۲

2330-E-202-421 February 2005



FOR OFFICIAL USE ONLY GROWN COPYRIGHT RESERVED

CONDITIONS OF RELEASE

1. This information is released by the UK Government for defence purposes only.

2. This information must be afforded the same degree of protection as that afforded to information of an equivalent security marking originated by the recipient Government or as required by the recipient Government's security regulations:

3. This information may be disclosed only within the Defence Department of the recipient Government, except as otherwise authorized by the Ministry of Defence (Army).

4. This information may be subject to privately owned rights.

TRAILER, LIGHTWEIGHT, GS, CARGO

PREPARATION FOR SPECIAL ENVIRONMENT INSTRUCTIONS AND INDEX

BY COMMAND OF THE DEFENCE COUNCIL

Ken Terri

Ministry of Defence Issued by

DEFENCE LOGISTICS ORGANIZATION

• .

ų.

AMENDMENT RECORD

Arndt No.	Incorporated by (Signature)	Date	Arndt No.	Incorporated by (Signature)	Date
1			32		
2			33		
3			34	• <u></u>	
4			35		
5	· ·		36		
6			37	<u></u>	
7			38		
8			39	<u></u>	
9			40		
10			41		
11			42	-	
12			43		
13			44		
14			45		
15			46		
16			47		
17			48		
18			49		
19			50		
20			51		
21	<u> </u>		52		
22			53		
23			54		
24			55		
25			56		
26			57		
27			58		
28			59		
29			60		· · · · · · · · · · · · · · · · · · ·
30	<u> </u>		61		
31		· ·	62		

. ę. .

:

.

: .

ARMY EQUIPMENT SUPPORT PUBLICATION

PREFACE

Sponsor : ES(Land) SUV IPT

Publications Agency: DLO Andover

INTRODUCTION

1 The Publications Agency is responsible for allocation of instruction numbers.

2 All Preparation for Special Environment instructions as issued are to be recorded in manuscript by the recipient on the 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.

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 at the end of this publication; it should be photocopied and used for forwarding comments on this AESP.

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

PREPARATION FOR SPECIAL ENVIRONMENT INSTRUCTION INDEX

This index is to be kept up to date by the User entering Preparation for Special Environment instructions as and when they are published,

lnstr No.	Subject
(1)	(2)
1	Waterproofing Instructions Stage 'B', Stage 'C' and Stage 'D'
2	
3	
4	
5	
6	
7	
8	
9	
10	

Feb 05

-

-

.

2330-E-202-421

TRAILER, LIGHTWEIGHT, GS, CARGO

CODE NB 2853 3107

PREPARATION FOR SPECIAL ENVIRONMENT INSTRUCTION No. 1 WATERPROOFING INSTRUCTIONS

Sponsor: ES(Land) SUV IPT **Publications Agency: DLO Andover**

AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date	Amdt No.	Incorporated By (Signature)	Date
1			4		
2			5		
3			6		

SUBJECT : WATERPROOFING INSTRUCTIONS STAGE 'B', STAGE 'C' AND STAGE 'D'

CONTENTS

Para

- Introduction (WARNING) (CAUTION) 1
- 3 Waterproofing stage 'B'
- De-waterproofing stage 'C' 4
- 5 De-waterproofing stage 'D'
- 6 Associated publications
- 7 Stores required
- 11 Stores, tools and equipment (WARNING)
- 12 General instructions
- 18 Materials, uses and application (WARNING)
- 26 Waterproofing arrangements
- 27 Checking the waterproofing kit
- 28 Waterproofing of cargo
- 30 Preparatory servicing (CAUTION)
- 31 Prestik P5408 application
- 34 Waterproofed equipment marking
 - WATERPROOFING STAGE 'B' (WARNING)
- 35 Sequence of operations
- 36 Task 1 Brake fluid reservoir (WARNING) (CAUTION)
- 37 Task 2 Towing electrical cable
- 38 Task 3 Number plate light
- 39 Task 4 Cargo
- 40 Task 5 Tailgate
- Task 6 Preservation 41
- Task 7 42 Waterproofed equipment marker stage 'B'
- Task 8 Protecting the AESP and remaining items of waterproofing kit 43 DE-WATERPROOFING STAGE'C' (CAUTIONS)
- 44 Task 9 Taikgate
- Task 10 Waterproofed equipment marker stage 'C' 45
- 46 Task 11 Temporary halt procedure

(Continued)

Inst Instr No 1 Page 1

ARMY EQUIPMENT SUPPORT PUBLICATION

CONTENTS (continued)

Para

WET SHOD RE-EMBARKATION (CAUTION)

47 Summary

DE-WATERPROOFING STAGE 'D' (CAUTIONS)

- 48 Task 12 Brakes
- Task 13 Lights 49
- 50 Task 14 Wash down 51 Task 15 Cargobag
- 52 Task 16 Overrun brake damper (WARNING)
- 53 Task 17 Road wheel hubs and brakes (WARNING)
- 54 Task 18 Number plate light
- Task 19 Towing electrical cable 55
- Task 20 Lubrication 56
- 57 Task 21 Waterproofed equipmentmarker
- 58 Task 22 Future waterproofing requirements

Table

Page

1	Man hour content	4
	Waterproofing task check list - Trailer, Lightweight, GS, Cargo	

Fig

1	Application of Prestik P5408	8
2	Waterproofed equipment markings	9
3	Electrical cable plug	
4	Lens drilling	
5	Number plate lamp	11
6	Tailgate stay	

INTRODUCTION

WARNING

FORDING AREA. BEFORE COMMENCING FORDING OPERATIONS, A RECONNAISSANCE MUST BE CARRIED OUT TO ENSURE THE AREA IS SAFE AND FREE OF OBSTACLES. FORDING IN UNSAFE CONDITIONS COULD RESULT IN INJURY OR DEATH.

CAUTION

EQUIPMENT DAMAGE. Only waterproofed variants with the Equipment Asset Code (EAC) listed on page 1 are to be implemented with this instruction. The equipment must not be subject to prepared fording until the stage 'B' kit is fitted as instructed in this AESP.

NOTE

This instruction AESP 2330-E-202-421 must be retained with the equipment record book.

1 This instruction details the method of waterproofing to enable the equipment to ford through an effective depth of 1.5 metres including ramp angle, wheel sinkage and wave height. The waterproofing when applied will enable the equipment to ford with the minimum of preparation for six minutes. To enable the equipment to achieve this objective, a Special Environment Waterproofing kit is fitted.

2 Where variations from standard occur on the vehicle or equipment due to modifications or contract changes, advice and direction of the unit Motor Transport Officer (MTO) should be sought regarding additional or amended tasks.

Waterproofing stage 'B'

3 The modification kit NSN 6WPG 2540-99-291-1332 is fitted prior to prepared fording. The maximum time allowed to complete this stage is two hours. This will permit the equipment to disembark or embark wet-shod dependant upon operational requirements. On completion of this stage pre-ford running time should be restricted to 15 minutes. Post ford use must conform to de-waterproofing stages 'C' and 'D'.

De-waterproofing stage 'C'

4 The tasks in this stage can be completed in a few minutes and must be conducted within 1 hour of leaving the water.

De-waterproofing stage 'D'

5 Tasks in this stage are dependent on operational conditions. Certain tasks may need to be carried out within 25 miles (40 Km) or 2 hrs from the point of disembarkation. The remaining tasks should be carried out as soon as conditions permit but within 46 miles (75 Km) or 3 days of landing.

NOTE

Vehicle mechanic assistance will be required for Tasks 3, 16, 17 and 20.

Associated publications

6	Refer to AESP:	2300-A-600-013	Waterproofing Regulations - Vehicles and Equipment
		2330-E-202-201	Operating Information
		2330-E-202-302	Technical Description
		2330-E-202-522	Repair Instructions
		2330-E-202-601	Maintenance Schedules

ARMY EQUIPMENT SUPPORT PUBLICATION

S rial	rial Detail		ximate e in hours	Maximum No of men who can be usefully	Maximum time required	
(1)	(2)	Crew Drv (3)	Veh mech (4)	employed (5)	hours (6)	
1	Perusal of this AESP and checking of Wpg kit against kit list.	1	-	2	1	
2	Servicing of equipment	2		2	2	
3	Waterproofing stage 'B'	1	0.25	2	1	
4	De-waterproofing stage 'C'	0.1		2	0.1	
5	Wet shod re-embarkation	0.5		2	0.5	
6	De-waterproofing stage 'D'	2	1	2	2	

TABLE 1 MAN HOUR CONTENT

STORES REQUIRED

7 Items for waterproofing kits are MOD controlled stores. Operationally they are issued without demand. Should issue be authorized for training purposes:-

7.1 In the UK they are to be demanded from the MOD Defence Storage and Distribution Agency (DSDA), Bicester, through district headquarters.

7.2 Overseas, they are to be demanded through formation or district headquarters.

8 When a complete stage 'B' kit is required, the full Army designation of the vehicle or equipment, including code number and contract number is to be stated on the demand. Authority for issue must be quoted.

9 Normally, individual items are not issued separately but may be demanded to make good kit deficiencies. Such demands are to quote full part numbers and designations as shown in this waterproofing instruction para 11.1. A brief explanation of circumstances necessitating the demand is to be attached.

10 Inflammable items which have a shelf storage life are listed at para 11.2 of the kit list. These Items are to be demanded separately by units prior to undertaking the fitting of waterproofing kits.

Stores, tools and equipment

WARNING

HEALTH AND SAFETY. MATERIALS USED IN WATERPROOFING ARE REQUIRED TO MEET OBLIGATIONS INTRODUCED UNDER THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002 (COSHH). SAFETY INFORMATION RELATING TO MATERIALS USED IS CONTAINED IN JSP (F) 395-CATALOGUE OF HAZARDOUS STORES.

11

ŧ

11.1 Stores to be demanded.

11.1.1 The following modification items are to be demanded quoting this instruction as authority for demand.

ltem No.	NSN		Designation	Oty per veh
	6WPG	2540-99-291-1332	Special environment waterproofing kit (WPG 9734) Trailer, Lightweight, GS, Cargo consisting:	1
1	AESP	2330-E-202-421	Waterproofing Instruction No.1	(1)
2	6WPG	2510-99-842-2595	Stay, tailgate (WPG 9728)	(2)
3	6WPG	2540 99 816 2670	Bag, PVC 36 in. x 24 in. (WPG 8220)	(4)
4	6WPG	2540 99 815 9470	Bag, PVC, cargo 72 in. x 36 in. x 18 in. (WPG 9031)	(1)
5	6WPG	5970 99 664 8764	Tape, adhesive PVC Scotch 88	(1 roll)
6	6WPG	7690-99-661-9067	Stage 'B' waterproofed equipment marker (WPG 9615)	(2)*
7	H4	8105-99-135-6190	Bag, plastic 450 mm x 255 mm	(2)*
8	F1	8020 99 943 0417	Brush, artist's flat fitch No. 2	(1)
9	H21	4020 99 942 5038	Rope, fibrous	(10 m)
10	F1	8020 99 125 5009	Brush 1 in, wide	(1)
11	H10	7930 99 244 6936	Container, spray	(1)
12	6MT1	5340 99 618 3776	Cable tie	(2)
11	.2 <u>Store</u>	s or suitable equivalent to	be obtained locally.	
ltem No.	NSN		Designation	Qtypr vh
13	6WPG	2540 99 816 2664	Prestik P5408 2 ft pack (WPG 8120)	1
14	6WPG	5970 99 225 1703	Compound, silicone 100 g tube	1
15	6WPG	6850 99 224 5311	PX-24 water displacing fluid	1 litre
16	6WPG	9150 99 224 8885	Grease XG-286 or approved equivalent	3 kg
17	Ht	6850 99 356 7379	Lec Klene solvent cleaner 300 ml	1

11.3 Special tools or suitable equivalent to be obtained locally.

ltem No.	NSN		Designation	Qty per veh
18	F1	5120 99 127 8258	Wrench, torque	1

NOTES

(1) The item numbers of Para 11 are used as reference throughout this instruction.

(2) * Denotes a spare is provided to cater for defective or damaged goods.

(3) Item number of Para 11.3 is required for Vehicle Mechanic (VM) assistance tasks.

GENERAL INSTRUCTIONS

12 The instructions in this publication describe the action to be taken before and after fording, to protect the equipment against damage resulting from immersion in sea water.

13 Waterproofing is carried out in stages and each stage is to be completed in the sequence given in this instruction. The tasks within each stage are shown in the most suitable sequence, but this may be varied according to circumstances. Where a complete task coverage requires more than one page, the task should be read in its entirety before commencing a page by page progression.

14 <u>CLEANLINESS IS THE FIRST ESSENTIAL OF SUCCESSFUL SEALING</u>. When applying compounds, ensure that the hands are clean and free from grease and that all surfaces to which sealing compounds are to be applied are scrupulously clean. Mud, oil, grease or water will spoil adhesion.

15 <u>REMEMBER THAT ALL WATERPROOFING MUST BE 100 % SUCCESSFUL.</u> One carelessly treated component may cause failure at a critical moment, so take great care with every detail. Whenever waterproofing is being carried out during wet weather, suitable shelter should be arranged over the vehicle.

16 The equipment load must be made secure to prevent any movement whilst the vehicle is ascending or descending the ramp on the ship or craft.

17 If difficulties are encountered, the Unit (MTO) should be consulted.

MATERIALS, USES AND APPLICATION

WARNING

HEALTH AND SAFETY. MATERIALS USED IN WATERPROOFING ARE REQUIRED TO MEET OBLIGATIONS INTRODUCED UNDER THE CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002 (COSHH). SAFETY INFORMATION RELATING TO MATERIALS USED IS CONTAINED IN JSP (F) 395-CATALOGUE OF HAZARDOUS STORES.

18 <u>Lec Klene solvent cleaner</u>: Used for cleaning and degreasing surfaces before applying any of the various waterproofing materials. Lec Klene is a flammable liquid, therefore suitable precautions should be taken.

19 <u>Prestik P5408</u>: A plastic sealing compound which, when moulded to joints and apertures prevents water entry. It is also used in some cases to cover electrical components and connections to prevent failure of the electrical system.

19.1 It is supplied as a strip 24 in. x 1 1/2 in. wide, in a protective wrapping.

19.2 The application of Prestik P5408 is shown in Fig 1. It must not be removed from its wrapping until actually required for application. When handling, the hands must be clean and free from grease. Remove the backing strip as shown in Fig 1. Where a considerable length is called for in a particular task, it is better to apply a series of short lengths, overlapping the strips as shown in Fig 1, and moulding the top layer to the under layer. This allows ease of handling and avoids excessive stretch. It is important that strips of the correct length are used as detailed in this instruction.

NOTE

Always keep Prestik P5408 clean and dry. The biggest hindrances to successful waterproofing are oil, dirt, and water, therefore, all surfaces to be waterproofed must be perfectly clean and dry. The fingers may, however, be slightly moist to prevent the Prestik P5408 sticking to them.

20 <u>Cover, elastic, waterproofing</u>: Manufactured from rubber and used to enclose various components. Before use, examine carefully and repair tears, splits or pin holes with adhesive tape. A spare cover of each type required to waterproof the equipment is provided in the kit.

Inst Instr No 1

Tob OF

21 <u>Grease</u>: Is used for the protection against sea water corrosion on certain parts. The surface should be thoroughly covered with an even, unbroken film of grease. A lumpy coating is wasteful and provides no better protection.

22 <u>Silicone compound</u>: Supplied in 100 g tubes and 12 oz. aerosol containers for junction boxes, fuse holders and other electrical components which must remain operative at all times. The components should be covered with a generous, unbroken, even film of silicone compound.

23 <u>Scotch Super 88 Electrical Insulation Tape</u>: A waterproof adhesive tape suitable for repairing and sealing PVC bags, breathers, apertures, joints and components. The width of the tape can be increased by overlapping to the required width.

24 <u>Fluid, water displacing, PX-24</u>: Supplied in 1 litre containers. It is used for corrosion prevention and to wash sea water from components as detailed in this AESP.

25 Bag, envelope PVC:

25.1 These bags are manufactured in varying sizes from a waterproof material, which are used to enclose parts of the vehicle as detailed in this instruction and other items as may be desired.

25.2 Before use, the bag must be inspected for pin holes, tears or split seams, which can be repaired with suitable lengths of adhesive tape or Prestik P5408.

WATERPROOFING ARRANGEMENTS

26 The operations are to be carried out by Unit personnel unless otherwise stated. THE WORK IS TO BE PLANNED AND CONTROLLED BY AN OFFICER WHO MUST ARRANGE FOR STAFF, TRAINED IN WATERPROOFING, TO INSPECT ALL TASKS PROGRESSIVELY TO ENSURE THAT THEY ARE COMPLETED SUCCESSFULLY. A check list to assist operators will be found at the end of this instruction, it should be photocopied and used to check completion of each task. This list must be initialled by the operator as each task is passed as satisfactory.

CHECKING THE WATERPROOFING KIT

27 Before commencing waterproofing the equipment, the kit must be checked against the kit list provided.

WATERPROOFING OF CARGO

28 Should it be desired to waterproof items of stores and equipment carried as cargo for which a waterproofing kit or specified suitable container is not available, use may be made of the range of BAGS, WATERPROOFING detailed below and available from RLC sources:

29 The following two PVC bags are reusable types fitted with zip closures, and primarily for use in 1/2 ton, 3/4 ton and 1 ton cargo trailere:

- 29.1 6WPG 2540 99 815 9470 Bag PVC cargo 72 in. x 36 in. x 18 in. (WPG 9031).
- 29.2 6WPG 2540 99 815 9471 Bag PVC cargo 36 in. x 36 in. x 18 in. (WPG 9032).

PREPARATORY SERVICING

CAUTION

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

30 Carry out 20000 kms (12000 miles) maintenance of the equipment as detailed in Maintenance Schedule AESP 2330-E-202-601, to ensure full service ability for fording.

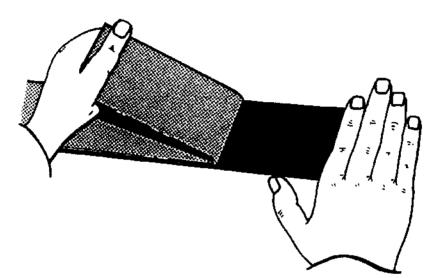
ARMY EQUIPMENT SUPPORT PUBLICATION

Prestik P5408 application

31 Lay the strip on a clean surface, tear open the outer polythene envelope wrapping at one end, and slide out the Prestik P5408 strip.

32 Remove the plain backing paper. <u>INSPECT PRESTIK P5408</u>; sections showing signs of dryness or cracks must be removed by cutting out suspected section of the strip.

33 Cut off the required length for use.

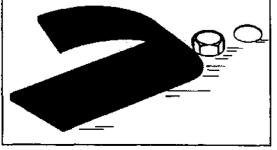


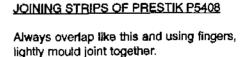
NOTE

Remove the remaining backing paper on the job.

APPLYING PRESTIK P5408 TO AN UNEVEN SURFACE

Using fingers, mould well down around uneven surfaces making sure no air pockets remain beneath the Prestik P5408.





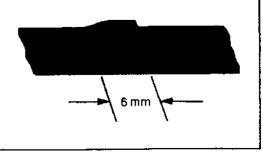


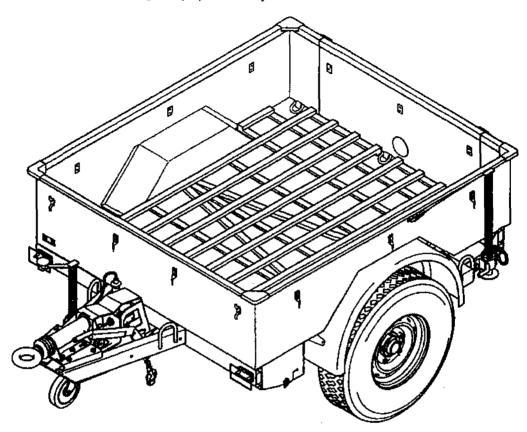
Fig 1 Application of Prestik P5408

Feb 05

2330-E-202-421

Waterproofed equipment marking

34 Ensure equipment marking is displayed correctly.



Colour meaning		Action	
B Red with white 'B' in centre	SEMI-PERMANENT Stage 'B' completed, equipment passed for disembarkation	Onboard landing ship or embarkation area	
	marking must ba covered with black adhes he marking must be uncovered when sta		

ſ

ARMY EQUIPMENT SUPPORT PUBLICATION

WATERPROOFING STAGE 'B'

WARNING

PERSONNEL HAZARD, ENSURE THE REAR STANDS ARE LOWERED BEFORE COMMENCING ANY WATERPROOFING PREPARATION.

SEQUENCE OF OPERATIONS

35 Carry out this Preparation for Special Environment as follows:

TASK1 BRAKEFLUID RESERVOIR

WARNING

BRAKE FLUID. HYDRAULIC FLUID IS A TOXIC SUBSTANCE WHICH MUST NOT BE CONSUMED OR ALLOWED TO COME INTO SKIN/EYE CONTACT. IN THE EVENT OF SLIGHT SKIN/EYE CONTACT, THOROUGHLY RINSE THE AFFECTED AREA WITH WATER. IF THERE IS EXCESSIVE SKIN/EYE CONTACT OR INGESTION/INHALATION SEEK MEDICAL ATTENTION IMMEDIATELY.

CAUTION

BRAKEFLUID. Brake fluid is corrosive, if any brake fluid comes into contact with the paintwork, immediately wash down with a lerge quantity of freshwater and wipe clean with a soft cloth.

NOTE

It is essential that the reservoir cap rubber cover is in serviceable condition, and that the rubber diaphragm is correctly located on the reservoir body, in order ensure a wateright seal. If the cover or diaphragm is found unserviceable it must be renewed prior to fording.

36 Release the securing screw and remove the brake master cylinder protection cover.

36.1 Remova the reservoir cap. Ensure that the rubber diaphragm is seated correctly on the reservoir body. Refit and tighten the reservoir cap taking care that the diaphragm is not displaced during refitting.

36.2 Refit the master cylinder protection cover.

TASK2 TOWING ELECTRICAL CABLE

37 Open the spring loaded cover of the towing cebie plug. Apply an even coat of silicone compound (item 14) to the plug terminals using a fitch brush (item 8). Close the cover.

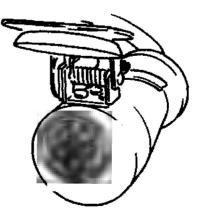


Fig 3 Electrical cable plug

Silicone compound

Feb 05

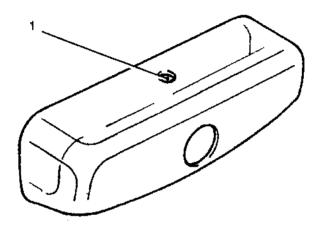
TASK3 NUMBER PLATE LIGHT

NOTE

This task to be carried out with the assistance of a vehicle mechanic.

38 Remove the number plate light cover and lens.

38.1 Drill a 5 mm diameter hole centrally in the underside of the lens to provide free drainage following fording.



1 Drilled hole, 5mm diameter

Fig 4 Lens drilling

38.2 Apply an even coat of silicone compound (item 14) over the bulb body and terminal, electrical connectors and the light base plate using a fitch brush (item 8).

38.3 Refit the light cover and lens.

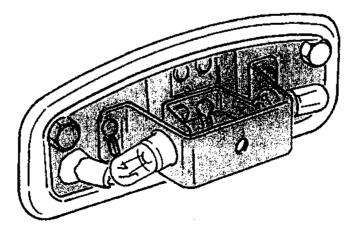


Fig 5 Number plate lamp

Silicone compound

ARMY EQUIPMENT SUPPORT PUBLICATION

TASK4 CARGO

39 Fit the cargo bag (item 4) into the trailer positioning the bag centrally over the axie. Place all items of cargo likely to suffer damage due to sea water immersion in the bag. Small items of equipment can be placed in PVC bags (item 3) prior to stowage in the bag. Seal the cargo bag in accordance with the instructions for use supplied with each bag.

39.1 Secure the bag to the trailer using the cargo retaining straps provided with the trailer. Ensure the bag is firmly secured to prevent it moving during fording operations. All sharp edges of cargo will need padding to ensure the bag is not damaged when secured.

TASK5 TAILGATE

40 Prop the tailgate open using the two tailgate stays (item 2). Secure the stays with the pins provided and the original tailgate retaining pins.

40.1 Open the closure plate on the tailgate.

NOTE

Tailgate stays are fitted to allow quick flooding of the trailer to prevent flotation.

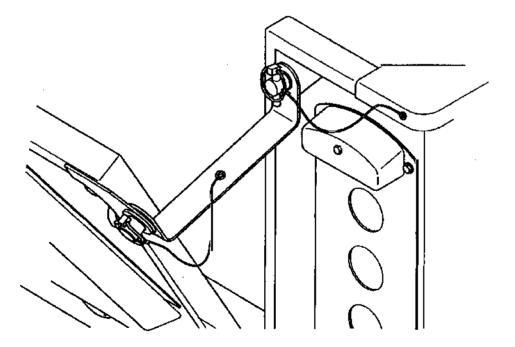


Fig 6 Tailgate stay

TASK6 PRESERVATION

41 Apply an even coat of grease XG-286 (item 16) using the brush (item 10) for preservation against sea water immersion to the following areas:

- 41.1 Handbrakelinkage and pivot points.
- 41.2 Rear support stand linkages and hinge pins.
- 41.3 Road wheel nuts.
- 41.4 Jockey wheel pivots and pins.

TASK7 WATERPROOFED EQUIPMENT MARKING STAGE 'B'

42 Apply the red stage 'B' waterproofed equipment marker (item 6) as instructed in Para 34 of this AESP. Clean the surface with Lec Klene (item 17) before applying the marker to the trailer.

TASK 8 PROTECTING THE AESP AND REMAINING ITEMS OF WATERPROOFING KIT

43 Place this AESP in a plastic bag (item 7). Seal bag with adhesive tape (item 5). Retain the AESP in a safe place on the prime mover, it will be required for de-waterproofing stages 'C' and 'D' and wet shod re-embarkation if required.

43.1 Place the Lec Klene solvent cleaner, Prestik P5408, PX-24, spray container, silicone grease and all remaining unused items of waterproofing kit in a bag (item 3). Seal the bag with adhesive tape (item 5) and stow in the cargo bag. These items are required for use in de-waterproofing stages 'C' and 'D'.

43.2 Return the two stands at the rear of the trailer to the stowed position.

43.3 Connect the towing electrical cable to the prime mover vehicle.

DE-WATERPROOFING STAGE 'C'

CAUTIONS

(1) TIME LIMITATION. The following Tasks must be conducted within 1 hour of leaving the water.

(2) DEFECT REPORTING. All defects including occurrences of water ingress found during stage 'C' de-waterproofing, must be reported to a senior member of Unit ES staff as soon as operationally possible, for appropriate Equipment Failure Report (EFR) action.

TASK9 TAILGATE

44 Remove the two tailgate stays and close and secure the tailgate. Close the tailgate closure plate. Retain the two stays for future waterproofing use.

TASK 10 WATERPROOFED EQUIPMENT MARKING STAGE 'C'

45 Cover the RED stage 'B' marker (refer to Fig 2) with adhesive tape (item 5).

TASK11 TEMPORARY HALTPROCEDURE

46 If a temporary halt procedure is necessary the following precautions should be actioned:

- 46.1 Disconnect the 12-pin towing electrical plug from the prime mover.
- 46.2 Chock road wheels.
- 46.3 Leave the trailer handbrake in the 'OFF' position.

ARMY EQUIPMENT SUPPORT PUBLICATION

WETSHOD RE-EMBARKATION

CAUTION

EQUIPMENT DAMAGE. Following completion of wet shod re-embarkation, de-waterproofing stages 'C' and 'D' must be carried out in accordance with this AESP.

SUMMARY

47 This instruction details action to be taken when the equipment will wet shod re-embark on the landing craft after disembarking operations have been completed.

47.1 Complete a thorough check of waterproofing carried out in stage 'B' waterproofing and rectify any damage.

47.2 Complete task 5.

47.3 Remove the black adhesive tape from the RED stage 'B' marker (see Fig 2).

47.4 Complete Task 8.

DE-WATERPROOFING STAGE 'D'

CAUTIONS

(1) MILEAGE LIMITATION AFTER DISEMBARKATION. Tasks 12, and 13 must be carried out 25 miles (40 km) or 2 hours, (whichever occurs first) from point of disembarkation if op rationally possible. The remaining tasks should be carried out as soon as conditions permit but within 46 miles (75 km) or 3 days, (whichever occurs first) of landing.

(2) DEFECT REPORTING. All defects including occurrences of water ingress found during stag 'D' de-waterproofing, must be reported to a senior member of Unit ES staff as soon as operationally possible, for appropriate Equipment Failure Report (EFR) action.

TASK12 BRAKES

48 To prevent seizure of brakes when parked, every opportunity should be taken to:

48.1 Chock the road wheels and leave the handbrake 'OFF'.

TASK13 LIGHTS

49 Examine all lights for sea water contamination, remove lens and drain off any water present.

49.1 Flush out any contaminated lights with PX-24 (item 15) using the spray container (item 11).

49.2 Refit lens.

TASK14 WASHDOWN

50 Wash down the equipment thoroughly with freshwater. Remove all traces of sand and salt deposits. Ensure the following areas are included:

- 50.1 Underside of body and axle.
- 50.2 Inside of stowage bins.
- 50.3 Rear support stands and jockey wheel mechanisms.
- 50.4 Operating mechanisms of cargo bag retaining straps

TASK15 CARGOBAG

51 Remove the waterproofing cargo bag from the trailer. Retain the cargo bag (item 4) for future waterproofing use. Place the cargo retaining straps in one of the trailer stowage bins.

TASK16 OVERRUNBRAKE DAMPER

WARNING

BRAKING EFFICIENCY. THE EFFICIENCY OF THE BRAKING SYSTEM MUST SATISFY ALL RELEVANT LEGAL REQUIREMENTS BEFORE THE EQUIPMENT IS RETURNED TO SERVICE.

NOTE

This task to be carried out with the assistance of a vehicle mechanic.

52 Remove the cable ties securing the towing eye rubber gaiter taking care not to damage the gaiter.

52.1 Turn back the large end of the gaiter and remove all sand and salt deposits from the gaiter and operating surface of the damper.

52.3 Reposition the gaiter correctly and secure with cable ties (item 12).

TASK 17 ROAD WHEEL HUBS AND BRAKES

WARNING

BRAKING EFFICIENCY. THE EFFICIENCY OF THE BRAKING SYSTEM MUST SATISFY ALL RELEVANT LEGAL REQUIREMENTS BEFORE THE EQUIPMENT IS RETURNED TO SERVICE.

NOTE

This task to be carried out with the assistance of a vehicle mechanic.

53 Strip and service the road wheel hubs and brakes ensuring that:

53.1 Road wheel hubs are free of contamination. If any of the hubs are contaminated, fit replacement oil seals.

53.2 Brake calipers, cables and linkages are in working order.

53.3 Refit the road wheels and tighten the wheel nuts to 102 to 115 Nm (75 to 85 lbf ft) using the torque wrench (item 18).

53.4 Test the braking system ensuring that all brakes are fully serviceable before the equipment is returned to service.

TASK 18 NUMBER PLATE LIGHT

54 Remove the number plate light cover and lens.

54.1 Clean the silicone compound from the light base plate, bulb holder and connectors.

54.2 Wash off the light with PX-24 (item 15) using the spray container (item 11) ensuring all traces of sand and salt deposits are removed.

54.2 Refit cover and lens to light.

TASK 19 TOWING ELECTRICAL CABLE

55 Clean the silicone compound from the towing cable electrical plug.

TASK20 LUBRICATION

NOTE

This task to be carried out with the assistance of a vehicle mechanic.

56 Complete a 20000 kms (12000 miles) service of the equipment as detailed in the Maintenance Schedule AESP 2330-E-202-601.

TASK 21 WATERPROOFED EQUIPMENT MARKING

57 Remove and dispose of the waterproofed equipment marker.

TASK 22 FUTURE WATERPROOFING REQUIREMENTS

58 Examine the content and condition of the stage 'B' waterproofing kit. Re-demand replacement items detailed at Sub-Para 11.1 as necessary so that the kit is complete for future use. Stow the waterproofing kit and this instruction in a safe place so that they are readily available for use.

ARMY EQUIPMENT SUPPORT PUBLICATION

TABLE 2 - WATERPROOFING TASK CHECK LIST -TRAILER , LIGHTWEIGHT, GS, CARGO

Page No. (1)	Para No. (2)	ltem(3)	Initialled Completed (4)
10			
l	~	WATERPROOFING STAGE 'B'	
10	35	Sequence of operations	
10	36	Task 1 Brake fluid reservoir	
10	37	Task 2 Towing electrical cable	
11	38	Task 3 Number plate light	
12	39	Task 4 Cargo	
12	40	Task 5 Tailgate	
12	41	Task 6 Preservation	
13	42	Task 7 Waterproofed equipment marking stage 'B'	
13	43	Task 8 Protecting the AESP and remaining items of waterproofing kit	
13	-	DE-WATERPROOFING STAGE 'C'	
13	44	Task 9 Tailgate	
13	45	Task 10 Waterproofed equipment marking stage 'C'	
13	46	Task 11 Temporary halt procedure	
14	-	WET SHOD RE-EMBARKATION	
14	47	Summary	
14	-	DE-WATERPROOFING STAGE 'D'	
14	48	Task 12 Brakes	
14	49	Task 13 Lights	
14	50	Task 14 Wash down	
15	51	Task 15 Cargo bag	
15	52	Task 16 Overrun brake damper	
15	53	Task 17 Road wheel hubs and brakes	

EQUIPMENT NO.

(continued)

Inst Instr No 1 Page 17

ARMY EQUIPMENT SUPPORT PUBLICATION

TABLE 2 - WATERPROOFING TASK CHECK LIST -TRAILER, LIGHTWEIGHT, GS, CARGO (continued)

Page No. (1)	Para No. (2)	ltem (3)	Initialied Completed (4)
		DE-WATERPROOFING STAGE 'D' (continued)	
15	54	Task 18 Number plate light	
15	56	Task 19 Towing electrical cable	
16	56	Task 20 Lubrication	
16	57	Task 21 Waterproofing equipment marking	
16	58	Task 22 Future waterproofing requirements	
			j
1			
1			

EQUIPMENT NO.

.

2330-E-202-421

	ENT(S) Of	ALSP"	
To: DCCS BFPO 794	From:		
			,,
Senders Reference	BI	N Number	Date
AESP* Title			.1
Chapter(s)/Instruction	Page(s)/Paragraph(s)		
Il you require more space please use the reverse of th Comment(s): Signed		bhone No.:	Date:
		R USE ONLY	
ю	From:		
Thank you for commenting on AESP*			
four reference	·····		ated Tick
Your reference	·····	D	ated Tick
Issue a revised/amended AESP*	·····	Under investiga	ated Tick

*AESP or EMER AESP Form 10 (Issue 5.0 dated Oec 01)