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TRAILER LIGHTWEIGHT GS CARGO

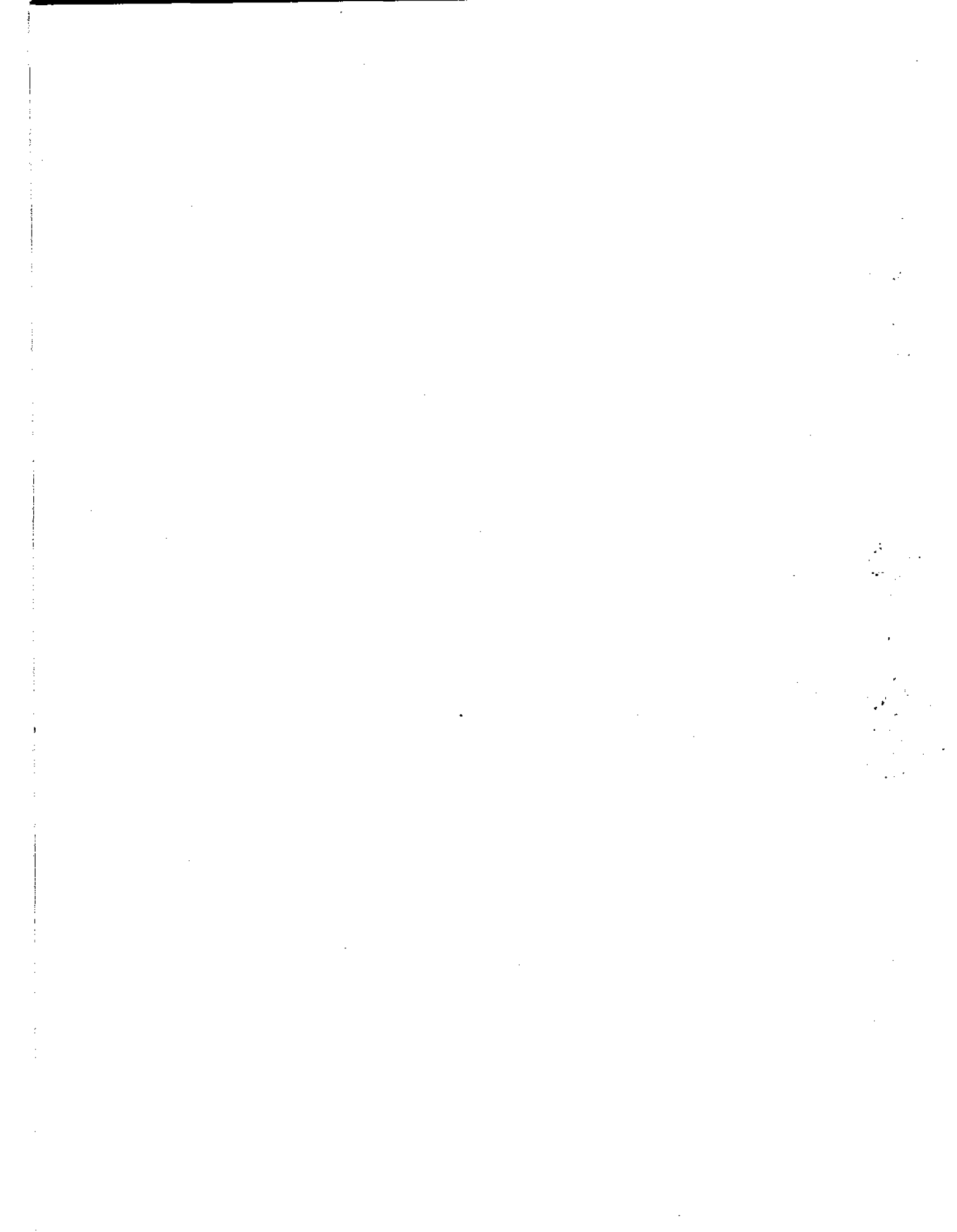
INSTALLATION INSTRUCTION AND INDEX

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

BY COMMAND OF THE DEFENCE COUNCIL

Kenneth Stewart

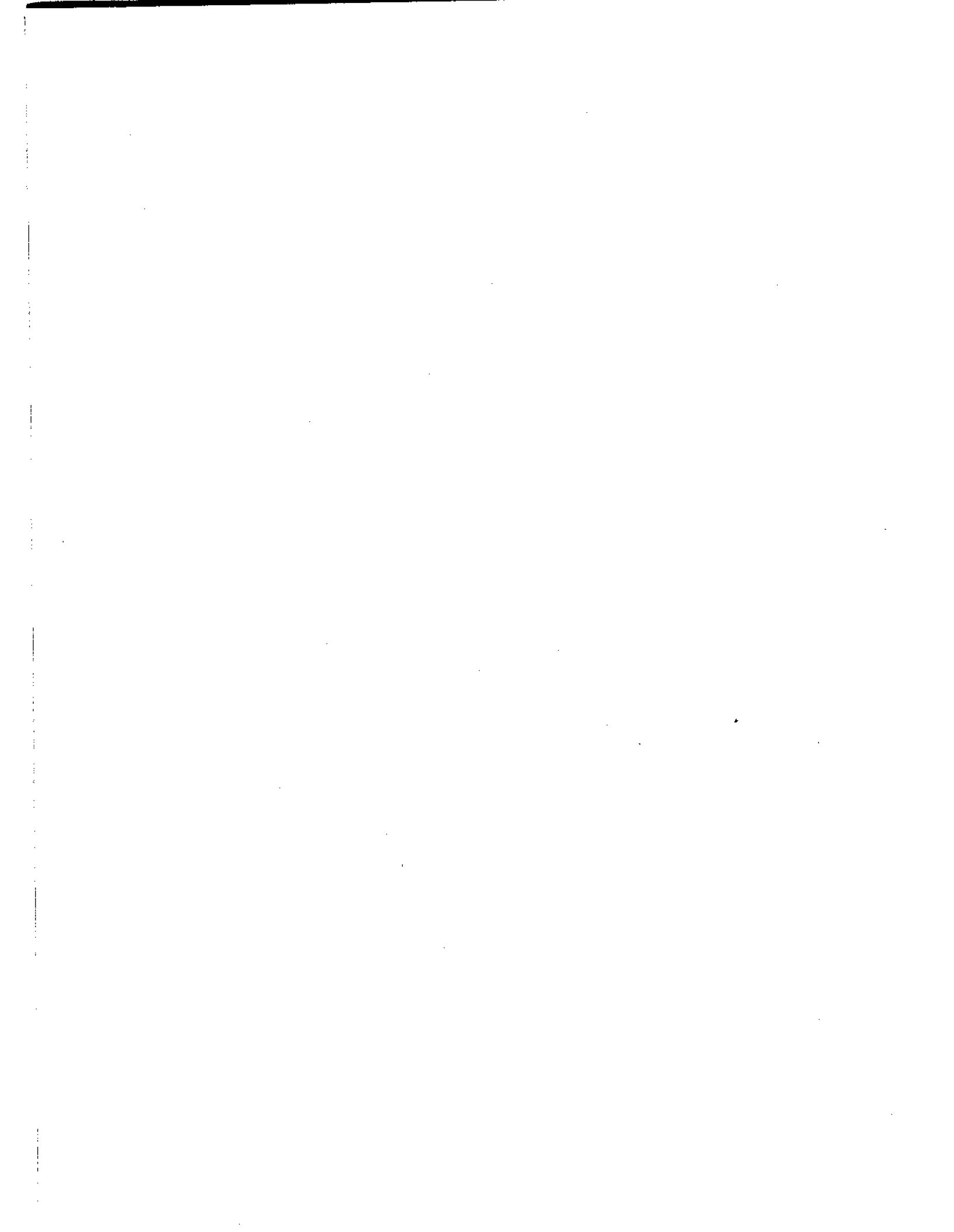
Ministry of Defence
Issued by
DEFENCE LOGISTICS ORGANISATION



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PREFACE

Sponsor: SUV IPT
Publication Authority: TES TIG Andover

INTRODUCTION

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

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

3 All preparation for Special Environment instructions, as issued, are to be recorded in manuscript by the recipient on the Numerical Preparation for Special Environment Instructions 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

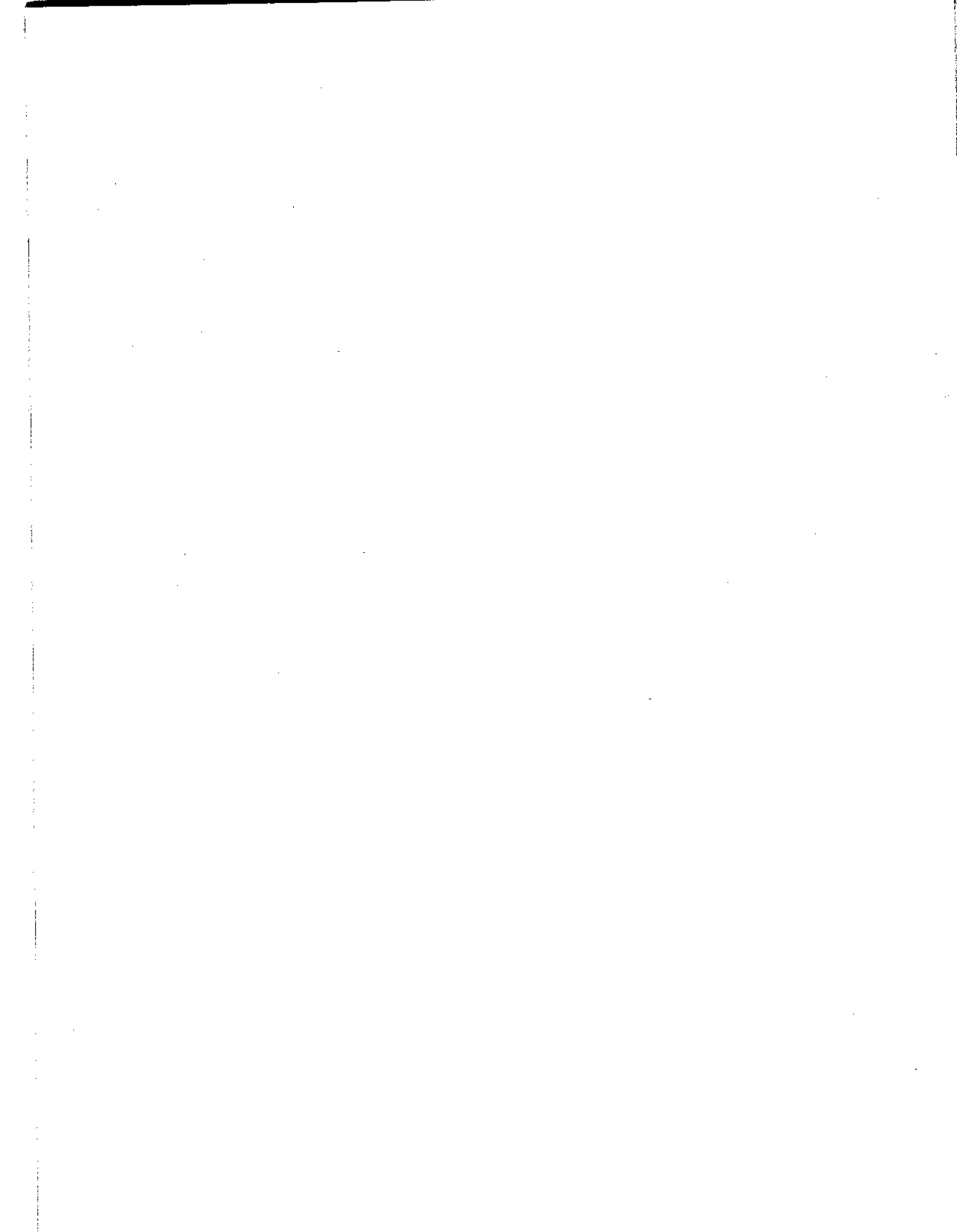
The publication agency is responsible for the preparation and maintenance of the Preparation for Special Environment Instruction Index and will advise the Distribution Authority on the issue of completed and subsequent index pages as necessary.

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

INSTALLATION INSTRUCTION INDEX

This index is to be kept up to date by the User entering installation instructions as and when they are published.

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2	Fitting of Airlog 4.5 kw Genset	
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TRAILER LIGHTWEIGHT GS CARGO

CODE NB 2853 3107

**INSTALLATION INSTRUCTION NO. 1
FITTING OF FORWARD AIRCRAFT REPAIR BODY**

Sponsor: SUV IPT

Publication Authority: TES TIG Andover

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Amdt No.	Incorporated by (Signature)	Date
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SUBJECT: The fitting of a forward aircraft repair body

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WARNINGS

1 The following WARNINGS are used in this instruction:

(1) **PERSONAL INJURY. THE GS BODY WEIGHS 120 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.**

(2) **PERSONAL INJURY. THE FORWARD AIRCRAFT REPAIR BODY WEIGHS 300 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.**

REASON FOR INSTALLATION

2 This instruction details the removal of the General Service (GS) cargo body, from the subject trailer, and the fitting of a special to role body to convert the trailer into a Forward Aircraft Repair (FAR) trailer, for use by the Royal Navy.

RELATED AND ASSOCIATED PUBLICATIONS

3 The following publication is referred to in this instruction.

<u>Reference</u>	<u>Title</u>
AESP 2330-E-202-522	Maintenance Instructions

INSTALLATION IMPLEMENTATION PLAN**Action required by:**

4 Units and establishments holding the subject trailers:

4.1 Demand the installation kit (refer to Table 2) when authorised.

4.2 Request the unit repair to carry out the installation, when the installation kit arrives.

5 Units and establishments embodying this installation:

5.1 Carry out this installation, when requested by the holding unit. No special tools or test equipment is required.

Man-hour content

6 The estimated man-hour content is listed in Table 1.

TABLE 1 ESTIMATED TIME REQUIRED PER EQUIPMENT

Serial (1)	Task (2)	Man-hours (3)	Tradesman employed (4)
1	Dismantling, preparation	1.5	REME tech + assistant
2	Assembly	1.5	REME tech + assistant
3	Testing	0.25	REME tech

TRAILER PARTS/ITEMS

Installation kit

7 Installation kit items are listed in Table 2.

TABLE 2 INSTALLATION KIT

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1		AA-2462-011	Body, trailer, forward, aircraft repair	1	
2		F164	Screw, countersunk, M8 x 25	2	
3		F394	Washer, plain, M8	2	
4		F353	Nut, nyloc, M8	12	
5		AA-2462-147	Extension harness	1	
6		01200306B	Tie-wrap, 200 x 4 mm	2	

Items to be removed

8 Items to be removed and stored are listed in Table 3. Items to be removed and retained for reinstallation are listed in Table 4.

TABLE 3 ITEMS TO BE REMOVED AND STORED

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1		AA-2322-232	Duckboard	1	
2		F1046	Nut	6	
3		F1047	Washer	6	
4		AA-2323-168	Reinforcing section	2	
5		AA-2323-285	Shackle	6	
6		AA-2323-136	Body, trailer GS	1	

TABLE 4 ITEMS TO BE REMOVED AND REINSTALLED

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1		F1126	Bolt	10	
2		F1017	Washer	20	
3		F1101	Screw	4	
4		F1058	Washer, spring	4	

(continued)

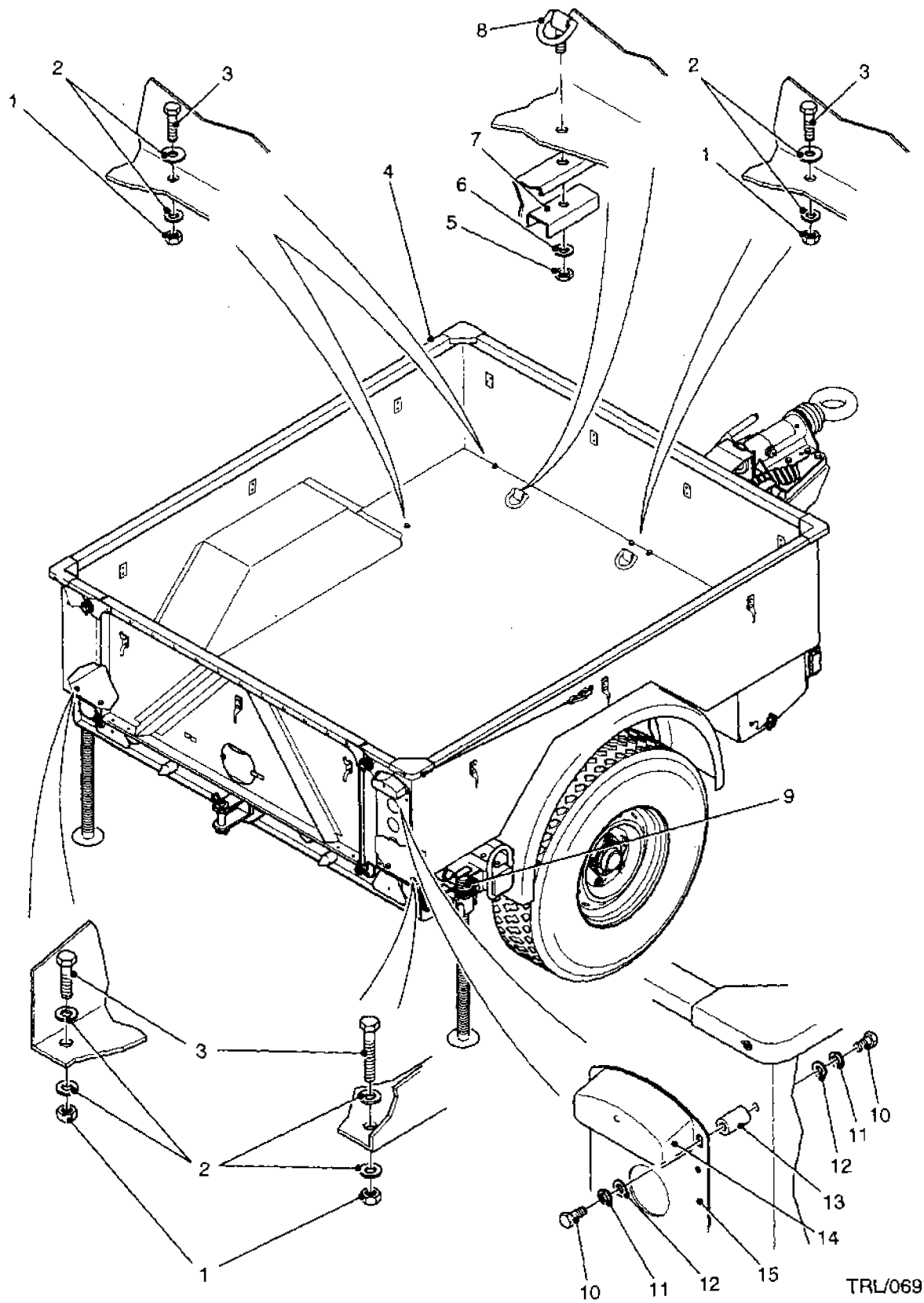


Fig 1 Trailer with GS body

TABLE 4 ITEMS TO BE REMOVED AND REINSTALLED (continued)

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
5		F1060	Washer, flat	4	complete with number plate and registration light
6		AA-2323-210	Number plate bracket	1	
7		C-F-20-15-M6-57	Spacer	2	

DISMANTLING/PREPARATION

9 To dismantle/prepare the trailer for its new body, proceed as follows:

- 9.1 Position the trailer on firm, flat, level ground under a suitable overhead crane if available.
- 9.2 Deploy the jockey wheel and rear support stands (Fig 1 (9)) to level the trailer.
- 9.3 Ensure the jockey wheel and support stands are locked and the handbrake fully on.
- 9.4 Remove the duckboard and store (Table 3, Serial 1).

NOTE

The reinforcing sections (7) are fitted to the two outer front shackles only.

- 9.5 With the aid of an assistant, remove the nuts (5), washers (6), reinforcing sections (where fitted) and shackles (8) (Table 3, Serials 2, 3, 4 and 5) at six positions.
- 9.6 With the aid of an assistant, remove the locking nuts (1), bolts (3) and washers (2) at ten positions, securing the trailer body (4) to its chassis. Discard the nuts and retain the bolts and washers for reinstalling (Table 4, Serials 1 and 2).
- 9.7 Disconnect the electrical harness from the registration light (14) and move the harness clear of the number plate bracket (15) and trailer body.
- 9.8 Remove the two screws (10), spring washers (11) and flat washers (12) securing the number plate bracket to the spacers (13). Retain the screws and washers for reinstalling (Table 4, Serials 3, 4 and 5).

Key to Fig 1

- | | | | |
|---|---------------------|----|----------------------|
| 1 | Locking nuts | 9 | Rear support stand |
| 2 | Washer | 10 | Screw |
| 3 | Bolts | 11 | Spring washer |
| 4 | Trailer GS body | 12 | Flat washer |
| 5 | Nut | 13 | Spacer |
| 6 | Washer | 14 | Registration light |
| 7 | Reinforcing section | 15 | Number plate bracket |
| 8 | Shackle | | |

9.9 Supporting the spacers, remove the two screws (10), spring washer (11) and flat washer (12) securing the spacer to the trailer GS body. Remove and retain all items for reinstalling (Table 4, Serials 3, 4, 5 and 7).

WARNING

PERSONAL INJURY. THE GS BODY WEIGHS 120 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.

9.10 Raise the right-hand corner of the trailer GS body and remove the number plate bracket complete with number plate and registration light. Retain the number plate bracket for reinstalling (Table 4, Serial 5).

9.11 Using suitable lifting tackle, lift the trailer GS body, clear of its chassis, and store (Table 3, Serial 6).

9.12 Inspect the balata belting for serviceability. If unserviceable replace as detailed in the Cat 522, Chap 2.

FITTING OF FORWARD AIRCRAFT REPAIR BODY

10 To fit the FAR body, proceed as follows:

WARNING

PERSONAL INJURY. THE FORWARD AIRCRAFT REPAIR BODY WEIGHS 300 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.

10.1 With the aid of an assistant, position the FAR body (Fig 2 (1)) (Table 2, Serial 1) onto the trailer chassis, correctly orientated with the rear door (10) to the rear of the trailer.

10.2 Open both side doors (3) and side flaps (2). Deploy the work benches (Fig 4 (2)) and remove the plywood lid centres (13) and plywood lid sides (12) from both sides.

10.3 Align the mounting bolt holes and secure the FAR body to the trailer chassis with the bolts, washers and reinforcing section (Table 4, Serials 1, 2 and 7) and new nuts (Table 2, Serial 4).

10.4 Tighten the nuts to 23 Nm.

10.5 Refit the plywood lid centres and sides, raise the work benches and close the side doors and flaps.

10.6 Secure the two spacers, with the screws, spring washers and flat washers (Table 4, Serials 3, 4, 5 and 7), to the right-hand jerry can holder (9) cross member (4).

10.7 Locate the number plate bracket (5), complete with number plate and registration light (Table 4, Serial 6) onto its mounting points, on the jerry can holder, and secure, at the top, with two screws, spring washers and flat washers (Table 4, Serials 3, 4 and 5).

10.8 Secure the number plate, at the bottom, with two screws (6), plain washers (7) and nyloc nuts (8) (Table 2, Serials 2, 3 and 4).

10.9 Attach the harness extension (Table 2, Serial 5) to the registration light harness and connect to the registration light.

10.10 Secure the registration light harness to the jerry can holder/FAR body as required with the tie-wraps (Table 2, Serial 6).

TESTING

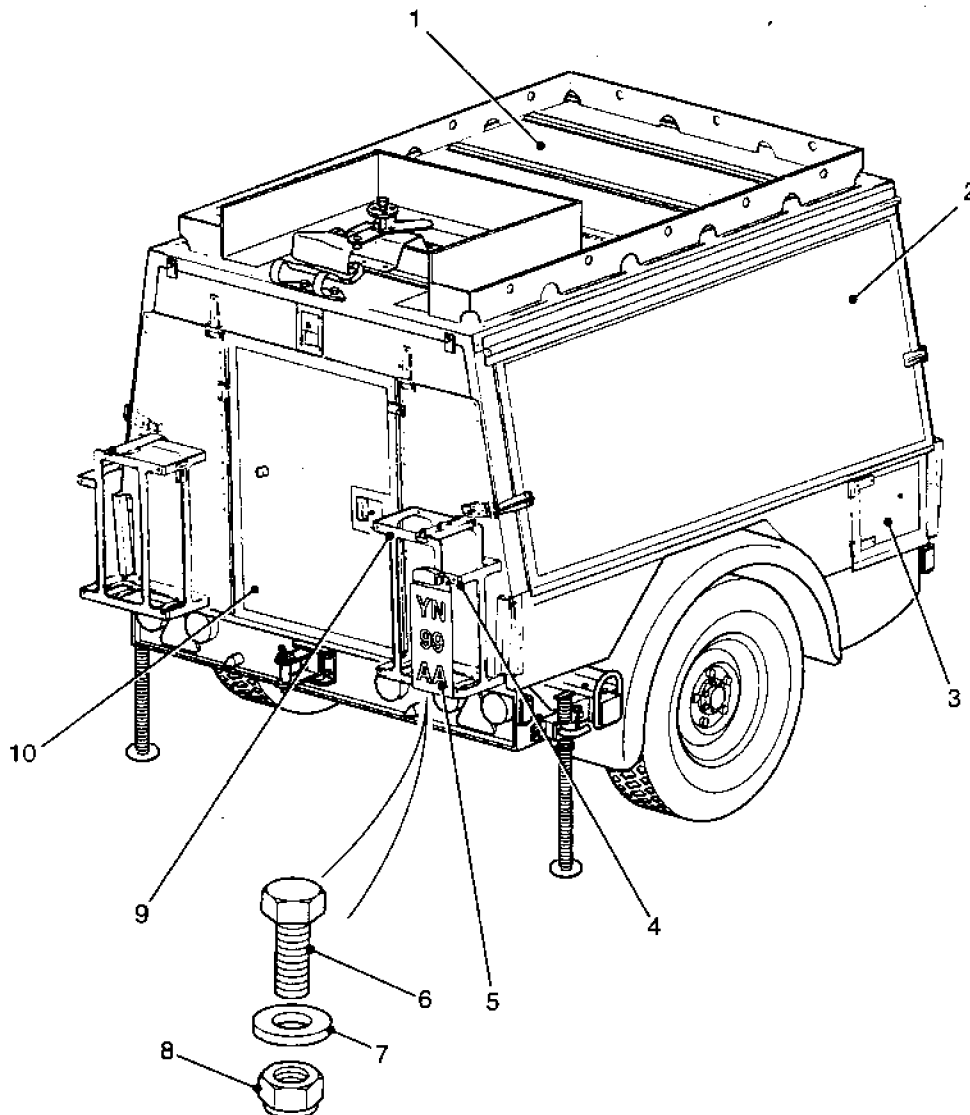
- 11 Connect the trailer electrics to a suitable prime mover and check operation of registration light.

DOCUMENTATION

- 12 Enter details of the winch assembly into the unit lifting tackle register (F88).

PARTS LIST

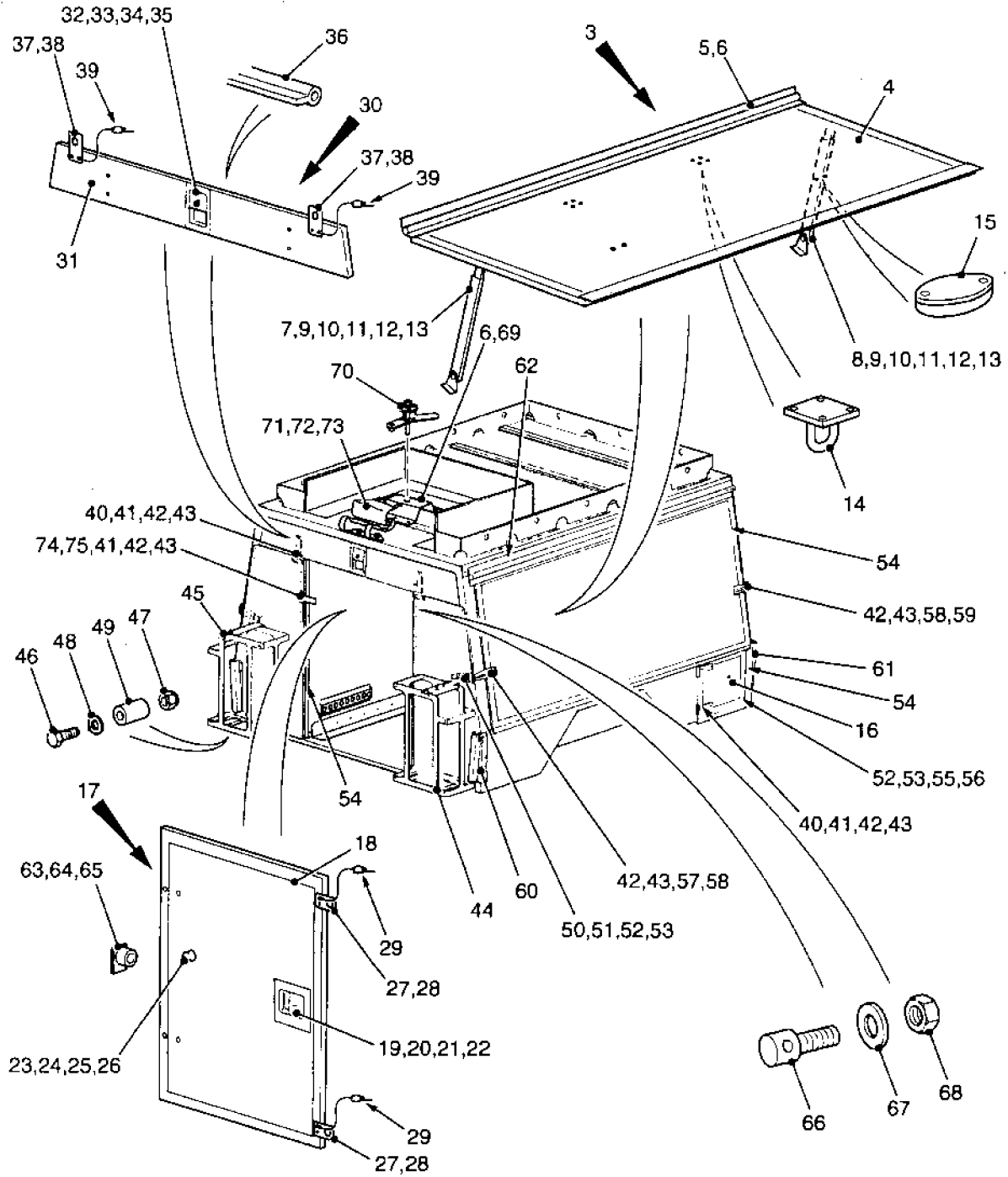
- 13 See Pages 8 to 15/16 for parts list details.



TRL/070

- | | | | |
|---|----------------------|----|-----------------------------|
| 1 | FAR body | 6 | Screw |
| 2 | Side flap | 7 | Plain washer |
| 3 | Side door | 8 | Nyloc nut |
| 4 | Cross member | 9 | Right-hand jerry can holder |
| 5 | Number plate bracket | 10 | Rear door |

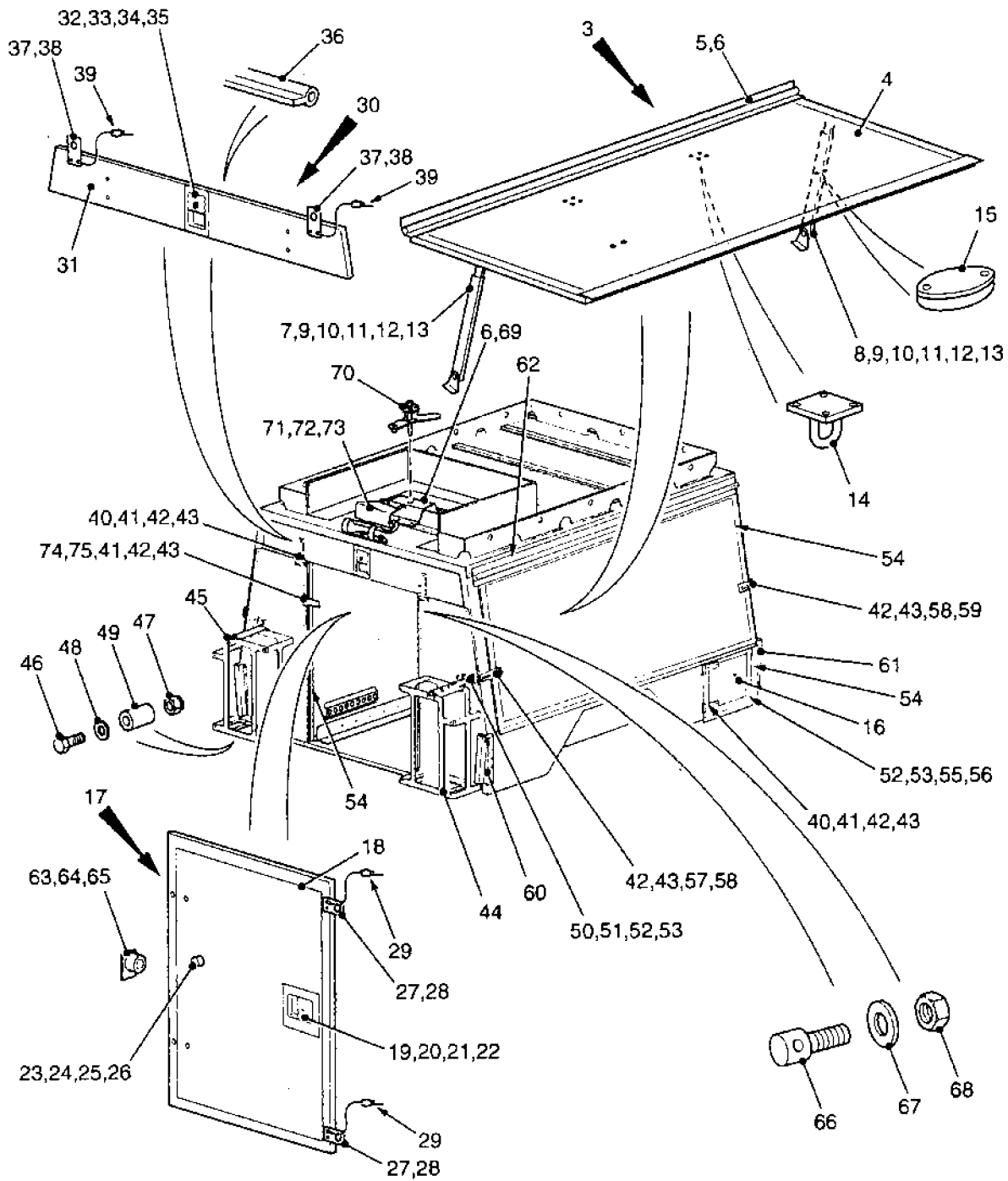
Fig 2 Trailer with FAR body



TRL/071

Fig 3 FAR body, external items

Fig 3 Item	DMC Army	NATO stock number	Item name	Part No./ Dwg No.	No. off	Annotation (NSCM)
NI 1			BODY, FORWARD AIRCRAFT REPAIR		1	
NI 2			.. FITTINGS, EXTERIOR	AA-2462-006	1	
3			.. FLAP, SIDE, ASSY	MS-2462-046	2	
4			.. FLAP, SIDE PANEL	AA-2462-045	1	
5			.. HINGE x 1825.00 LONG	SVF525-1825	1	
6			.. RIVET, ALUM, DIA 4.8, 5.0-6.5	SR01-4811	44	
7			.. STAY, SUPPORT WITH THUMB SCREW AND BOTTOM BRKT	9-0006	2	
8			.. SUPPORT STAY (NO BRKT)	9-00557	2	
9			.. PLATE FORMED - STAY BRKT	AA-2462-066	3	
10			.. SCREW, SOCKET HD, BUTTON, M6 x 30	F109	4	
11			.. SCREW, SOCKET HD, BUTTON, M6 x 20	F107	4	
12			.. NUT, NYLOC, M6	F349	8	
13			.. WASHER, PLAIN, M6 x 1/2	F382	8	
14			.. PLATE, STAPLE	750-711	2	
15			.. BUFFER, RUBBER	2023-002	2	
16			.. DOOR, SIDE, ASSY	MS-2462-048	2	
17			.. DOOR, REAR, ASSY	MS-2462-050	1	
18			.. PANEL, REAR DOOR	AA-2462-049	1	
19			.. HANDLE, PADDLE, HOOK LATCH BLACK, STAINLESS	9-00447B/PL	1	
20			.. SCREW, SOCKET HD, BUTTON, M5 x 25	F050	4	
21			.. NUT, NYLOC, M5	F345	4	
22			.. WASHER, PLAIN, M5 x 3/8	F375	4	
23			.. HOLDER, DOOR, RUBBER (MALE)	0666/002	1	
24			.. SCREW, HEX HD, M6 x 30	F060	1	
25			.. WASHER, PLAIN, M6	F382	1	
26			.. NUT, NYLOC, M6	F349	1	
27			.. PLATE	AA-2462-127	2	
28			.. RIVET, ALUM, DIA 4.8, 5.0-6.5	SR01-4811	4	
29			.. LANYARD ASSY WITH COTTER PIN	AA-2323-299	2	
30			.. FLAP, REAR, ASSY	MS-2462-053	1	
31			.. PLATE, FORMED (REAR FLAP)	AA-2462-052	1	
32			.. HANDLE, PADDLE, HOOK LATCH, STAINLESS	9-00449-PL	1	
33			.. SCREW, SOCKET HD, BUTTON, M5 x 20	F048	4	
34			.. NUT, NYLOC, M5	F345	4	
35			.. WASHER, PLAIN, M5 x 3/8	F375	4	
36			.. SEAL, TOP TUBE	4833-0032	A/R	
37			.. PLATE	AA-2452-127	2	
38			.. RIVET, ALUM, DIA 4.8, 5.0-6.5	SR01-4811	4	
39			.. LANYARD ASSY WITH COTTER PIN	AA-2323-299	2	
40			.. HINGE, STAINLESS STEEL, 304	9810-6330	6	
41			.. SCREW, SOCKET HD, BUTTON, M6 x 25	F108	32	
42			.. NUT, NYLOC, M6	F349	48	
43			.. WASHER, PLAIN, M6 x 3/4	F384	48	
44			.. FRAME, JERRY CAN, ASSY (RH)	MS-2397-080	1	



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Fig 3 FAR body, external items

Fig 3 item	DMC Army	NATO stock number	Item name	Part No./ Dwg No.	No. off	Annotation (NSCM)
			BODY, FORWARD AIRCRAFT REPAIR - contd.			
			FITTINGS, EXTERIOR - contd			
45			FRAME, JERRY CAN, ASSY (LH)	MS-2462-054	1	
46			SCREW, SOCKET HD, BUTTON, M8 x 40	F180	8	
47			NUT, NYLOC, M8	F353	10	
48			WASHER, PLAIN, M8 x 1	F094	10	
49			BOSS, DRILLED, 9.00	AA-2462-055	8	
50			FASTENER, OVERCENTRE, 703 SERIES ST/ST	9100-703RLSS	4	
51			SCREW, CSK, M5 x 20	F008	12	
52			NUT, NYLOC, M5	F345	16	
53			WASHER, PLAIN, M5 x 3/8	F375	16	
54			SEAL, DOOR, SPONGE RUBBER SECTION (ALL APERTURES LESS REAR FLAP)	SR 5052	A/R	
55			BOLT, SLAM, RING TAIL	2467-001	2	
56			SCREW, HEX HD, M5 x 25	F014	4	
57			KEEPER ASSY, LONG	MS-2462-094	2	
58			SCREW, SOCKET HD, BUTTON, M6 x 35	F110	16	
59			KEEPER ASSY, SHORT	MS-2462-095	2	
60			BRKT, CAM POLE ASSY, LH	MS-2421-175	2	
61			BRKT, CAM POLE ASSY, RH	MS-2421-177	2	
62			RIVET, ALUM, DIA 4.8, 3.5-5.0	SR01-4895	4	
63			HOLDER, DOOR (FEMALE)	0774001	1	
64			SCREW, HEX HD, M6 x 25	F059	1	
65			NUT, NYLOC, M6	F349	1	
66			PEG, RETAINING	AA-2323-212	4	
67			WASHER, FLAT, M10	F1026	4	
68			NUT, PLAIN, M10	F1027	4	
69			ASSEMBLY PLATE, SPARE WHEEL TIE DOWN	AA-2462-137	1	
70			ASSEMBLY PIN AND PLATE, SPARE WHEEL	AA-2462-144	1	
71			SCREW, HEX HD, M12 x 25	F238	2	
72			NUT, NYLOC, M12	F061	2	
73			HARNES, SPARE WHEEL SUPPORT	HS-F8921	1	
74			HINGE, FEMALE	AA-2462-149	2	
75			HINGE, MALE	AA-2462-150	2	

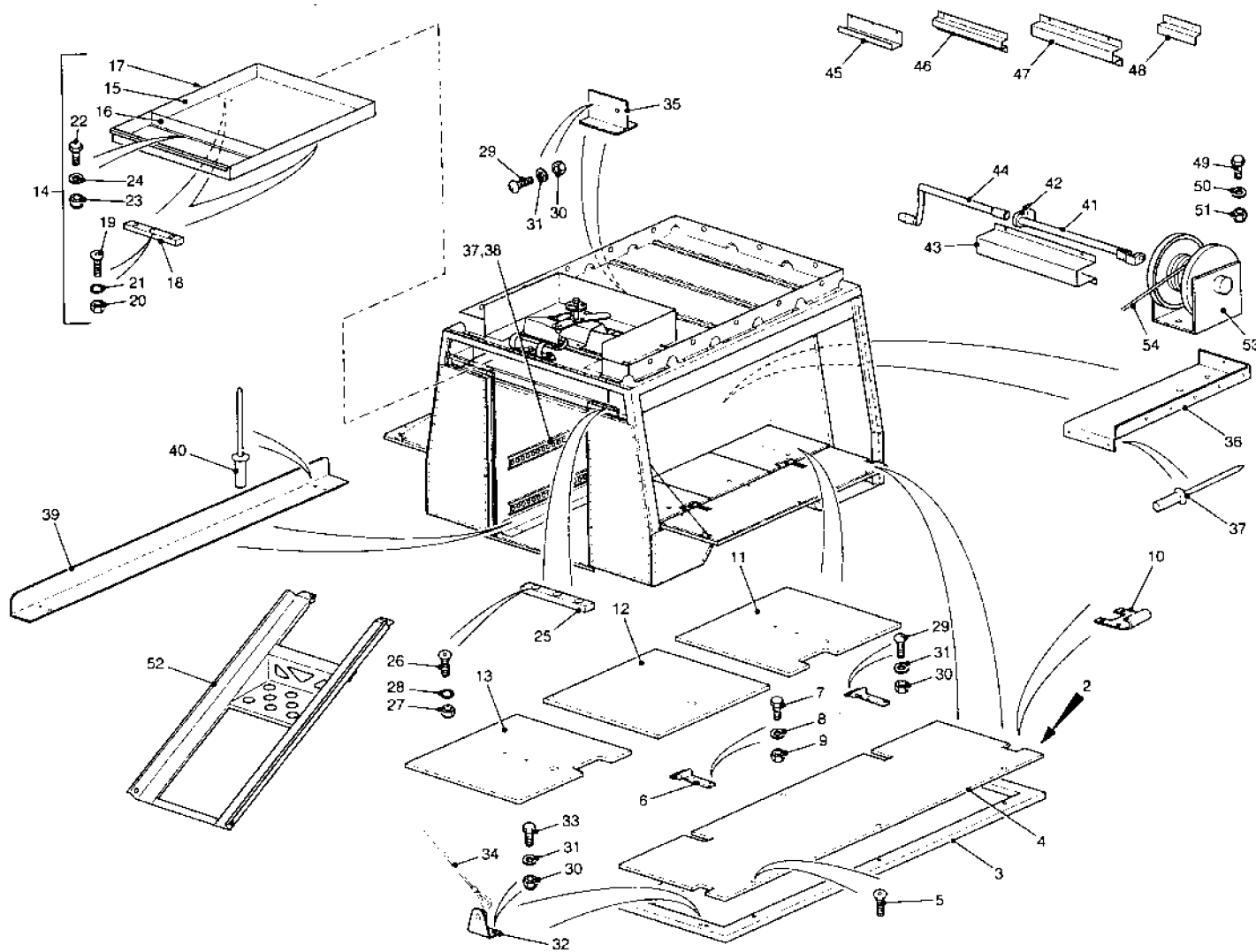


Fig 4 FAR body, internal items

TRM/072

Fig A Item	DMC Army	NATO stock number	Item name	Part No./ Dwg No.	No. off	Annotation (NSCM)
NI 1			BODY, FORWARD AIRCRAFT REPAIR			
2			FITTINGS, INTERNAL	AA-2462-005	1	
3			BENCH, WORK, ASSY	MS-2462-061	2	
4			FRAME	C84-3700	1	
5			WORK TOP	AA-2462-060	1	
6			SCREW, SKT CSK HD, M6 x 20	F111	10	
7			HINGE	9610-6330	2	
8			BOLT	F107	4	
9			WASHER	F388	4	
10			NUT	DVNO1-02634	4	
11			LATCH	437-000	1	
12			LID ASSY, SIDE, PLYWOOD	AA-2462-111	2	
13			LID ASSY, CENTRE, PLYWOOD	AA-2462-112	2	
14			LID ASSY, SIDE, PLYWOOD	AA-2462-109	2	
15			DRAWER ASSY	MS-2462-089	1	
16			PLATE, FORMED, DRAWER	AA-2462-067	1	
17			PLATE, FORMED, PARTITION	AA-2462-070	1	
18			TRIM, EDGE	4948-002	A/R	
19			GUIDE, DRAWER	AA-2462-068	2	
20			SCREW, CSK, M6 x 12	F088	6	
21			NUT, PLAIN, M6	F351	6	
22			WASHER, SHAKEPROOF, M6	F388	6	
23			SCREW, HEX HD, M8 x 16	F119	2	
24			NUT, NYLOC, M8	F353	2	
25			WASHER, PLAIN, M8 x 20	F382	2	
26			GUIDE, DRAWER	AA-2462-068	2	
27			SCREW CSK, M6 x 12	F088	6	
28			NUT, PLAIN, M6	F351	6	
29			WASHER, SHAKEPROOF	F388	6	
30			SCREW, SOCKET HD, BUTTON, M6 x 20	F107	12	
31			NUT, NYLOC, M6	F349	24	
32			WASHER, PLAIN, M6 x 1/2	F382	24	
33			PLATE, FORMED STAY BRKT	AA-2462-066	4	
34			SCREW, HEX SET, M6 x 25	F059	12	
35			CABLE, STAY	AA-2462-071	2	
36			GUIDE, BAR, TEE	AA-2462-087	2	
37			PLATE, FORMED, WINCH MOUNT	AA-2462-086	1	
38			RIVET, ALUM, DIA 4.8, 5.0-6.5	SR01-4811	100	
39			LOADLOK, 1806G x 386 mm	AA-2462-082	10	
40			PLATE, FORMED, GUIDES	AA-2462-081	2	
41			RIVET, ALUM, DIA 4.8, 0-4.5	SR21-4895	8	
42			WINCH EXTENSION	MS-2462-099	1	
43			PLATE, FORMED	AA-2462-100	1	
44			COVER, SHAFT	AA-2462-115	1	
45			HANDLE, ASSY	AA-2462-134	1	
46			PLATE, FORMED, WORKMATE	AA-2462-130	1	
47			PLATE, FORMED, SPARE WHEEL BRACE	AA-2462-126	1	
48			PLATE, FORMED, WINCH HANDLE	AA-2462-132	1	
			PLATE, FORMED, WINCH HANDLE	AA-2462-136	1	

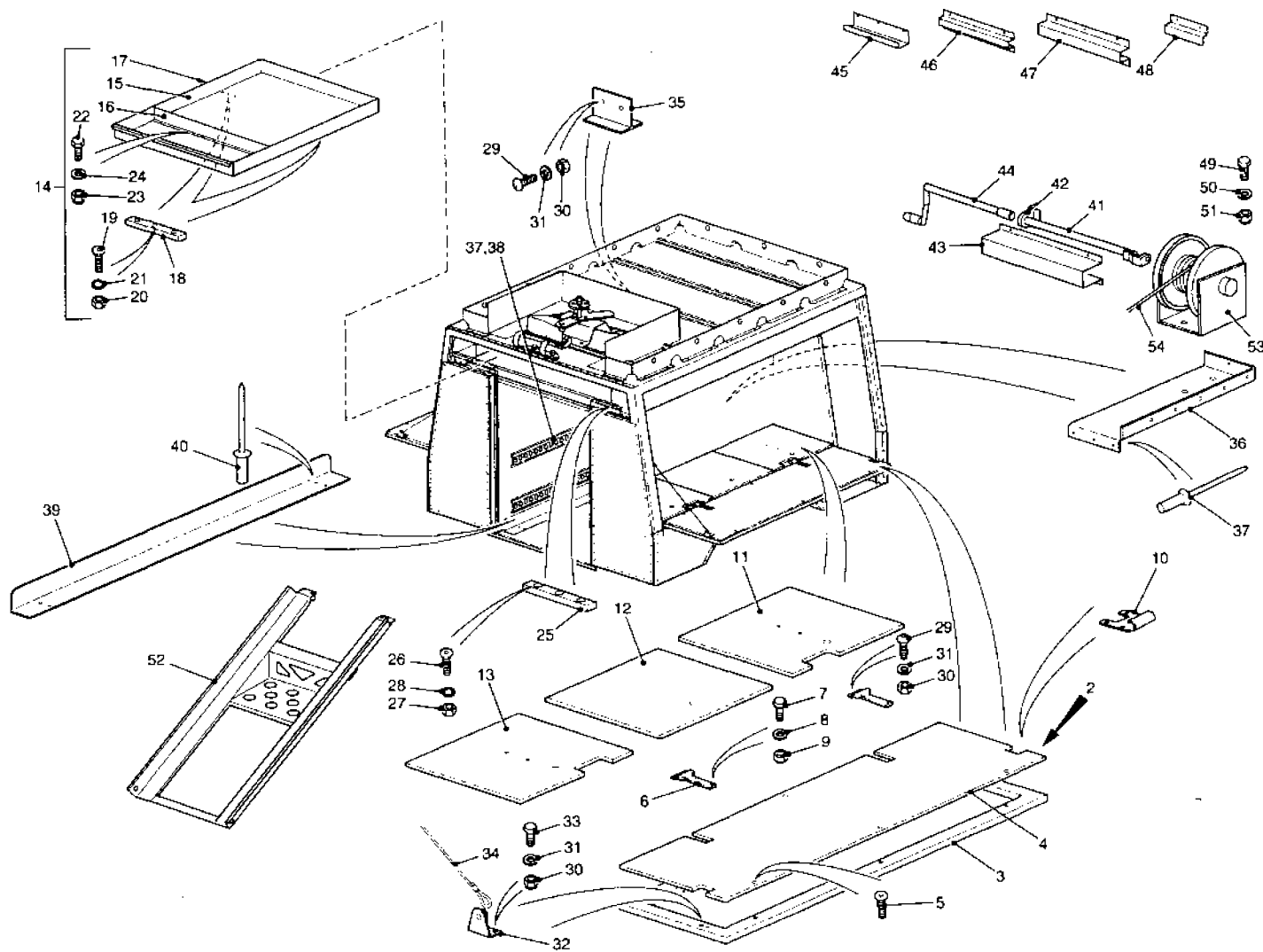
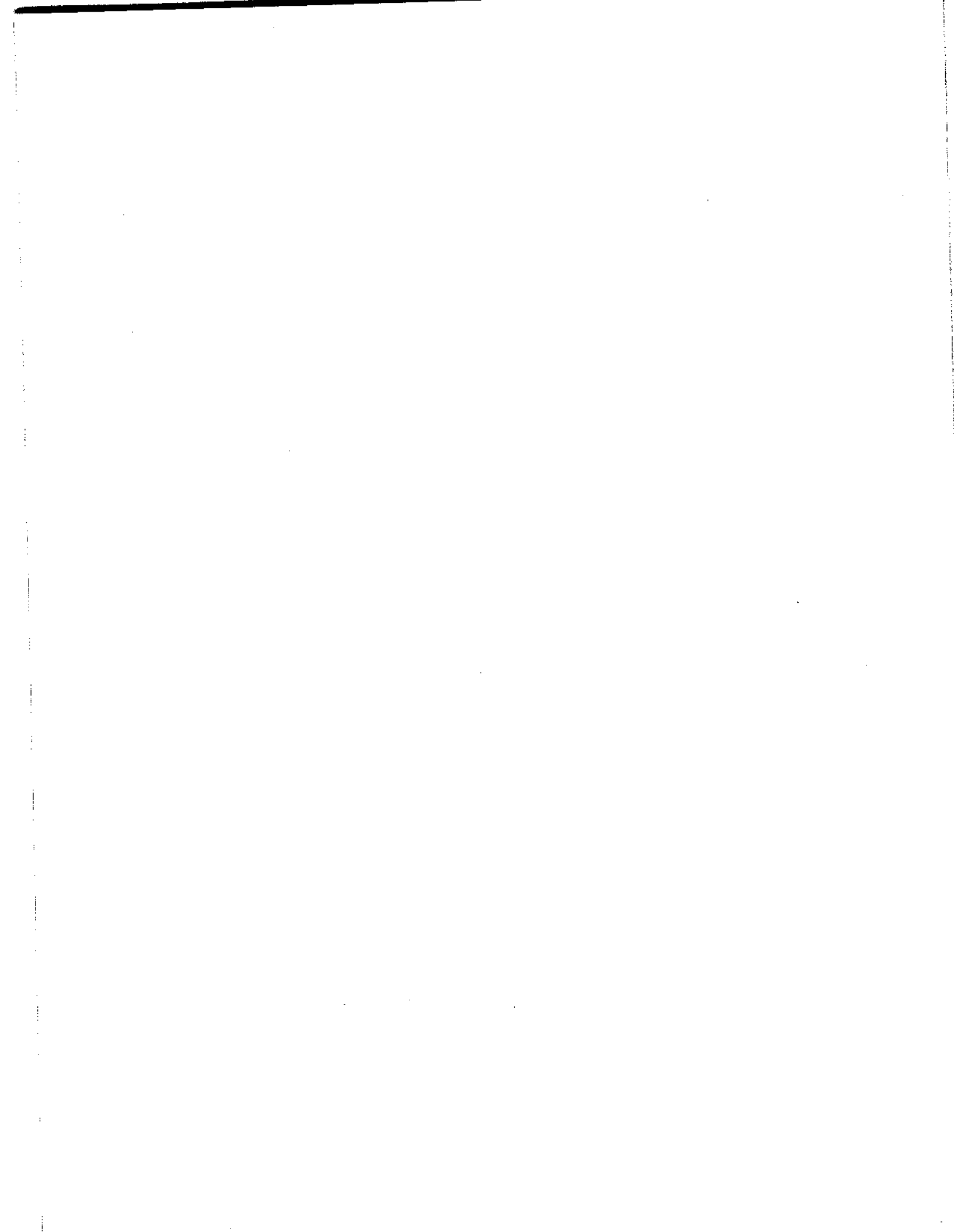


Fig 4 FAR body, internal items

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Fig 4 Item	DMC Army	NATO stock number	Item name	Part No./ Dwg No.	No. off	Annotation (NSCM)
			BODY, FORWARD AIRCRAFT REPAIR - contd			
			. FITTINGS, INTERNAL - contd			
49			.. SCREW, HEX HD, M8 x 20	F120	2	
50			.. NUT, NYLOC, M8	F353	2	
51			.. WASHER, PLAIN, M8 x 20	F392	2	
52			.. RAMP ASSY	AA-2462-078	1	
53			WINCH ASSY	AA-2462-088	1	
54			. ROPE, WINCH	AA-2462-148	1	



TRAILER LIGHTWEIGHT GS CARGO

CODE NB 2861 3101

**INSTALLATION INSTRUCTION NO. 2
FITTING OF AIRLOG 4.5 KW GENSET**

Sponsor: SUV IPT

Publication Authority: TES TIG Andover

AMENDMENT RECORD

Amdt No.	Incorporated by (Signature)	Date
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SUBJECT: The fitting of an AIRLOG 4.5 kW generator set

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WARNING

- 1 The following WARNING is used in this instruction:

PERSONAL INJURY. THE AIRLOG 4.5 KW GENSET WEIGHS 324 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.

REASON FOR INSTALLATION

- 2 This instruction details the removal of the tie down shackles from the body of the General Service (GS) cargo trailer, and the installation of an AIRLOG 4.5 kW GENSET.

RELATED AND ASSOCIATED PUBLICATIONS

- 3 The following publication is referred to in this instruction.

<u>Reference</u>	<u>Title</u>
AESP 2330-E-202-522	Maintenance Instructions

INSTALLATION IMPLEMENTATION PLAN**Action required by**

- 4 Units and establishments holding the subject trailers:
- 4.1 Demand the installation kit (refer to Table 2) when authorised.
 - 4.2 Request the unit repair to carry out the installation, when the installation kit arrives.
- 5 Units and establishments embodying this installation:
- 5.1 Carry out this installation, when requested by the holding unit. No special tools or test equipment is required.

Man-hour content

- 6 The estimated man-hour content is listed in Table 1.

TABLE 1 ESTIMATED TIME REQUIRED PER EQUIPMENT

Serial (1)	Task (2)	Man-hours (3)	Tradesman employed (4)
1	Dismantling, preparation	0.5	REME tech + assistant
2	Assembly	0.5	REME tech + assistant
3	Testing	0.25	REME tech

TRAILER PARTS/ITEMS

Installation kit

7 Installation kit items are listed in Table 2.

TABLE 2 INSTALLATION KIT

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1			Kit AIRLOG 4.5 kW (genset)	1	
2		F1209	Screw, hexagon, M12 x 30	6	
3		F1042	Washer, flat, M12	6	
4		F1041	Nut, nyloc, M12	6	

Items to be removed

8 Items to be removed and stored are listed in Table 3. Items to be removed and retained for reinstallation are listed in Table 4.

TABLE 3 ITEMS TO BE REMOVED AND STORED

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1		AA-2322-232	Duckboard	1	
2		F1046	Nut	6	
3		F1047	Washer	6	
4		AA-2323-285	Shackle	6	

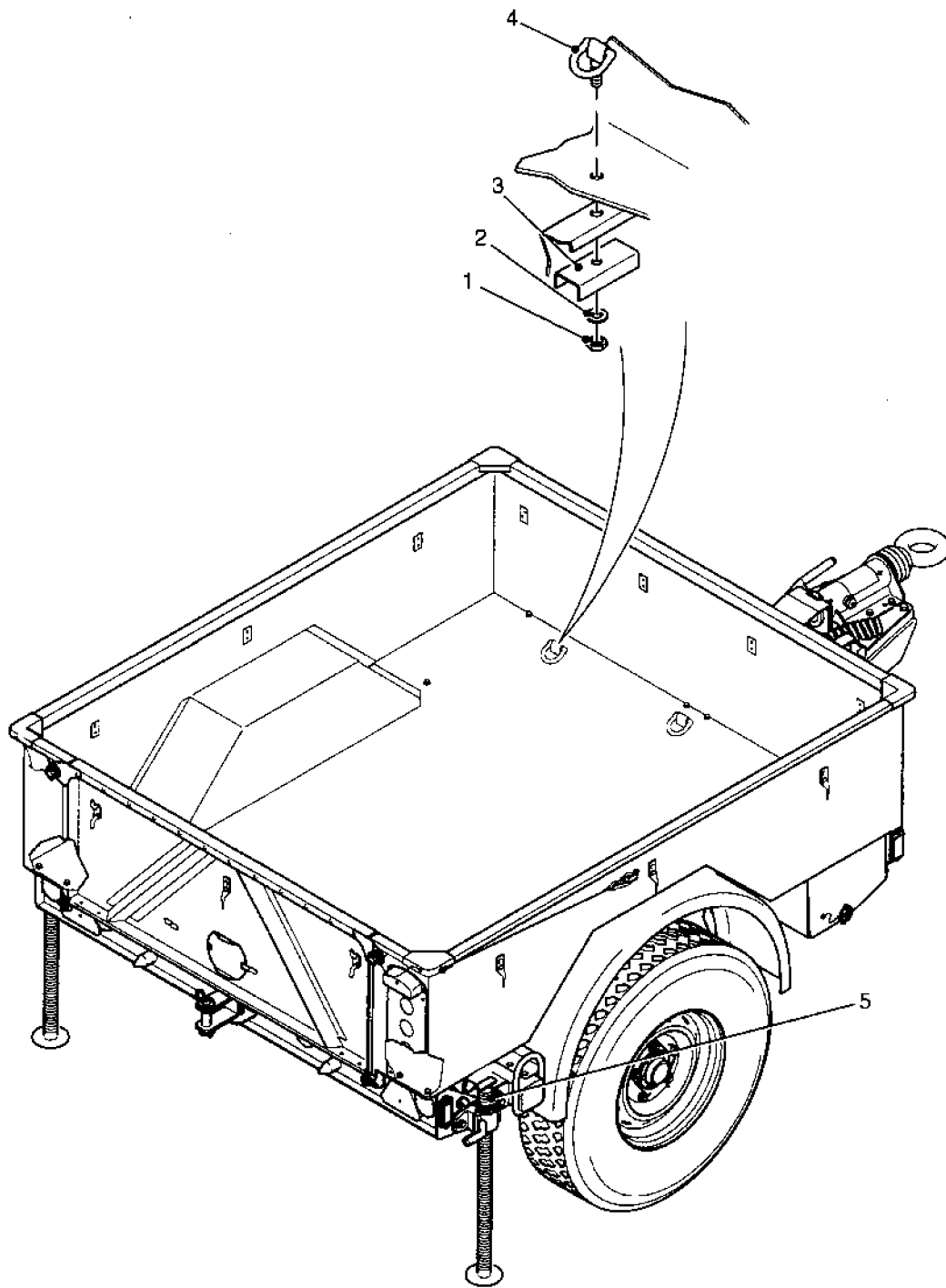
TABLE 4 ITEMS TO BE REMOVED AND REINSTALLED

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1		AA-2363-168	Plate, support	2	

DISMANTLING/PREPARATION

9 To dismantle/prepare the trailer for its installation, proceed as follows:

- 9.1 Position the trailer on firm, flat, level ground under a suitable overhead crane if available.
- 9.2 Deploy the jockey wheel and rear support stands (Fig 1 (5)) to level the trailer.
- 9.3 Ensure the jockey wheel and support stands are locked and the handbrake fully on.
- 9.4 Remove the duckboard and store (Table 3, Serial 1).



TRL/073

- | | | | |
|---|---------------|---|---------------|
| 1 | Nut | 4 | Shackle |
| 2 | Washer | 5 | Support stand |
| 3 | Support plate | | |

Fig 1 Trailer with GS body

NOTE

The support plate (3) is fitted to the two outer front shackles only.

9.5 With the aid of an assistant, remove the nuts (1), washers (2), support plates (where fitted) and shackles (4) and store (Table 3, Serials 2, 3 and 4) at six positions. Retain the support plates (Table 4, Serial 1) for refitting.

FITTING OF GENERATOR SET TO TRAILER BODY

10 To fit the Generator set (Table 1, Serial 1) proceed as follows:

WARNING

PERSONAL INJURY. THE GENERATOR SET WEIGHS 324 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.

10.1 With the aid of an assistant, install the generator frame assembly (Fig 2 (5)) into the trailer body (6) with the equipment tray facing towards the rear of the trailer.

10.2 Ensure that the mounting holes in the frame are aligned with the corresponding holes in the trailer body and secure with the six screws (9) washers (8) and nuts (7) (Table 2, Serials 2, 3 and 4). Refit the support plates removed at Para 9.5.

10.3 Fit the four tie down brackets (4) over the lugs on the generator (1).

10.4 Using a suitable lifting device and with the help of an assistant lower the generator (1) onto the frame assembly with the control panel facing toward the rear of the trailer. Ensure that the mounting holes in the tie down brackets are aligned with the corresponding holes in the frame and secure using the eight screws (2) and spring washers (3).

10.5 Attach the three earth leads (Fig 3 (4, 5 and 7)) to the generator and secure with the bolt (9) and wing nut (2).

10.6 Connect the long earth lead (4) to the earth spike (16) using screw (10) and nut (19).

10.7 Connect the short earth lead (5) to stud (11) on the frame (6) and secure with nut (12).

10.8 Connect the short earth lead (7) to the trailer body (1) and secure with screw (14) and nut (15).

10.9 Tidy up all loose leads with cable ties (3).

10.10 Thread the four equipment straps (8) through the apertures in the equipment tray (13).

10.11 Insert the mallet (17) and five exhaust extensions (18) into the equipment tray (13) and secure with the equipment straps (8).

10.12 Install and secure the fire extinguisher (20) into the bracket (21) on top of the generator.

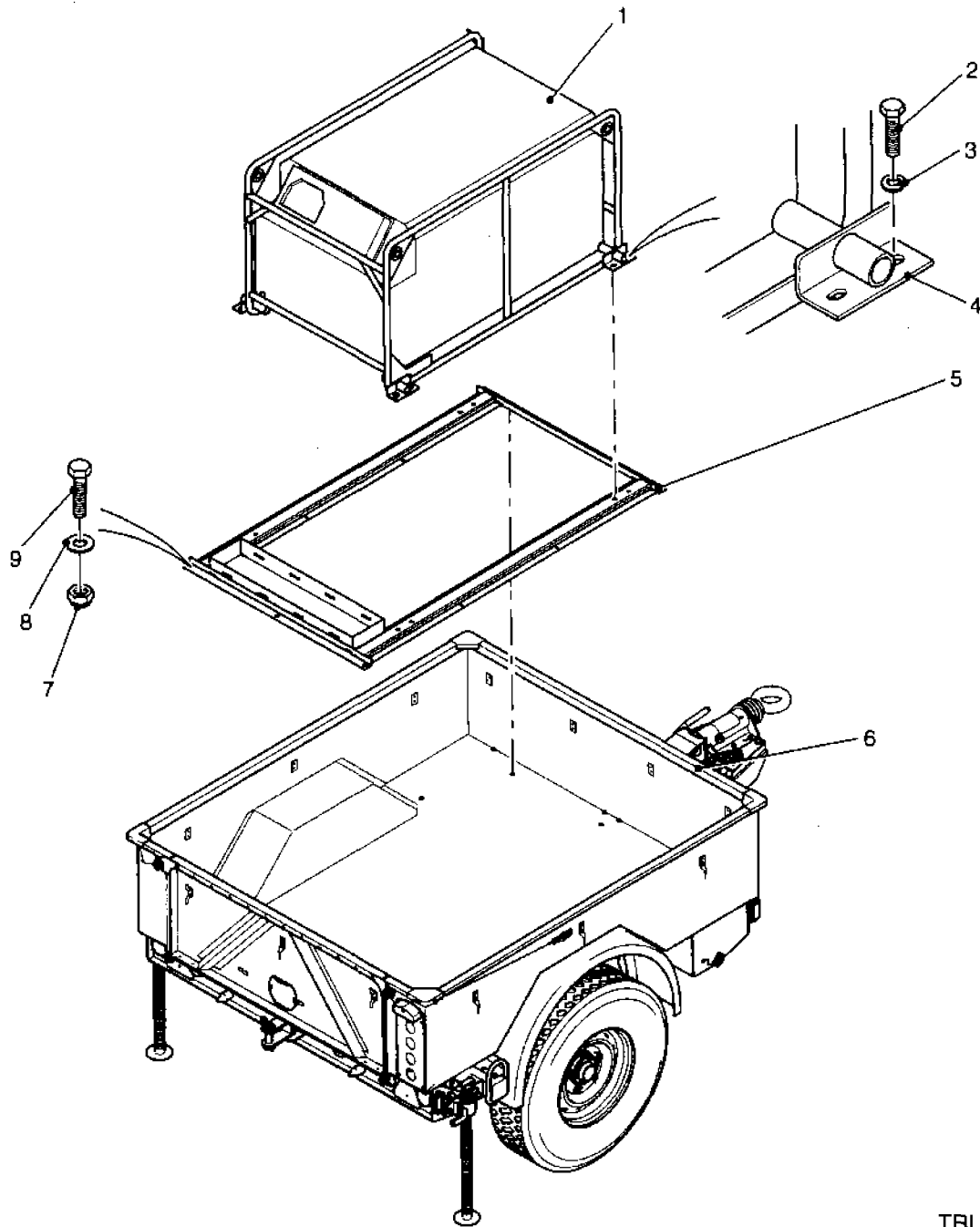
10.13 Install the canopy to the trailer body.

TESTING

11 Connect the trailer electrics to a suitable prime mover and check operation of registration light.

PARTS LIST

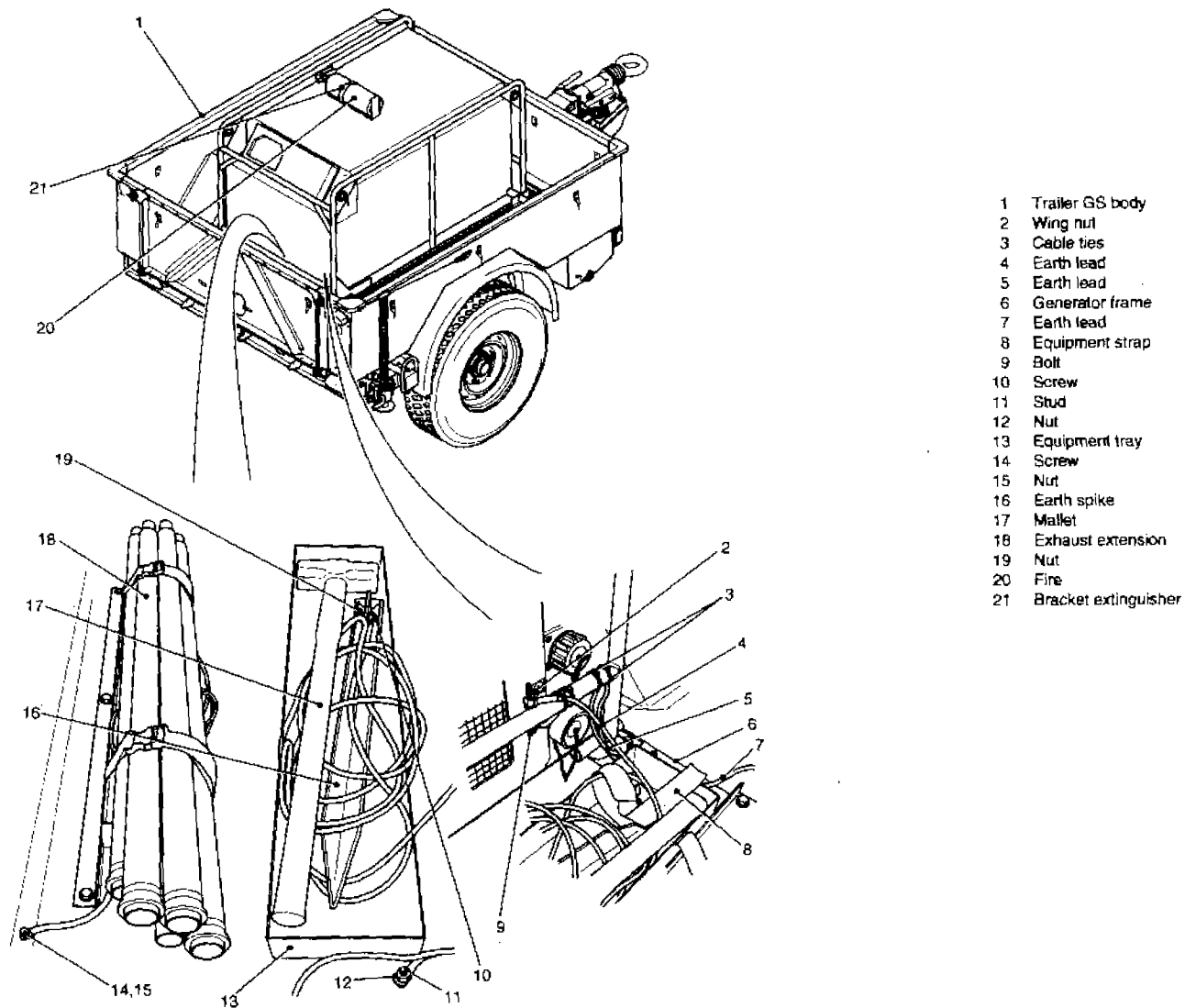
12 See Pages 8 and 9/10 for parts list details.



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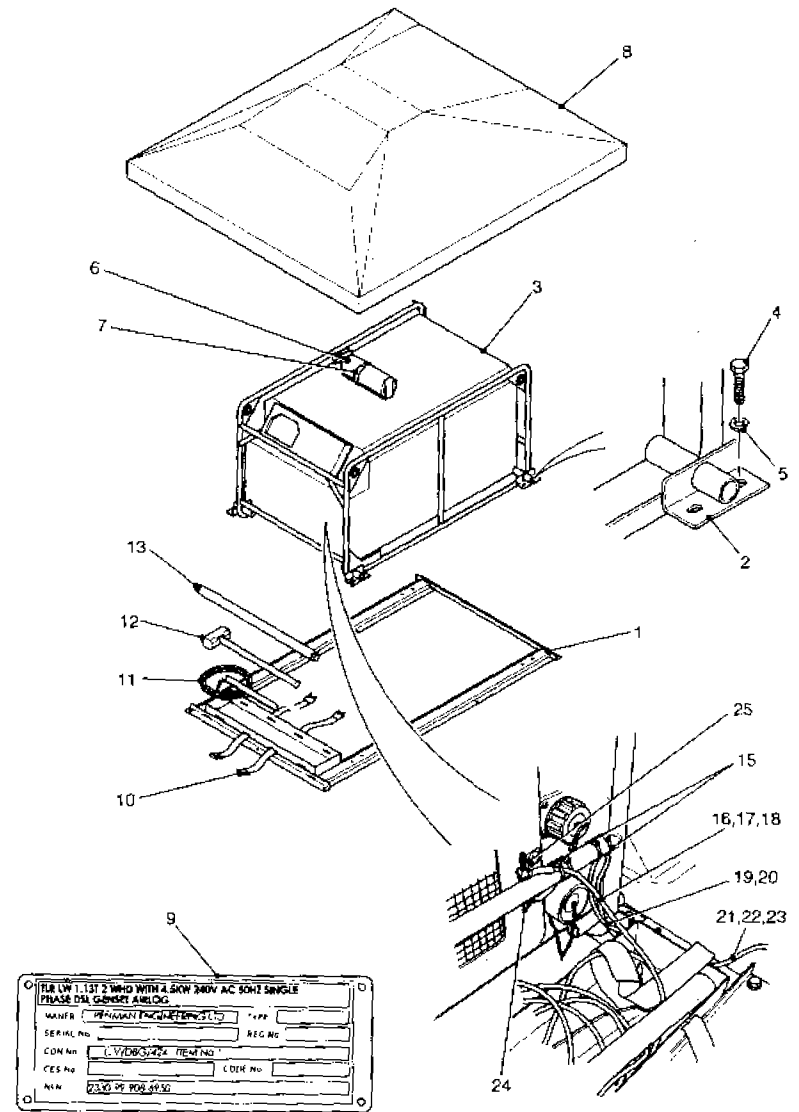
- | | | | |
|---|------------------|---|-----------------|
| 1 | Generator | 6 | Trailer GS body |
| 2 | Screw | 7 | Nyloc nut |
| 3 | Spring washer | 8 | Washer |
| 4 | Tie down bracket | 9 | Screw |
| 5 | Generator frame | | |

Fig 2 Generator installation



TRL/075

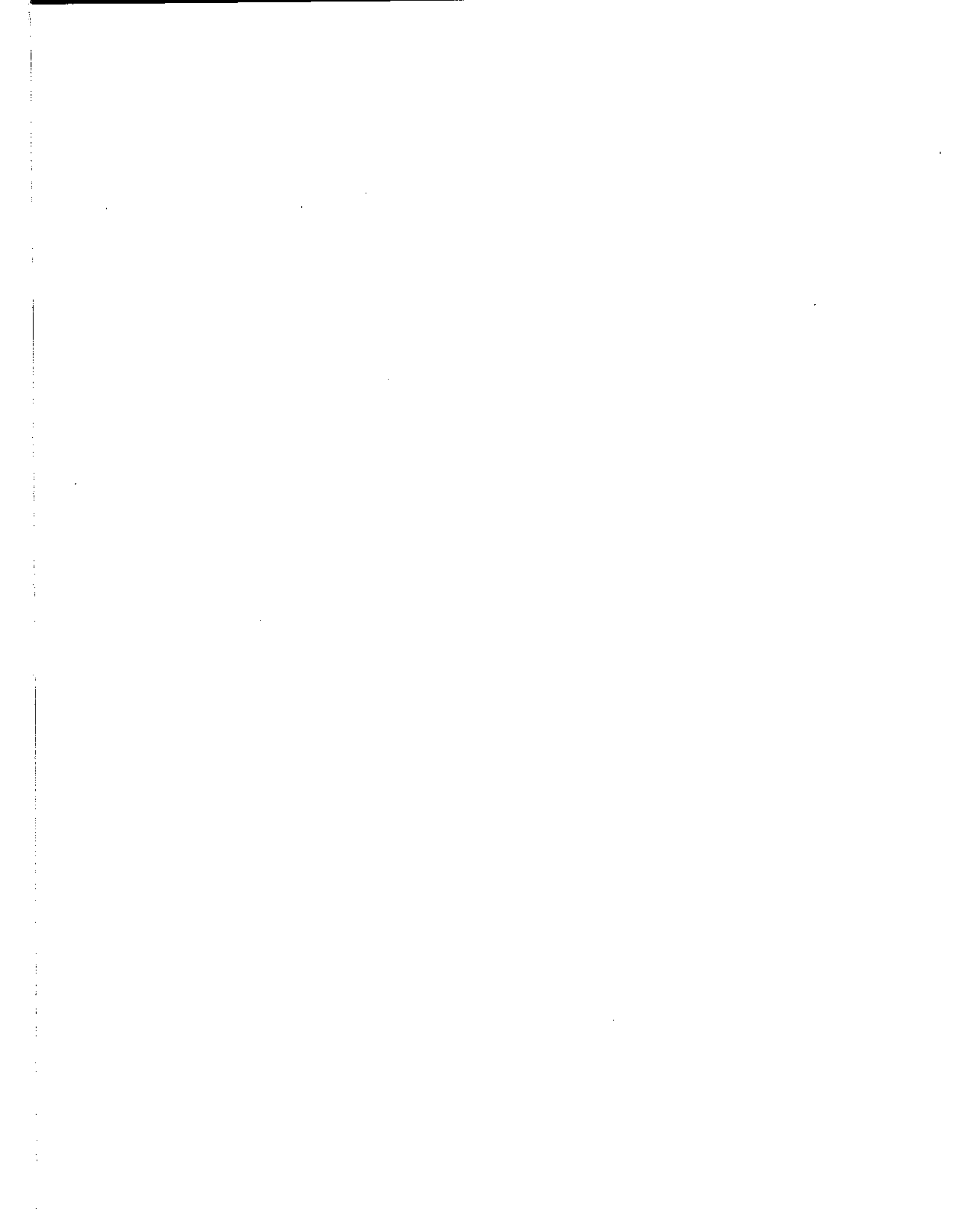
Fig 3 Generator installation



TRL/076

Fig 4 Generator installation kit

Fig 4 Item	DMC Army	NATO stock number	Item name	Part No./ Dwg No.	No. off	Annotation (NSCM)
1			INSTALLATION KIT 4.5 KW AIRLOG GENERATOR SET	MS-2558-001	1	
2			. WELDED ASSY, GENERATOR FRAME	AA-2558-027	1	
3			. TIE DOWN ASSY, GENERATOR	MS-2558-023	4	
4			. GENERATOR, AIRLOG		REF	
5			. SCREW, M10 X 25, HEX HEAD	F193	8	
6			. WASHER, SPRING, M10	F406	8	
7			. EXTINGUISHER		1	
8			. BRACKET, EXTINGUISHER		1	
9			. CANOPY, AIRLOG TRAILER	AA-2558-031	1	
10			. CONTRACT PLATE	AA-2558-030	1	
11			. EQUIPMENT STRAP		4	
12			. SPIKE, EARTH		1	
13			. MALLET		1	
14	NI		. EXTENSION, EXHAUST		5	
15			. EARTHING SCHEME			
16			.. TIE-WRAP, 200 X 4 MM	01200306B	A/R	
17			.. EARTH LEAD		1	
18			.. SCREW		1	
19			.. NUT		1	
20			.. EARTH LEAD		1	
21			.. NUT		1	
22			.. EARTH LEAD		1	
23			.. SCREW		1	
24			.. NUT		1	
25			.. BOLT		1	
			.. WING NUT		1	



TRAILER LIGHTWEIGHT GS CARGO

CODE NB 2861 4100

**INSTALLATION INSTRUCTION NO. 3
FITTING ONAN GENERATOR SETS**

Sponsor: SUV IPT

Publication Authority: TES TIG Andover

AMENDMENT RECORD

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

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

SUBJECT: The fitting of ONAN generator sets

CONTENTS

Para

- 1 Warnings
- 2 Reason for installation
- 3 Related and associated publications
Installation implementation plan
- 4 Action required by
- 6 Man-hour content
- Trailer parts/items
- 7 Installation kit
- 8 Items to be removed
- 9 Dismantling/preparation
- 10 Fitting of generator support frame to trailer body (WARNINGS)
- 11 Earth lead connection points
- 12 Parts list

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2	Generator support frame installation	6
3	Earth lead connection points	8
4	Generator installation kit.....	10

WARNINGS

- 1 The following WARNINGS are used in this instruction:
- (1) **PERSONAL INJURY. THE GENERATOR SUPPORT FRAME ASSEMBLY WEIGHS 132 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.**
 - (2) **PERSONAL INJURY. THE ONAN GENERATOR SET WEIGHS 183 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.**
 - (3) **SAFETY HAZARD. WHEN A SINGLE GENERATOR IS FITTED IT MUST BE LOCATED IN THE REAR GENERATOR POSITION TO AVOID EXCEEDING THE TRAILER DRAWBAR PREPONDERANCE.**

REASON FOR INSTALLATION

- 2 This instruction details the removal of the tie down shackles from the body of the General Service (GS) cargo trailer, and the installation of ONAN generators and associated equipment.

RELATED AND ASSOCIATED PUBLICATIONS

- 3 The following publication is referred to in this instruction.

<u>Reference</u>	<u>Title</u>
AESP 2330-E-202-522	Maintenance Instructions

INSTALLATION IMPLEMENTATION PLAN**Action required by**

- 4 Units and establishments holding the subject trailers:
- 4.1 Demand the installation kit (refer to Table 2) when authorised.
 - 4.2 Request the unit repair to carry out the installation, when the installation kit arrives.
- 5 Units and establishments embodying this installation:
- 5.1 Carry out this installation, when requested by the holding unit. No special tools or test equipment is required.

Man-hour content

- 6 The estimated man-hour content is listed in Table 1.

TABLE 1 ESTIMATED TIME REQUIRED PER EQUIPMENT

Serial (1)	Task (2)	Man-hours (3)	Tradesman employed (4)
1	Dismantling, preparation	0.5	REME tech + assistant
2	Assembly	1.5	REME tech + assistant
3	Testing	0.25	REME tech

TRAILER PARTS/ITEMS

Installation kit

7 Installation kit items are listed in Table 2.

TABLE 2 INSTALLATION KIT

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1			ONAN generator installation kit	1	
2		F1209	Screw, hexagon, M12 x 30	6	
3		F1042	Washer, flat, M12	6	
4		F1041	Nut, aero, M12	6	

Items to be removed

8 Items to be removed and stored are listed in Table 3.

TABLE 3 ITEMS TO BE REMOVED AND STORED

Serial (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)	Remarks (6)
1		AA-2322-232	Duckboard	1	
2		F1046	Nut	6	
3		F1047	Washer	6	
4		AA-2363-168	Plate, support	2	
5		AA-2323-285	Shackle	6	

DISMANTLING/PREPARATION

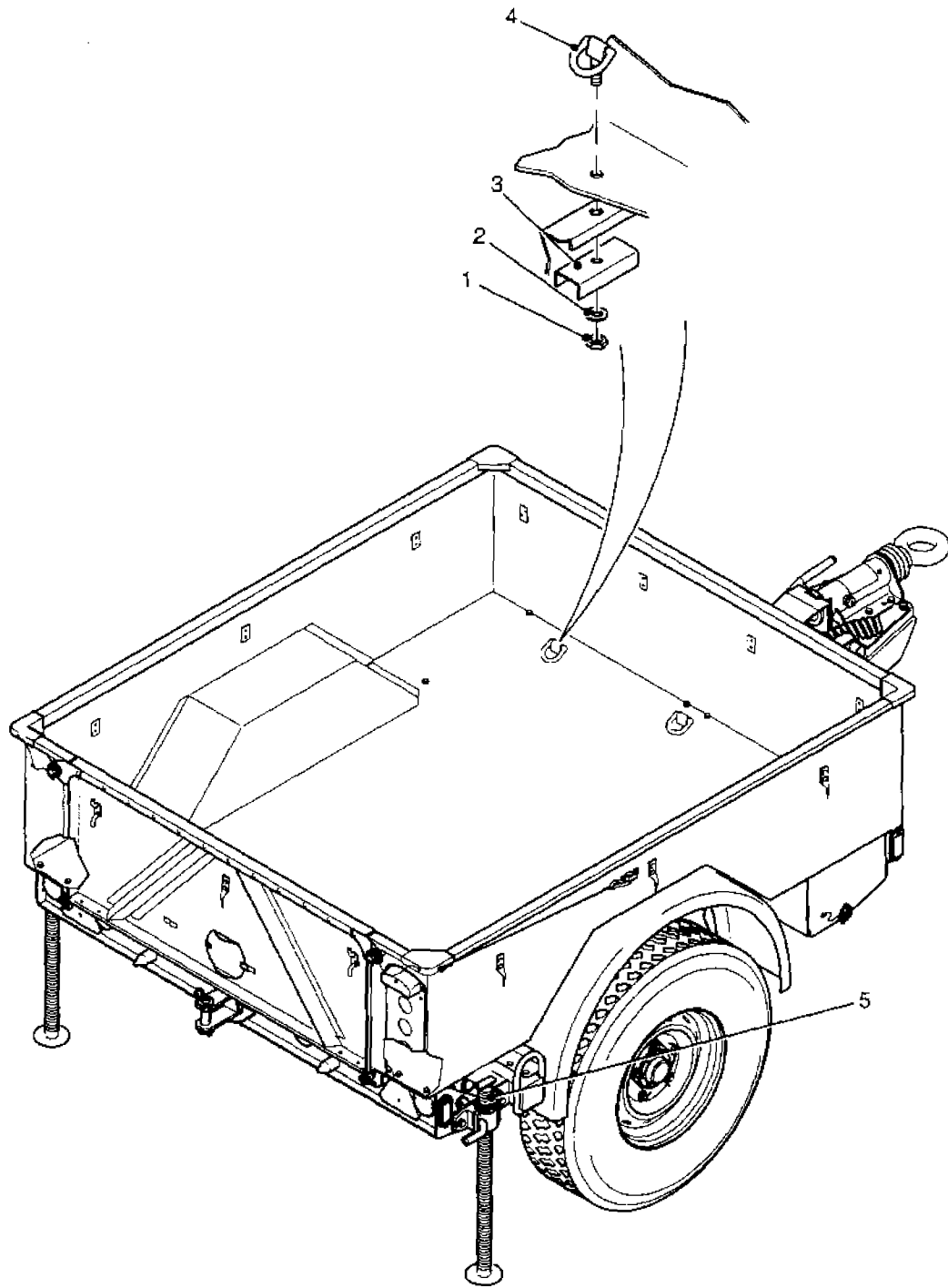
9 To dismantle/prepare the trailer for its installation, proceed as follows:

- 9.1 Position the trailer on firm, flat, level ground under a suitable overhead crane if available.
- 9.2 Deploy the jockey wheel and rear support stands (Fig 1 (5)) to level the trailer.
- 9.3 Ensure the jockey wheel and support stands are locked and the handbrake fully on.
- 9.4 Remove the duckboard and store (Table 3, Serial 1).

NOTE

The support plate (3) is fitted to the two outer front shackles only.

- 9.5 With the aid of an assistant, remove the nuts (1), washers (2), support plates (where fitted) and shackles (4) and store (Table 3, Serials 2, 3, 4 and 5) at six positions.



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- | | |
|-----------------|----------------------|
| 1 Nut | 4 Shackle |
| 2 Washer | 5 Rear support stand |
| 3 Support plate | |

Fig 1 Trailer with GS body

FITTING OF GENERATOR SUPPORT FRAME TO TRAILER BODY

10 To fit the Generator support frame, proceed as follows:

10.1 With the aid of an assistant, place the generator support frame (Fig 2 (18)) onto suitable supports to allow work on the underside of the frame.

10.2 Install rear generator frame (19) onto the support frame (18) ensuring that the mounting holes are aligned and with the aid of an assistant, secure with four screws (22), plain washers (21) and nuts (20).

10.3 Repeat the procedure for the forward generator frame.

10.4 Install jerry can frame (10) as shown in Fig 2. Align the mounting holes and with the aid of an assistant, secure with four countersunk screws (11), plain washers (12) and nyloc nuts (13).

10.5 Repeat the procedure for the remaining three jerry can frames.

WARNING

PERSONAL INJURY. THE GENERATOR SUPPORT FRAME ASSEMBLY WEIGHS 132 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.

10.6 Using a suitable lifting device and with the help of an assistant lower the support frame assembly (18) into the trailer body (14). Ensure that the mounting holes in the support frame are aligned with the corresponding holes in the trailer body and secure with six screws (17), plain washers (16) and nyloc nuts (15).

10.7 Loosen the bolts on the four generator clamps (8) on the two generator support plates (9) and rotate inboard.

WARNING

PERSONAL INJURY. THE ONAN GENERATOR SET WEIGHS 183 KG. CARE MUST BE TAKEN WHEN HANDLING TO AVOID INJURY.

10.8 Using a suitable lifting device and with the help of an assistant lower the rear generator set (2) onto the generator frame (19) and ensure the generator is correctly seated and the control panel facing forward.

10.9 Rotate the four generator clamps (8) until they are in contact with the tubular frame of the generator (2) and tighten.

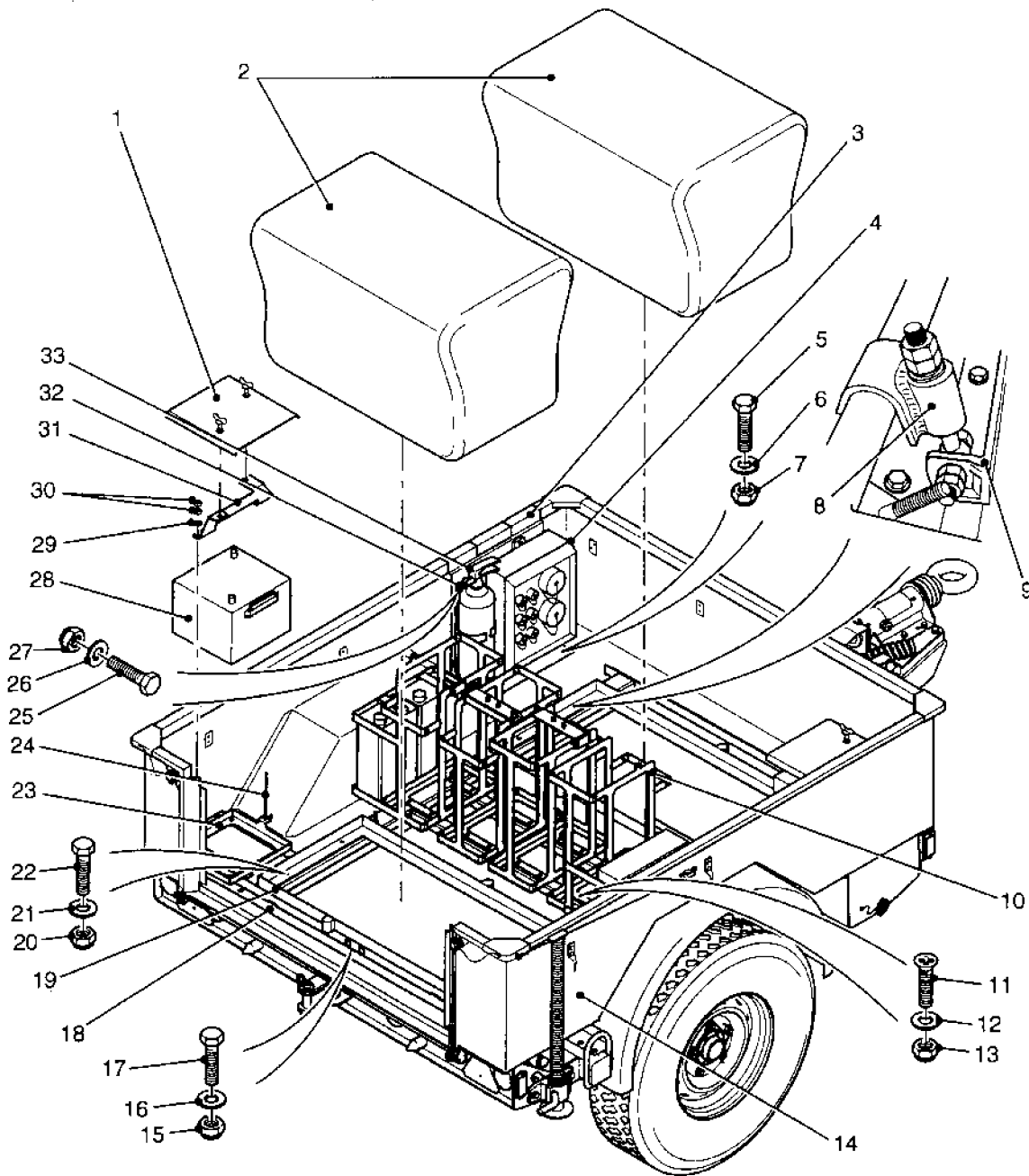
10.10 Repeat the procedure for the forward generator set ensuring that the control panel is facing rearwards.

10.11 Install the rear battery (28) onto the battery base (23). Fit two battery hooks (24) into the holes provided in the battery base (23).

10.12 Fit the clamp plate (31) over the top of the battery (28). Push the two hooks through the clamp plate and secure with two nuts (30) and a plain washer (29). Install battery cover (1).

10.13 Repeat the procedure for the forward battery.

10.14 Hook the control panel bracket (3) over the forward end of the Left-Hand (LH) side of the body panel (14). Align the holes in the panel with corresponding holes in the body floor and secure with two screws (5) washers (6) and nuts (7).



(TAILGATE REMOVED FOR CLARITY)

TRL/080

Fig 2 Generator support frame Installation

Key to Fig 2

1	Battery cover	18	Generator support frame
2	Generator set	19	Generator frame
3	Control panel bracket	20	Nut
4	Control panel	21	Washer
5	Screw	22	Screw
6	Washer	23	Battery base
7	Nut	24	Battery hook
8	Generator clamp	25	Screw
9	Support plate	26	Washer
10	Jerry can frame	27	Nut
11	Screw	28	Battery
12	Washer	29	Washer
13	Nut	30	Nut
14	Trailer body	31	Clamp plate
15	Nut	32	Fire extinguisher bracket
16	Washer	33	Fire extinguisher
17	Screw		

10.15 Fit the control panel (4) and secure with four screws, plain washers and nuts.

10.16 Fit the fire extinguisher bracket (32) to the control panel bracket (3) and secure with four screws (25), washers (26) and nuts (27). Fit the fire extinguisher (33).

EARTH LEAD CONNECTION POINTS

11 There are three common earth points within the trailer body. Earth points A and B as shown in Fig 3 are identical and are secured as shown in Detail A. Earth point C is secured as shown in Detail B. The earth leads are connected as follows:

11.1 Connect earth leads from the forward generator, forward generator frame, jerry can frames 3 and 4, rear battery frame and trailer body to common earth stud A as shown in Fig 3. Secure common earth stud A with two plain nuts (Fig 3 (1)) as shown in Detail A.

11.2 Connect earth leads from the rear generator, rear generator frame, jerry can frames 1 and 2 and forward battery frame to common earth stud A as shown in Fig 3. Secure common earth stud A with two plain nuts (1) as shown in Detail A.

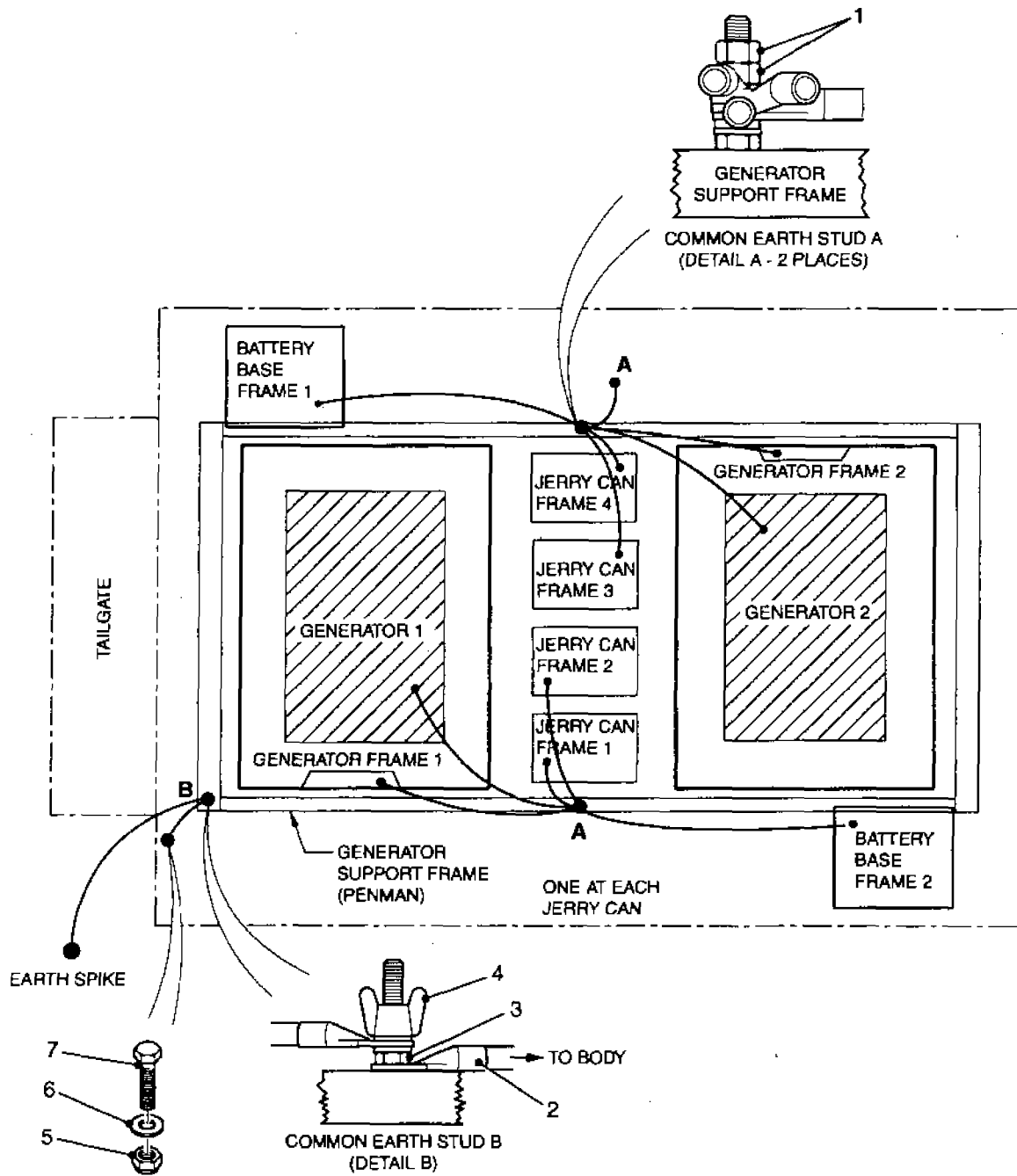
11.3 Attach rear body earth lead (2) to common earth stud B and secure with nut (3). The rear body earth lead is secured to the body using screw (7), plain washer (6) and nyloc nut (5).

11.4 Attach earth spike lead to common earth stud B and secure with wing nut (4).

11.5 Remove front and rear battery covers (Fig 2 (1)). Connect front and rear generator earth and positive connections and refit battery cover.

PARTS LIST

12 See Pages 10 and 11/12 for parts list details.

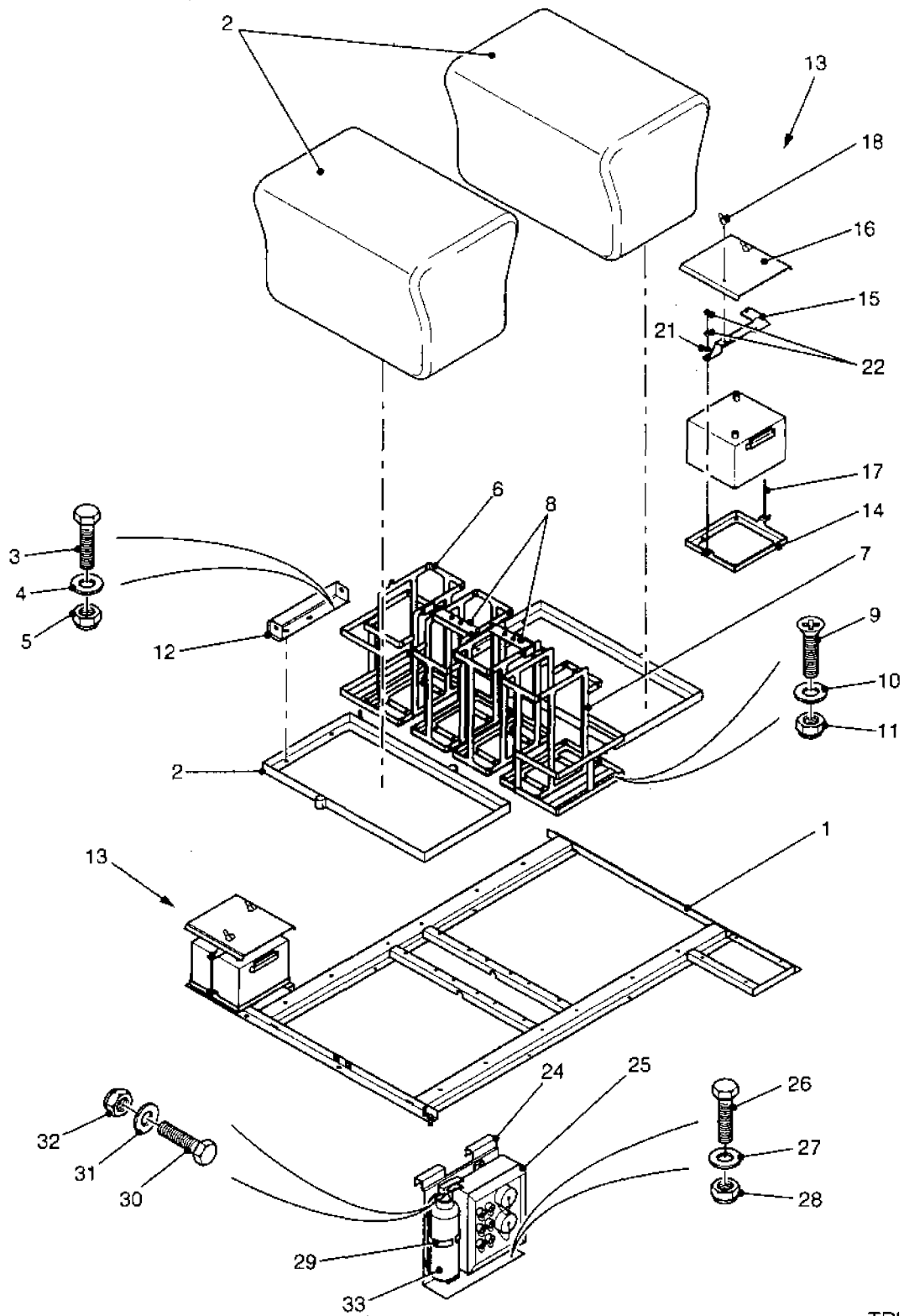


TRL/081

- | | | | |
|---|------------|---|--------------|
| 1 | Nut | 5 | Nut |
| 2 | Earth lead | 6 | Plain washer |
| 3 | Nut | 7 | Screw |
| 4 | Wing nut | | |

Fig 3 Earth lead connection points

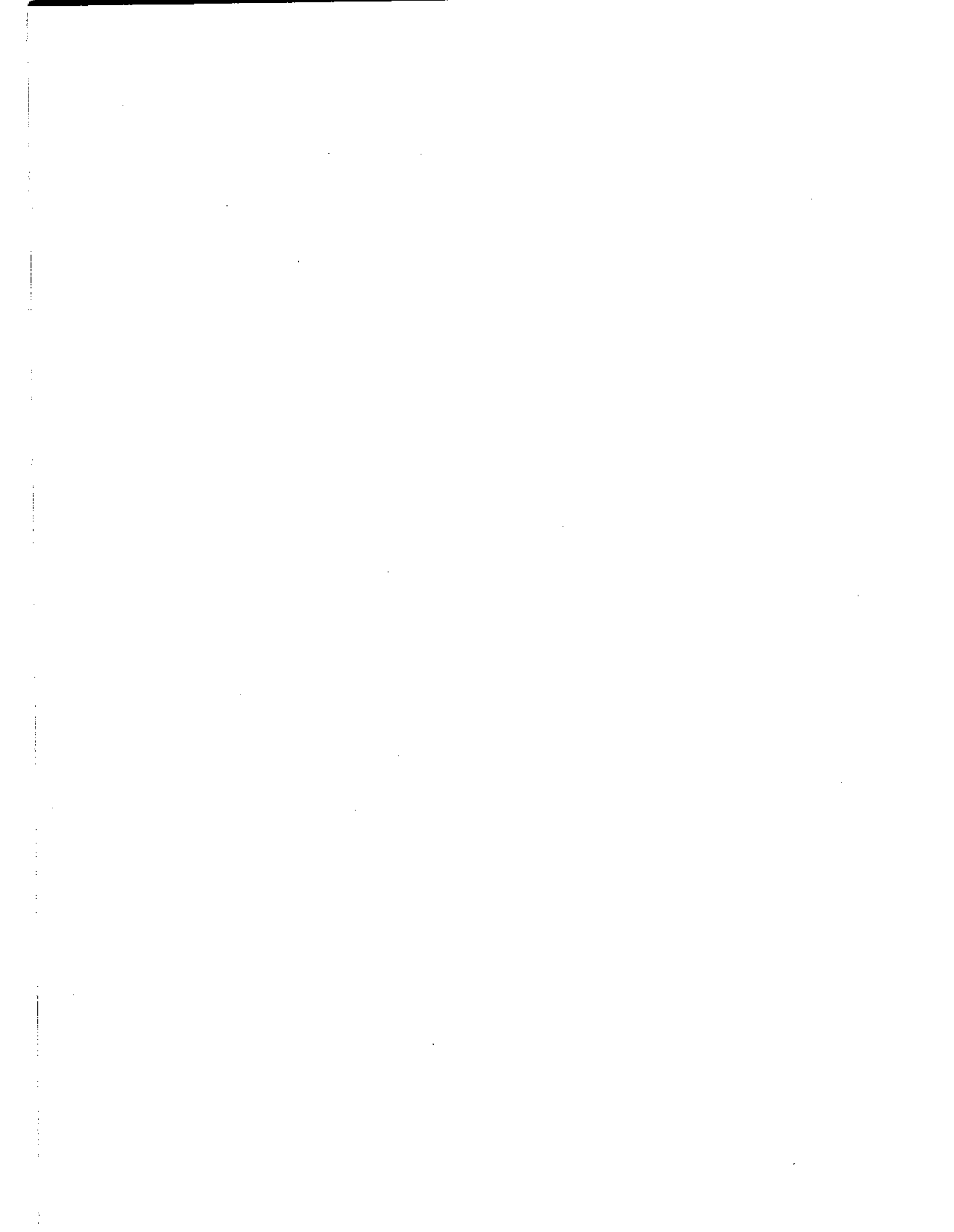
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TRL/082

Fig 4 Generator installation kit

Fig 4 Item	DMC Army	NATO stock number	Item name	Part No./ Dwg No.	No. off	Annotation (NSCM)
			ONAN GENERATOR INSTALLATION KIT	MS-2257-001	1	
1			. ASSEMBLY WELDED, GENERATOR FRAME	MS-2557-018	1	
2			. ONAN GENERATOR AND BASE TRAY		2	
3			. SCREW, HEX HEAD, M8 X 25	F121	8	
4			. WASHER, PLAIN, M8	F394	8	
5			. NUT, NYLOC, M8	F353	8	
6			. JERRY CAN FRAME ASSEMBLY	MS-2557-036	1	
7			. JERRY CAN FRAME ASSEMBLY	MS-2557-042	1	
8			. JERRY CAN FRAME ASSEMBLY	MS-2462-054	2	
9			. SCREW, CSK, SKT HEAD, M6	F111	16	
10			. WASHER, PLAIN, M6	F382	16	
11			. NUT, NYLOC, M6	F349	16	
12			. GENERATOR SUPPORT PLATE	MS-2557-032	4	
13			. FRAME BATTERY ASSEMBLY	MS-2397-099	2	
14			. . BASE PLATE	AA-2397-100	1	
15			. . CLAMP PLATE	AA-2397-101	1	
16			. . BATTERY COVER	AA-2397-102	1	
17			. . BATTERY HOOK	AA-2397-103	2	
18			. . WING HEAD STUD	85-12-400-16	2	
NI 19			. . RETAINER	85-34-201-20	2	
NI 20			. . CLIP ON RECEPTACLE	85-47-101-15	2	
21			. . WASHER, 1/2 PLAIN ST. ST, M6	F1062	2	
22			. . NUT, PLAIN, ST. ST. M6	F1061	4	
NI 23			. . EJECTOR SPRING	14-18-150-24	2	
24			. PLATE, FORMED	AA-2557-046	1	
25			. CONTROL PANEL		1	MoD supplied item
26			. SCREW		4	
27			. WASHER, PLAIN		4	
28			. NUT		4	
29			. BRACKET, FIRE EXTINGUISHER		4	
30			. SCREW		4	
31			. WASHER		4	
32			. NUT		4	
33			. FIRE EXTINGUISHER		1	
NI 34			. EARTHING STRAP		10	
NI 35			. PLATE	AA-2268-677	2	
NI 36			. EQUIPMENT STRAP	AA-2152-154	2	



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