Fig 1a Assembly drawing of APU

V13819/1

Fig 1b Fire detector wiring

Fig 2 Outrigger supports for APU

V13819/21

Key to bold not underlined

Index for Fig 3

- 1 Fire warning, Emergency light and mounting plate
- 2 Power control / Distribution unit and mounting frame
- 3 Static sub-set 'C'
- 4 SPS Controller
- 5 NBC Equipment
- 6 SEOW Equipment
- 7 AESP Stowage
- 8 Switching Unit
- 9 NBC Equipment
- 10 Fire Suppression Control Unit and mounting frame
- 11 Data adaptor for teleprinter 'A'
- 12 Tee Box 'A'
- 13 Static sub-set for teleprinter 'A'
- 14 Teleprinter 'A'
- 15 Teleprinter mounting frame and stowage box
- 16 Seat
- 17 Secure stowage
- 18 SPS Stowage Area.

Fig 3 Interior view of SAS/MC installation

V13819/20

Fig 4 Right hand fuel tank

V13819/4

Fig 5 Fuel tank cover



Fig 6 Fire detector location

V13819/13



Inside

Fig 7 | inside view of roof area

Fig 8 Door assembly modifications

V13819/16

Fig 9 Fuel pipe location on roof

V13819/2

Fig 10 Assembly of fuel valve

V13819/6

Fig 11 View of right hand fuel tank

V13819/8

Fig 12 Rear view of right hand fuel tank

V13819/7

Fig 13 Fuel pipe location below fuel tank

V13819/9

Fig 14 Fuel hose detail in APU compartment

V13819/3

Fig15 View of APU's mounted

V13819/11

~~UK RESTRICTED~~

Fig 16 Fuel filter detail

V13819/5

~~UK RESTRICTED~~

Fig 17 Plan view of armoured enclosure

Fig 18 Detail of APU clamping

V13819/12

Fig 19 Exhaust system

V13819/14

CARRIER, INSTALLATION, FULL TRACKED, FV439 MK 2/1

MODIFICATION INSTRUCTION NO. 2

Sponsor:
DGES(L)

Publication Agency:
DLO Chertsey
Project No: S01008(345)
File ref:

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
2		
3		

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

SUBJECT: Fuel tank filter

(Approval No. 43/0/0046)

INTRODUCTION

1 This instruction introduces the installation of a fuel strainer element to the fuel tank filler cap to reduce fuel contamination.

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

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

REASON FOR MODIFICATION

3 Code 4 - to improve maintainability.

PRIORITY

4 Routine.

ESTIMATED TIME REQUIRED

5 Embodiment: 0.15 man-hour.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This instruction is to be implemented by:

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

QLIS
12 DEC 2000
LFSS
DLO Chertsey

Action required by

7

7.1 Units and establishments holding equipment:

7.1.1 Examine equipment documents to see if modification is applicable.

7.1.2 Examine equipment or modification record plate to see if modification is embodied and where necessary Units with 1st Line REME Support demand the stores required.

7.1.3 On receipt of stores, request REME to modify equipment.

7.1.4 Record the AESP and instruction number in equipment documents.

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

7.2.1 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.

7.3 All recipients of this instruction. Add particulars to AESP 2350-T-254-811 Instr Index.**Stores, tools and equipment**

8

8.1 Stores to be demanded:

8.1.1 The following item is to be demanded quoting this instruction as the authority.

8.1.2 Registration/Serial number of vehicle/engine/assembly for equipment held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	9ACR	2910-99-866-5448	Strainer element.	2

Sequence of operations

NOTE

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

9 Carry out this instruction as follows:

Refer to Fig 1

9.1 Remove fuel filler cap from left hand fuel tank. Remove circlip (item 2).

9.2 Fit fuel filter (item 1). Refit circlip (item 2). Refit fuel filler cap.

9.3 Repeat Sub-Para 9.1 and 9.2 for right hand fuel tank.

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

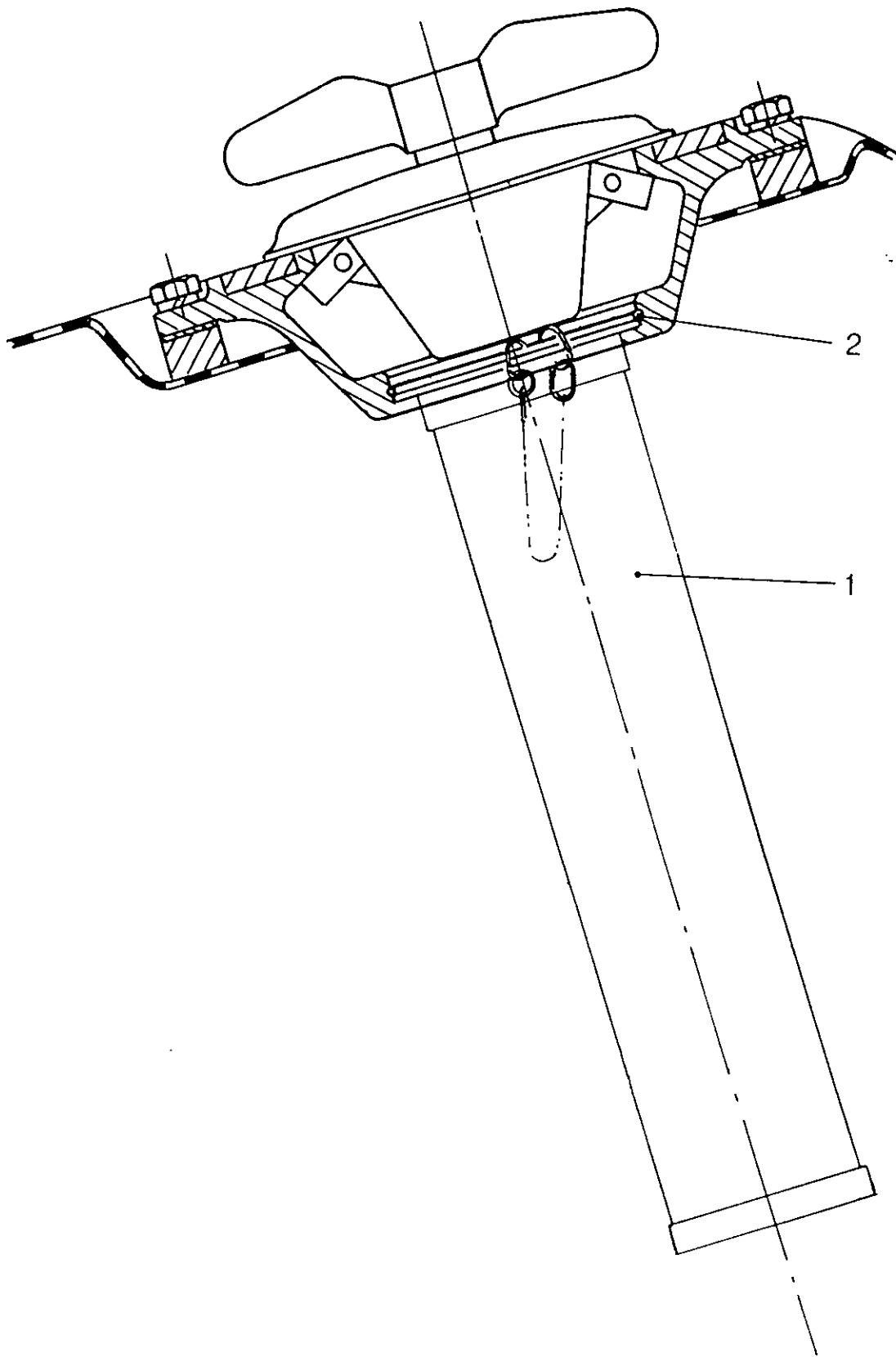
11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Nil.



V14634/1

Fig 1 Fuel tank filter

CARRIER, INSTALLATION, FULL TRACKED, FV439 MK 2/1

MODIFICATION INSTRUCTION NO. 3

Sponsor:
DGES(L)

Publication Agency:
DLO Chertsey
Project No: S01008(5)
File ref:

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
2		
3		

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

SUBJECT: Driver and commanders SA80 stowage
(Approval No. 43/9/0010)

INTRODUCTION

1 This instruction details the internal fittings for the stowage of the SA80.

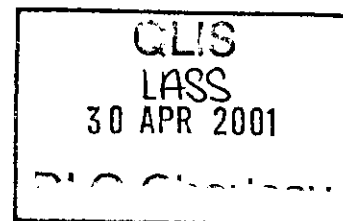
1.1 Limitations on use of equipment. Nil.

APPLICABILITY

2

2.1 Fitted to FV439, radio relay only.

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



REASON FOR MODIFICATION

3 Code 1 - to improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

5 Embodiment: 1.5 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This instruction is to be implemented by:

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

Action required by

7

7.1 Units and establishments holding equipment:

- 7.1.1 Examine equipment documents to see if modification is applicable.
- 7.1.2 Examine equipment or modification record plate to see if modification is embodied and where necessary Units with 1st Line REME Support demand the stores required.
- 7.1.3 On receipt of stores, request REME to modify equipment.
- 7.1.4 Record the AESP and instruction number in equipment documents.

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

- 7.2.1 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.

7.3 All recipients of this instruction. Add particulars to AESP 2350-T-254-811 Instr Index.

Stores, tools and equipment

8

8.1 Stores or suitable equivalent to be obtained locally:

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	9ACR	5340-99-839-8252	Bracket mounting.	1
2	9ACR	5340-99-839-8251	Bracket mounting.	1
3	6MT1	2540-99-740-7338	Barrel clip assy.	2
4	6MT1	2540-99-724-5832	Butt clip.	2
5	G1	5305-99-122-5360	Screw hex hd M6 x 16 mm lg.	4
6	G1	5305-99-122-5366	Screw hex hd M8 x 20 mm lg.	11
7	G1	5305-99-135-0451	Screw pan hd M8 x 20 mm lg.	1
8	G1	5310-99-137-9232	Washer s/coil lock M8.	4
9	G1	5310-99-138-9227	Washer s/coil lock M8.	12
10	G1	5310-99-122-5295	Nut plain hex M6.	4
11	G1	5310-99-122-5296	Nut plain hex M8.	12
12	G1	5310-99-122-6475	Washer flat M8.	6

8.2 Items/stores to be modified:

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
13	9ACR	2510-99-867-4629	Cover assy (lower).	1

WARNING

PERSONAL INJURY. DUE TO THE POSSIBILITY OF ASBESTOS ON THE INTERNAL SURFACE (ENGINE SIDE) OF COVER ASSY (ITEM 13). PROTECTIVE CLOTHING SHOULD BE WORN, ESPECIALLY GLOVES AND FACE MASK WHEN DRILLING AND HANDLING DURING THE MODIFICATION.

Sequence of operations

NOTE

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

9 Carry out this instruction as follows:

Refer to Fig 1 and 2

9.1 Remove engine cover (item 13), mark out and drill holes. Refer to Fig 1.

9.2 Attach barrel and butt clips (item 3 and 4), to brackets (item 1 and 2) using (item 5, 6, 8, 9, 10 and 11). Refer to Fig 2 for location and quantity required.

9.3 Attached brackets (item 1 and 2) to engine cover (item 13) using (item 6, 7, 9, 11 and 12). Refer to Fig 2 for location and quantity required.

9.4 Refit engine cover (item 13).

TESTING AFTER EMBODIMENT

10 Check that the SA80 stowage operates correctly.

EFFECT ON WEIGHT

11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Nil.

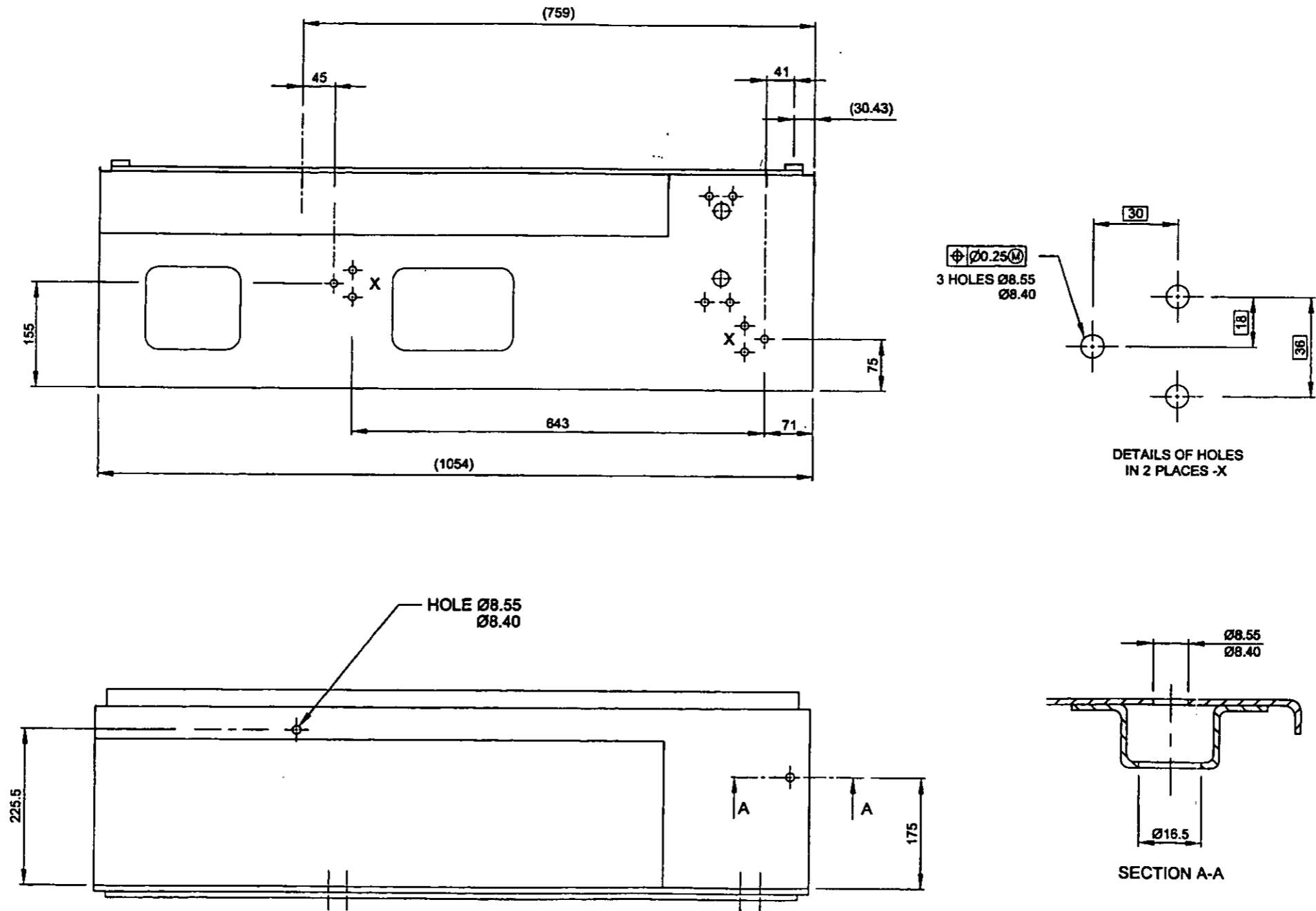


Fig 1 Engine cover (item 13)

V12891/1

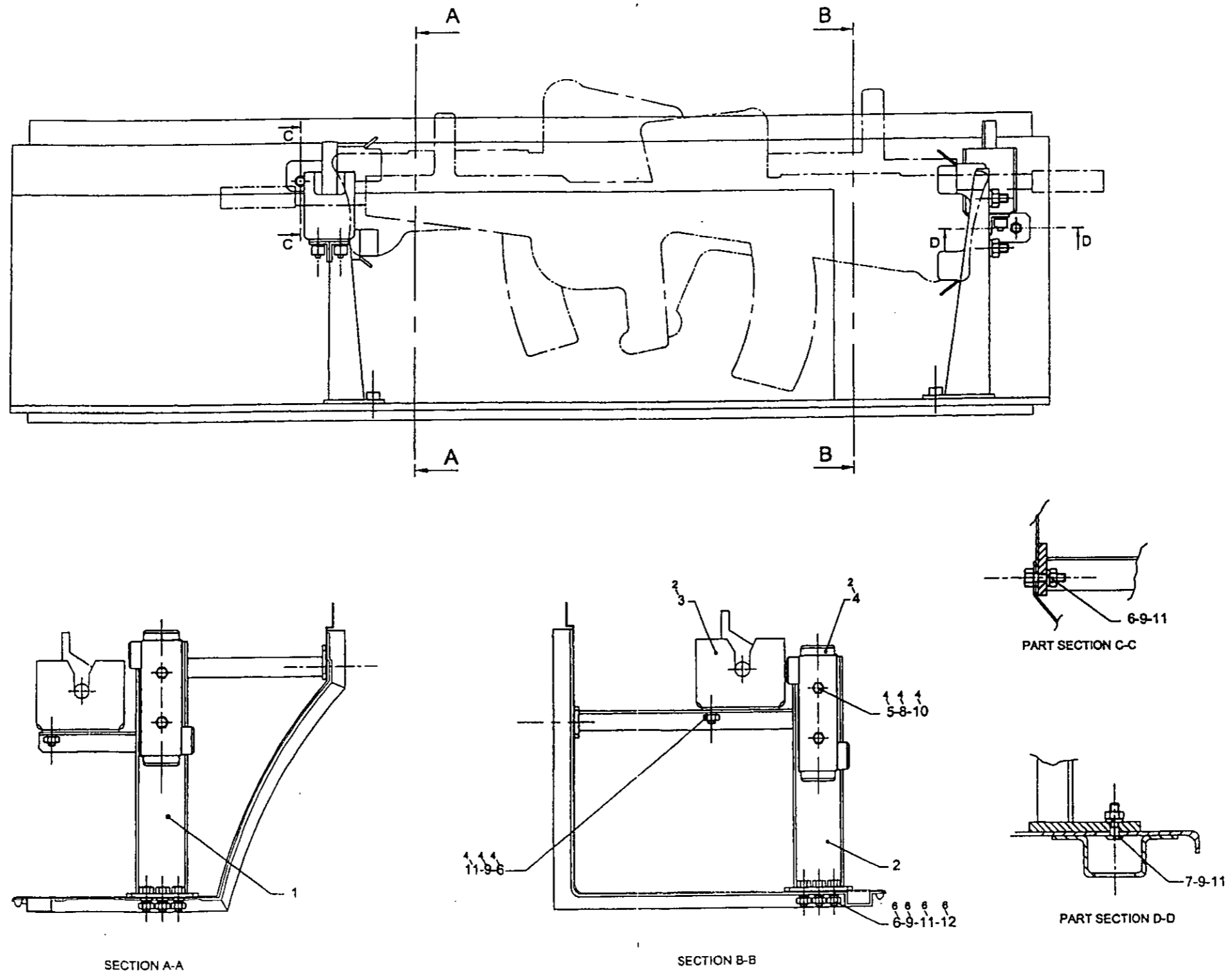


Fig 2 General arrangement of brackets and clips

V12891/2

CARRIER, INSTALLATION, FULL TRACKED, FV439 MK 2/1
MODIFICATION INSTRUCTION NO. 4

Sponsor:
DGES(L)

Publication Agency:
DLO Chertsey
Project No: S01008(54)
File ref:

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
2		
3		

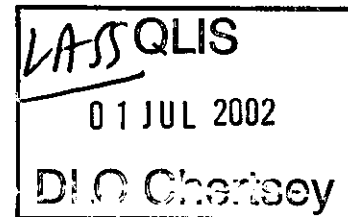
Amdt No.	Incorporated By (Signature)	Date
4		
5		
6		

SUBJECT: Drivers and commanders SA80 stowage
(Approval No. 43/9/0003)

INTRODUCTION

1 This instruction details the internal fittings for the stowage of the SA80.

1.1 Limitations on use of equipment. Nil.



APPLICABILITY

2

2.1 Fitted to FV 439 SAS/MC only.

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

REASON FOR MODIFICATION

3 Code 1 - to improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

5 Embodiment: 2.5 man-hours.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This instruction is to be implemented by:

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

Action required by

7

7.1 Units and establishments holding equipment:

7.1.1 Examine equipment documents to see if modification is applicable.

7.1.2 Examine equipment or modification record plate to see if modification is embodied and where necessary Units with 1st Line REME Support demand the stores required.

7.1.3 On receipt of stores, request REME to modify equipment.

7.1.4 Record the AESP and instruction number in equipment documents.

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

7.2.1 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 When the Modification has been embodied, complete and return Annex A.

7.3 All recipients of this instruction. Add particulars to AESP 2350-T-254-811 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.

8.1.2 Registration number of vehicle for equipment held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	9ACR	5340-99-500-7161	Bracket mounting.	1
2	9ACR	5340-99-818-0705	Bracket mounting.	1
3	6MT1	2540-99-740-7338	Barrel clip assy.	2
4	6MT1	2540-99-724-5832	Butt clip.	2
8.2 <u>Stores or suitable equivalent to be obtained locally:</u>				
5	G1	5305-99-122-5360	Screw hex hd M6 x 16 mm lg.	4
6	G1	5305-99-122-5366	Screw hex hd M8 x 20 mm lg.	4
7	G1	5305-99-759-2086	Screw pan hd M8 x 18 mm lg.	3
8	G1	5310-99-137-9232	Washer s/coil lock M6.	4

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
9	G1	5310-99-138-9227	Washer s/coil lock M8.	7
10	G1	5310-99-122-5295	Nut plain hex M6.	4
11	G1	5310-99-122-5296	Nut plain hex M8.	7
8.3	<u>Items/stores to be modified:</u>			
12		FV 847342	Cover assy (lower).	1
13		FV 847355	Cover plate.	2

Sequence of operations

NOTE

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

9 Carry out this instruction as follows:

Refer to Fig 1

9.1 Remove cover plates (item 13) from front of engine cover. Remove and discard the hook. Carefully remove, reposition and re-weld the handle to the cover plate. Welding to be carried out to current regulations. Repeat for the second cover plate. Restore paint finish to current regulations. Refit cover plates (item 13).

Refer to Fig 2

9.2 Remove cover assy (item 12) from engine cover. Mark out and drill holes in cover assy. Restore paint finish to current regulations.

Refer to Fig 3

9.3 Attach barrel clips (item 3) to bracket mounting (item 2) using (item 6, 11 and 9), and attach bracket mounting (item 12) to cover assy (item 12) using (item 7, 11 and 9). Refit cover assy.

9.4 Attach butt clips (item 4) to bracket mounting (item 1) using (item 5, 10 and 8). Attach bracket mounting (item 1) using existing fittings, packing 'A - A' as indicated.

TESTING AFTER EMBODIMENT

10 Check that the SA80 stowage operates correctly.

EFFECT ON WEIGHT

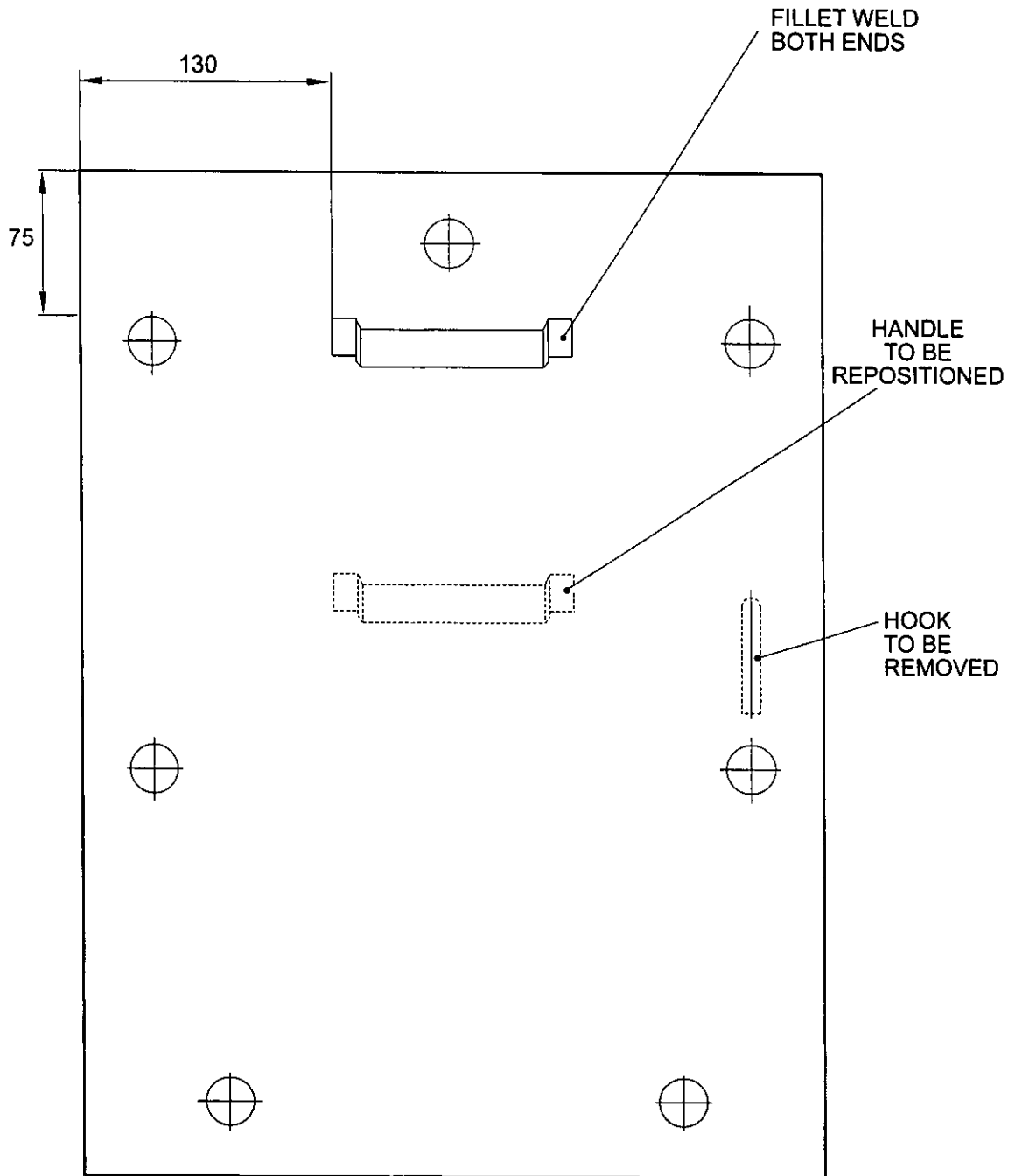
11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

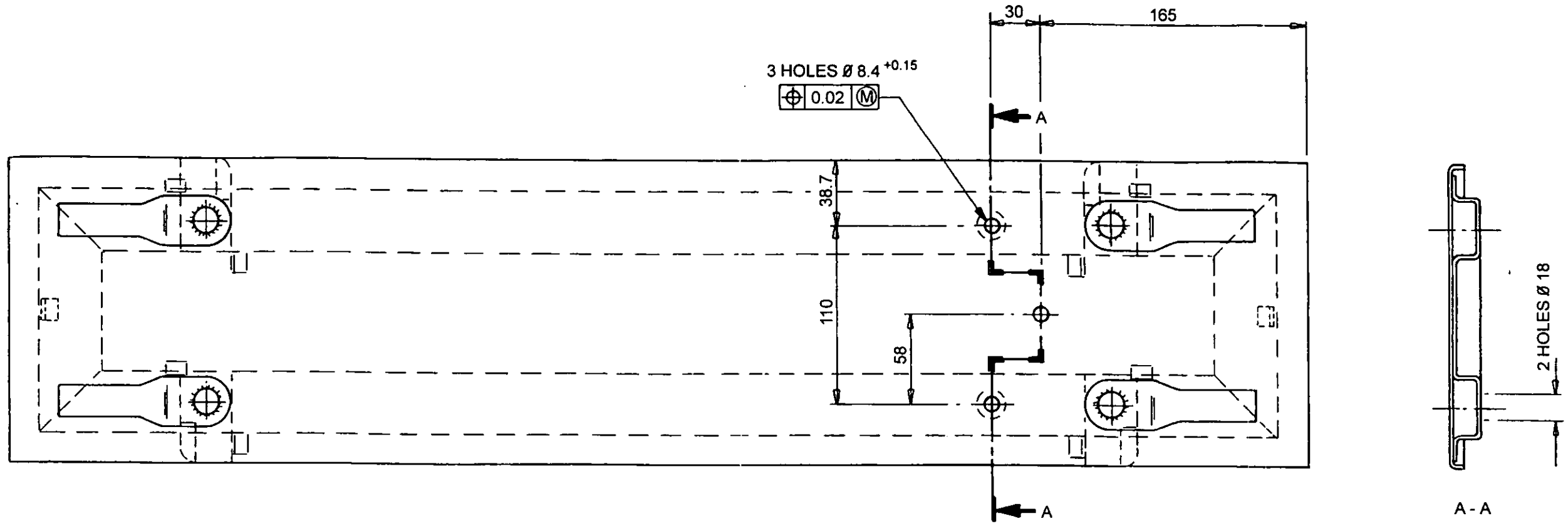
12 Nil.



Dimensions in mm

Fig 1 Cover plate

V13952/3



Dimensions in mm

Fig 2 Cover assy (lower)

V13952/1

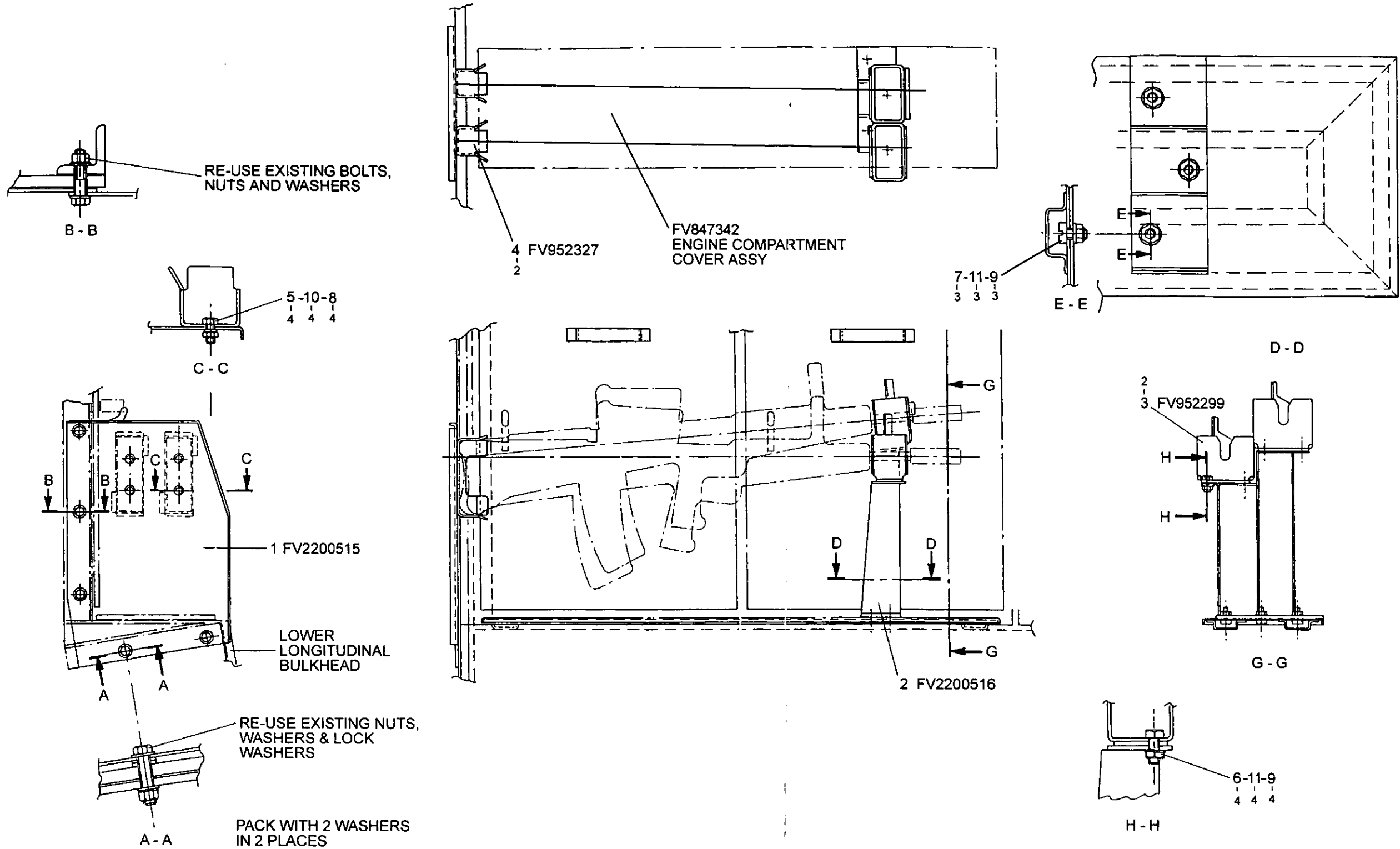


Fig 3 General arrangement of SA80 stowage

V13952/2

MODIFICATION INSTRUCTION NO. 4 ANNEX A

FV430 SERIES - MODIFICATION RECORD

To enable accurate modification records to be maintained for all FV430 series vehicles, all units are to complete and return this form when the modification has been embodied. Multiple equipment returns can be submitted.

To:

FV430 ESM LASS IPT DLO Monxton Road Andover Hampshire SP11 8HT

From:

Unit:	UIN:
Name:	Signature:

MODIFICATION NO. 4

Vehicle registration number(s)	Date embodied

~~UK RESTRICTED~~

~~UK RESTRICTED~~

CARRIER, INSTALLATION, FULL TRACKED, FV439 MK 2/1
MODIFICATION INSTRUCTION NO. 5

Sponsor:
DGES(L)

Publication Agency:
DLO Andover
Project No: S01008()
File ref: 43/2/0017

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
2		
3		

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

SUBJECT: High visibility marker boards

(Approval No. 43/2/0017)

INTRODUCTION

1 This instruction introduces the fitment of two high visibility marker boards to the stowage bins mounted either side of the rear door of the vehicle. The marker boards can be reversed to show green/black to match the vehicle when required.

1.1 Limitations on use of equipment. Nil.

APPLICABILITY

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

REASON FOR MODIFICATION

3 Code 1 - to improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

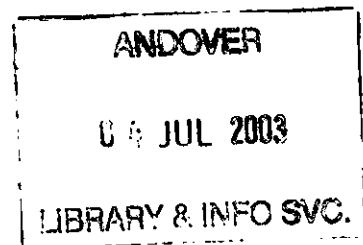
5 Embodiment: 1.0 man-hour.

MODIFICATION IMPLEMENTATION PLAN

6

6.1 This instruction is to be implemented by:

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



Action required by

7

7.1 Units and establishments holding equipment:

7.1.1 Examine equipment documents to see if modification is applicable.

7.1.2 Examine equipment or modification record plate to see if modification is embodied and where necessary Units with 1st Line REME Support demand the stores required.

7.1.3 On receipt of stores, request REME to modify equipment.

7.1.4 Record the AESP and instruction number in equipment documents.

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

7.2.1 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 When the Modification has been embodied, complete and return Annex A.

7.3 All recipients of this instruction. Add particulars to AESP 2350-T-254-811 Instr Index.**Stores, tools and equipment****NOTE**

If high visibility rear marker plates are fitted to the vehicle, and are of the same pattern as item 1, carefully remove and re-use the marker plates.

8

8.1 Stores to be demanded:

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

8.1.2 Registration of vehicle for equipment held by user units.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	6MT1	9905-99-837-2954	Marker plate (pair)	1
2	9ACR	2540-99-815-0156	Holder assembly	2
8.2 <u>Stores or suitable equivalent to be obtained locally:</u>				
3	G1	5305-99-122-5360	Screw hex hd M6 x 16 lg	8
4	G1	5310-99-122-5295	Nut hex M6	8
5	G1	5310-99-137-9232	Washer spring M6	8

8.3 Items/stores to be modified:

6	FV 586548	L/H and R/H stowage bin doors	2
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Sequence of operations

NOTE

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

9 Carry out this instruction as follows:

WARNING

PAINT PROCESSES TO BE CARRIED OUT IAW AESP 0200-A-221-013 FOLLOWING ALL NECESSARY SAFETY PRECAUTIONS

9.1 Paint, to current regulations, the rear surface of the marker plates (item 1) green/black to match rear stowage bins.

Refer to Fig 1

9.2 Drill holes as indicated in both of the stowage bin doors (item 6).

9.3 Fit holder assembly (item 2) to left hand stowage bin door (item 6) using fittings (item 3, 4 and 5), ensuring that opening for the marker plates (item 1) is at the top. Repeat for right hand stowage bin door.

9.4 Fit the marker plates (item 1) in to the holder assemblies (item 2).

TESTING AFTER EMBODIMENT

10 Nil.

EFFECT ON WEIGHT

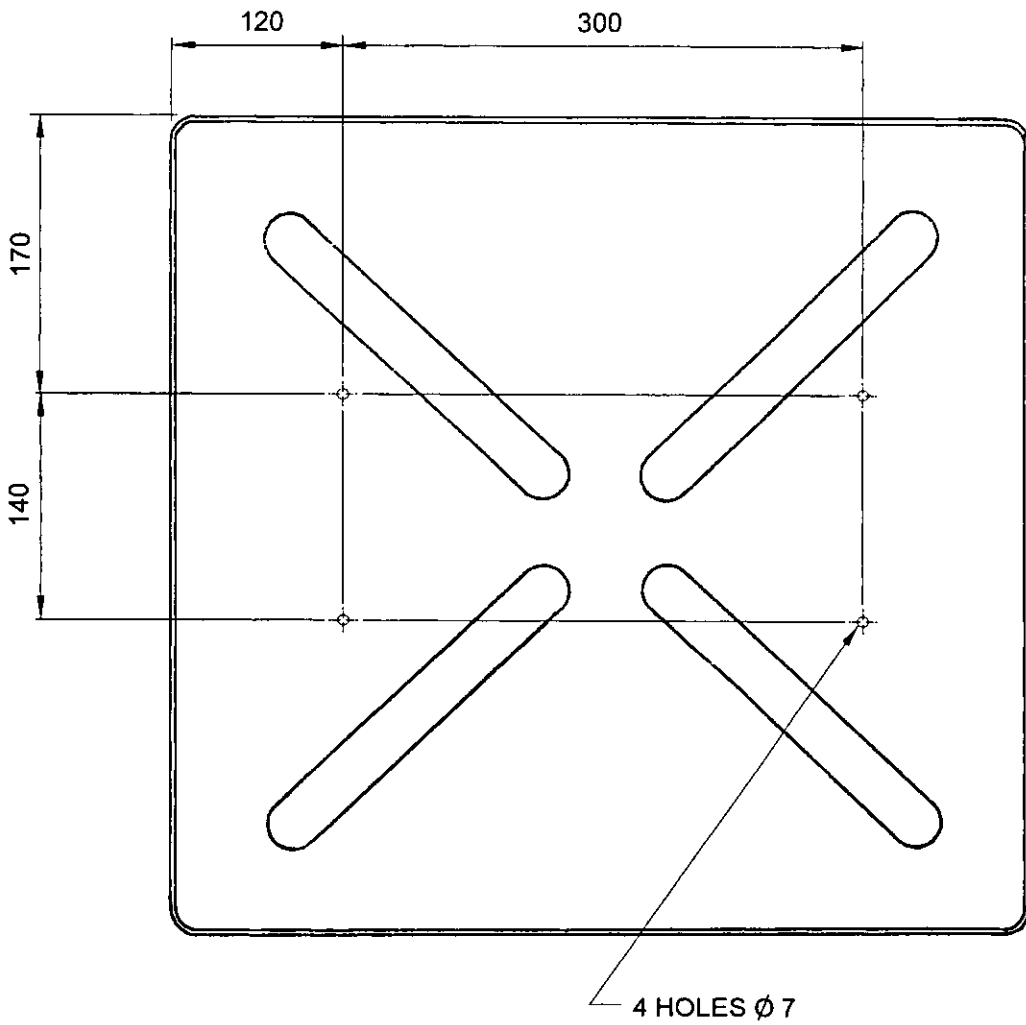
11 Negligible.

PUBLICATION AMENDMENTS

NOTE

Necessary amendments will be issued separately.

12 Nil.



DIMENSIONS IN mm

V14963/1

Fig 1 Rear stowage bin door

MODIFICATION INSTRUCTION NO. 5

ANNEX A

To enable accurate modification records to be maintained for all FV430 series vehicles, all units are to complete and return this form when the modification has been embodied. Multiple equipment returns can be submitted.

FV430 ESM LASS IPT DLO Monxton Road Andover Hampshire SP11 8HT

From:

Unit:	UIN:
Name:	Signature:

Modification No. 3

Date embodied:

Vehicle registration number(s)

~~UNRESTRICTED~~

~~UNRESTRICTED~~

**CARRIER PERSONNEL FULL TRACKED
FV439 SERIES – COMMUNICATIONS VEHICLE**

MODIFICATION INSTRUCTION No. 7

Sponsor:
LASS IPT

Publication Agency:
BAE Systems Land Systems

AMENDMENT RECORD

Amdt No.	Incorporated by (Signature)	Date
1		
2		
3		

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

SUBJECT: Hatch Locking Arm (Commander's)

Approval No. MAE 43/2/0034

INTRODUCTION

1 As a result of serious equipment failure when the commander's hatch locking arm (catch) failed to lock in the open position, causing injury to personnel, a modified catch is introduced.

APPLICABILITY

2 This modification is applicable to: FV 439 Series

REASON FOR MODIFICATION

3 Code 1 – To improve safety.

PRIORITY

4 Immediate.

ESTIMATED TIME REQUIRED

5 Embodiment: 2 Man hours

MODIFICATION IMPLEMENTATION PLAN

6 This instruction is to be carried out by units authorised to carry out level 2 and above.

Action required by

7

7.1 Units holding subject vehicles:

7.1.1 Demand items listed in Para 8 and carry out this instruction.

7.1.2 Record completion details in vehicle documents.

7.2 All recipients of the AESP.

Add particulars to AESP 2350-T-254-811 Modification Instruction Index.

Stores, Tools and Equipment

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

8.1 Stores to be demanded

Item No.	NSN/Part No.	Designation	Qty Per eqpt
1	2510-99-736-7835	Catch WA – Commander's Hatch	1
2	5315-99-944-0176	Split Pin 3/32" dia x 7/8"lg	1

8.2 Stores to be discarded

Item No.	NSN/Part No.	Designation	Qty Per eqpt
3	2510-99-865-6527	Catch WA – Commander's Hatch	1
4	5315-99-944-0176	Split Pin 3/32" dia x 7/8"lg	1

8.3 Stores to be removed and refitted

Item No.	NSN/Part No.	Designation	Qty Per eqpt
5	5315-99-137-8940	Pin	1
6	5360-99-865-6518	Torsion Spring	1
7	5365-99-865-6517	Distance Piece	2
8	703000800910	Plain Washer 1/2" dia x 13 SWG	2

Sequence of operations (all variants)

9 Refer to figs 1 & 2 and embody the modification as follows:

9.1 With the commander's hatch in closed position remove split pin (4) and washer (8) from one end of pin (5). Remove pin together with torsion spring (6), distance pieces (7), commander's hatch catch (3) and washer. Discard split pin and commander's hatch catch.

9.2 Refit torsion spring (6) and distance pieces (7) and fit replacement commander's hatch catch (1), securing in position with pin. Refit washer (8) and replace split pin (2).

TESTING AFTER EMBODIMENT

10 Ensure hatch cannot be "bounced" out of the locked open position.

PUBLICATION AMENDMENTS

11 Nil.

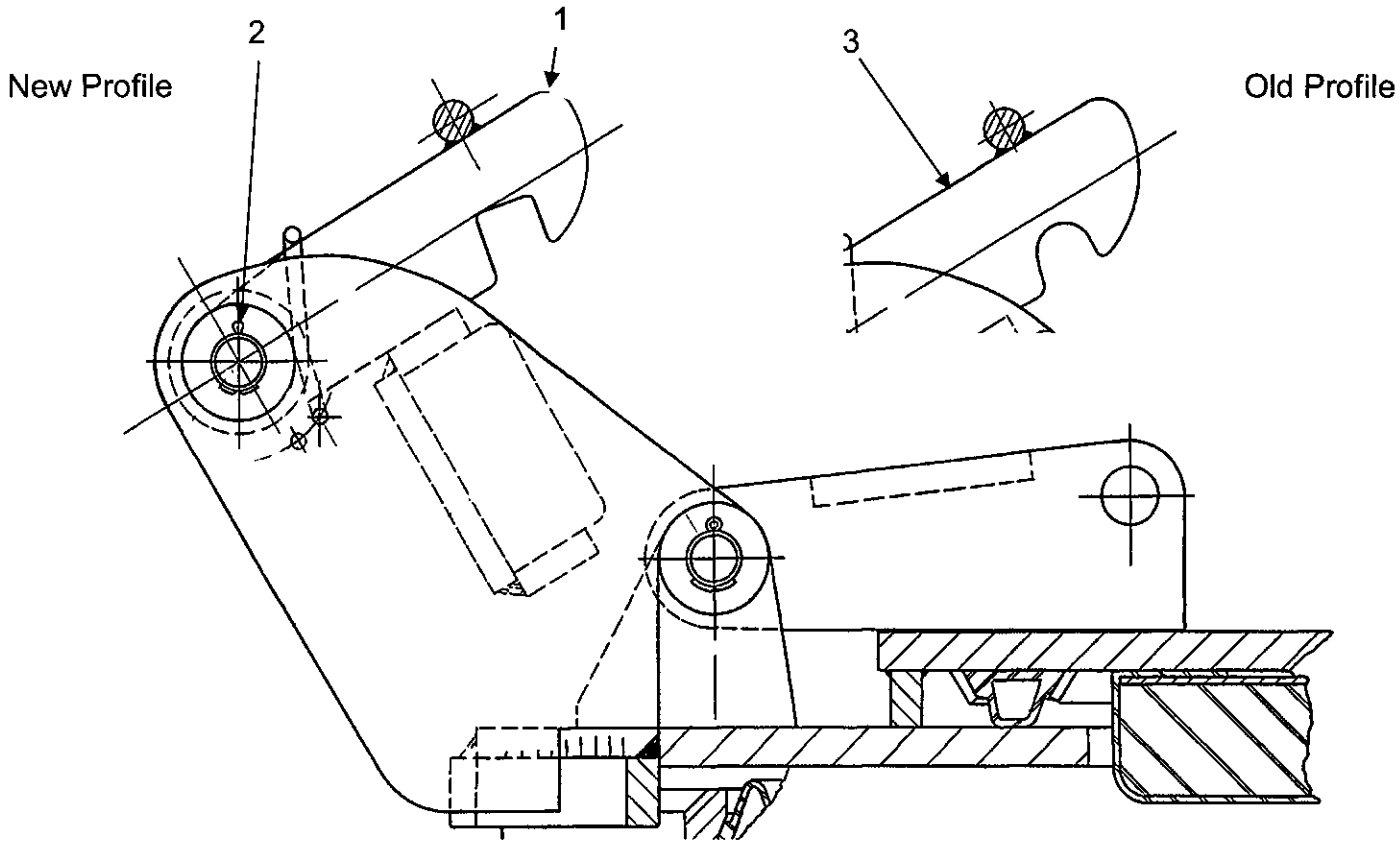


Fig 1 Catch Mechanism Side View

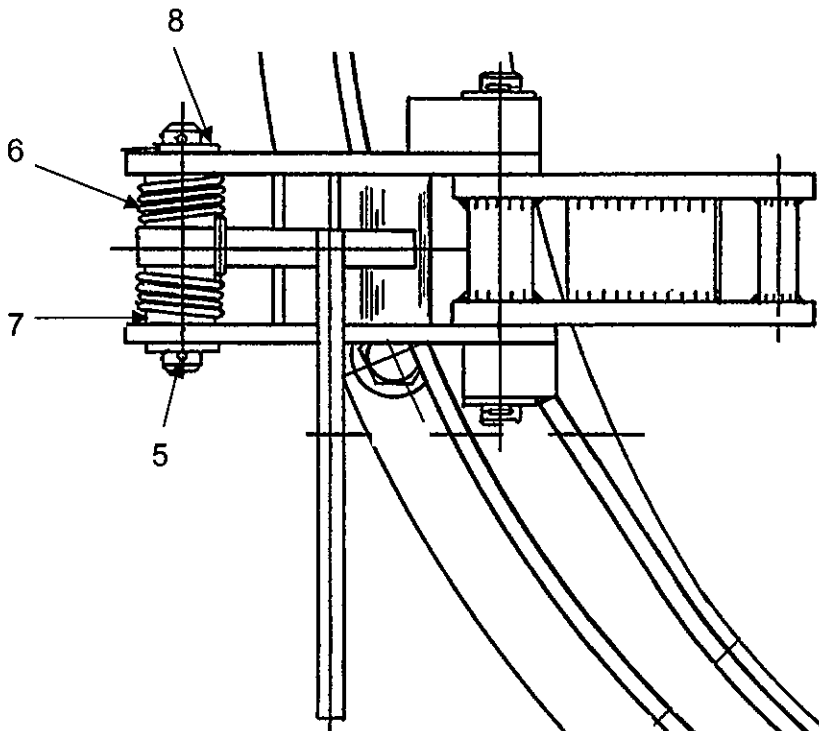


Fig 2 Catch Mechanism View from Above