## ARMY EQUIPMENT SUPPORT PUBLICATION

#### LICESTRICTED.

# FV430 SERIES VEHICLES, ALL MARKS

## **GENERAL INSTRUCTION NO. 2**

LASS QLIS
20 FEB 2002
DLO Chertsey

Sponsor: DGES(L) Publication Agency:
DLO Chertsey
Project No: S01008(8)
File ref:

## AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
1		
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Gear selector mechanism

## INTRODUCTION

- 1 To overcome wear of the gear selector mechanism and the failure of the roll pin retaining the output lever to the shaft, the gear selector output lever is to be welded to the shaft.
  - 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: 1.50 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 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, 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-250-821 Instr Index.

## Sequence of operations

- 8 Carry out this instruction as follows:
  - 8.1 Remove the lower engine cover. Disconnect the gearbox connecting link from the gear selector and remove the gear selector mechanism.
  - 8.2 Remove the right hand access plate from the side of the gear selector mechanism. Retain all fittings.

Refer to Fig 1

- 8.3 Weld, to current regulations, the output lever to the shaft.
- 8.4 Whilst firmly holding the gear input lever in 3-6 range, check the output lever for movement. None is permitted. Ensure full and correct range of movement of the gear selector mechanism.
- 8.5 Refit the access plate removed at Sub-Para 8.2. Refit the gear selector mechanism removed in Sub-Para 8.1
- 8.6 Adjust the gearbox connecting link in accordance with EMER Tkd Veh E 103/2, Chap 6, Para 3. Refit the lower engine cover.

## **TESTING AFTER EMBODIMENT**

9 Check correct operation of the start inhibitor circuit. Ensure full and correct range of movement and correct selection of gear ranges.

#### **EFFECT ON WEIGHT**

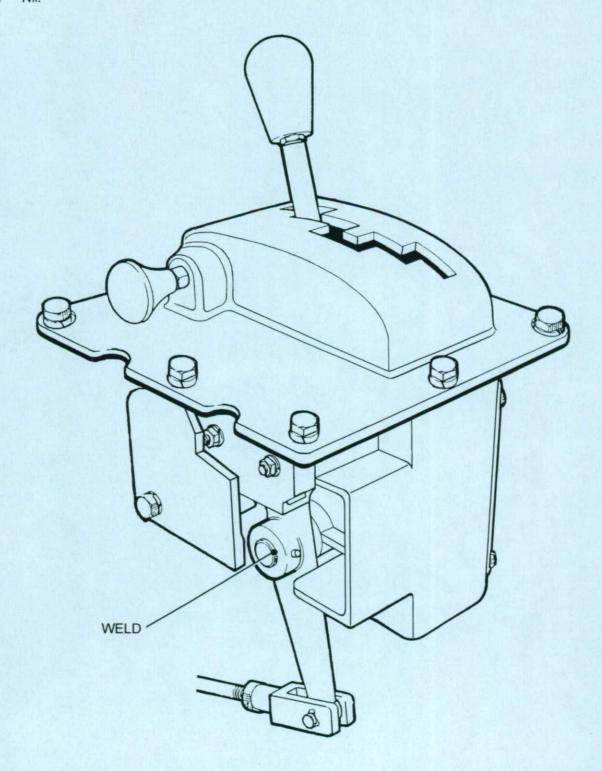
10 Negligible.

## **PUBLICATION AMENDMENTS**

NOTE

Necessary amendments will be issued separately.

11 Nil.



V14900/1

Fig 1 Gear selector mechanism

## **FV430 SERIES VEHICLES, ALL MARKS**

#### **GENERAL INSTRUCTION NO. 3**

Sponsor: DGES(L) Publication Agency: **DLO Chertsey** 

Project No: S01008(53)

File ref:

## AMENDMENT RECORD

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1	LIOTI (AGMS) SAWARD	03 Mw <sub>03</sub>
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Steering unit oil seals

(Approval No. 43/0/0053)

#### INTRODUCTION

- To increase oil flow and pressure within the steering unit two seals are to be fitted to the left hand housing mechanical drive, this eliminates oil seepage between the end cover and bearing housing.
  - Limitations on use of equipment. Nil.

## **APPLICABILITY**

Unmodified stock, held at all levels of technical storage.

## REASON FOR MODIFICATION

Code 2 - to improve operational performance.

#### **PRIORITY**

Routine.

#### **ESTIMATED TIME REQUIRED**

Embodiment: 2.00 man-hours.

## MODIFICATION IMPLEMENTATION PLAN

6

- This instruction is to be implemented by:
  - Units authorized to carry out level 4 maintenance. 6.1.1
- 6.2 Associated instructions. Nil.
- 6.3 Strike plate action: See Sub-Para 7.1.3.

S01008(165) **DLO Chertsey** 0203\NTCP-1104 Oct 02 (Amdt 1)

Gen Instr No. 3

## Action required by

7

- 7.1 Army units authorized to carry out level 4 maintenance:
  - 7.1.1 During overhaul of equipment on charge 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.
  - 7.1.3 Erase MOD 23 from modification record plate.
- 7.2 All recipients of this instruction. Add particulars to AESP 2350-T-250-821 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	9CET	5330-99-823-5157	Ring, sealing.	2
8.2	Items/store	es to be modified:		
2	10	3040-99-865-5708	Housing, mechanical, drive L/H.	1

## Sequence of operations

NOTE

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

- 9 Carry out this instruction as follows:
  - 9.1 When dismantling the steering unit, remove housing (item 2). Machine two seal grooves in the housing (item 2) to the dimensions shown on drawing FV450949. Detail dimensions shown at section 'A A' and detail 'D'.
  - 9.2 Fit seals (item 1) to housing (item 2), prior to reassembly of the steering unit.

#### TESTING AFTER EMBODIMENT

10 Carry out steering unit tests to existing publications.

#### **EFFECT ON WEIGHT**

11 Negligible.

#### **PUBLICATION AMENDMENTS**

12 Nil.

## FV 430 SERIES VEHICLES, ALL MARKS

#### **GENERAL INSTRUCTION NO. 4**

Sponsor:

DGES(L)

Publication Agency: DLO Chertsey

Project No: S01008(75)

File ref:

#### AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Fixed fire extinguisher controls

#### INTRODUCTION

1

- 1.1 Recent specification changes to FV 430 fixed fire extinguisher system operating cables have resulted in a new design of cable, which will be issued as a routine replacement. The change is common to all cables, fitted to any FV 430 series vehicle, and affects the end fitting and finger pull at the extinguisher manifold/mounting bracket.
- 1.2 This instruction provides information on the identification of the original and new cable types, including the installation and adjustment.

#### **APPLICABILITY**

2 All FV430 series vehicles, held at all levels of technical storage.

#### **REASON FOR MODIFICATION**

3 Code 5 - to conform to changes in pattern of commercial stores.

#### PRIORITY

4 Routine.

## **ESTIMATED TIME REQUIRED**

5 Embodiment: 0.5 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 Army units authorized to carry out levels 2, 3 and 4 maintenance:
  - 7.1.1 When required, replace and adjust fixed fire extinguisher cables IAW this instruction.
- 7.2 All recipients of this instruction. Add particulars to AESP 2350-T-250-821 Instr Index.

## Sequence of operations

8 Carry out this instruction as follows:

Refer to Fig 1

- 8.1 Note the differences between the finger pulls and the cable ends of the original cable and the new cable. Although either type of fixed fire extinguisher cable can be fitted, the finger pulls are not interchangeable between cable types, and must be kept with the cable that it has been manufactured to fit. The finger pull that is supplied with the new type of cable must only be fitted to the new type of cable.
- 8.2 Adjust the fire extinguisher cables by first setting the lower junction box adjusters to the mid position. Adjust the junction box upper adjusters evenly until the pin in the long hexagon of the discharge head begins to move, tighten locknuts. Adjust the cables to give 3.2 mm free play on the remote controls, which will also give 3.2 mm freeplay on the external handles.

## **TESTING AFTER EMBODIMENT**

9 Nil.

## **EFFECT ON WEIGHT**

10 Negligible.

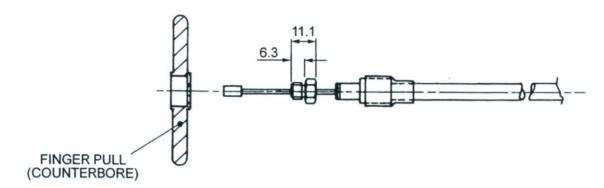
## **PUBLICATION AMENDMENTS**

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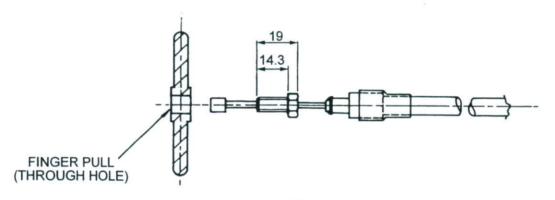
NOTE

Necessary amendments will be issued separately.

11 Nil.



**NEW CABLE END** 



ORIGINAL CABLE END

Dimensions in mm

V14959/1

Fig 1 Original and new type cable and fittings

## **FV430 SERIES VEHICLES, ALL MARKS**

#### **GENERAL INSTRUCTION NO. 5**

Sponsor: DGES(L) Publication Agency: DLO Chertsey

Project No: S01008(267)

File ref:

#### **AMENDMENT RECORD**

Amdt No.	Incorporated By (Signature)	Date
1		
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Removal of the power tool facility

#### INTRODUCTION

- 1 To remove the cable that is used to supply power from the drivers link box to the power tool transformer. All FV430 series vehicles power tools were removed from use under the authority of DCI 27/92 and DCI 70/94. The power tool transformer and all other associated cabling and output sockets will be removed during base overhaul.
  - 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 Routine.

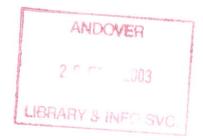
#### **ESTIMATED TIME REQUIRED**

5 Embodiment: 0.30 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 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, carry out this modification.
  - 7.2.2 Record completion details of modification against appropriate entry in vehicle documents.
  - 7.2.3 When the instruction has been embodied, complete and return Annex A.
- 7.3 All recipients of this instruction. Add particulars to AESP 2350-T-250-821 Instr Index.

## Stores, tools and equipment

8

8.1 Stores to be removed and reduced to scrap:

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	6MT4	2590-99-766-3523	Wiring harness.	1

## Sequence of operations

NOTE

The item number in Para 8 is used as reference throughout this instruction.

9 Carry out this instruction as follows:

Refer to Fig 1

9.1 Remove cable (item 1) and dispose of locally.

## **TESTING AFTER EMBODIMENT**

10 Nil.

#### **EFFECT ON WEIGHT**

11 Negligible.

#### **PUBLICATION AMENDMENTS**

NOTE

Necessary amendments will be issued separately.

12 Nil.

Gen Instr No. 5 Page 2 To:

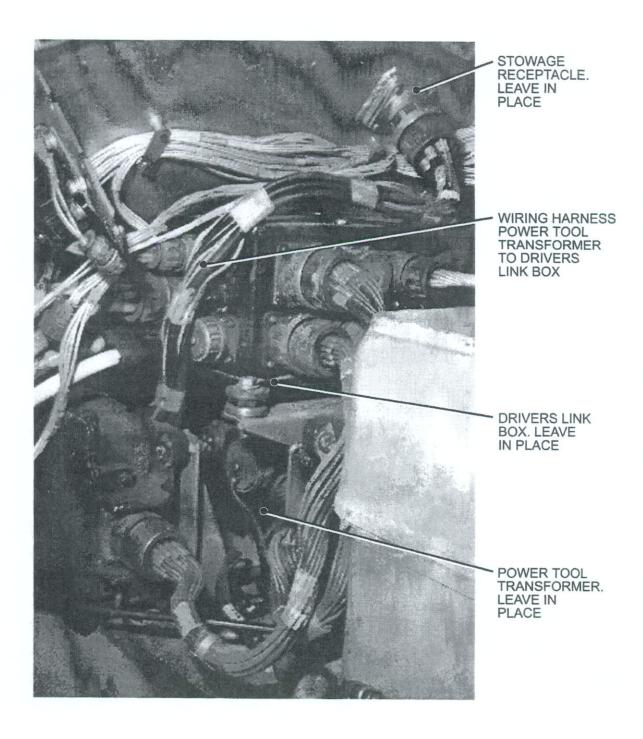
FV430 ESM

## **GENERAL INSTRUCTION NO. 5 ANNEX A**

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

LASS IPT DLO Monxton Road Andover Hampshire SP11 8HT		
From:		
Unit:	UIN:	
Name:	Signature:	
Date embodied:		

Vehicle registration number(s)



V14990/1

Fig 1 Driver's compartment, forward right corner (instrument panel removed for clarity)

## **FV430 SERIES VEHICLES, ALL MARKS**

#### **GENERAL INSTRUCTION NO. 6**

Sponsor:

DGES(L)

Publication Agency: DLO Andover Project No: S01008

File ref:

## AMENDMENT RECORD

Amdt No.	Incorporated By (Signature)	Date
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Flasher unit

(Approval No. 43/0/0061)

#### INTRODUCTION

- 1 The original flasher is no longer available, the replacement flasher requires revised wiring connections in the switchbox. This instruction introduces the new type of flasher and the associated wiring fitted in the switchbox, changing the switchbox to amendment strike 2
  - 1.1 Limitations on use of equipment. Nil.

#### **APPLICABILITY**

On failure.

#### **REASON FOR MODIFICATION**

3 Code 5 - to conform to changes in pattern of commercial stores.

## **PRIORITY**

4 Routine.

## **ESTIMATED TIME REQUIRED**

5 Embodiment: 0.5 man-hours

## MODIFICATION IMPLEMENTATION PLAN

6

- 6.1 This instruction is to be implemented by:
  - 6.1.1 Units authorized to carry out levels 2 and 3 maintenance.
- 6.2 Associated instructions. Nil
- 6.3 Strike plate action: N/A



## Action required by

7

- 7.1 Army units authorized to carry out levels 2 and 3 maintenance:
  - 7.1.1 When requested by units without REME 1st Line Support, carry out this instruction.
- 7.2 All recipients of this instruction. Add particulars to AESP 2350-T-250-821 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.

Item No.	DMC	NSN/Part No.	Designation	Qty per eqpt
1	6MT4	2590-99-881-5774	Switchbox	1
8.2	Stores to	o be removed and returned	through normal channels:	
2	6MT4	2590-99-881-5774	Switchbox	1

## Sequence of operations

NOTE

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

- 9 Carry out this instruction as follows:
  - 9.1 On failure of the flasher unit, remove the switchbox from the Drivers Control Panel.
  - 9.2 Demand and fit a new switchbox (item 1) and return the defective switchbox (item 2).

#### **TESTING AFTER EMBODIMENT**

10 Ensure that the vehicle indicators operate correctly

#### **EFFECT ON WEIGHT**

11 Negligible.

## **PUBLICATION AMENDMENTS**

NOTE

Necessary amendments will be issued separately.

12 Nil.

## **FV430 SERIES, VEHICLES, ALL MARKS**

# GENERAL INSTRUCTION No. 7 (Completely revised)

Sponsor:

DGES (L)

Publication Agency: LASS IPT DLO Andover

Task No: 13117

## **AMENDMENT RECORD**

Amdt No.	Incorporated By (Signature)	Date
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Amdt No.	Incorporated By (Signature)	Date
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SUBJECT: Suspension Wheel Station Hydraulic Damper

Approval No. 43/2/0025

## INTRODUCTION

- 1 This instruction introduces hydraulic dampers that replace the original friction dampers.
  - 1.1 Limitations on use of equipment. Nil.

#### **APPLICABILITY**

- 2 This instruction is applicable to:
  - 2.1 FV432, FV436, FV439

## **REASON FOR INTRODUCTION**

3 Code 4 - to improve maintainability.

## **ESTIMATED TIME REQUIRED**

4 Embodiment:

3 man-hours.

## **IMPLEMENTATION**

5

- 5.1 This instruction is to be implemented by:
  - 5.1.1 Units authorised to carry out level 2, 3 and 4 maintenance.

## Action required by

6

- 6.1 Units and establishments holding equipment.
  - 6.1.1 Record the AESP and instruction number in equipment documents.

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Jun 04 (Amdt 1)

- 6.2 All recipients of this instruction.
  - 6.2.1 Add particulars to AESP 2350-T-250-821 Gen Instr Index.
- 6.3 Units authorised to carry out level 2, 3 and 4 repairs
  - 6.3.1 Upon failure of the linear friction type damper, obtain the items listed in Para 7 and carry out this instruction.
  - 6.3.2 When the General Instruction has been embodied, complete and return annex A

## Stores, tools and equipment

7

## NOTE

- (1) Upon **initial** fit of the Hydraulic damper kit, it must be noted that the dampers **must** be fitted as axle pairs, (i.e. **both** front and/or **both** rear wheel stations and not singly)
- (2) When fitting shock absorbers ensure that they are fitted with the larger diameter outer can end to the top mountings
- 7.1 Stores to be demanded.

72

	Item No.	DMC	NSN/Part No.	Designation	Qty Per wheel station
	1		2510-99-549-6075	Suspension Kit	1
	С	onsists of:			
	2		2510-99-364-0551	Hydraulic linear damper	1
	3		2510-99-611-7609	Top Mounting Pin らのいろろろ	1
	4		2510-99-575-2206	Top Mounting Pin 800(883)	2
1*	5		2510-99-799-9134	Bottom Mounting Pin 80018832	1
	6		2510-99-679-8193	Revised Bump Stop	1
	186	CAN DE	×	_	

7.2 Stores to be removed and discarded.

Item No.	DMC	NSN/Part No.	Designation	Qty Per wheel station
7		2530-99-865-6116	Damper	1
8		5306-9+9-866-9210	Top Mounting Pin	1
9		2530-99-865-6114	Mounting Pin FV 300040	1
10		FV395845	Bump Stop assembly	1

## 7.3 Stores to be obtained locally

ltem No.	DMC	NSN/Part No.	Designation	Qty Per wheel station
11		8030-99-253-6699	Sealing Compound	As Reqd
12		5310-99-137-0580	5/8 in. UNF Shallow Nylock nut  Not correct - 3/4"	2

## Sequence of operations

#### WARNINGS

PERSONNEL DANGER. ENSURE ALL SAFETY PROCEDURES DETAILED IN AESP 2350-T-250 OCTAD ARE FOLLOWED WHILST FITTING THE DAMPER UPGRADE.

#### NOTE

The item numbers used in Para 7 are used as reference throughout this instruction.

#### Front wheel stations

- 8 Follow the procedures laid down in AESP 2350-T-251-201 for the removal of road wheels and remove the front road wheel.
- 9 Slacken the upper bracket-clamping bolt (Fig 1) and remove the existing damper top mounting pin and discard. Retain the top pin nut, if the nut is damaged fit a new nut NSN 5310-99-866-6962.

#### NOTE

Removal and refitting of the top pin is improved if the outer mounting bracket is unbolted from final drive flange.

- 9.1 If the trailing arm does <u>not</u> feature a split clevis damper mounting, then unscrew and remove the UNF lock-nut fitted to the inner end of the mounting pin and unscrew and remove the pin.
- 9.2 If the trailing arm <u>does</u> feature a split clevis damper mounting arrangement, slacken and remove the bolts retaining the upper caps of the split clevis to the trailing arm (Fig 2). Identify which upper clevis half was fitted to which part of the clevis mounting before removing them from the trailing arm.

## WARNING

EQUIPMENT DAMAGE. IT IS ESSENTIAL THAT WHEN RE-FITTING THE CLEVIS UPPER CAPS THEY ARE REFITTED IN THE POSITIONS (INNER OR OUTER) AND ORIENTATION THEY WERE ON REMOVAL. THE CAPS ARE MACHINED IN LINE WITH THE TRAILING ARM. RE-FITTING THE CAPS IN THE WRONG POSITION COULD GIVE PROBLEMS WITH MOUNTING BORE ALIGNMENT.

- 10 Lift away the damper and clean all loose dirt/corrosion away from the damper mounting holes in the upper bracket/trailing arm.
- 11 Slacken and remove the ¾ in. UNF nut securing the existing bump-stop assembly (Item 9) to the mounting bracket and remove the bump stop. Clean the loose dirt/corrosion away from the bump-stop bracket-mounting hole.
- 12 If the trailing arm is of the split-clevis type, fit the bottom mounting pin (Item 5) to the lower mounting bush of the replacement damper (Item 2) as follows:
  - 12.1 Unscrew the threaded nut from the pin (Item 6) and clean and de-grease both parts. Fit the pin through the damper lower mounting bush. Apply the sealing compound (Item 11) to the threads of the pin, fit the nut and tighten to a torque of 15/20 Nm (11/15 lbft) using 23mm A/F and 27mm A/F sockets on pin and nut respectively (taking care not to damage the pin or nut outer surface). Allow the sealing compound to cure for two hours (minimum) to achieve functional bond strength.
- 13 Place the replacement damper (Item 2) upper mounting in position in the upper mounting bracket (Fig 1) with the nameplate facing outward. Fit the top-mounting pin (Item 3) through the upper mounting as shown and screw fully in using a 1<sup>5</sup>/<sub>16</sub> in. socket until the damper mounting inner sleeve is fully clamped. Retighten the upper bracket-clamping bolt.

- 14 If the lower mounting is of the split clevis type, offer the lower end of the replacement damper (complete with mounting pin (Item 5)) into the trailing split clevis (orientation of mounting pin (Item 5) is not important). Refit the split clevis caps to the positions they were removed from (Sub-para 9.2). Refit and tighten the 4 off clevis cap retainer bolts.
- 15 If the trailing arm lower mounting is not of the split clevis type, offer the damper lower mounting bush into the trailing arm clevis and fit mounting pin (Fig 3(5)). Screw the pin fully home (i.e. damper bush inner sleeve clamped) and fit a new UNF lock nut to the protruding inner thread of pin (Item 5).

#### WARNING

EQUIPMENT DAMAGE. DAMAGE TO THE REPLACEMENT HYDRAULIC DAMPERS WILL RESULT IF THE ORIGINAL (SHORTER LENGTH) BUMP STOPS ARE NOT REPLACED WITH THE REPLACEMENT (LONGER) BUMP STOP SUPPLIED WITH THE HYDRAULIC DAMPER KIT. ON NO ACCOUNT SHOULD OLD PARTS BE RE-USED.

- 16 Fit the replacement bump stop (Item 6) to the bump stop bracket, and fit the ¾ in. UNF self-locking nut supplied with the replacement bump stop to the protruding stud. When fitting the bump stop discard the washer and check for thread protrusion through the nylock nut.
- 17 Follow the procedures laid down in AESP 2350-T-251-201 for the refitting of the front road wheel.

#### Rear wheel stations

- 18 Following procedures laid down in AESP 2350-T-251-201 for the replacement of the existing friction type linear dampers; remove the rear roadwheel and adjacent top rollers (in order to gain access to the upper damper mounting).
- 19 Slacken and remove the existing damper top-mounting pin.
  - 19.1 If the trailing arm does <u>not</u> feature a spit clevis damper mounting, unscrew and remove the UNF 'stiff' nut fitted to the inner end of the mounting pin and unscrew and remove mounting pin.
  - 19.2 If the trailing arm <u>does</u> feature a split clevis damper mounting arrangement, slacken and remove the bolts retaining the upper halves of the split clevis to the trailing arm (Fig 2). Identify which upper clevis half was fitted to which part of the clevis mounting before removing them from the trailing arm.

#### **WARNING**

EQUIPMENT DAMAGE. IT IS ESSENTIAL THAT WHEN RE-FITTING THE CLEVIS UPPER CAPS THEY ARE REFITTED IN THE POSITIONS AND ORIENTATION THEY WERE ON REMOVAL. THE CAPS ARE MACHINED IN LINE WITH THE TRAILING ARM. RE-FITTING THE CAPS IN THE WRONG POSITION COULD GIVE PROBLEMS WITH MOUNTING BORE ALIGNMENT.

- 20 Lift away the damper and clean loose/dirt/corrosion away from the damper mounting holes in the upper bracket/trailing arm.
- 21 Slacken and remove the ¾ in. UNF nut securing the existing bump stop assembly (Fig 3) to the bump stop mounting bracket and remove the bump stop (Item 9). Clean loose dirt/corrosion away from the bump stop bracket-mounting hole.
- 22 If the trailing arm is of the split-clevis type, fit the bottom mounting pin (Item 5) to the lower mounting bush of the replacement damper (Item 2) as follows:
  - 22.1 Unscrew threaded nut from the pin (Item 5). Clean and de-grease both parts. Fit the pin through the damper lower mounting bush. Apply sealing compound (Item 10) to the threads of the pin, fit the nut and tighten to torque of 15/20 Nm using 23mm A/F and 27mm A/F sockets on pin and nut respectively (taking care not to damage the pin or nut outer surface). Allow the sealing compound to cure for 2 hours (minimum) to achieve functional bond strength.

- 23 Place the replacement damper (Item 2) upper mounting in position in the upper mounting bracket (Fig 4) with the nameplate facing outward. Fit the top-mounting pin (Item 4) through the upper mounting and screw fully in using a <sup>15</sup>/<sub>16</sub> in. A/F socket until the damper mounting inner sleeve is fully clamped. Fit a new shallow UNF lock nut (Item 12) to the protruding inner thread of the pin (Item 4) and check for thread protrusion through the nylock nut.
- 24 If the lower mounting is of the split clevis type, offer the lower end of the replacement damper (complete with mounting pin (Item 5)) into the trailing split clevis (orientation of mounting pin (Item 5) is not important). Refit split clevis 'caps' to the positions they were removed from (ref section 9.2).
- 25 If the trailing arm lower mounting is not of the 'split clevis' type, offer the damper lower mounting bush into the trailing arm clevis and fit mounting pin (Fig 3, Item 5). Screw the pin fully home (i.e. damper bush inner sleeve 'clamped') and fit a new <sup>5</sup>/<sub>8</sub> in. UNF lock nut to the protruding inner thread of pin.
- 26 Fit the replacement bump stop, (Item 6) to the bump stop bracket fit the ¾ in. UNF self-locking nut supplied with the replacement bump stop to the protruding stud and **tighten**. When fitting bump stop discard the washer and check for thread protrusion through the nylock nut.
- 27 Follow the procedures laid down in AESP 2350-T-251-201 for the refitting of the rear road wheel.

#### Testing after embodiment

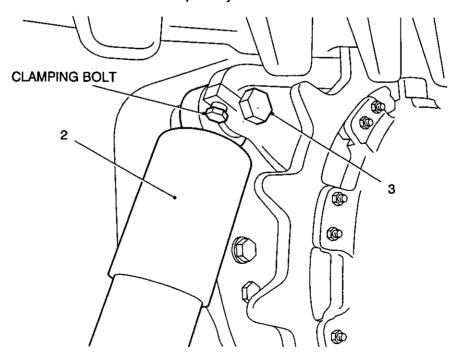
28 Nil

## **EFFECT ON WEIGHT**

29 Negligible

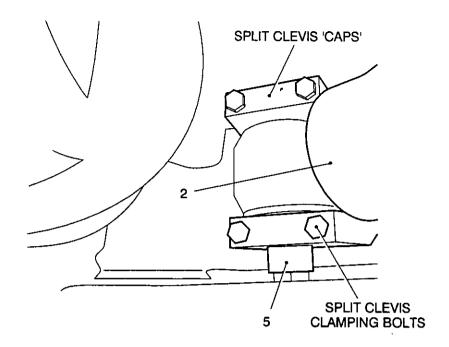
#### **PUBLICATION AMENDMENTS**

30 Publication amendments will be issued separately.



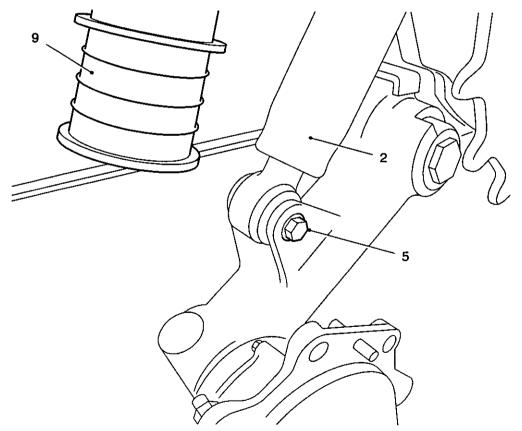
430/80001

Fig 1 Front upper mounting bracket



430/80002

Fig 2 Split Clevis lower mounting



430/80003

Fig 3 Standard (Non split) Lower mounting brackets

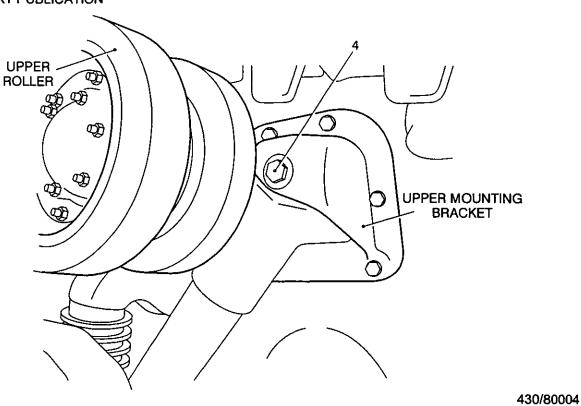


Fig 4 Rear Damper top mounting bracket

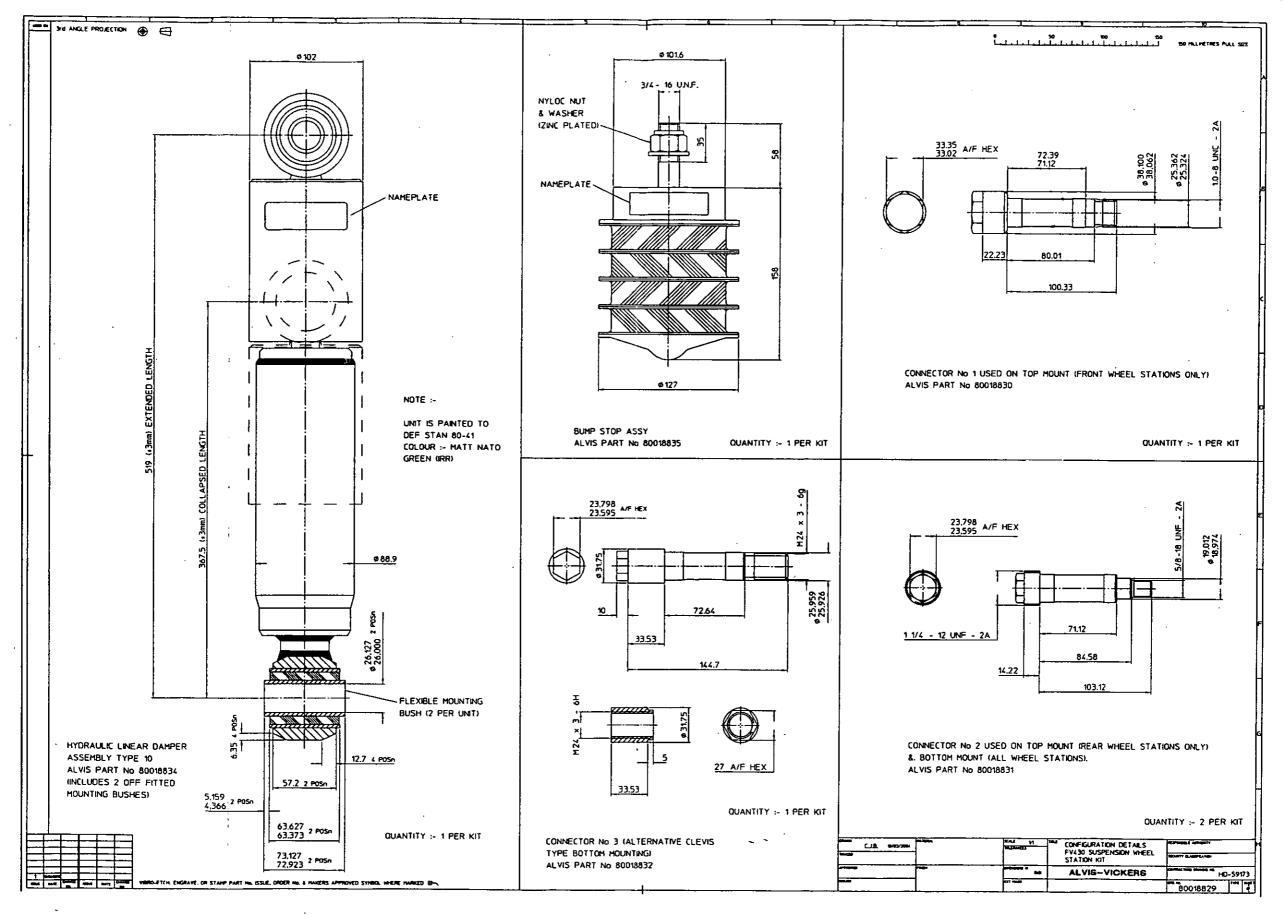


Fig 5 Configuration Details

Gen Instr No. 7 Page 8

UK DECTRICTED

Jun 04 (Amdt 1)

430/80000

FV430 ESM

## **GENERAL INSTRUCTION No. 7**

## **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, indicating in the table below which axle pairs have been fitted. Multiple equipment returns can be submitted.

LASS IPT DLO Monxton Road Andover Hampshire SP11 8HT	
From:	
Unit:	UIN:
Name:	Signature:

## **General Instruction No. 7**

Vehicle registration number(s)	Front pair	Rear pair	Date embodied
	<u> </u>		
	<u> </u>		
	<del> </del>		
	<u> </u>		

# COMMENT(S) ON AESP\*

To: DCCS BFPO 794	Fron	LASS I Monxto	redge, 430 TSO, PT, DLO Andover, on Road, Andover, SP11 8HT		
Sender's Reference B	IN Number	••••	Date		
LASS IPT, 430 TSO, AESP.			16 June 04		
<b>AESP* Title:</b> 2350-T-250-821, General Ins	structions, FV43	30 Common	tems.		
Chapter(s)/Instruction P	Chapter(s)/Instruction Page(s)/Paragraph(s)				
General Instruction No.7 P	ara's: 7,9,16,20	6 and 23.			
If you require more space, please use the re Comment(s): Amendments detailed on att		orm or a sep	arate piece of paper.		
			-	<del></del>	
Signed:	***************************************	Telephone	No.: 01264 385684.		
Name (Capitals): MARK DREDGE		Rank/Grad	e: DDate:	: 16 June 04	
×					
FOR AES	SP* SPONSOR	USE ONLY			
То:		From:		••••••	
Thank you for commenting on AESP*:					
Your reference:		Dated:		•••••	
Action is being taken to:	Tick			Tick	
Issue a revised/amended AESP*		Under inves	stigation		
Incorporate comment(s) in future amendme	ents x	No action re	equired		
Signed:  Name (Capitals):		•	Date		
AESP Form 10 (Issue 5.0 dated Dec 01)					

Form 10.dot Date

## Amendments to FV430 General Instruction No.7

Amenaments	s to FV430 General Instr	uction No.7	
<u>Para 2.1</u>			
Remove:			
All FV430 seri	ies.		
Insert:			
FV432, FV436	6 and FV439.		
Para 7			
Insert second	note:		
•	hock absorbers ensure the lock to the top mountings.	nat they are fitted with the larger di	ameter
<u>Para 7.3</u>			
Insert line iten	n:		
12 53	310-99-137-0580	5/8 in. UNF Shallow Nylock Nut	2off
Para 9			
Insert at end o	of Para after "discard".		
Note: Remova		new nut NSN: 531099-866-6962. s improved if outer mounting brack	et is
Para's 16 and	<u>1 26</u>		
Insert after tex	xt:		
When fitting b nylock nut.	oump stop discard washer	r and check for thread protrusion t	nrough
<u>Para 23</u>			
Remove:			
Fit a new UNF	F lock nut to the protrudin	g inner thread of pin (item 4).	
Insert:			
		310 99 137 0580 to the protruding ead protrusion through nylock nut.	

**FV430 SERIES, VEHICLES, ALL MARK** 

**GENERAL INSTRUCTION No. 8** 

Sponsor:

DGES(L)

Publication Agenc BAE Systems Land Systems

(Weapons & Vehicles) Ltd

Task No.: 13133

#### AMENDMENT RECORD

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

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

SUBJECT: Fixed Fire Extinguisher Bottles - Change of Contents

(Approval No. 43/0/00/71)

#### INTRODUCTION

This instruction details the procedure to remove the existing fixed BCF fire extinguisher bottles and replace with new fixed fire extinguisher bottles containing FM200 so as to comply with the latest environmental regulations.

#### **APPLICABILITY**

- This general instruction is applicable to:
  - 2.1 Carrier Personnel Full Tracked FV432 Mk 2 & 2/1.
  - 2.2 Carrier Maintenance Full Tracked FV434 Mk 1 and 1/1.
  - 2.3 Carrier Armoured Staff Vehicle, Full Tracked, Mk 2 and 2/1 FV436 (ASV).
  - 2.4 Carrier, Installation, Full Tracked, Mks 2 and 2/1 (FV439).

#### REASON FOR INTRODUCTION

3 To conform to the latest environmental regulations.

## **ESTIMATED TIME REQUIRED**

Embodiment:

1.5 man-hours.

## **IMPLEMENTATION**

This General instruction is to be implemented by units authorized to undertake level 2 maintenance and above.

## HICKOTOTED=46

## Action required by

F

## 6.1 Holding units and establishments:

- 6.1.1 Examine equipment documents to see if this instruction is applicable and where necessary, units with level 2 maintenance support request the stores from unit QM(T). Extinguishers are to be issued to Unit QM (Tech) under the control of Turret Systems, LASS IPT, Tel Andover Mil (94391) Ext 3124 or Civ (01264) 383124. Units are not to demand unless replacements are required.
- 6.1.2 On receipt of the stores, request level 2 maintenance to modify the equipment.
- 6.1.3 Record the General subject and AESP details in the equipment documents (AB 413).
- 6.2 Units authorised to complete level 2 maintenance and above:
  - 6.2.1 When requested by users, obtain the items listed in Para 7 and carry out this instruction.
  - 6.2.2 Record completion details of General in equipment documents (AB 413).
- 6.3 <u>All recipients of this instruction:</u> Add particulars to AESP 2350-T-250-821 Gen Instr Index. Turret Systems, LASS IPT, is to be notified of any equipment still fitted with BCF extinguishers by 1<sup>st</sup> Dec 2006.

#### Stores, tools and equipment

7 The item numbers in Para 7 are used as reference throughout this instruction.

#### 7.1 Stores to be demanded.

ltem	DMC	NSN/Part No.	Designation (4)	Qty
(1)	(2)	(3)		(5)
1	6BCF	4210-99-861-3043	Extinguisher bottle fire suppression. (light stone colour)	2

## 7.2 Stores to be removed.

ltem (1)	DMC (2)	NSN/Part No. (3)	Designation (4)	Qty (5)
1	6BCF	4210-99-826-6758	Fire Extinguisher filled with 1/2 gallon B.C.F.	2
	(Sup	erest (4210-99-	581-5087)	



#### Sequence of operations

#### **WARNINGS**

- (1 PERSONNEL HAZARD. UNDER NO CIRCUMSTANCES IS THE CYLINDER CLAMP TO BE REMOVED UNTIL BOTH CONTROL CABLES HAVE BEEN DISCONNECTED.
- (2) PERSONNEL HAZARD. UNDER NO CIRCUMSTANCES IS WORK ON THE CONTROL CABLE TO BE UNDERTAKEN UNTIL SECURITY OF CYLINDERS HAS BEEN CONFIRMED.
- 8 Embody the instruction kits as follows:
  - 8.1 Ensure the vehicle is parked on firm level ground with the parking brake applied and the vehicle master switch in the 'OFF' position.
  - 8.2 If not already fitted, embody AESP 2350-T-250-811 Mod Instr No. 4 Fire extinguisher restraint prior to removing the bottles.

#### WARNING

- (1) ASPHYXIATION HAZARD. THIS EQUIPMENT CONTAINS A BCF FIRE SUPPRESSED SYSTEM. IF BCF VAPOUR IS BREATHED, IT CAN CAUSE SUFFOCATION. ONLY TRAINED PERSONNEL UNDER SUPERVISION ARE ALLOWED TO WORK ON THE SYSTEM. ANYONE WHO HAS BREATHED BCF VAPOUR IS TO RECEIVE MEDICAL ATTENTION.
- 8.3 Remove the old fixed fire extinguisher (qty 2) with 1/2 gallon B.C.F (item 2) in accordance with the procedure detailed in AESP 2350-T-250-522 Chap 2-3.

#### WARNING

- (1) ASPHYXIATION HAZARD. THIS EQUIPMENT CONTAINS A HECTOFLOUROPROPANE (FM 200) FIRE SUPPRESSED SYSTEM. IF FM 200 VAPOUR IS BREATHED, IT CAN CAUSE SUFFOCATION. ONLY TRAINED PERSONNEL UNDER SUPERVISION ARE ALLOWED TO WORK ON THE SYSTEM. ANYONE WHO HAS BREATHED FM 200 VAPOUR IS TO RECEIVE MEDICAL ATTENTION.
- 8.4 Fit the new fixed extinguisher suppression (item 1) (2 off) in accordance with the procedure detailed in AESP 2350-T-250-522 Chap 2-3.
- 8.5 Old BCF extinguishers are to be returned to stores in packaging from new FM 200 bottles (item 1), with packaging suitably re-labelled with NSN 6BCF 4210-99-826-6758.

#### **Testing after embodiment**

9 Nil.

#### Effect on weight

10 Negligible.

#### **PUBLICATION AMENDMENT**

11 Relevant AESP's will be amended in due course.

Amendment No. 1 to 2350-T-250-821 Gen Instr No. 7

#### **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.

#### **AMENDMENT INSTRUCTION**

FV430 Series, Vehicles, All Marks,

#### **GENERAL INSTRUCTION No 7**

#### **ACTION**

#### Removal and insertion of leaves

1 Remove

1.1 From, Pages 1 to 9/10 (5 leaves) Pages 1 to 9/10 (5 leaves)

## Amendment record

2 Record the incorporation of this amendment on the amendment record box on page 1 of this instruction and destroy this instruction sheet together with any pages that have been removed.

Insert

LASS