RRAF/FORM/2516

R.R.A.F. TECHNICAL ORDERS

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R.R.A.F. TECHNICAL ORDERS

AMENDMENT RECORD SHEET

TO: - VOLUME: - ..3....... SECTION: - ..2....... SUB.SECTION: ..B........

R.R.A.F. TECH ORDER NO.	AMENDMENT NUMBER RECEIVED				
3. 2. B59	308				
B67	320				
B40	332				
B75	403				
B84	435				
B70	456	581			
B66	463	594			
B86	475	990			
B88	490				
B74	541				
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B94	577	586			
B44	593				
B23	653				
B105	717				
B109	745				
B108	744				
B101	833	846			
B115	908				

NOTE: 1. This Index to Amendments issued, is to be inserted behind the Index Sheet of each Section & Sub.Section of all Volumes of Technical Orders.

2. Amendments are to be entered in the columns provided from left to right immediately on receipt, and the Amendment attached to the applicable Technical Order.

29th January, 1962

This T.S.I. is issued in accordance with R.R.A.F. T.S.I., Vol.1, No. 2, Issue 7.

Vampire Mk. T.11 Aircraft - Rewire of Undercarriage Leg Lock Micro Switches

(mod. No. R.R.A.F./Vamp/15)
(Class C/3)

1. INTRODUCTION

This modification introduces Triprensheath Cable Electric 5E/3114 to replace Tripren used on leg lock micro switches.

2. EMBODIMENT

Next Major Servicing.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

9 man hours.
Electricians - 7 man hours.
Airframe fitter - 2 man hours.

4. DRAWINGS

Photographs - Nos. 1, 1A and 2.
Drawings - Figs. 1 and 2.

5. PARTS AND SPECIAL TOOLS REQUIRED

(a) Parts Required

		Qty. Reqd.
5E/3114	Cable, Electric, Triprensheath 6	8' 6"
28E/14038	Clips, Type P, 5/16"	3 off
5K/9107065	Sleeves, Insulating, No. 1	18 off
5K/9107067	Sleeves, Insulating, No. 3	6 off
5K/9107389	Sleeve, Marking, Yellow, 3MM 0	2
5K/9107311	" " " 3MM 1	8
5K/9109124	" " " 3MM 3	2
5K/9107129	" " " 3MM 4	2
5K/9109125	" " " 3MM 5	4
5K/9109126	" " " 3MM 6	2
5K/9107545	" " " 3MM +	6
5K/9107467	" " " 3MM U	18
5X/6988	Crimp End, Ring, Tongue, 4 B.A.	9
5F/2034	Tubing, Insulating, Synthetic, Flexible (.375" I.D.)	12"

(b) No special tools are required.

6. SPARES AFFECTED

Nil.

7. CHANGE OF STORES, REFERENCE, PART, AND ASSEMBLY NUMBERS

Nil.

8. SEQUENCE OF OPERATIONS

(1) Airframe Fitter tradesmen remove radius attachment bolts from upper links, Port, Starboard and nose. Replacement of attachment bolts after modification.

/(2)

(2) Electrical Tradesmen

(a) With upper links disconnected from main radius rods, locate leg lock micro switches, cable and control terminal blocks in undercarriage wheel housing.

(b) Disconnect cable U+, U5, U13 from terminal blocks 34 and 35, port side, and remove cable and micro switch from upper link.

(c) Disconnect cable U+, U6, U15 from terminal blocksm 37 and 38, starboard side, and remove cable and micro switch from upper link.

(d) Disconnect cable U+, U14, U10 from terminal blocks 32 and 33, nose, and remove cable and micro switch from upper link.

(e) Make up two cables using triprensheath 6 (5E/3114), each approximately 2' 6" in length. Strip cable outer insulation on micro switch ends to lengths shown in Fig. 1, sleeve and mark cables to original cable coding and connect to micro switches.

(f) Fit micro switches and cables to upper port and starboard undercarriage. Secure cables using clips, P type, 28E/14038 to underside of micro switch on switch securing bolt, as shown in Photographs 1 and 1A.

(g) Route cables port and starboard to the respective terminal blocks, ensuring that the cable from the leg lock micro switch is routed through the rearmost of the two slots between the mainplane upper skin and the boom of rib No. 3. It is important not to have any slack cable on first forward movement of upper link when undercarriage is retracting.

(h) Slide a 6" length of tubing, insulating, synthetic, flexible (5F/2034) over the cable at the terminal block end. Secure the cable and tubing to the cleat on the boom of rib No. 3, ensuring that the tubing extends through the rearmost slot on the boom by at least 1".

(j) Sleeve and Mark U+, U5, U13, port side and U+, U6, U15, starboard side, and crimp end, ring, tongues, 4 B.A. on terminal block ends and connect as original coding.

(k) Make up one cable using Triprensheath 6, approximately 3' 6" in length, sleeve and mark U+, U10, U14 on terminal block end. Strip cable outer insulation to measurements shown in Fig. 2 for micro switch connections. Crimp end, ring, tongues, 4 B.A. on terminal block end of cables. Connect micro switch and fit to nose upper link, routing cable under micro switch (as shown in photograph 2) to terminal blocks 32 and 33.

9. TESTING AFTER EMBODIMENT

Carry out retraction tests, and light indication sequence.

10. RECORDING ACTION

Record on Form 700.

11. DISPOSAL OF REDUNDANT PARTS

Nil.

12. EFFECT OF WEIGHT ON C. OF G.

Negligible.

(E.F. GERICKE)
Squadron Leader,
Officer Commanding
Technical Wing
Royal Rhodesian Air Force
New Sarum

SOURCE: RRAF/VAMP/M27 and
F.C.T. T.S.I., Vol.3, Part 2A/Vampire, Command Mod.Vampire 106, Issue No.2

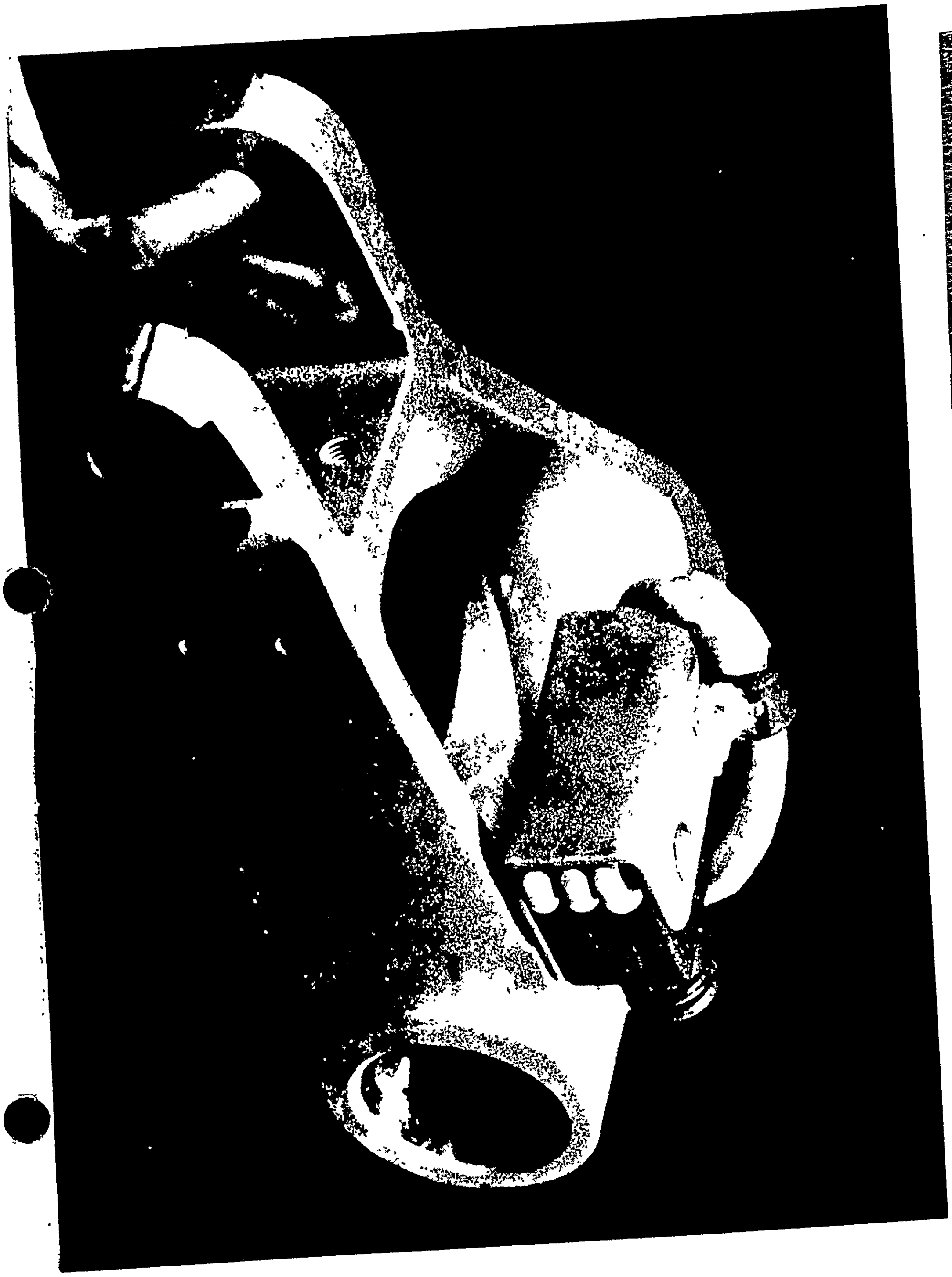


PHOTO No 1A

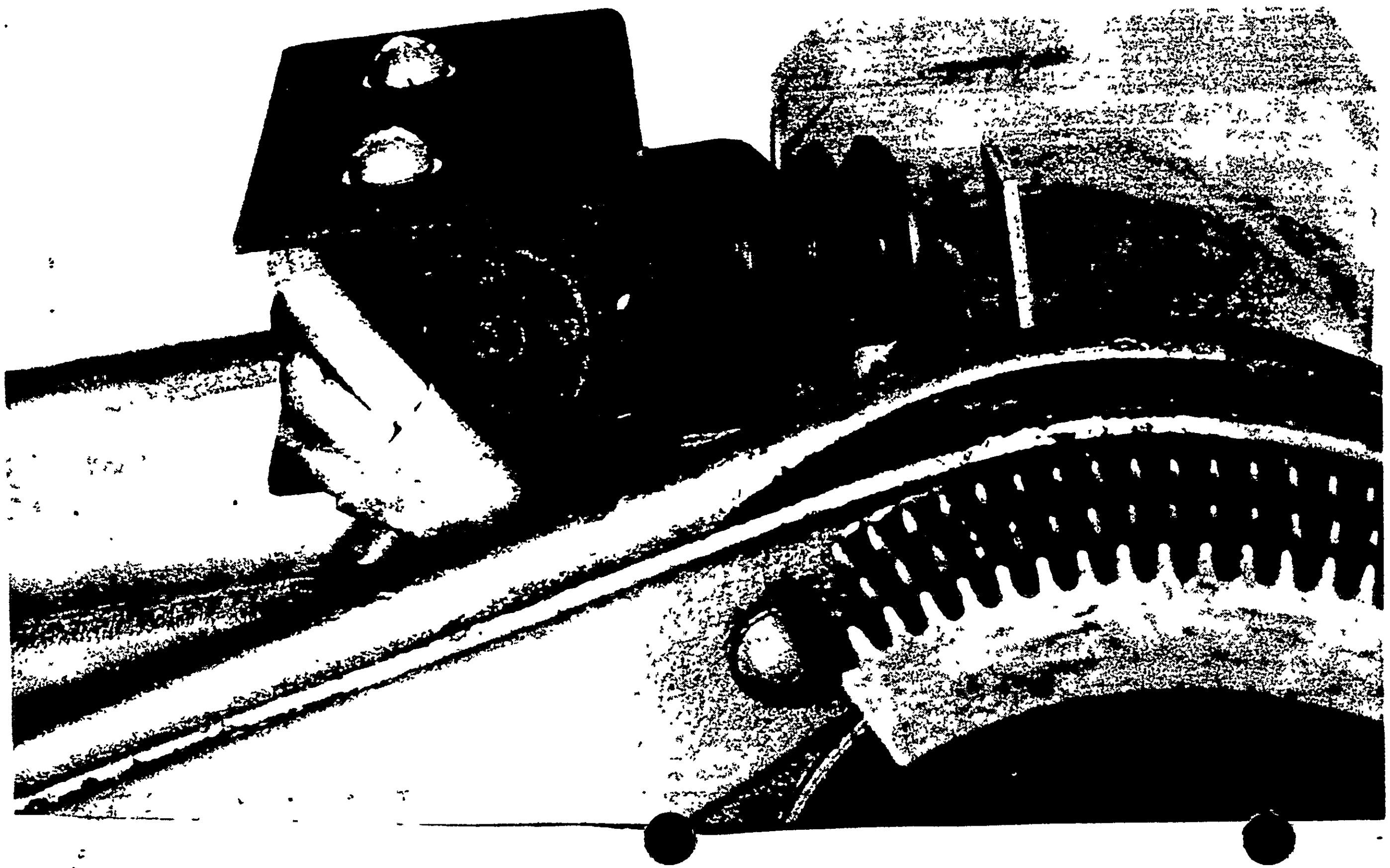
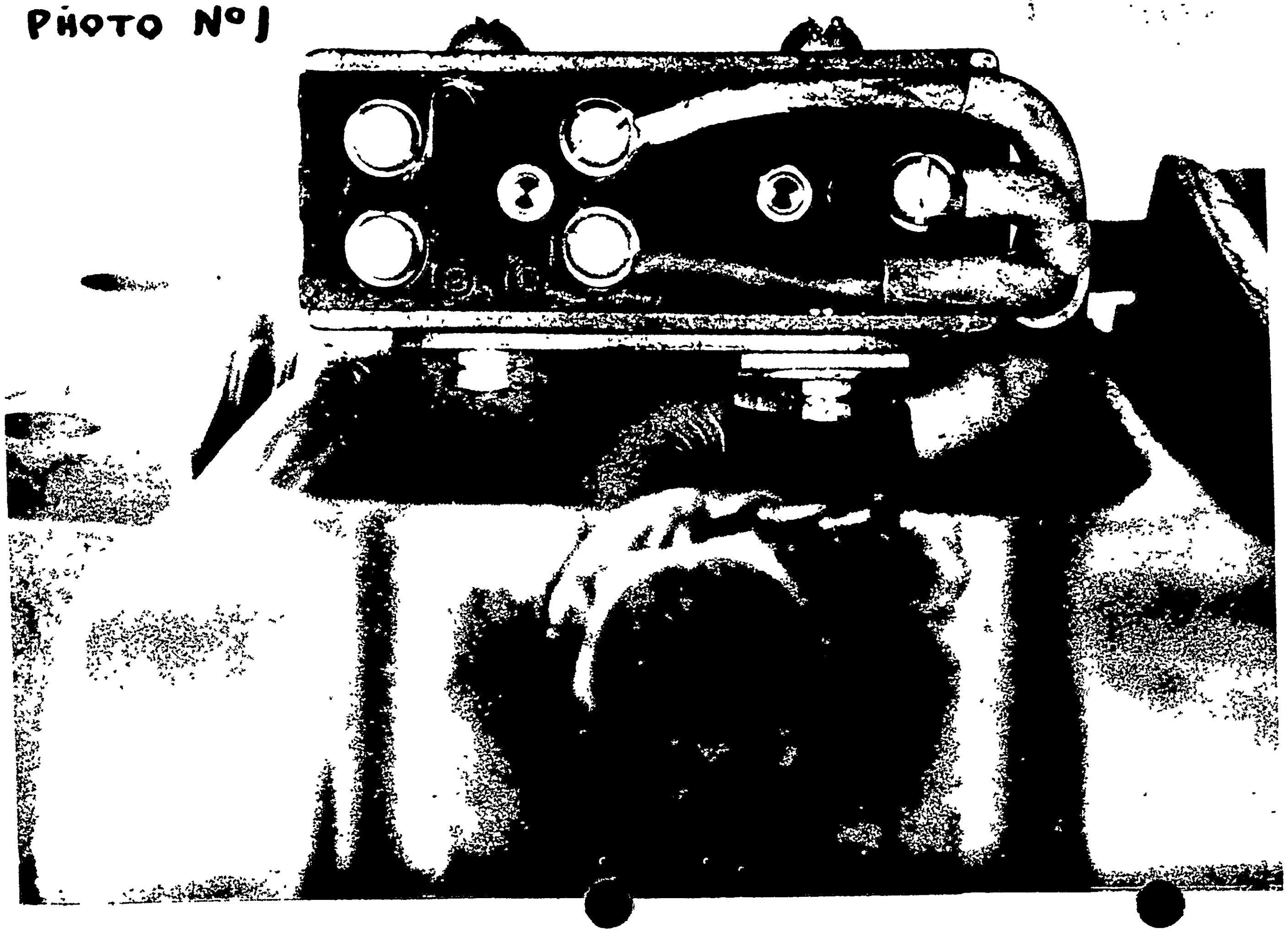
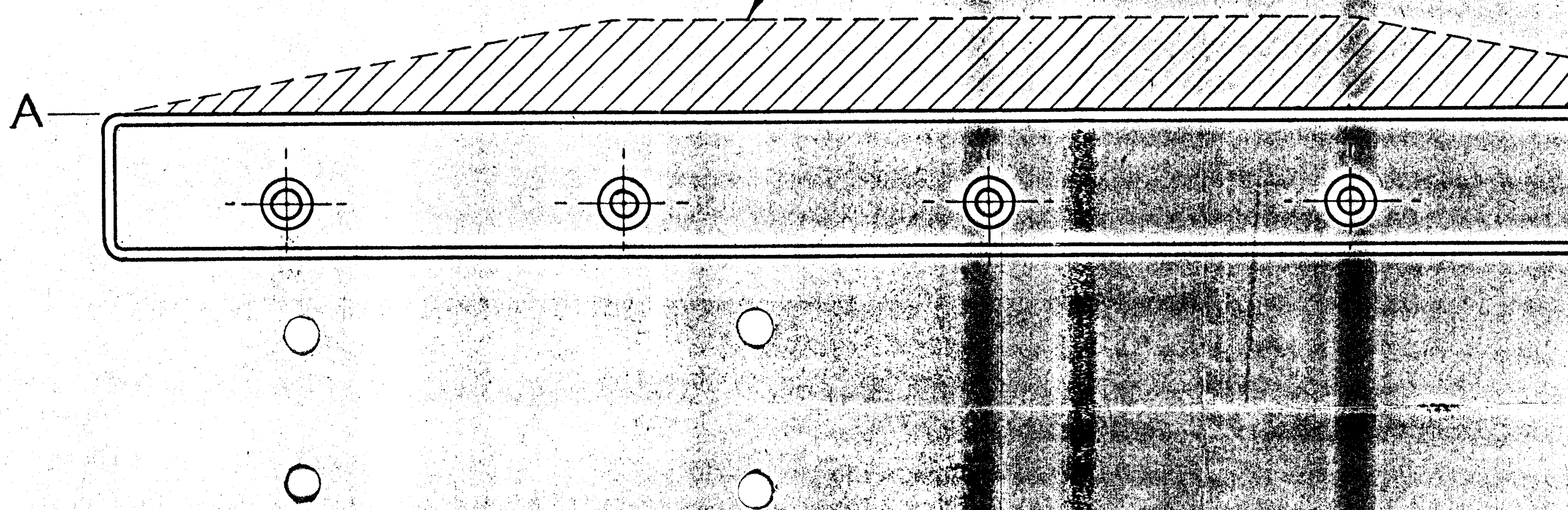


PHOTO No 1



A.V. 54	DO NOT SCALE	QUERIES TO D.O.	DIMENSION

PT. No. G00. 1595 A/1 (PORT.) } BEFORE
PT. No. G00. 1596 A/1 (STBD.) }



CUT ALONG LINE A-A. RADIUS & CHAMFER AS SHOWN. DISCARD

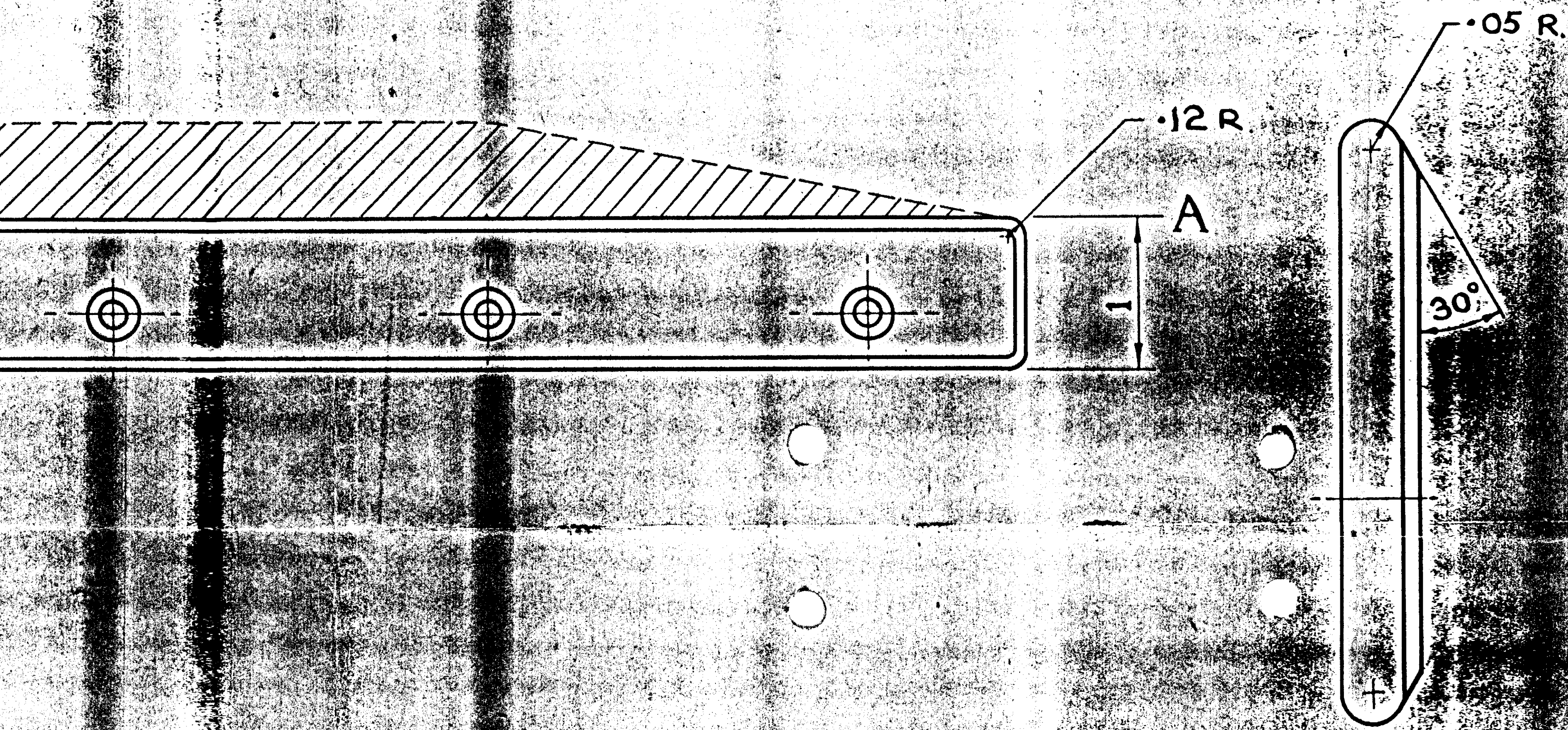
STORES REF. 26 FC. 737 (PORT) } AFTER MODIFICATION.
STORES REF. 26 FC. 739 (STB'D) }

							FINISH
D. O. R.R.A.F. N. S.	SCALE FULL & 4:1	DE-MODIFICATION OF MOD VAMPIRE 3320 **RUBBING STRIP MAIN U/C**				SOURCE. D.H. DRG No MA.723 & TECH ORDER V3-2-851	TOLERAN ± ·015

UERIES TO D.O.	DIMENSIONS IN INCHES	REMOVE SHARP EDGES

ISSUE	DATE	AMENDMENT	DRN / CHKD
A	8/5/58		

PT. No. G00. 1595 A/1 (PORT)
PT. No. G00. 1596 A/1 (STBD) } BEFORE MODIFICATION



CHAMFER AS SHOWN DISCARD SHADED PORTION

END ELEVATION
AFTER MODIFICATION
SCALE 4X FULL SIZE

C.737 (PORT)
C.739 (STBD) } AFTER MODIFICATION.

		FINISH SMOOTH.	DRN	—	DRAWING No.
			TRCD.	C.J.C.	AV 54
OF 20 MAIN U/C	SOURCE D.H. DRG No MA.723 & TECH ORDER V3-2-B51	TOLERANCE ± ·015	CHKD.	A.J. Young	
			O.C.M.U.	[signature]	No OF SHTS 1
			APPROVED	[signature]	SHEET No 1

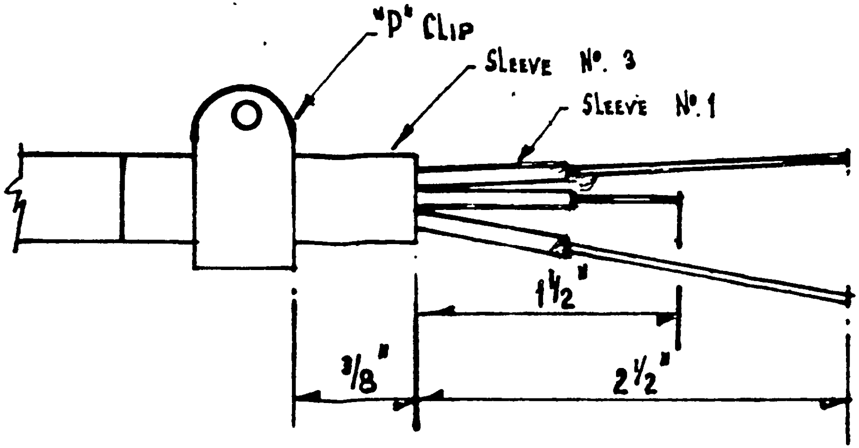

"P" CLIP
SLEEVE No. 3
SLEEVE No. 1
1½"
3/8"
2½"

FIG. 1.

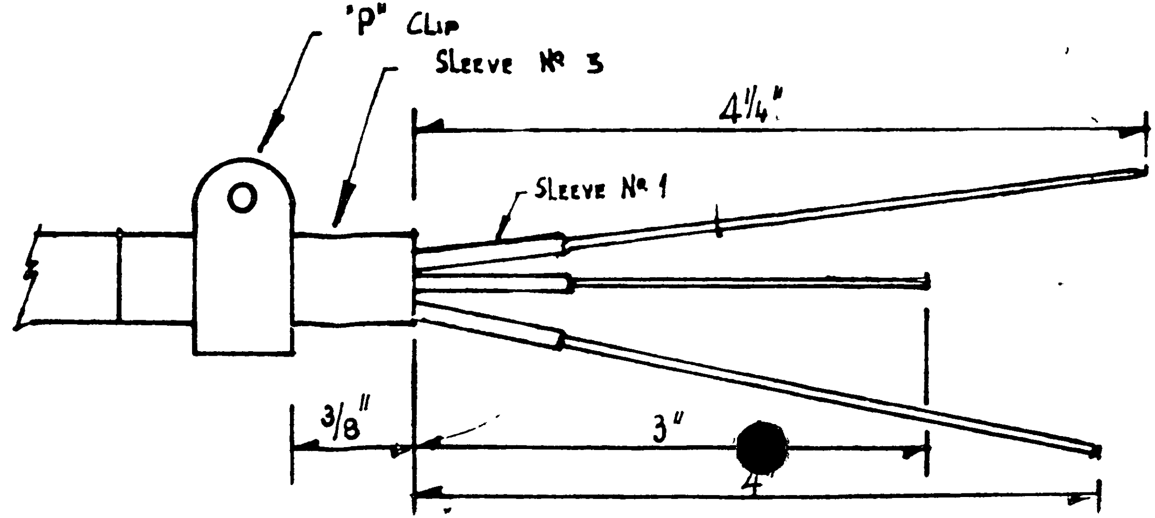

"P" CLIP
SLEEVE No 3
4¼"
SLEEVE No 1
3/8"
3"

FIG: 2.

Technical Wing,
Royal Rhodesian Air Force,
New Sarum.

R.R.A.F. Technical Staff Instruction.

Vol.3. Sect.2. Sub.Sect.B.99 (Issue 1).

Date:- 7th December, 1961

This T.S.I. is issued in accordance with R.R.A.F. T.S.I, Vol.1,No.2, Issue 7.

Vampire T.Mk.11 Aircraft - Hydraulics - To Introduce Redesigned Hydraulic Hand Pump Handle, Part No. 15S.1651A in Place of Part No. 15S.949A/1.

(Mod. No. Vampire/3636).

(Class B/2).

INTRODUCTION

The round head bolt on the existing hydraulic hand pump handle fouls the harness release cable and a thigh strap on the starboard side of the port parachute assembly. This modification introduces a new handle with the lateral axis of the longer lever rotated through ninety degrees to obviate the foul.

This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.Is, S.Is or S.R.I.Ms.

EMBODIMENT

This modification is to be embodied by:

Squadrons: At the first opportunity, but not later than one month after receipt of parts.

C.R.S.E. : Before issue of aircraft.

APPROXIMATE TIME REQUIRED FOR EMBODIMENT

3 Man - hours.

DRAWINGS REQUIRED

Nil.

PARTS REQUIRED

(a) The modification kit consisting of the following items is to be demanded from C.E.D. New Sarum, under Ref. No. 26FC/103636 :

Ref.No.	Part No.	Nomenclature	Qty.	Class of Equipt.
26FC/13273	15.S.1651A	Handle assy., sliding	1	C

(b) The following material is also required, and is to be provided under Unit arrangements;

33C/1197	-	Compound, sealing, chromated. Spec. D.T.D.900/4301.	As Reqd.	C

6. MODIFICATION OF SPARES AFFECTED

Nil.

7. CHANGE OF STORES REFERENCE, PART AND ASSEMBLY NUMBERS

Nil.

/8.

8. SEQUENCE OF OPERATIONS

The sequence of operations is in accordance with A.P.4099J, Vol.2, Leaflet No. P.24, A.L. No. 347.

9. TESTING AFTER EMBODIMENT

Nil.

10. RECORDING ACTION

Record in aircraft Forms 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned part rendered redundant by the embodiment of this modification is to be disposed of in accordance with current procedure:

Ref.No.	Part No.	Nomenclature	Qty.	Class of Equipt.
26FC/10486.	15.S.949A/1	Handle assy, sliding	1	C

12. EFFECT ON WEIGHT AND C. OF G.

Nil.

(E.L. PATTRICK)
Warrant Officer
Technical Adjutant
Technical Wing
R.R.A.F. New Sarum

SOURCE: Mod Folio RRAF/VAMP/M11
& A.P.4099J, Vol.2, Leaflet P.24.

Technical Wing
Royal Rhodesian Air Force
New Sarum

R.R.A.F. Technical Staff Instruction

Vol.3, Sect.2, Sub Sect. B98 (Issue 1)

Date: 8 December, 1961

This T.S.I. is issued in accordance with R.R.A.F. T.S.I. Vol.1, No.2, Issue 7.

Vampire T.Mk.11 Aircraft - Engine Control - To Improve Operation of Guard Provided for Preventing Ingress of Loose Articles into Throttle Boxes

(Mod. Vampire/3622)

(Class B/2)

INTRODUCTION

There have been reports of the throttle levers jamming owing to loose articles falling through the control lever slot in the throttle boxes and lodging between the chain and sprocket. This modification introduces a guard over the chain sprockets to obviate jamming of this nature.

(1) This modification supersedes the work called for by Mod. No. Vampire 3584.

(2) This modification is not essentially connected with any other approved modification.

EMBODIMENT

This modification is to be embodied by:

Squadrons: At the first opportunity but not later than 2 months after receipt of parts.

C.R.S.E.: Before issue of aircraft.

APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 16 manhours (3 to strip, 7 to embody, 4 to re-assemble and 2 to test, less rectification.)

DRAWINGS REQUIRED

Drawing No. A.P. 4099J/D.21/60, Sheets 1 and 2 incorporated in A.P. 4099J, Vol.2, Part 1, Leaflet No. D.21, A.L. No. 345.

PARTS AND SPECIAL TOOLS REQUIRED

(a) The Modification Kit consisting of the following items is to be drawn from C.E.D. New Sarum, under Ref. No. 26FC/103622:

Ref. No.	Part. No.	Nomenclature	Qty.	Class of Equip.
26FC/-	15.CE.2047	Bracket	1	-
26FC/-	15.CE.2069ND	Plate, bottom	1	-
26FC/-	15.CE.2075A	Clip Assy. Saddle	2	-
26FC/-	15.CE.2083A/ND	Plate Assy. top	1	-
26FC/-	15.CE.2089A	Seal Assy. control box	1	-
26FC/-	15.CE.2115A	Plate Assy. side stbd.	1	-
26FC/-	15.CE.2117	Plate Assy. side port	1	-

/2...

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equip.
28D/13088	A.25/21B	Bolt, hex. hd. 4 B.A.	1	C
28M/10327	AGS.2002/B1	Nut, stiff, thin, 4 B.A.	1	C
28W/9419448	AGS.2035/B	Washer, shakeproof 4 BA	1	C
28D/11937	AS.1246/1B	Bolt, roundhead, 4 B.A.	2	C
28Q/6668	AS.2227/408	Rivet, snaphead, 1/8" dia.	3	C
28Q/10412	AS.2230/404	Rivet, 120 deg. csk. hd. 1/8" dia.	2	C
26FC/-	AS.2810/4/190	Piece, distance	1	-
28S/15751	AS.2991/4B	Screw, roundhead 4 B.A.	1	C
28P/9429528	SP.9/C8	Pin, split, 1/16" dia.	2	C
28W/9419474	AP.15/B	Washer, 18 s.w.g. 4 B.A.	1	C

b) The following materials are also required and are to be provided under unit arrangements:

ef. No.	Part No.	Nomenclature	Qty.	Class of Equip.
3B/1108 or 3B/9428837	-	Finish, synthetic, matt, night.	As reqd.	C
3B/9429195	-	Primer, etch, accelerator	As reqd.	C
3B/9429196	-	Primer, etch, base	As reqd.	C
3V/1197	-	Compound, chromated sealing, Spec. D.T.D. 900/4301	As reqd.	C

. SPARES AFFECTED

Nil

. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows:-

Old			New	
Ref. No.	Part/Assy. No.	Nomenclature.	Part/Assy. No.	Ref. No.
26FC/-	15CE.815A/7	Assy. of engine control box (port)	15CE.815A/8	26FC/-
26FC/-	15C/.10014/1	Assy. of engine control box (2nd pilot's)	15CE.2079A	26FC/-
26FC/-	15CE.2077A	Ass. of engine control box (port)	15C/.2077A/1	26FC/-

. SEQUENCE OF OPERATIONS

The sequence of operations is to be in accordance with the A.P. leaflet at Para.4 above.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied, the following testa re to be carried out:

(1) Check the elevator trim tab, for its full travel and freedom of movement, with reference to A.P. 4099J, Vol.1, Sect.3.

(2) Check all the levers disturbed on the 1st and 2nd Pilot's engine control boxes, for their full travel and freedom of movement, with reference to the settings noted and A.P. 4099J, Volume 1.

10. RECORDING ACTION

Record in Aircraft Forms 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned part rendered redundant by the embodiment of this modification is to be disposed of in accordance with current procedure.

Ref. No.	Pt. No.	Nomenclature	Qty.	Class of Equip.
26FC/-	15.N.1349A	Guard, cable	1	-

12. EFFECT ON WEIGHT AND C OF G

This modification causes a weight change of + 0.50 lb., and a change of moment of - 4.0 lb.ft.

(E.F. GERICKE)
Squadron Leader,
Officer Commanding
Technical Wing
Royal Rhodesian Air Force
New Sarum

rce: Mod Folio/RRAF/Vamp/M2
And A.P. 4099J, Vol.2, Pt.1, Leaflet D21, A.L. No.345

Date: 7 December, 1961

This T.S.I. is issued in accordance with R.R.A.F. T.S.I. Vol.1, No.2 Issue 7.

Vampire Aircraft - Steel Adaptor in place of existing Aluminium Alloy Adaptor at No.1 Wing Tank Filler Cap - Introduction

(Mod. No. Vampire/3204)
(Class C/3) on replacement of Adaptor.

1. INTRODUCTION

This modification has been necessitated by cases where the existing aluminium alloy adaptor has loosened two or three turns, and owing to the similarity of materials, has seized on the filler neck. It makes provision for the introduction of a steel adaptor in place of the existing type.

NOTE: This modification is only to be embodied when the existing adaptor is found to be loose.

2. EMBODIMENT

This modification is to be embodied on replacement of adaptor for aircraft embodying Mod. No. Vampire/3041.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

4 Man Hours.

4. DRAWINGS REQUIRED

Nil

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts are required for each tank and are to be drawn from C.E.D. New Sarum.

Ref.	Part No.	Nomenclature	Qty.	Class of Stores
26FC/6752	P00.3915	Adaptor, filler	1	C
26FC/5872	P00.3427ND			
or				
26FC/6414	BM1593/9	Washer, Seating	1	C
33H/167		Plastic Hermetite (Light Grade)	As Reqd.	C

(2) Special Tools

Spanner 26FC/NIV.16

6. SPARES AFFECTED

Nil

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

Nil

/8.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations, which is common to both port and starboard No.1 wing fuel tanks:

(1) Unscrew No.1 wing tank filler cap. Disconnect the retaining chain at the filler cap and withdraw the now redundant adaptor, Pt. No. P00 3669 (Ref) from the filler neck.

(2) Check the washer, Pt. No. P00.3427ND or BM 1593/9 (Ref only), between the filler adaptor and the filler neck for serviceability and replace, if necessary. If no ready made washer is available, a washer may be made from cork jointing or NEO-K-TEX, grade HL/30, 1/16" thick sheet with o/d 3.10 in. and i/d 2.37 ins.

(3) Using compound to form a seal, screw the new filler adaptor, Pt. No. P00 3915, into the neck ring of the tank. Re-connect the retaining chain to the filler cap and screw the cap into the new adaptor.

TESTING AFTER EMBODIMENT

Nil

10. RECORDING ACTION

Record in Aircraft F.700 and F.4801.

11. DISPOSAL OF REDUNDANT PARTS

The following items are rendered redundant and are to be disposed of in accordance with current authorised procedure:

Stores Ref.	Part No.	Nomenclature	No. off	Class of Store
5FC/5871	P00.3669	Adaptor, filler	1	C

12. EFFECT ON WEIGHT AND C OF G

Negligible.

(E.F. GERICKE)
Squadron Leader,
Officer Commanding
Technical Wing
Royal Rhodesian Air Force
New Sarum

Source: E.62, 7501/4/1/ENG
& A.P. 4099G, Vol.2, Part 1, Leaflet No. H.13, A.L. No.82

Date:- 1st. November, 1961

Vampire T.II. Aircraft - Cockpit - To make provision for and introduce Ejection Seat with Martin Baker MOD. E.S. 926 embodied, and to introduce Guards for Flexible Oxygen Hoses.

(Mod. No. Vampire / 3620)
(Class B/3).

1. INTRODUCTION

Cases of anoxia have occurred to the crew of aircraft, fitted with ejection seats, due to the aircraft portion of the oxygen hose becoming disconnected from the seat connection. To overcome this defect, this modification re-routes the oxygen hose from the port and starboard economizers to their respective positions at the hose break-connection on the guide rail extension brackets, introduced by Martin Baker Mod. No. E.S. 926, and revises the length of the port hose. A hose guard is introduced to ensure that the hoses are not trapped on raising and lowering the seats.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications S.T.I's, S.I's or S.R.I.M's.

(2) This modification is essentially connected with Mod. No. Martin Baker E.S. 926 (To reposition Break Connector in Main Oxygen Hose Assembly) when that work is embodied this modification must be affected concurrently.

2. EMBODIMENT

This modification is to be embodied by:-

Squadrons: At the first opportunity and not later than the next Primary Star Servicing.

C.R.S.E. :- Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

8 Man-hours.

4. DRAWINGS REQUIRED

Drawing No. AP. 4099J/J.33/60, incorporated in AP.4099J, Vol.2. Part 1. Leaflet no. J33, A.L. No. 348.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and materials.

The Modification Kit which consists fo the following items is to be drawn from C.E.D. New Sarum, under Ref. No. 26FC/103620:-

Ref.No.	Part No.	Nomenclature.	Qty.	Class of Equipt.
26FC/-	15F/3721A	Guard assy. oxygen hose	2	-
28D/9436920	A.25/1C	Bolt, Hex. hd. 2 B.A.	1	C
28E/8185	AGS.605/3	Clip hose.	2	C

(2) Special Tools and Test Equipment.

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

Nil.

/2.......

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

Nil.

8. SEQUENCE OF OPERATIONS

The sequence of operations is in accordance with AP. 4099J. Vol.2. Part 1. Leaflet No. J53. A.L. No. 348.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied, carry out a function and leak test on the oxygen system in accordance with current authorised procedure.

10. RECORDING ACTION

Record on F.700 and F.4801.

11. DISPOSAL OF REDUNDANT PARTS

Nil.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of + 1.75 lb., and a change of moment of -8.0 lb.ft.

(E.L. PATTRICK)
Warrant Officer,
Technical Adjutant
Technical Wing
R.R.A.F. New Sarum

SOURCE: Mod. Folio/RRAF/VAMP/M15.

Technical Wing,
Royal Rhodesian Air Force,
New Sarum.

R.R.A.F. Technical Staff Instruction.

Vo.3.Sect.2. Sub.Sect.B.95.(Issue 1.)

Date:- 20th. September, 1961

This T.S.I. is issued in accordance with R.R.A.F. T.S.I. Vol.1.No.2.Issue 7.

Vampire Mk. F.B.9. and T.11. Aircraft - Main Plane - To introduce Pinned Chobert Rivets at Rib 2 Skin Joint in place of Parker Kalon Screws;

(Mod. No. Vampire 3634)

(Class S.O.O. - Applicable to Aircraft wings having between 1,400 and 1,500 hours Fatigue Life time).

1. INTRODUCTION

To give increased fatigue life for the wing, this modification replaces the Parker Kalon screws at Rib 2 skin joint with Chobert Rivets and sealing pins.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, S.T.I's, S.I's, or S.R.I.M's.

(2) This modification is not essentially connected with any other approved modification.

NOTE: To obtain maximum security of the Chobert rivets they are NOT to be assembled with a sealing compound or inserted with a Chobert mandrel but are to be inserted dry and lightly driven home. The sealing pins only, are to be lightly coated with Chromated sealing compound (Ref.No. 33C/1197).

2. EMBODIMENT

This modification is to be embodied by :-

C.R. & S.E.

(1) On Vampires F.B.9. aircraft R.R.A.F. 101, 102, 105 and 107 - immediately.

(2) On balance of Vampire F.B.9. and T.11. aircraft - when Wings have reached between 1,400 and 1,500 hours Fatigue Life time.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 3 man hours.

4. DRAWINGS REQUIRED

D.H. Drawing No. MA.1370, Sheet 1, is incorporated in this T.S.I.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials.

The following parts and materials are required, and are to be provided under Unit arrangements.

Ref. No.	Part No.	Nomenclature.	Qty.
28Q/11842	AGS.2042/609	Pin, sealing, Chobert, M.S.	14
28Q/11827	AGS.2045/613	Rivet, Chobert, snaphead, alum. Alloy 3/16 in. dia.	14
33B/9428777		Paint, finishing cellulose, aluminium, Spec. D.T.D. 772.	As Reqd.
33B/9428859		Stoppers, oil base, Spec. D.T.D. 772.	As Reqd.
33B/9429195		Paint, priming, etch, accelerator, Spec. D.T.D. 868.	As Reqd.

/33B/.

5. Contd.

Ref. No.	Part No.	Nomenclature.	Qty.
33B/9429196		Paint, priming, etch, base, Spec. D.T.D. 868.	As Reqd.
33C/1197		Compound, chromated, sealing Spec. D.T.D. 900/4301.	As Reqd.

(2) Special Tools and Test Equipment.

Ref. No.	Part No.	Nomenclature.	Qty.
1B/NIV.46	-	Reamer 0.1914" - 0.1906"	1
1A/NIV.33.	-	Drill 11/64" dia.	1
1A/NIV.34	-	Drill 11/64" dia. bottom flat with 0.030" radius.	1
-	-	Block, reamer guide.	1

NOTE: The guide block is to be manufactured to satisfy the following requirements:-

(1) To seat flat on the wing area shown on the attached drawing.

(2) To provide a reamed hole as a guide at right angles to the wing.

The guide block is to be manufactured from:-

Ref. No.	Part No.	Nomenclature.	Qty.
5F/9400956		Fabric, Synthetic, resin bonded sheet ½" Spec. B.S.S. 972 Type 'B', size 3 in x 3 in. or. Any other suitable material.	1

6. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes of Reference, Part or Assembly numbers as a result of this modification.

7. SEQUENCE OF OPERATIONS

(1) Working on the underside of the Port and Starboard mainplanes, refer to the drawing and replace the seven existing Parker Kalon screws, at the rib 2 skin joint, with seven 3/16 in. dia. snaphead Chobert rivets. Part No. A.G.S. 2045/613 and seven sealing pins, Part No. A.G.S. 2042/609. The Chobert rivets are NOT to be inserted with a Chobert mandrel but are to be lightly driven in and secured by means of the sealing pins and all mating surfaces lightly coated with chromated sealing compound (Ref. No. 33C/1197).

NOTE: Extreme care should be taken when drilling and reaming to prevent any oversizing of the holes, which could lead to the scrapping of the mainplane. To assist with drilling and reaming, it is recommened that a guide block is used.

(2) Repair the finish to the mainplane to suit the existing colour scheme in accordance with the standard procedure.

8. TESTING AFTER EMBODIMENT

Nil.

9. RECORDING ACTION

Record in Aircraft Form 700 and Form 4805.

10. DISPOSAL OF REDUNDANT PARTS

Nil.

11. EFFECT OF WEIGHT AND C. OF G.

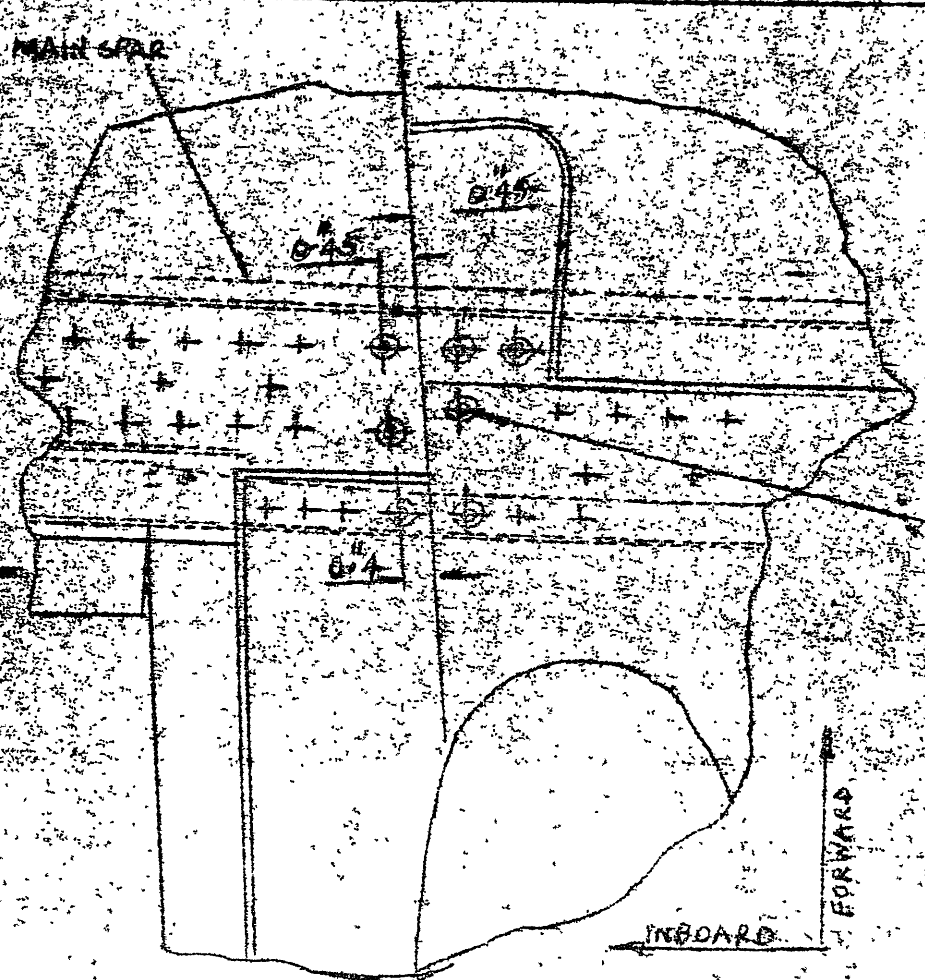
Nil.

(E.F. GERICKE)
Squadron Leader,
Officer Commanding
Technical Wing
R.R.A.F. New Sarum

SOURCE: A.P. 4099J. Vol.2. Pt. 1. Leaflet No. 07./De Havilland Modification Leaflet/Modification Committee Folio/Vamp/M. 10.

3-2-B95

D.H. DRAWING No. MA.1396 MOD No. VAMPIRE 3634



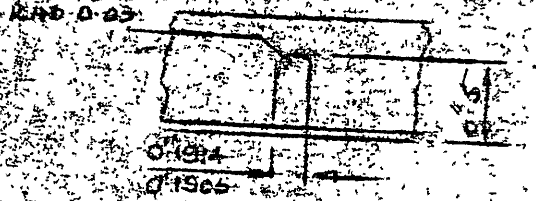


FIG. 2 SECTION ON REAMED HOLE

NOTE. TO OBTAIN WELL REAMED HOLES IT IS RECOMMENDED THAT A REAMED LFS GUIDE BLOCK IS USED

REMOVE SEVEN EXISTING TYPE Z No 6 PK SCREWS. REAM EXISTING SCREW HOLES AS PER FIG 2.

A.G.S. 2045 613 RIVET CHOBERT SNAPHEAD 5/32" DIA 7-OFF

A.G.S. 2042 600 SEALING PIN 7-OFF

THE CHOBERT RIVETS ARE NOT TO BE INSERTED WITH A CHOBERT MANDREL BUT ARE TO BE LIGHTLY DRIVEN IN AND SECURED BY MEANS OF THE SEALING PINS

PORT - AS DRAWN
STB'D - SIMILAR

FIG. 1. PART VIEW ON UNDERSIDE OF WING

INTRODUCTION OF PINNED CHOBERT RIVETS IN LIEU OF PARKER-KALON SCREWS

COPY TO ZAA

Technical Wing Headquarters,
Royal Rhodesian Air Force,
New Sarum

R.R.A.F. Technical Staff Instruction
Vol.3, Sect.2, Sub-Sect. B94 (Issue 1)

Date: 15th September, 1961

This T.S.I. is issued in accordance with R.R.A.F. T.S.I. Vol.1, No.2 (Iss.7)

Vampire Mk.FB.9 and T.11 Aircraft - Fuel System - Improve Method of Retaining Filler Cap in Fuselage Fuel Tank

(Mod. No. Vamp/3612)
Class C/3)

1. Introduction - As per leaflet. H28 - AP 4099J. VOL 2. PART 1.

2. Embodiment SQUADRON :- AT FIRST OPPORTUNITY (NOT LATER THAN 6 MONTHS AFTER RECEIPT OF THIS TSI)
CRSE : BEFORE ISSUE OF AIRCRAFT.
ALSY

3. Approx. Time etc. - As per leaflet.

4. Drawings Required. - Nil

5. Parts Required The Mod. Kit consisting of the following items is to be drawn from C.E.D. New Sarum, under Stores Ref. 26FC/103612 :-

Ref. No.	Part No.	Nomenclature	Qty.	Class
26FC/13385	15PT.39A/ND	Plate & Chain Assembly	1	C

6. Modification of Spares Affected The following list shows the spares affected by this mod. and the parts required to modify them :-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/13032	15PT.19A	Cap Filler Complete		
26FC/13040	15-22 PT.3A/ND	Tank, Fuel fuselage less fuel transmitter & booster pump		

These are to be modified as in para. 8, operations (1) to (3) inclusive.
Parts required.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/13385	15PT.39A/ND	Plate & Chain Assembly	1	C

Spares to be modified by Stock Holding Unit.

7. Change of Reference, Part and Assembly Numbers - As per leaflet.

8. Sequence of Operations - As per leaflet.

9. Testing After Embodiment - Nil

10. Recording Action - Record in Aircraft F.700 and F.4801.

11. Disposal of Redundant Parts - Parts rendered redundant by this modification are to be disposed of as scrap.

12. Effect on Weight and C. of G. - Nil

(E.F. GERICKE)
Squadron Leader,
Officer Commanding
Technical Wing
Royal Rhodesian Air Force
NEW SARUM

Source:- Mod. Folio/RRAF/Vamp/M24

12. EFFECT OF WEIGHT ON C. OF G.

Nil

(E.F. GERICKE)
Squadron Leader,
Officer Commanding
Technical Wing
Royal Rhodesian Air Force
NEW SARUM

SOURCE: A.P.4099G, Vol.2, Part 1, Leaflet F.16, A.L. No.195

5. Contd.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
5K/9109123	T3A	Sleeve, marking, 6 mm. Coded 'A' (5 mm)	13	C
5K/9107287	T3A	Sleeve, marking, 6 mm. coded, 'G' (5 mm)	13	C
5K/9107547	T3A	Sleeve, marking, 6 mm. coded '+' (5 mm.)	13	C
5E/3042	-	Cable, electric, Unipren 24, Spec. E.3.E.21. Length 24 ft.	1	C
5F/2279	-	Strapping, Helvin, 5/16" wide.	As Reqd.	C
5F/2307	-	Stud, Helvin	"	C
5X/9400391	Z.77665	Lug, terminal, No.11A	1	C
28P/9429528	SP9/C6	Pin, split, 1/16" in. dia.	2	C
28P/9429653	SP9/G12	Pin, split, ⅛" dia.	2	C
30B/1609	-	Solder, electricians' resin cored, Spec.BS.441	As Reqd.	C
32A/94	-	Cord, stringing, braided, spec. 4F.35.	As Reqd.	C
33C/10	-	Beeswax. Spec. C.S.2177(1)	"	C
33C/1138	-	Compound, sealing, Bostik 1790 Spec.D.T.D.900/4058	"	C
33C/1139	-	Compound, sealing, Bostik Primer 1751, D.T.D.900/4058	"	C

SPARES AFFECTED

Nil

CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS

Nil

SEQUENCE OF OPERATIONS

In accordance with A.P.4099?, Vol.2, Part 1, Leaflet E16, A.L. No.195.

TESTING AFTER EMBODIMENT

When this modification has been embodied the following tests are to be carried out:-

(1) A continuity check of all cables introduced or altered during the embodiment of this modification in conjunction with the wiring diagram on Sheet 1 of the drawing.

(2) A functional check of the fire warning and fire extinguisher circuits, ensuring that the fire services operate irrespective of the position of the 'GROUND/FLIGHT' master switch.

10. RECORDING ACTION

Record on Form 700.

11. DISPOSAL OF REDUNDANT PARTS

5CZ/884 - Link end, fuse block each 2 - is redundant and is to be disposed of in accordance with current procedure.

Technical Wing Headquarters,
Royal Rhodesian Air Force,
New Sarum.

Date: 15th. September, 1961

R.R.A.F. Technical Staff Instruction
Vol.7, Sect.2, Sub-Sect. B44 (Issue 1)
Vol.3, Sect.2, Sub-Sect. B93

This T.S.I. is issued in accordance with R.R.A.F. T.S.I. Vol.1, No.2 (Issue 7)

Vampire F.B. Mk.9 Aircraft - Electrical - To revise Connections of Fire Extinguisher & Fire Warning Circuits to Give Direct Operation From Battery

(Mod. No. Vampire/3522)

(Class C/3)

INTRODUCTION

In the event of a forced landing, the pilot, to observe fire warning or to operate the fire extinguishers, must keep his 'GROUND/FLIGHT' master switch in the 'FLIGHT' position; this renders the aircraft electrically 'alive' and on impact greatly increases the risk of fire from electrical sources. To obviate this, this modification takes the fire services electrical supply direct from the batteries, thus, being entirely independent of the master switch, it will enable the pilot, in the event of an emergency, to switch to 'GROUND' and still have the fire warning and the fire extinguisher services at his disposal.

EMBODIMENT

Squadrons: At the first opportunity but not later than 3 months after receipt of this T.S.I.

C.T.D.: Before issue of aircraft.

APPROXIMATE TIME REQUIRED FOR EMBODIMENT

9 Man-hours.

DRAWINGS REQUIRED

Drawing No. A.P. 4099G/F.16/57 sheets 1 and 2 are incorporated in A.P.4099G, Vol.2, Part 1, Leaflet 16, A.L. No.195.

PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts and materials are required and are to be provided under Unit arrangements:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/-	DHS.181/5	Tubing, P.V.C.5 mm. i/dia. length 14 ft.0 in. (cut from 5F/2303).	1	-
26FC/-	DHS.181/8	Tubing, P.V.C.8 mm. i/dia. length 6 ft. 0 in. (cut from 5F/2143)	1	-
26FC/-	DHS.575/3	Tubing, rubber, 3/16 in. i/dia. length 3 ft. 0 in. (cut from 32C/56)	1	-
5F/9107207	T2A	Sleeve, marking, 4 mm code 'A' (3 mm)	4	C
5K/9107285	T2A	Sleeve, marking, 4 mm. coded 'G' (3 mm)	4	C
5K/9107545	T2A	Sleeve, marking, 4 mm. coded, '+' (3 mm)	4	C
5K/9109123	T2A	Sleeve, marking, 4 mm. Coded '2' (3 mm.)	4	C

/2.......

Technical Headquarters,
Royal Rhodesian Air Force.

No. 1. Group Technical Staff Instruction.
Vol.3.Sect.2.Sub.Sect.B92. (Issue 1).

22nd February, 1961.

Vampire T.11. Aircraft - Flying Controls Introduction of a Guard at the base of the Control Pedestal.

(Mod. Vampire/3632)

(Class B/2).
(partially superseding Mod/Vamp/3405).

1. INTRODUCTION

To prevent the ingress of foreign bodies into the control mechanism, this modification installs a new guard and screen to the centre rear false floor, immediately below the 2nd control rods between the false support bracket and the ejection seat beam.

This modification partially supersedes the work called for by the embodiment of Mod/Vamp/3405. (Vol.3.Sect.2.Sub.Sect.B.45. refers).

2. EMBODIMENT

This is to be effected as follows :-

Squadrons :- At the first opportunity, but no later than the first Primary Star Inspection following receipt of this T.S.I. This is conditional upon receipt of Mod. Kits.

C.T.D. :- Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 7 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099J/D20/60.

5. PARTS AND SPECIAL TOOLS REQUIRED

Modification kits are to be demanded as required from O.C. C.E.D. under Stores Reference 26FC/103632.
The following materials is also required, and is to be demanded under the following designation: 33C/1197 compound Sealing, Chromated.

6. SPARES AFFECTED

There are no spares affected by the embodiment of this modification.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

There are no changes in Stores Reference, Part, or Assembly Numbers as a result of the embodiment of this modification.

8. SEQUENCE OF OPERATIONS

Embodiment is to be in accordance with the Instructions detailed in A.P.4099J.Vol.2.Part 1. Leaflet No. D.20. A.L.No.344.

9. TESTING AFTER EMBODIMENT

There are no special tests required after the embodiment of this modification.

10. RECORDING ACTION

Record in the current Form 700 and Form 4801.

2/........

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts are rendered redundant by the embodiment of this modification, and are to be returned to O.C. C.E.D. for disposal as scrap in accordance with current equipment regulations:

26FC/-	15F.2801	Screen	Qty.1.
26FC/-	15F.3217	Guard	Qty.1.

12. EFFECT OF WEIGHT ON C. OF G.

The embodiment of this modification causes a weight change of plus 0.2 lbs and a change in moment of -1.0.lb.ft.

(D.B. MILES)
Fg.Officer.
ENG I.

SOURCE: A.P.4099J.Vol.2.Part 1.Leaflet No.D.20.A.L.No.344.

DISTRIBUTION :-

In accordance with Vol.1.No.2. (Issue 6) Para 6 (As amended).

Tech Office.

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

8th December, 1960.

No. 1. Group Technical Staff Instruction.
Vol.3. Sect.2. Sub.Sect. B91. (Issue 1).

Vampire T.11. Aircraft.
Introduction of Reinforcing of Top Rudder Hinge in Fin.

(Mod. Vampire/3508).

(Class B/2).

"Information and Record Purposes."

INTRODUCTION

"Cases have been discovered where the nut plate on the fin rib No.5. forward of the fin rear spar, at the rudder top hinge has cracked, thus releasing the rudder top hinge bracket attachment nuts and allowing the hinge attachment to flex, with subsequent cracking of the fin spar web at this point. This modification introduces Doubler plates, and a reinforced hinge bracket which strengthens this region.

1. This modification supersedes the work called for by the satisfaction of S.T.I./Vampire/148b, which when satisfied, meets in full, the requirements of the modification.

2. It is advised that as all R.R.A.F. Vampire T.11 Aircraft have had S.T.I./Vamp/148b satisfied, no further action is to be taken in respect of this modification, other than recording in the current Forms 700 and 4801 of its embodiment by the satisfaction of S.T.I./Vamp/148b.

D.B. Miles.

(D.B. MILES)
Flying Officer
ENG I.

SOURCE: A.P.4099J Vol.2. Part 1. Leaflet No. G4. (A.L.No.296).

DISTRIBUTION :

In accordance with Vol.1. No.2. Issue 6 Para 6 (As amended).

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

14th November, 1960.

No. 1. Group Technical Staff Instruction.

Vol.3. Sect.2. Sub.Sect.B. 90. (Issue 1).

~~Vol.7. Sect.2. Sub.Sect. B.40. (Issue 1).~~

Vampire Mk. T.11. Aircraft.
Engine Controls - Introduction of Switch.
Stores Ref. 5CW/5056 in place of 5CW/3723.

(Mod. Vampire/3288).

(Class C/3 (W.O.T.S.A.C.)

"INFORMATION AND RECORD PURPOSES ONLY".

INTRODUCTION

This modification introduces a stronger switch and a re-designed high pressure fuel cock handle, in which the new switch is accommodated.

It has been observed that during the embodiment of Mod/Vamp/3574 (Vol.3. Sect.2. Sub.Sect.B81 ref rs), the modification standard of the engine control box assembly (port) on certain T.11. aircraft was at variance with the modification state as shown in the Forms 1125 and 4801. Mod. 3288 had been embodied, presumably in the course of normal replacement, yet no recording action had been taken.

Units are advised that where Mod.3288 is found embodied, retrospective documentation of Forms 700 and 4801 will be necessary, and the embodiment of Mod/Vamp/3574 will then be in accordance with its applicability relative to Mod/Vamp/3288.

EMBODIMENT

Embodiment will automatically be effected on replacement. Reference should be made however, to A.P.4099J. Vol.2. Leaflet No.F.17.(A.L.275), in order to establish the part number of pre and post mod assemblies.

It is advised that no Forms 674 are to be submitted in respect of Mod/Vamp/3288, as the foregoing has been issued for "Information and Record purposes only".

(D.B. MILES)
Flying Officer
ENG I.

SOURCE: A.P.4099J.Vol.2. Part 1. Leaflet No. F.17.
Amendments No. 204. 205 and 275.

DISTRIBUTION :

In accordance with Vol.1. No.2.(Issue 6)(Para 6) (as Amended).

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

No. 1. Group Technical Staff Instruction.

Vol.3. Sect.2. Sub.Sect.B.89. (Issue 1).

8th November, 1960.

Redundent Engine Ignition Equipment Removal from Aircraft.

(Mod. RRAF/Vampire/11).

(Class 3- On Removal of Engine from Aircraft).

1. INTRODUCTION

When High Energy Ignition equipment was introduced under Modification/ Goblin/830, Modification/Vampire/963 and other associated modifications, the pre-mod booster coils and leads were left in situ for emergency purposes. Since all Goblin engines are now fitted with H.E. Ignition equipment the redundent booster coils and leads are to be removed.

2. EMBODIMENT

At the next Minor Servicing or engine removal. Vampire F.B.9. and T.11. aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

$\frac{3}{4}$ hour.

4. DRAWINGS REQUIRED

See Para 8, Sub.para 1.

5. PARTS AND SPECIAL TOOLS REQUIRED

Nil.

6. SPARES AFFECTED

Nil.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS

Nil.

8. SEQUENCE OF OPERATIONS

1. Referring to Vol.3. Sect.2. Sub.Sect.B.17 (Issue 1), turn to Drawing No. AP.4099G/F.10/54 (Sheet 6).
2. Remove from aircraft the booster coils and mounting bracket, together with the two leads and sockets which connect with the mounting bracket PT. No. 13N.821.A.
3. Remove the mounting bracket Pt. No. 13N.821A. and jubilee clips from the vertical engine bearer.
4. Remove from the upper engine cowling rail the igniter plug leads, conduits and clips.

NOTE: Any braided cord bindings removed during the above operations must be remade in the approved manner where still required.

9. TESTING AFTER EMBODIMENT

Nil.

10. RECORDING ACTION

Record in F.700 and F.4801.

2/.........

11. DISPOSAL OF REDUNDANT PARTS

Return to Central Equipment Depot.

12. EFFECT OF WEIGHT ON C. OF G.

Nil.

(D.B. MILES)
Flying Officer
ENG I.

SOURCE: 1. Gp/7501/4/3/Eng (Vol 1.) M.8.

DISTRIBUTION :-

In accordance with Vol.1. No. 2. (Issue 6) Para 6 (As amended).

Mk.2A Oxygen Line Filter.
To Introduce Repositioning of Filter and Consequent
Re-Routing of Pipeline Mk.T11. Aircraft.

(Mod. RRAF/Vamp/12). H. 490

(Class B2.)

1. INTRODUCTION

It has been found that oil contamination of the Mk.2A Oxygen Line Filter (Stores Ref.6D/1660) has occurred on a Vampire T.11 aircraft, due to oil dripping from the rudder control cross-shaft bearing which is situated directly above and in line with the filter. In order to overcome this defect the filter has been repositioned approximately 7" further aft and in line with the original position.

2. EMBODIMENT

Squadrons : Within 7 days.

C.T.D. : Before Test Flight.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

1 Man-Hour.

4. DRAWINGS REQUIRED

Photograph No. A147/60 is available to sections concerned.

5. PARTS AND SPECIAL TOOLS REQUIRED.

(i) Parts and Materials.

30B/522 Pipe, Copper - 2' 9".
6D/1502 Spherical nipples Mk. 3c - 2 off.
6D/487 Nut Union Mk.4A - 4 off.

(ii) Special Tools and Test Equipment.

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

Nil.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

Nil.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(i) Unlock and turn off oxygen line valve.

(ii) Disconnect monel metal pipeline (Stores Ref. 6D/1559) from Mk.2A Oxygen Line Filter and Mk.11D. Oxygen Regulator.

(iii) Remove 3/16" O.D. copper pipeline complete with Filter from the pressure bulkhead fitting.

(iv) Make up new pipeline (extended by approximately 7") as per photograph, complete with nipples and wire nuts.

2/...

8. Contd.

(v) Refit new pipeline, after degreasing and cleat as per photograph.

(vi) Refit and rewire lock Mk.2A Filter.

(vii) Rework monel metal pipeline as per photograph and cleat accordingly.

(viii) Turn on oxygen line valve and rewire lock.

9. TESTING AFTER EMBODIMENT

Check system for leaks and carry out flow test in accordance with A.P.4099J, Series 2, Vol.4. Part 4, Sheet No. 149.

10. RECORDING ACTION

Form 700 and 4801 as Mod. No. R.R.A.F./Vamp/10.

11. DISPOSAL OF REDUNDANT PARTS

Parts rendered redundant by this modification are to be retained to C.E.D. in accordance with current procedure.

12. EFFECT OF WEIGHT ON C. OF G.

Negligible.

F.W. Burton
(F.W. BURTON)
Flight Lieutenant
ENG II.

SOURCE: No. 1. Group Headquarters R.R.A.F.
1.Gp/7505/4/2/ENG (Vol.1.).

DISTRIBUTION :-

In accordance with Vol.1. No.2. (Issue 6) Para 6 (As amended).

CANCELLED BY [illegible] DATED [illegible]

28.

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

No. 1. Group Technical Staff Instruction.
Vol.3. Sect.2. Sub.Sect.B.87. (Issue 1).

7th November, 1960.

Vampire F.B.9. and T.Mk.11. Aircraft.
Introduction of Felt Washers - Flying Control Hinge Bearings.

(Mod/RRAF/Vamp/10).

(Class C/3).

1. INTRODUCTION

Cases have been reported of excessive corrosion being found in Flying Control hinge bearings of Vampire Aircraft undergoing Major Inspection. This is considered to be due to insufficient lubrication, and in the case of the Dive Brake hinge bearings, the possibility of the oil being forced out by the airflow when the brakes are operated in flight.

This modification introduces felt washers to either side of the flying control hinge bearings other than the elevator hinge bearings to which felt washers are already fitted.

2. EMBODIMENT

Squadrons : At first convenient opportunity but no later than the next Minor Inspection.

C.T.D. : Before issue of aircraft.

3. APPROXIMATE TIME FOR EMBODIMENT

Not estimated.

4. DRAWINGS REQUIRED

There are no drawings required for the embodiment of this modification.

5. PARTS OR SPECIAL TOOLS REQUIRED

The undermentioned items are required and are to be demanded from O.C. Central Equipment Depot individually.

Stores Sec/Ref.	Nomenclature	Qty.
32B/952	Felt 1/8" Thick.	As Reqd.

6. SPARES AFFECTED

Nil.

7. CHANGE OF STORES REFERENCE, PART AND ASSEMBLY NUMBERS

Nil.

8. SEQUENCE OF OPERATIONS

(a) Remove the following flying control surfaces: - Ailerons, Flaps, Dive Brakes and Rudders.

(b) Manufacture and fit suitable felt washers to fit either side of each individual hinge bearing.

(c) Replace the flying control surfaces and lubricate the felt washers with Oil OM 150.

NOTE: The removal and refitment of the flying controls listed in sub.para (a) above, must be in accordance with the instructions detailed in the relevant A.P.

2/........

9. TESTING AFTER EMBODIMENT

Carry out independent checks to flying controls as laid down in R.R.A.F. Servicing Orders.

10. RECORDING ACTION

Record in F.700 and 4801 as Mod/RRAF/Vamp/10.

11. DISPOSAL OF REDUNDANT PARTS

Nil.

12. EFFECT ON WEIGHT ON C. OF G.

Negligible.

(D.B. MILES)
Flying Officer
ENG I.

SOURCE: 1.Gp/7561/4/2/Eng. (Vol.1.) Encs. 1 and 2.

DISTRIBUTION :

In accordance with Vol.1. No.2. (Issue 6) Para 6. (As amended).

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

No. 1. Group Technical Staff Instruction.
Vol.3.Sect.2. Sub.Sect.B86. (Issue 1).

16th September, 1960.

~~Also Refer AL 475~~ CANCELLED

Vampire T.Mk.11 Aircraft
Introduction of Silicone Rubber Hoses - Cabin
Pressurisation System.

(Mod. R.R.A.F./Vampire/9)

(Class C.3.)

INTRODUCTION

Cases have been reported of splitting of the existing hose connections between the Air Control Valve and the Cold Air Unit. This is considered to be due to deterioration caused by heat in system combined with hot climatic conditions. This modification introduces hose connections with greater heat resisting properties, for use in the hot air pipe circuit. Note :- This Modification meets the requirements of Mod/Vamp/3395 which is applicable to F.B. 9 Aircraft only.

EMBODIMENT

This Modification is divided into three parts. Part 1 - Engine Bay, Part 2 - Port Mainplane, Part 3 - Fuselage Tank Bay.
Embodiment is to be as follows:-

Squadrons : Part 1 : - At the first convenient opportunity, but no later than the next Minor Servicing.

Part 2 : - As for Part 1, or concurrent with unscheduled No. 1 (Port) Tank Removal.

Part 3 : - As for Part 1, or concurrent with an unscheduled Main Fuel Tank removal.

C.T.D. : Before issue of Aircraft.

APPROXIMATE TIME REQUIRED FOR EMBODIMENT

Not estimated.

DRAWINGS REQUIRED

5. " The undermentioned items are required and are to be demanded from C.E.D. individually. AL 990.

STORES REF.	PART NO.	NOMENCLATURE	QTY
26FC/11820	DAS/393/16/2.0 in.	Dunlop silicone glass fabric coupling hose.	2 off
27VA/4135	DAS/393/16/2.5 in.	" " "	3 "
26FC/11822	DAS/393/16/9.0 in.	" " "	1 "
26FX/9068	DAS/393/24/2.5 in.	" " "	5 " "

DAS/393/24/2.5 ins 5 off, AL 475 ED

6. SPARES AFFECTED

None.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS

None.

8. SEQUENCE OF OPERATIONS.

Part 1 is considered self explanatory, therefore no detailed Sequence of Operations is given.

Part 2

(1) Drain all fuel from the aircraft in accordance with the relevant Air Publication.

(2) In all cases utilise existing hose clips when replacing hoses.

(3) Remove No. 1 port fuel tank and its supporting cradle (this item is held in position by nine 2 BA. bolts) and retain these items for reassembly.

(4) With this support cradle removed, access is immediately gained to the now redundant hose fitted between No. 1 rib and the C.A.U. This item is to be replaced by the replacement hose Part Number DAS/933/16/9.0".

(5) Access to the redundant hoses on the port side of the inter-cooler is also obtained now that the tank support cradle is removed. In this case through the lightening hole through the main spar, outboard of rib 1B, to which the C.A.U. is attached. Replace these two hoses with DAS/393/16/2.5".

(6) Replace tank support cradle and No. 1 fuel tank.

(7) Raise the front upper port engine cowl panel and locate the control valve assembly. Locate the "Hot Air" supply pipe which runs from the control valve to No.4 bulkhead, remove the redundant hose from forward end and fit replacement hose Part Number DAS/393/20/2.5". The redundant hose connecting the pipe to the control valve is replaced by Part No. DAS/393/16/2.0". Locate the pipe from the control valve to rib No. 1, the redundant hose at rib No. 1 is replaced by DAS/393/16/2.5", and at the control valve by DAS/393/16/2.0".

Part 3.

(1) Drain aircraft and remove fuselage fuel tank in accordance with relevant A.P.

(2) With the fuselage fuel tank removed the "Hot Air" supply pipe is accessible, replace two redundant hose connections with Part Number DAS/393/20/2.5".

(3) Open the port ammunition tank access door and remove the fairing fitted between the fuselage inner skin and ammunition tank. The "Hot Air" pipe is now accessible where it is connected to the "Non Return" valve, the hose connecting is to be replaced by DAS/393/20/2.5".

(4) Replace fairing removed in operation 3 and close ammunition tank access door.

(5) Refit fuselage fuel tank in accoodance with the relevant Air Publication.

9. TESTING AFTER EMBODIMENT

Carry out fuel flow checks as detailed in A.P.4099J, Volume 1, Section 4, Chapter 2, Paragraph 9.

10. RECORDING ACTION

Record in Form 700 and 4801 as Mod/RRAF/Vamp/9.

3/.........

11. DISPOSAL OF REDUNDANT PARTS

The redundant items are to be disposed of as "Scrap".

12. EFFECT OF WEIGHT ON C. OF G.

None.

for (H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: 1.Gp/7504/3/ENG. Vol.4. Enc.81.

DISTRIBUTION :-

In accordance with Vol.1. No.2. Issue 6 Para 6. (As amended).

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

R.R.A.F. Technical Order.
Vol.3. Sect.2.Sub.Sect.B.85. (Issue 1).

5th August, 1960.

Vampire F.B.9. and Mk. T.11. Aircraft.
Fuel System - Introduction of Stainless Steel End
Fitting for Fuel Pipe between L.P. Fuel Filter and E.D.P.

(Mod. Vampire/3616).

(Class B2).

1. INTRODUCTION

It has been found that the stove enamelling on the existing pipe end, on the fuel pipe ~~between~~ the low pressure filter and the engine driven pump tends to flake off and get into the engine fuel system components. Cases of "Flame-outs" in the air are attributed to the presence of this foreign matter. To obviate any further possible ingress of foreign matter from this source, this modification introduces a stainless steel pipe end fitting.

2. EMBODIMENT

Embodiment of this Modification is to be effected as soon as possible, and no later than the next Primary Inspection of "In Use" Aircraft. Aircraft that are held on C.T.D. strength are to be modified before issue to "User Units". Engines held in E.R.S. are to be modified concurrent with the Bay Servicing that they may be undergoing, and in any case, before re-installation into their respective Airframe/s.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

2 Man-Hours.

4. DRAWINGS REQUIRED

None required, embodiment is by replacement of the item concerned.

5. PARTS AND SPECIAL TOOLS REQUIRED

Modification Kits are to be demanded as required from O.C. C.E.D., Stores Reference 26FC/103616.

6. SPARES AFFECTED

None.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

Part No. P00.3663A becomes Part No. 15PT.37A.

8. SEQUENCE OF OPERATIONS

Embodiment is to be in accordance with the requirements of A.P. 4099J Vol.2. Part 1 Leaflet No. H26. (A.L.No.316).

NOTE: It is advised that although, according to the relevant Mod. Leaflet, applicability is to T.11. Aircraft only, as the fuel system layout on R.R.A.F. F.B.9. aircraft is, in this instance, identical, the Modification applicability has been extended to include F.B.9's.

Attention is drawn to Para. 8 of the Sequence of Operations in the Vol.2. Leaflet. Reference is made to the Starboard side of the Engine Cowlings, this should read Port, as should all reference to Stbd.

9. TESTING AFTER EMBODIMENT

9. Contd.

(2) Check the fuel pressure warning light circuit for correct functioning.

10. RECORDING ACTION

Record in Forms 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

Items rendered redundant by the embodiment of this Modification are to be returned to C.E.D. for disposal as scrap in accordance with current Equipment Regulations.

12. EFFECT OF WEIGHT ON C. OF G.

None.

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099J.Vol2.Part 1. Leaflet No. H26. (A.L.No. 316).

DISTRIBUTION :-

In accordance with Vol.1. No.2. Issue 6. Para. 6. as amended.

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

R.R.A.F. Technical Order.
Vol.3.Sect.2.Sub.Sect.B84(Issue 1).
Vol.7.Sect.2.Sub.Sect.B.29.

20th April, 1960.

VAMPIRE MK.T.11. AIRCRAFT.
RE-POSITIONING OF SWITCH GUARDS - BOOSTER PUMP AND FUEL PUMP EMERGENCY SWITCHES.

(MOD RRAF/VAMP/8)

(Class 2).

1. INTRODUCTION

During inverted flights it has been found difficult to operate rapidly the "Fuel Pump Emergency Switch" to the "On" position. Practice drills have established that the time taken by the average pilot to operate the "Fuel Pump Emergency Switch" is in excess of the 4 seconds laid down in Vampire T.11. Pilots Notes (A.P.4099J. P.Ns.) Flame extinction is a probability as a result of delayed operation of this switch.

This modification is introduced to facilitate operation of the switch.

2. EMBODIMENT

Squadrons: At the first opportunity but not later than the next primary star inspection. following receipt of the modified data label No 435

C.T.D. : Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

Not estimated.

4. DRAWINGS REQUIRED

Drawing No. A.V.64.

5. PARTS AND SPECIAL TOOLS REQUIRED.

Nil.

6. SPARES AFFECTED

Nil.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

Nil.

8. SEQUENCE OF OPERATIONS

Reference is to be made to Drawing No. A.V.64 which may be obtained from W.O. i/c Drawing Office, R.R.A.F. New Sarum. As it is considered that this drawing is self-explanatory no detailed sequence of operations is given.

9. TESTING AFTER EMBODIMENT

None required.

10. RECORDING ACTION

Record in current F.700 and F.4801 as Mod. RRAF/VAMP/8.

2/........

11. DISPOSAL OF REDUNDANT PARTS

None.

12. EFFECT OF WEIGHT ON C. OF G.

Negligible.

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: 1.Gp/7504/3/ENG. E31D.

DISTRIBUTION :-

One copy to essential recipients
plus the following :

Specialist Officer Group.	(2)
W.O. Electrical Section.	(2)
W.O. i/c Drawing Office N.S.	(1)
File 1.Gp./7504/3/Eng.	(1)
Ops./Trng. 1.No. 1 Gp.	(1)
H.Q. R.R.A.F.	(2)

Technical Headquartes,
No. 1. Group,
Royal Rhodesian Air Force.

25th March, 1960.

R.R.A.F. Technical Order.
Vol.3.Sect.2.Sub.Sect.B83. (Issue 1).

Vampire F.B.9. & T.11. Aircraft.
Improved Drainage of Lower Cowl Panels
and Introduction of Extractor Fairings
over Drain Holes.

(Mod. Vampire 3526)

Class B2)

1. INTRODUCTION

The drainage of residual fuel and oil from inside the engine cowlings is not efficient at present; thus presenting a considerable fire hazard. This modification introduces improvements to the cowling drainage to permit complete drainage of residual fuel and oil, and also introduces external extractor fairings which prevent oil and fuel being sucked into the engine bay through the drain holes.

2. EMBODIMENT

Squadrons : At the first opportunity, but not later than the next primary * inspection following receipt of parts.

M.U. : Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

10 man-hours.

4. DRAWINGS REQUIRED

F.B.9's. A.P.4099G/P19/59 Sheets 1-6.

T11s. A.P.4099J/P23/59 Sheets 1-6.

5. PARTS AND SPECIAL TOOLS REQUIRED

Modification kits in respect of F.B.9s. & T.11s are to be demanded from O.C. C.E.D. under 26FC/103526.

6. SPARES AFFECTED

Reference is to be made to the appropriate paragraph in the relevant Vol2. leaflets.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

As detailed in relevant leaflets.

8. SEQUENCE OF OPERATIONS.

Embodiment of this modification is to be in accordance with the instructions detailed in

(a) FB9s. - AP.4099G Vol.2. Part 1. Leaflet No.P19(AL.226).

(b) T11s. AP.4099J Vol.2.Part.1. Leaflet No.P.23(AL.319).

9. TESTING AFTER EMBODIMENT

None required.

10. RECORDING ACTION

Record in current F700 and F4801.

2/..........

11. DISPOSAL OF REDUNDANT PARTS

None.

12. EFFECT ON WEIGHT AND C. OF G.

Increase of 0.66 lb. and a change of moment of +2.0 lb/ft.

H J Pringle

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099G Vol.2. Part 1. Leaflet No.P19 (AL.No.226).
A.P. 4099J " 2. " 1. " " P23 (AL.No.319).

DISTRIBUTION :-

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O.C. C.E.D. (1)

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

28th March, 1960.

R.R.A.F. Technical Order.
Vol.3.Sect.2.Sub.Sect.B82.(Issue 1).
~~Vol.6.Sect.2.Sub.Sect.B1 (Issue 1).~~

VAMPIRE MK.T11 AIRCRAFT.
INTRODUCTION OF MK.3 TURN & SLIP INDICATOR
STORES REFERENCE 6A/5546

(Mod. Vampire 3594)

(Class C3.(N.C.P.)

THIS ORDER IS INFORMATORY ONLY. AL.408

1. INTRODUCTION

The new instrument gives more accurate readings when being used under extreme conditions.

NOTE: The Mk.3 instrument is not peculiar to Vampire T.11 aircraft. This Technical Order is issued to confirm that Mk.3. Turn & Slip Indicators may be fitted to T.11s in place of Mk.2A Items, Stores Reference 6A/3593.

2. EMBODIMENT

Embodiment will be effected by replacement only. User Units are advised that there is no need to submit Fs 674 in respect of the modified indicator, as issues will be to the above mod. standard; conditional upon Nil stocks of pre-mod. items being held.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

1 Man-hour.

4. DRAWINGS REQUIRED

None.

5. PARTS AND SPECIAL TOOLS REQUIRED

Future provisioning of Turn and Slip Indicators for Vampire T11 aircraft is to be to Mod.3594 standard. P.S.C.O. please note.

6. SPARES AFFECTED

None.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS

The embodiment of this modification changes the assembly No. of the instrument panel as follows :- 15F.2027A/15 becomes 15F/2027A/16.

8. SEQUENCE OF OPERATIONS.

N/A.

9. RECORDING ACTION

When Mk.3 Turn and Slip Indicators are fitted or are found fitted, record in the current F700 and F4801, as Mod/Vamp/3594 embodied/found embodied.

10. DISPOSAL OF REDUNDANT PARTS

There are no redundant items.

2/.........

11. EFFECT ON WEIGHT AND C. OF G.

None.

H. J. Pringle

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099J Vol2. Pt.1. Leaflet No. K17.
A.L.No.329.

DISTRIBUTION :-

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O.C. C.E.D. (1)

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

R.R.A.F. Technical Order.
Vol.3.Sect.2.Sub.Sect.B81. (Issue 1).
Vol.7.Sect.2.Sub.Sect.B.28. (Issue 1).

Date : 21st March, 1960.

Vampire T.11. Aircraft.
Introduction of Uniflexpren Cable to
Relight Button on H.P. Cock Lever to
Terminal Block.

(Vampire ~~3547~~) 3574 AL. 445

(Class ~~C3~~) C4

1. INTRODUCTION

The relight cable, routed behind the H.P. Fuel Cock Lever has been breaking where it is looped at the base of the lever, due to the continued flexing it has to undergo. To overcome this defect, this modification introduces a new cable which has greater flexing properties to withstand the repeated bending action imposed.

2. EMBODIMENT

Squadrons : At the first opportunity, but no later than 6 months from the date of issue of this Technical Order.

M.U. : Before issue of the aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

3 Man-hours.

4. DRAWINGS REQUIRED

None.

5. PARTS AND SPECIAL TOOLS REQUIRED

Items of Unit Supply, as listed in A.P.4099J Vol.2. Part I. Leaflet No.F23 (AL.248) are to be demanded, as required, from O.C. C.E.D.

6. SPARES AFFECTED

Spares holdings of 26FC/- 15 C.E. 815A/6 Assy. Engine Control Box, Port, and 26FC/11766 15 CE1787A H.P. Fuel Cock Lever Assy. need not be modified until they are actually required for an aircraft. They will then be modified after issue and before fitment.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS

Part No. 15CE815A/6 becomes 15CE815A/7.

8. SEQUENCE OF OPERATIONS

Embodiment of this modification is to be in accordance with the instructions detailed in A.P.4099J. Vol.2. Part 1. (Leaflet No. F23 (A.L.249).

9. TESTING AFTER EMBODIMENT

After embodiment, test the relight circuit for continuity and correct functioning.

2/........

10. RECORDING ACTION

Record on current F700 and F4801.

11. DISPOSAL OF REDUNDANT PARTS

None.

12. EFFECT OF WEIGHT ON C. OF G.

None.

H.J. Pringle
(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099J. Vol.2.Part.1.
Leaflet No. F23. (AL.249).

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O.C. C.E.D. (1)
N.C.O. i/c Elect.Sect. (2)

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

17th March, 1960.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub. Sect. B80. (Issue 1).
Vol. 7. Sect. 1. Sub. Sect. B26 (Issue 1).

Vampire F.B.9 Aircraft
Introduction of Gunfire Test Switch.

(Mod. Vampire/3489)

(Class B2).

1. INTRODUCTION

To eliminate the danger to personnel when operating the gun firing micro switch in the nose, a gun firing test switch is introduced in the circuit. This will obviate the necessity of operating the nose micro switch. The switch is mounted on the starboard cannon bay rail, so that personnel will not be in the firing line whilst testing the operation of the guns.

2. EMBODIMENT

Squadrons : At the first opportunity, but not later than the next primary * preceding gun firing exercises.

M.U. : Before issue of the aircraft.
NOTE: Embodiment of this modification must be effected on R.R.A.F. 112 during its rebuild.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

8 Man-hours.

4. DRAWINGS REQUIRED

D.H. Drawings No. M.A.1070 Sheets 1-5.

5. PARTS AND SPECIAL TOOLS REQUIRED

Modification kits are to be demanded as required from O.C. C.E.D. under 26FC/103489.

6. SPARES AFFECTED

None.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

None.

8. SEQUENCE OF OPERATIONS.

Reference is to be made to the Standard Draft Modification Leaflet, compiled by Messrs. De-Havilland's Ltd., and which is held by Tech. Headquarters, No. 1. Group. This leaflet, together with the relevant drawings will be issued on loan to User Units.

9. TESTING AFTER EMBODIMENT

Tests will be carried out in accordance with the instructions detailed in the modification leaflet.

10. RECORDING ACTION

Record in the current F.700 and F.4801.

2/.........

11. DISPOSAL OF REDUNDANT PARTS

None.

12. EFFECT OF WEIGHT ON C. OF G.

Increase in weight of 0.20 lb. and a change in moment of -1.0 lb.ft.

H. J. Pringle
(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: 1.Gp/7504/3/Eng. Vol.4. and
De Havilland Draft Modification Leaflet.

DISTRIBUTION :-

One copy to essential recipients
plus the following :-

O.C. C.E.D. (1)

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

R.R.A.F. Technical Order.
Vol.3.Sect.2.Sub.Sect.B79.(Issue 1).

15th March, 1960.

VAMPIRE T.11 AIRCRAFT
INTRODUCTION OF GUARD FOR ELEVATOR CONTROL
QUADRANT IN COCKPIT FLYING CONTROLS.

(Mod. VAMPIRE/3545)

(Class B2).

1. INTRODUCTION

To exclude all loose articles, this modification introduces a guard with a detachable cover over the quadrant pulley, to form a continuation of panelling from the false floor, thus the port aft false floor end plate, introduced by Mod/Vamp/3405 is not required upon embodiment of this modification.

This modification partially supersedes the work called for by Mod/Vamp/3405.

2. EMBODIMENT

Squ drons : At the first opportunity, but not later than the next primary * servicing.

M.U. : Before issue of the aircraft.
NOTE: Units are advised that embodiment of Mod/Vamp/3583 could well be effected concurrent with this modification. Vol.3.Sect.2.Sub.Sect.B78 (Issue 1) refers.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

10 Man-hours.

4. DRAWINGS REQUIRED

A.P.4099J/D15/57 Sheets 1-6.

5. PARTS AND SPECIAL TOOLS REQUIRED

1 off Bit, Forstner 1A/4405. Mod. Kits are to be demanded under 26FC/103545. Items of unit supply under relevant Sect/Ref.No.

6. SPARES AFFECTED

None.

7. CHANGE OF STORES REF RENCE, PART, AND ASSEMBLY NUMBERS.

None.

8. SEQUENCE OF OPERATIONS

Embodiment is to be in accordance with A.P.4099J Vol.2.Part 1. Leaflet D15 (A.L.No.256).

9. TESTING AFTER EMBODIMENT

Testing will be in accordance with the instructions detailed in the relevant Mod Leaflet.

2/.........

10. RECORDING ACTION

Record in the current F700 and F4801.

11. DISPOSAL OF REDUNDANT PARTS

Items rendered redundant by the embodiment of this modification are to be returned to C.E.D. as scrap for disposal in accordance with current equipment regulations.

12. EFFECT OF WEIGHT ON C. OF G.

Increase of 1.88 lbs. and a change in moment of -10.0 lb.ft.

H. J. Pringle

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099J. Vol.2.Part.1.
Leaflet No.D15 (A.L.No.256).

DISTRIBUTION :-

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O.C. C.E.D. (1)

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

R.R.A.F. Technical Order.
Vol.3.Sect.2.Sub.Sect.B78 (Issue 1).

14th March, 1960.

Vampire Mk.T.11. Aircraft.
Flying & Engine Controls - Introduction of a Guard over the Engine and Elevator Trim Control Chain and Sprocket at Bulkhead No.2.

(Mod. Vampire/3583)

(Class B2).

1. INTRODUCTION

Cases have occurred, in the cockpit, of loose articles having lodged between the exposed engine and elevator trim control chains and sprockets, causing jamming. This modification introduces chain guard covers on the bulkhead and on the port fusealage wall, to prevent this happening.

2. EMBODIMENT

1. Squadrons - At the first opportunity, but no later than the next Primary * Servicing of the aircraft.

2. M.U. - Before issue of the aircraft.

NOTE: Units are advised that opportunity should be taken to effect embodiment of Mod/Vamp/3545 concurrent with the above modification.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

12 man-hours.

4. DRAWINGS REQUIRED

AP.4099J/D17/58. Sheets 1-3.

5. PARTS AND SPECIAL TOOLS REQUIRED

1. Mod. Kits under 26FC/103583.

2. Items of Unit Supply - under appropriate Section and Ref. Nos.

6. SPARES AFFECTED

None.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

None.

AL. 405.

8. SEQUENCE OF OPERATIONS

Embodiment is to be in accordance with ~~A.P.4099J Vol.2.Part.1. Leaflet No.D17 (A.L.No.307)~~ D.H. DRAFT. MOD LEAFLET MOD/VAMP/3583 (ISS 3). Reference should be made to this leaflet for a detailed list of items of Unit Supply.

9. TESTING AFTER EMBODIMENT

Testing will be in accordance with the instructions detailed in the modification leaflet. The attention of trades concerned is drawn to the relevant RRAF Tech Order appertaining independant control checks.

2/........

10. RECORDING ACTION

Record in the current F700 and F4801.

11. DISPOSAL OF REDUNDANT PARTS

None

12. EFFECT OF WEIGHT ON C. OF G.

Increase in weight of 0.02 lb. No change in moment.

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099J. Vol.2. Part 1.
Leaflet No. D17. (A.L.No.307).

DISTRIBUTION :-

One copy to essential recipients
plus the following :-

O.C. C.E.D. (1)

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

10th March, 1960.

File

R.R.A.F. Technical Order.
Vol.3.Sect.2. Sub.Sect.B.77.(Issue 1).

Vampire T.11. Aircraft.
Introduction of Low Back Pressure N.R.V.
(27M698) in place of 27W/7 in Canopy Jettison
Jack Return Line.

(Mod. No. Vampire 3550)

(Class B2 (N.C.P.)

1. INTRODUCTION

To prevent sufficient pressure to operate the canopy hatch jettison mechanism being built up in the jettison jack return line, while the selector remains in the non-release position, a new low, back pressure non-return valve is introduced, replacing the present non-return valve that operates at approximately 50 p.s.i. The new N.R.V. will allow the accepted seepage from the selector to return to the header tank without inadvertently operating the canopy hatch jettison mechanism.

2. EMBODIMENT

Squadrons : This is to be at the first opportunity and no later than the next Primary Inspection on the aircraft.

C.T.D. : Embodiment is to be effected concurrent with the Major Servicing on Vamps 130 and 131. T.11s in L.T.S. are to be modified to Mod.3550 standard before re-issue into service.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

8 Man-hours.

4. DRAWINGS REQUIRED

No drawings are required.

5. PARTS AND SPECIAL TOOLS REQUIRED

Valves, Hydraulic, non-return, 27M/698 are to be demanded from O.C. C.E.D. as required. Quantity 1 off ea. per T.11.

6. SPARES AFFECTED

Nil.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS.

Nil.

8. SEQUENCE OF OPERATIONS

Reference is to be made to A.P.4099J Vol.2 Part 1. leaflet No.J.29. A.L. No.297. Para. 8. Sub.Paras 9-14.

2/.........

9. TESTING AFTER EMBODIMENT

Testing is to be as detailed in para 9 of Leaflet No.J29 (AL.297).

10. RECORDING ACTION

Record in the relevant F.700 and 4801.

11. DISPOSAL OF REDENDANT PARTS

Valve, Hydraulic, Non-return. 27W/7, and is to be returned to O.C. C.E.D. to be held against possible future requirements.

12. EFFECT OF WEIGHT ON C. OF G.

Nil.

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: A.P.4099J. Vol.2. Part 1. Leaflet No.J29 (A.L.No.297).

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Technical Headquarters.
No. 1. Group.

16th December, 1959.

R.R.A.F. Technical Order.
Vol. 6. Sect. F. Sub.Sect.B2.(Issue 1).
Vo.3. Sect. 2. Sub.Sect. B74. (Issue 1).

Vampire T. Mk. 11 Aircraft.

To introduce additional A/V Mountings on Main Instrument Panel (Instruments).

(Mod/Vampire/3477)

(Class B/2 (A.L.No. ~~317~~ 359 refers). A.L. 541. &P.

1. **Introduction**

Excessive movement at the top of the main instrument panel is causing damage to the Air Speed Indicator, and Gyro Gunsight Mountings. To eliminate this defect, double instead of single anti-vibration mountings are introduced to the centre positions at the base of the instrument panel.

2. **Embodiment**

Squadrons : At the first opportunity, but no later than the next Minor servicing.

C.T.D. : Before issue of the Aircraft.

3. **Approximate time Required for Embodiment**

The work will take approximately 7 man-hours.

4. **Drawings Required**

Drawing No. A.P.4099J/K.15/60, Sheets 1 - 2 is incorporated in this Leaflet, K.15. A.L 541. &P.

5. **Parts and Special Tools Required**

There are no special tools or test equipment required to embody this modification.

Mod. Kits are available and are to be demanded as required from O.C. C.E.D. under Stores Reference 26FC/103477.

6. **Spares Affected.**

No spares are affected by this modification.

7. **Change of Stores Reference, Part and Assembly Numbers.**

All changes are detailed in Leaflet No. K.15 of A.P.4099J, Vol.2. Part 1. ~~(A.L.263 and 317)~~. (A.L. 359) A.L 541. &P.

8. **Sequence of Operations**

The embodiment of this modification is to be strictly in accordance with A.P.4099J Vol.2. Part 1. Leaflet No. K.15. ~~(A.L. No. 263 and A.L. No. 317)~~.(AL 359) A.L 541. &P.

9. **Testing after Embodiment**

When this modification has been embodied, and inspected, functionally check and test all circuits and instruments disturbed in accordance with the current authorised procedure.

10. **Recording Action**

Record in current F.700 and F.4801.

11. **Disposal of Redundant Parts**

Parts rendered redundant by this modification are to be returned to C.E.D. for disposal in accordance with the current authorised procedure.

12. Effect of Weight on C. of G.

This modification causes a weight change of + 0.50 lb. and a change of moment of -4.0 lb. ft.

H J Pringle
(H.J. PRINGLE)
Wing Commander
S.T.S.O.

Source : A.P.4099J Vol. 2. Part 1. Leaflet No. K15.
~~(A.Ls. 263 and 317)~~. (AL 359) AL.

Distribution :-

One copy to essential recipients plus the following :-

W.O. i/c No. 1. Sqdn.	(2)
W.O. i/c Instrument Section	(1)
O.C. C.E.D.	(1)

File

Technical Headquarters,
No. 1. Group,
Royal Rhodesian Air Force.

R.R.A.F. Technical Order.
Vol.3. Sect.2.Sub.Sect.B.75 (Issue 1).

12th March, 1960.

Vampire F.B.9. & T.11 Aircraft.
Introduction of Double Tab Washers on
4B.A. Bolts between Rudder Tip and Spar.

(Mod. R.R.A.F./Vamp/6.)

(Class B.2.)

1. INTRODUCTION

Cases have been reported of the four 4BA attachment bolts in the rudder tip/spar working loose, resulting in cracking of the upper end of the spar along the inside corners of the channel section. To eliminate this defect, the four plain wash rs beneath the heads of the bolts are removed, and locking is effected by the introduction of double tab washers in lieu.

This modification meets the requirements of Flying Training Command Mod. Vamp.103 which superseded and cancelled Mod/Vamp/3621, and its embodiment renders compliance with Vol.3.Sect.2.Sub.Sect. E.52 Issue 1. (S.I./R.R.A.F./Vamp/15.) unnecessary.

2. EMBODIMENT

This is to be effected at the first opportunity following the receipt of the tab washers, and not later than the next Minor Inspection after receipt of same.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 4 man-hours.

4. DRAWINGS REQUIRED

None required. Reference is to be made to the relevant Air Publications.

5. PARTS AND SPECIAL TOOLS REQUIRED

26FC/NIV 32/FRONT

2 off each front and rear tab washers will be required for each aircraft. Stores Reference Nos. ~~26FC/Niv/RRAF/6F~~ Washer, Double Tab, Front - ~~26FC/Niv/RRAF/6R Washer, Double Tab, Rear~~.

26FC/NIV 33 REAR *AL 403*

6. SPARES AFFECTED

There are no spares affected by the embodiment of this modification.

7. CHANGE OF STORES REFERENCE, PART, AND ASSEMBLY NUMBERS

There are no changes in Reference, Part or Assembly Numbers as a result of this modification.

8. SEQUENCE OF OPERATIONS

The fitment and locking of the tabs is self explanatory. Reference is to be made, however, to the relevant Air Publications as to the method of removing and replacing the Rudders. Independant checks after the embodiment of this modification are to be carried out in accordance with current R.R.A.F. Servicing Orders.

NOTE: Varnish, Pigmented, Jointing (Curclad) Stores Reference 33C/1264 is to be used as a jointing medium between the faying surfaces of the tabs and the rudders.

2/........

9. TESTING AFTER EMBODIMENT

There are no special tests required after the embodiment of this modification.

10. RECORDING ACTION

Record in the current F700 and F4801 as Mod/R.R.A.F./Vampire 6.

11. DISPOSAL OF REDUNDANT PARTS

Disposal of the redundant 4BA washers is to be in accordance with current Equipment Regulations.

12. EFFECT OF WEIGHT ON C. OF G.

This modification has a negligible effect on the C. of G.

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

SOURCE: Technical Headquarters and
1.Gp/7504/3/Eng. Vol.4.Enc.21.

DISTRIBUTION :-

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O.C. C.E.D. (1)

Technical Headquarters.
No. 1. Group.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect.B73.(Issue 1).

15th December, 1959.

Vampire Mk. T11 Aircraft
Hydraulic System, to re-route the Hydraulic Vent Pipe
to the Common Drain Box.

(Mod./Vamp/3569.)
(Class B2)
(Applicable to A/c embodying Mod.3192.)

1. Introduction.

The existing Hydraulic Vent, situated at the bottom of the fire proof bulkhead, allows the fluid to seep back into the engine cowling. To obviate this, the vent pipe is re-routed to a redundant connection on the drain box, which allows the residual fluid to escape to atmosphere.

Embodiment.

Squadrons	:	At the first opportunity, and not later than the next Minor Inspection.
C.T.D.	:	Before Issue of Aircraft.

Approximate time required for Embodiment.

10 Man-hours. (1 to strip, 3 to embody, 2 to re-assemble, 4 to test.)

Drawings Required.

These are supplied with Leaflet No. P. 22 of A.P.4099J. Vol. 2. Part 1.

Parts and Special Tools Required

There are no special tools required for the embodiment of this Modification.

The Modification Kit, consisting of the Items listed in Leaflet P. 22, is available, and is to be demanded from O.C. C.E.D. under Section 26FC/103569.

Spares Affected

These are listed in Leaflet P.22.

Change of Stores Reference, Part, and Assembly Numbers.

As listed in Leaflet P.22.

Sequence of Operations

Embodiment of this Modification is to be strictly in accordance with A.P. 4099J Vol. 2. Part 1. Leaflet No. P.22. (A.L.294).

9. Testing After Embodiment

Carry out a functional test of the Hydraulic System in accordance with A.P. 4099J, Vol. 1. Sect. 3. Chap. 6.

10. Recording Action

Record in the current F.700, and in the F.4801.

11. Disposal of Redundant Parts

To be returned to C.E.D. for disposal in accordance with current authorised procedure.

12. Effect of Weight on C. of G.

This modification causes a weight change of +1.1 lb. and a change of

2/.........

12. contd.

moment of + 1.0 lb. ft.

H J Pringle
(H.J. PRINGLE)
Wing Commander
S.T.S.O.

Source : A.P. 4099J. Vol.2. Part.1.
Leaflet No. P.22. (A.L.294).

Distribution :-

One copy to essential recipients
plus the following :-

W.O. i/c No. 1. Sqdn.	(2)
O.C. C.E.D.	(1)

Vol. 3 . 2 . B74

A.L.M. 263

(Additional A/V mountings)

Vampire T. Mk. 11 Aircraft—Instruments—To introduce Additional A/V Mountings on Main Instrument Panel

(MOD. NO. VAMPIRE 3477.)

(Class ~~B~~ 2) AL/317.

(AB/A/6719.—27.11.57.)

1. INTRODUCTION

Excessive movement at the top of the main instrument panel is causing damage to the Air Speed Indicator and the Gyro Gunsight Mountings. To eliminate this defect, this modification introduces double, in place of single, anti-vibration mountings to the centre positions at the base of the instrument panel.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by:—

2nd Line Servicing Units: At the first opportunity (not later than 18 months after receipt of parts) AL/317.

3rd Line Servicing Units (R.S.U.s): As detailed in A.P.3158, Vol. 2, Leaflet B/6

4th Line Servicing Units (Repair Depots): Before issue of aircraft

Aircraft Storage Units: In accordance with the Standard of Preparation.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 7 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099J/K.15/57, Sheets 1–2 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(*a*) The Modification Kit which consists of the following items will be assembled by No. 35 Maintenance Unit under Ref. No. 26FC/103477.

(i) Items supplied by the Contractor:—

Ref. No.	*Part No.*	*Nomenclature*	*Qty.*	*Class of Equipment*
26FC/-	15F.2991	Bracket, inst. panel mounting (bottom centre)	2	—
26FC/-	15F.3201A	Buffer stop assembly	2	—
26FC/-	15F.3207	Label "No. 1 Set"	1	—

R

Ref. No.	*Part No.*	*Nomenclature*	*Qty.*	*Class of Equipment*
26FC/-	15F.3209	Label "No. 2 Set"	1	—
27FP/466	212	Clip, Oddie	2	C
28D/12547	A.25/15E	Bolt, ¼ in. B.S.F.	2	C
28S/2863	A.32/B16	Screw, 4 B.A.	16	C
28S/2822	A.33/A20	Screw, 6 B.A.	8	C
28M/10287	AGS.2001/B1	Nut stiff 4 B.A.	16	C
28M/10290	AGS.2001/E1	Nut stiff ¼ in. B.S.F.	2	C
28Q/9976	AS.163/204	Rivet $\frac{1}{16}$ in. dia. 120 deg. csk/hd.	6	C
28Q/8428	AS.163/403	Rivet ⅛ in. dia. 120 deg. csk/hd.	8	C
28Q/6692	AS.2227/204	Rivet, $\frac{1}{16}$ in. dia. sp/hd.	4	C
28Q/6676	AS.2229/305	Rivet, $\frac{3}{32}$ in. dia. 90 deg. csk/hd.	4	C
28P/9429528	SP.9/C8	Pin, split $\frac{1}{16}$ in. dia.	4	C
28W/9419465	SP.13/B	Washer 4 B.A.	16	C
28W/12298	SP.18/E	Washer ¼ in. B.S.F.	4	C

(ii) Service Supply items:—

Ref. No.	*Part No.*	*Nomenclature*	*Qty.*	*Class of Equipment*
10AJ/140	—	Mounting, anti-vibration, Equiflex	4	B

All the above items will be issued to R.A.F. units at home on issue order—no demands are to be submitted. R.A.F. units abroad, and all other users, are to demand separately their requirements of kits as listed in sub-para. (*a*) above in accordance with current regulations.

(*b*) The following materials are also required, and are to be provided under Unit arrangements:—

Ref. No.	*Part No.*	*Nomenclature*	*Qty.*	*Class of Equipment*
33B/1021	—	Primer, etch base	As reqd.	C
33B/1023	—	Primer, etch accelerator	As reqd.	C
33B/1108 (Home) } 33B/205 (Overseas) }	—	Finish synthetic matt, night, Spec. D.T.D.314	As reqd.	C
33C/1264	—	Compound, pigmented varnish jointing. Spec. D.T.D.369A	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers are follows:—

	Old		*New*	
Ref. No.	*Part/Assy. No.*	*Nomenclature*	*Part/Assy. No.*	*Ref. No.*
26FC/-	15F.1645A/11	Instrument panel detail	15F.1645A/12	26FC/-
26FC/-	15F.1925A/13	Assy. of instrument panel with piping	15F.1925A/14	26FC/-
26FC/-	15F.2027/A13	Assy. of instruments to panel	15F.2027A/14	26FC/-
26FC/-	15FS.3221A/2	Support structure (Inst. panel and control box)	15FS.3221A/3	26FC/-
26FC/-	15N.965A/14	Instrument panel, installation of electrics	15N.965A/15	26FC/-

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations:—

(1) Working in the cockpit, remove the main instrument panel as detailed in A.P.4099J, Vol. 1, Sect. 5, Chap. 2, retaining the attaching items for subsequent reassembly, with the exception of the split pins.

(2) With the instrument panel on the bench carefully drill out the rivets securing the two redundant labels, Part No. 15F.2067 (No. 1 Set) and Part No. 15F.2069 (No. 2 Set), situated one each side of the centre cut-out of the instrument panel adjacent to the panel's lower centre attachments. Blank off the six redundant rivet holes using six new $\frac{1}{8}$ in. dia. x 120 deg. countersunk head rivets, Part No. AS. 163/204, first countersinking the face of the panel 120 deg. x 0.125 in. dia.

(3) Remove the screws securing the plates and the hinge attaching brackets to the panel, and retain these items together with their small spring for subsequent reassembly, then, as shown in detail 'A' on sheet 1 of the drawing, open up these redundant holes with a No. 30 (0.1285 in. dia.) drill, countersinking them both sides of the panel 120 deg. x 0.25 in. Plug the holes using eight new $\frac{1}{8}$ in. dia. x 120 deg. countersunk head rivets, Part No. AS.163/403.

(4) *Refer* to Detail 'A' on sheet 1 of the drawing, mark out the positions on the panel for the new attachment holes for the repositioning of the plates 0.30 in. inboard and drill them using a No. 26 (0.1470 in. dia.) drill. Drill out the two 0.50 in. dia. holes and chamfer them on the face of the panel 45 deg. x 0.05 in. to suit the boss on each of the plates.

(5) Refit the plates and the hinge brackets, together with their small springs, to the panel in their new positions, first coating all mating surfaces with pigmented varnish jointing compound (Ref. No. 33C/1264). Secure them with eight new 6 B.A. 90 deg. countersunk head screws, Part No. A.33/A20.

(6) *Refer* to detail 'A' on sheet 1 of the drawing, mark out and drill, the four new rivet attaching holes, using a No. 52 (0.0635 in. dia.) drill, for the two new labels (No. 1 Set) and (No. 2 Set), Part Nos. 15F.3207 and 15F.3209, respectively. Countersink these holes 90 deg. x 0.11 in. dia. on the back of the panel. Coat the mating surfaces of the panel and the new labels with pigmented varnish jointing compound then rivet them into position using four new $\frac{1}{16}$ in. dia. Snaphead rivets, Part No. AS.2227/204. Make these rivets flush on the rear of the panel.

(7) Working in the cockpit, locate on each side of the centre support structure the redundant bracket assemblies, Part No. 13F.511, for securing the instrument panel. Remove these assemblies together with their redundant single anti-vibration mountings (Ref. No. 10AJ/1568) packing pieces, Part No. 15F.425, and buffer stop assemblies, Part No. 15F.489, from the aircraft. Retain the two five inches long bonding flexes which are required for reassembly.

(8) *Refer* to detail 'B' on sheet 1 of the drawing, and mark out and drill both the new attaching holes and the 1.5 in. dia. holes for the new anti-vibration mountings in the top of each support structure. Deburr these holes. *Refer* to sheet 2 of the drawing and mount one new anti-vibration mounting (Ref. No. 10AJ/140) on each side of the centre support structure together with one new buffer assembly, Part No. 15F.3201A. Coat the mating surfaces of these items with pigmented varnish jointing compound and secure them into position with eight new 4 B.A. screws, nuts and washers, Part Nos. A.32/B16, AGS.2001/B1 and SP.13/B, respectively.

(9) Rivet the two new 'Oddie' clips, Part No. 212, on to the inside of the two new instrument panel mounting brackets, Part No. 15F.2991, with four new 90 deg. countersunk head $\frac{3}{32}$ in. dia. rivets, Part No. AS.2229/305, having first coated the mating surfaces with pigmented varnish jointing compound. Secure the remaining two anti-vibration mountings to the underside of these two brackets with eight new 4 B.A. screws, nuts and washers, Part Nos. A.32/B16, AGS.2001/B1 and SP.13/B, respectively, first coating the mating surfaces with pigmented varnish jointing compound.

(10) Attach the new panel mounting assemblies onto the new anti-vibration mountings, previously fitted to the centre support structure, with two new $\frac{1}{4}$ in. B.S.F. bolts and nuts, Part Nos. A.25/15E and AGS.2001/E1, respectively and four new check washers, Part No. SP.18/E. Fit the retained bonding flexes between the new panel mounting brackets and the centre support structure, securing them by means of the new anti-vibration mounting attachment screws. Ensure that the tags at the ends of the flexes have a good clean connection.

(11) Repair the finish where necessary on the panel using primer etch base and accelerator (Ref. Nos. 33B/1021 and 33B/1023), respectively) and finish synthetic matt night (Ref. No. 33B/1108 *or* 33B/205).

(12) Refit the instrument panel into the cockpit as detailed in A.P. 4099J, Vol. 1, Sect. 5, Chap. 2, using the retained attaching items and four new split pins, Part No. SP.9/C8.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected, the following tests are to be carried out:—

Function and check all circuits and instruments disturbed during the embodiment of this modification in accordance with the current authorized procedure.

10. RECORDING ACTION

Record on Aircraft Form 700.

11. DISPOSAL OF REDUNDANT PARTS

(1) The undermentioned parts rendered redundant by the embodiment of this modification are to be returned to No. 14 Maintenance Unit, Carlisle:—

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
10AJ/1568	MD.SM.8	Mounting, anti-vibration, Equiflex	2	B

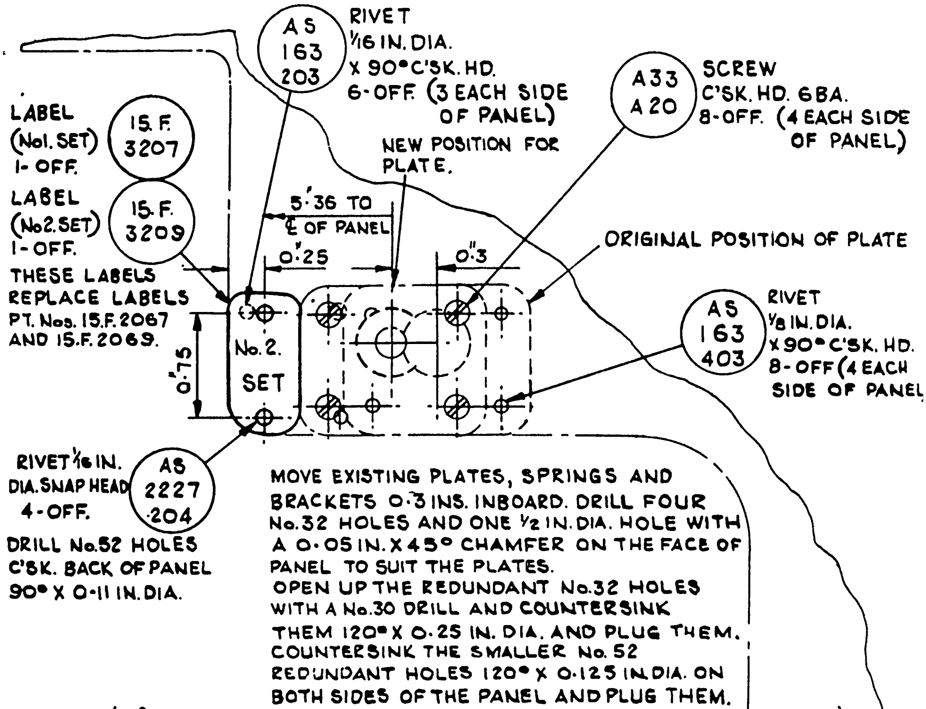
(2) The undermentioned parts rendered redundant by the embodiment of this modification are to be disposed of as scrap in accordance with Air Ministry Salvage Leaflets:—

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/-	13F.511	Bracket, instrument panel bottom mounting	2	—
26FC/-	15F.425	Packing	2	—
26FC/6141	15F.489	Buffer stop assy.	2	C
26FC/-	15F.2067	Label, 'No. 1 Set'	1	—
26FC/-	15F.2069	Label, 'No. 2 Set'	1	—

12. EFFECT ON WEIGHT AND C. OF G.

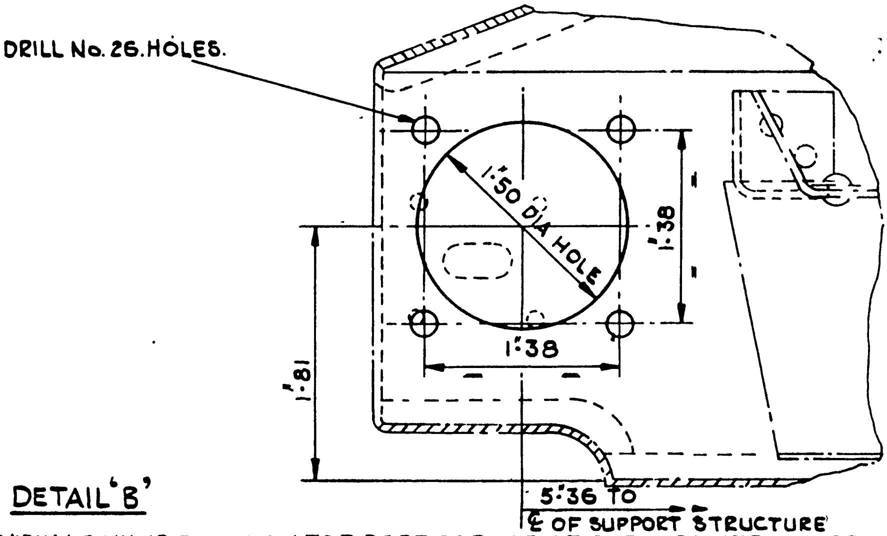
This modification causes a weight change of + 0.50 lb., and a change of moment of − 4.0 lb. ft.

(7124) Wt.8205/9208 1M 12/57 W.B.&H.Ltd. Gp. 1267/2



DETAIL 'A'

VIEW SHOWING NEW POSITIONS FOR LOWER CENTRE INSTRUMENT PANEL FIXINGS. STB. SIDE DRAWN. PORT OPP. HAND.



DETAIL 'B'

VIEW LOOKING DOWN ON TOP PORT CORNER OF SUPPORT STRUCTURE SHOWING HOLES TO BE DRILLED FOR NEW EQUIFLEX A.V. MOUNTING. PORT DRAWN STB. OPP. HAND.

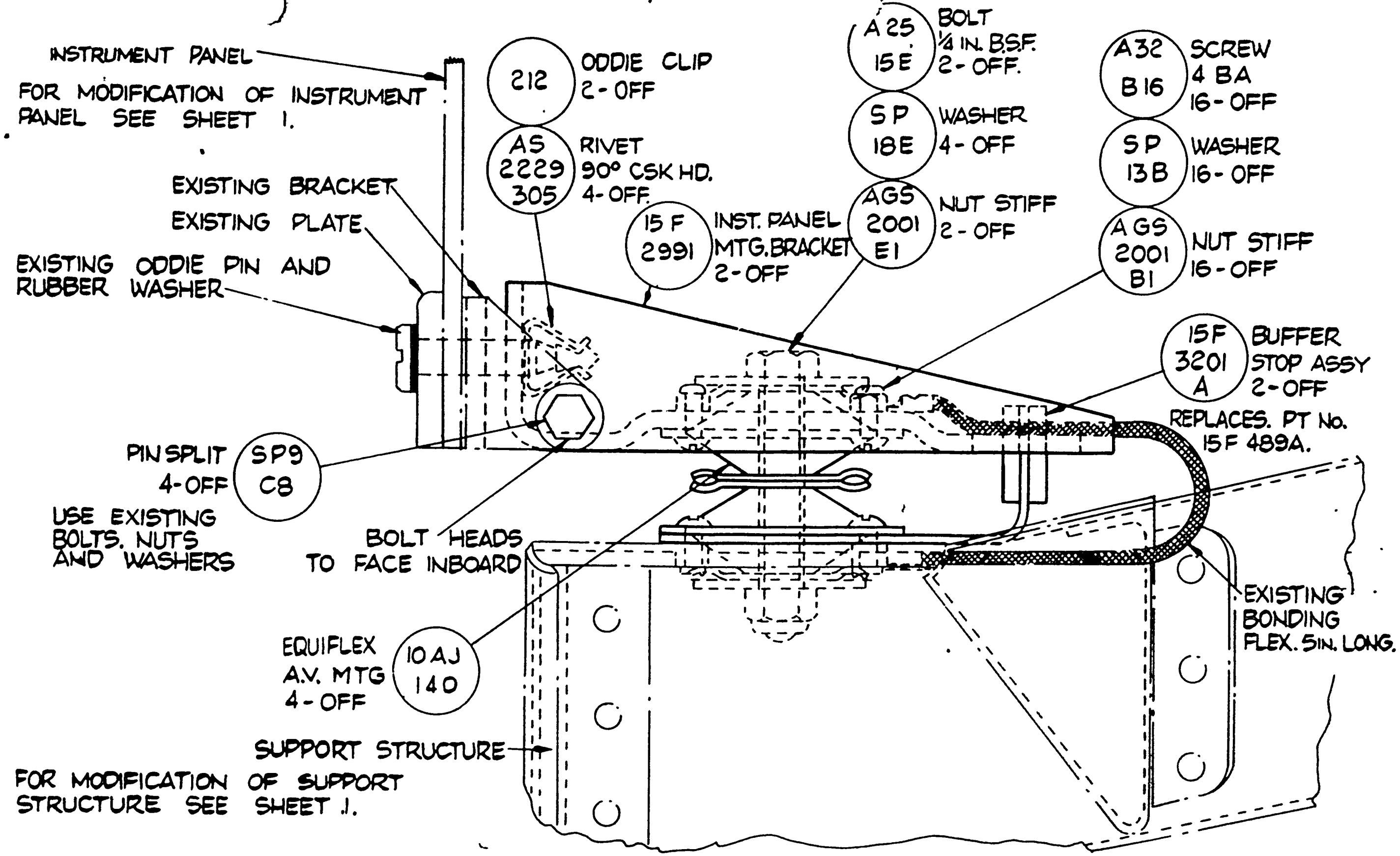
DRG. No. A.P. 4099J/K.15/57
SHEET 1

RESTRICTED

7124 Wt. 8205/9208 1,000 12/57 W.B.&H.Ltd. Gp.126/7/2

DRG. No. A.P. 4099J/K 15 /57

SHEET 2



VIEW SHOWING FITMENT OF NEW ANTI-VIBRATION MOUNTINGS TO SUPPORT STRUCTURE.

7124 Wt.8205/9208 1000 12/57 W.&H.Ltd Gp.1267/2

Headquarters,
No. 1. Group.
R.R.A.F.

5th November, 1959.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B.72 (Iss 1).

Vampire T.Mk.11. Elevators. 13TE 1A/2:- Fouling
To Chamfer Trailing Edge.

Vampire Modification 3507. Class C4.

1. INTRODUCTION

This modification is introduced to prevent the possibility of a foul occurring between the Rudder and the Elevator trailing edge, when rudder is at extreme ends of its travel.

2. EMBODIMENT

This Modification is to be embodied :

Squadrons	:	At the first available opportunity and not later than next Primary * inspection.
C.T.D.	:	Before issue of Aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately .75 man hours per aircraft.

4. DRAWINGS REQUIRED

De Havilland Drawing 15Z1877 is incorporated in this Technical Order.

5. PARTS AND SPECIAL TOOLS REQUIRED

There are no Parts or Special Tools required for embodiment of this modificattion.

6. SPARES EFFECTED

There are no spares effected by this modification.

7. CHANGE OF REFERENCE AND PART NUMBERS

There are no changes of Refernoe, Part or Assembly Numbers as a result of this modification.

8. SEQUENCE OF OPERATIONS

Remove corner at each end of the elevator trailing edge to the dimensions shown in the attached drawing 15Z1877, remove all sharp edges, rematch and repaint to present colour scheme.

9. TESTING AFTER EMBODIMENT

There are no special tests required after embodiment of this modification.

10. RECORDING ACTION

Record in the Form 700 and 4801 as Vamp/Mod/3507 embodied.

11. DISPOSAL OF REDUNDANT PARTS

There are no parts rendered redundant by this modification.

12.

2/......

12. EFFECT ON WEIGHT

This modification has a negligible effect on weight or C of G.

H.J. Pringle.

(H.J. PRINGLE)
Wing Commander
S.T.S.O.

Source : I.Gp/7504/3/Eng. (Vol. 4) Encl. 7.

Distribution :-

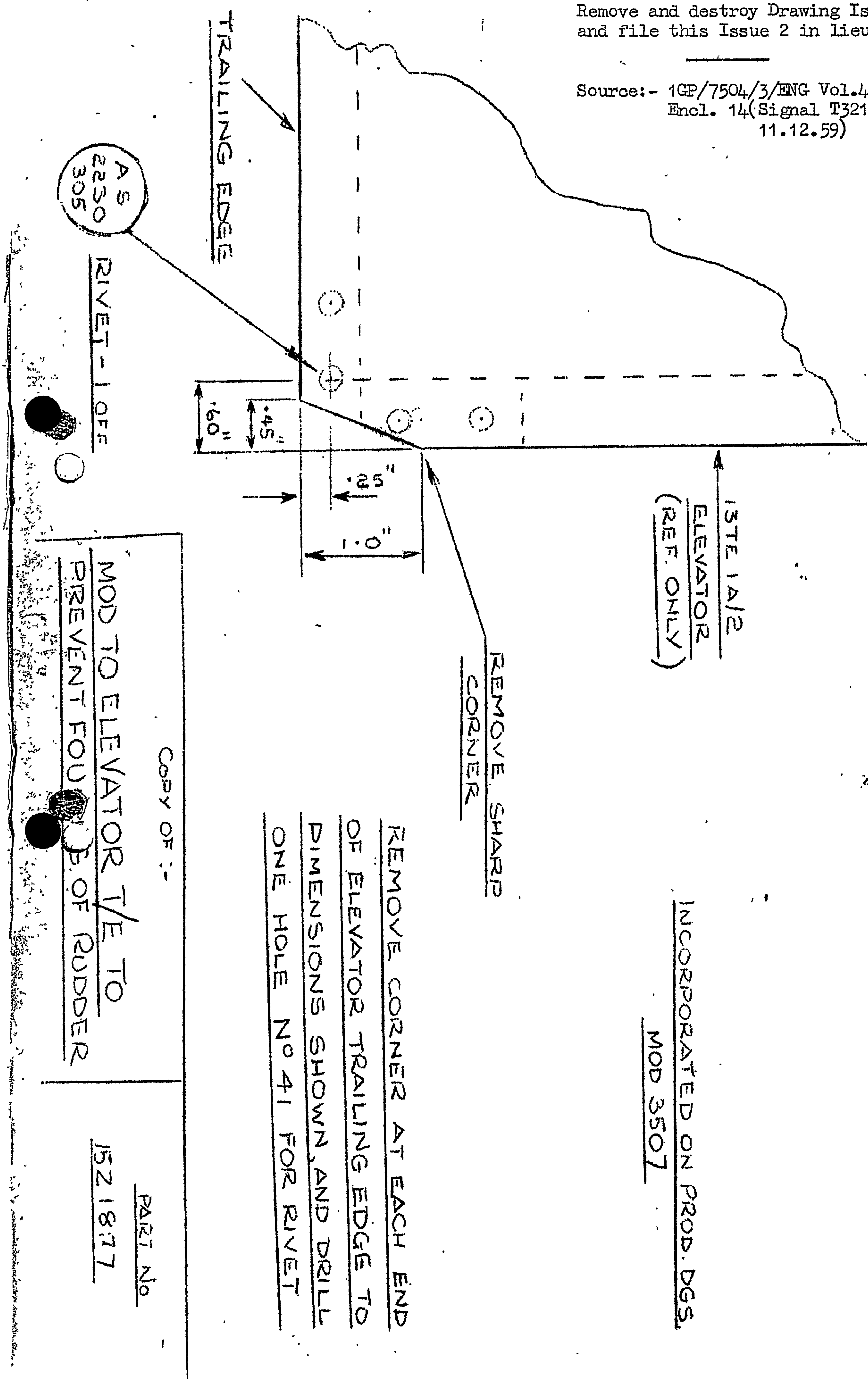
One copy to essential recipients
plus the following :-

W.O. i/c No. 1. Sqdn.	(2)
W.O. i/c No. 2. "	(2)
Stress Skin Section.	(2)

Vol.3, Sect. 2, Sub-Sect. B72
Drawing Issue 2, superseding
and cancelling Issue 1.

Remove and destroy Drawing Issue 1
and file this Issue 2 in lieu.

Source:- 1GP/7504/3/ENG Vol.4
Encl. 14(Signal T321 dtd
11.12.59)



Headquarters,
No. 1. Group.
R.R.A.F.
5th November, 1959.

R.R.A.F. Technical Order.
Vol. 3, Sect. 2, Sub.Sect. B71 (Iss. 2).
~~Vol. 6, Sect. 3. Sub.Sect. B.7. (Iss 2).~~
Superseding and cancelling Issue 1 Orders dated 22nd September, 1959.

Vampire F.B. Mark 9 Aircraft
Modification/RR.A.F/Vamp/5. (Issue 2).

INTRODUCTION OF ACCELEROMETER INDICATOR MARK 2
TYPE 3D.91 STORES REFERENCE 6A/2451.

1. INTRODUCTION

This modification authorises the fitment of an Accelerometer Indicator Mark 2, Stores Reference 6A/3451 to R.R.A.F. Vampire Mark 9 Aircraft.

2. EMBODIMENT MANDATORY REQUIREMENT FOR ALL VAMPIRE MK.F.B9. AIRCRAFT AE58.

S~~quadrons - Prior to flight on operational exercises with drop tanks fitted.~~

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately :-

a) Airframe Trade - 2 hours.

b) Instrument Trade - 2 hours.

4. DRAWINGS REQUIRED

R.R.A.F. Drawing No. AV.57 (Issue B) - "Introduction of Accelerometer to Instrument Panel - Vampire F.B. Mark 9 Aircraft."

5. PARTS AND SPECIAL TOOLS REQUIRED

Parts and Materials: The following parts and materials are required and are to be provided under unit arrangements:-

(a)

Stores Ref.	Nomenclature.	Qty.	Class of Store.
6A/3451	Accelerometer.	1	A
28S/2139	Screw 4 BA. 90° Csk. Hd.	6	C
28S/2418	Screw 2 BA. Rd. Hd. Brass	2	C
28M/10281	Nuts. 2 BA. L. Alloy S. Locking.	2	C
33B/205	Finish Synthetic Matt. Night.	As required.	C

(b) Special Tools and Test Equipment

There are no special tools or test equipment required for the embodiment of this modification.

6. SEQUENCE OF OPERATIONS

a) Remove clock Stores Reference 6A/2197 or 6A/2958.

b) Using item 1 of R.R.A.F. Drg. AV.56 as a template, mark out position for accelerometer, Stores Ref. 6A/3451 as laid down in R.R.A.F. Drg. AV.57 (Iss.B).

c) (Airframe Tradesman) Cut out hole on starboard side of instrument panel to R.R.A.F. Drg. AV.57 (Iss. B.)

d) Fit accelerometer Stores Reference 6A/3451.

e) Fit clock in position to lower instrument panel, port side adjacent to fuel gauge in accordance with R.R.A.F. Drg. AV.57 (Iss. B) utilizing existing clock mounting bracket Stores Ref. 6A/2639 using two round head brass screws Stores Ref. 28S/2418 and two light alloy self locking nuts Stores Ref. 28M/10281. Lock screws as Vol. 6, Sect. 3, Sub.Sect. A7, Issue 2.

2/.......

6. Contd.

f) Touch up screws with Finish Synthetic Matt Night, Stores Ref. 33B/205.

7. TESTING AFTER EMBODIMENT

There are no special tests after the embodiment of this modification.

8. RECORDING ACTION

Record embodiment of this modification in Forms 700 and 4801 as Mod/RRAF/Vampire/5. (Issue 2).

9. EFFECTS ON C OF G

This modification has negligible effect on C of G.

Sgd. H.J. Pringle
(H.J. PRINGLE)
Wing Commander
S.T.S.O.

Source RRAF/7504/3/Eng. Vol. 3. Encl. 97. & Vol. 4. Encl.3.

Distribution :-

One copy to essential recipients
plus the following :-

W.O. i/c Instrument Section.
W.O. i/c No. 1. Sqdn.
W.O. i/c No. 2. "
W.O. i/c A.R.S. C.T.D.

Air Headquarters,
Royal Rhodesian Air Force.

8th September, 1959.

R.R.A.F. Technical Order.
Vol. 6. Sect. 3. Sub.Sect. B6.(Iss 1).
Vol. 3. Sect. 2. Sub.Sect. B70 (Iss 1).

VAMPIRE MK. T11 AIRCRAFT.
MODIFICATION/RRAF/VAMPIRE/4.

Introduction of Accelerometer Indicator, Mark 2, Type 3D91, Stores Ref. 6A/3451.

1. INTRODUCTION

This modification authorises the fitment of an Accelerometer Indicator, Mk.2, Stores Ref. 6A/3451 to R.R.A.F. Vampire Mk.T.11

(b) Insert :- "Mandatory requirement for all in-use Vampire Mk. T.11 Aircraft."

(N.B. Removal of accelerometers from T.11s undergoing Major Servicing or in Storage is authorised.)

The work will take approximately 2 man hours.

4. DRAWINGS REQUIRED

R.R.A.F. Drawing AV56 titled "Introduction of Accelerometer to port side of Instrument Panel Vampire Mk.T.11 Aircraft."

5. PARTS AND SPECIAL TOOLS REQUIRED

(a) Parts and materials.

The following parts and materials are required and are to be provided under Unit arrangements.

Stores Ref.	Nomenclature	Qty.	Class of Store.
6A/3451	Accelerometer	1	A
28S/2139	Screw 4BA 90 deg csk hd.	2	C
33B/205	Finish synthetic matt night	As Required.	C
36B/1728	Alclad 16 SWG	"	B

(b) There are no special tools required for the embodiment of this modification.

6. SEQUENCE OF OPERATIONS

(a) Remove cover plate Stores Ref. 15F1905ND.

(b) Manufacture mounting plate to R.R.A.F. Drawing AV56, and fit Accelerometer Indicator Mk.2, Stores Ref. 6A/3451.

(c) Fit mounting plate and Accelerometer to Instrument Panel.

(d) Touch up heads of new screws, using synthetic matt night finish Stores Ref. 33B/205.

7. TESTING AFTER EMBODIMENT

There are no special tests required after the embodiment of this modification.

8. RECORDING ACTION

Record embodiment of this modification in Forms 700 and 4801 as MOD/RRAF/VAMPIRE/4.

9. EFFECTS ON C OF G.

This modification has a negligible effect on

2/........

9. Contd.

weight and C. of G.

Scott

(I. SCOTT)
Squadron Leader
S.T.S.O.
A.H.Q. R.R.A.F.

Source : RRAF/7504/3/Eng. Vo. 3. Enclosure 95A.

Distribution :-

one copy to essential recipients plus
the following :-

W.O. i/c Instrument Section	(2)
W.O. i/c A.R.S.	(2)
W.O. i/c No. 1. Sqdn.	(2)
W.O. i/c No. 2. Sqdn.	(2)

Air Headquarters,
Royal Rhodesian Air Force.

8th September, 1959.

R.R.A.F. Technical Order.
Vol. 6. Sect. 3. Sub.Sect. B6. (Iss 1).
Vol. 3. Sect. 2. Sub.Sect. B70 (Iss 1).

VAMPIRE MK. T11 AIRCRAFT.
MODIFICATION/RRAF/VAMPIRE/4.

Introduction of Accelerometer Indicator, Mark 2, Type 3D91, Stores Ref. 6A/3451.

1. INTRODUCTION

This modification authorises the fitment of an Accelerometer Indicator, Mk.2, Stores Ref. 6A/3451 to R.R.A.F. Vampire Mk.T.11 Aircraft. **NOTE:** THIS MODIFICATION MEETS THE REQUIREMENTS OF MOD/VAMP/34. WHICH FOR R.R.A.F. PURPOSES, IT CANCELS AND SUPERSEDES. AL 456 3.8.60. E.P.

2. EMBODIMENT

Sqdns : ~~Prior to~~ ~~operational exercises~~ with drop tanks ~~fitted~~. A No 5.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 2 man hours.

4. DRAWINGS REQUIRED

R.R.A.F. Drawing AV56 titled "Introduction of Accelerometer to port side of Instrument Panel Vampire Mk.T.11 Aircraft."

5. PARTS AND SPECIAL TOOLS REQUIRED

(a) Parts and materials.

The following parts and materials are required and are to be provided under Unit arrangements.

Stores Ref.	Nomenclature	Qty.	Class of Store.
6A/3451	Accelerometer	1	A
28S/2139	Screw 4BA 90 deg csk hd.	2	C
33B/205	Finish synthetic matt night	As Required.	C
36B/1728	Alclad 16 SWG	"	B

(b) There are no special tools required for the embodiment of this modification.

6. SEQUENCE OF OPERATIONS

(a) Remove cover plate Stores Ref. 15F1905ND.

(b) Manufacture mounting plate to R.R.A.F. Drawing AV56, and fit Accelerometer Indicator Mk.2, Stores Ref. 6A/3451.

(c) Fit mounting plate and Accelerometer to Instrument Panel.

(d) Touch up heads of new screws, using synthetic matt night finish Stores Ref. 33B/205.

7. TESTING AFTER EMBODIMENT

There are no special tests required after the embodiment of this modification.

8. RECORDING ACTION

Record embodiment of this modification in Forms 700 and 4801 as MOD/RRAF/VAMPIRE/4.

9. EFFECTS ON C OF G.

This modification has a negligible effect on

2/........

Air Headquarters,
Royal Rhodesian Air Force.

8th September, 1959.

R.R.A.F. Technical Order.
Vol.3.Sect.2. Sub.Sect.B.69(Iss2).
Cancelling and superseding (Issue 1).

Vampire F.B.9Aircraft - Refrigeration System - To Introduce Silicone Hose Connection Between Control Valve and Cold Air Unit in Hot Air Lines to Non-Return Valve.

MOD. NO. VAMPIRE 3395

CLASS C/3 ON REPLACEMENT

1. INTRODUCTION

Cases have been reported of splitting of the existing hose connections between the air control valve and the cold air unit. This is considered to be due to deterioration caused by heat in the system combined with hot climatic conditions. This modification introduces hose connections with greater heat resisting properties, for use in the hot air pipe circuit.

2. EMBODIMENT

Squadrons : At next Minor Servicing, or on replacement.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 10 man hours.

4. DRAWINGS REQUIRED

Nil.

5. PART AND SPECIAL TOOLS REQUIRED

The undermentioned items comprise a set of parts and are to be demanded from O.C., Central Equipment Depot individually.

Ref. No.	Part No.	Nomenclature.	Qty.
	D.A.S.393/16/2.5 in.	Dunlop Silicone Glass Fabric Coupling Hose.	5
	D.A.S.393/16/2.0 in.	Dunlop Silicone Glass Fabric Coupling Hose.	2
	D.A.S.393/16/9.0 in.	Dunlop Silicone Glass Fabric Coupling Hose.	1
	D.A.S.393/20/2.5 in.	Dunlop Silicone Glass Fabric Coupling Hose.	1

6. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes in Part and Reference numbers.

7. SEQUENCE OF OPERATIONS.

NOTE: Two alternative sequences of operations are given at A and B below. The sequence of operation at Para A is as defined in the original leaflet. However, due to difficulties experienced in the C.T.D., the alternative sequence of operations at Para B have been compiled. Units may select either sequence when carrying out this Modification.

A 1) On the top face of the starboard mainplane, locate and remove the access panel for the cold air unit, retaining its attaching items for re-assembly. Working inside the mainplanes, through the access hole, locate the air pipe from the engine to the cold air unit. From this pipe remove the 9 in. rubber pipe coupling, which connects the cold air unit to a pipe adaptor on rib 1, and in its place fit a new pipe coupling, part No. D.A.S.393/13/9.0 in. long 1.0 in. bore.

2) Now on the under face of the starboard mainplane, locate and remove the access panel for the intercooler. On the starboard side of the intercooler, locate the two rubber pipe couplings, unscrew the four jubilee clips and remove both couplings, replacing them with two new couplings, Part No. D.A.S.393/16/2.5 in. long 1.0 in. bore,

2/..........

7. A. 2) Contd.

and retighten the four jubilee clips.

3) Raise the front upper starboard engine cowling panel and locate the air pipe which is connected to the air supply and temperature control valve, at one end, and a pipe adaptor on rib 1 at the other. Unscrew the jubilee clips at rib 1 securing the rubber pipe coupling and remove this coupling, replacing it by a new coupling, Part No. D.A.S./393/16/2.5 in. long 1.0 in. bore, retightening the jubilee clips.

4) Lower the front lower starboard engine cowling panel and locate the air supply and temperature control valve. To this valve are fitted two pipes with rubber hose couplings, disconnect and remove these couplings and replace them with two new couplings, Part No. D.A.S.393/20/2.0 in. long 1 in. bore, secure them with the original four jubilee clips.

5) Lower the cannon bay doors and remove the starboard outer gun, as detailed in A.P. 4099G, Vol. 1. Sect. 12. Chap. 1. Locate the air pipe which runs from bulkhead 2 to bulkhead 4, adjacent to the cannon heater pipe on the starboard fuselage wall in the cannon bay, remove the three rubber hose couplings in this assembly and replace them by three new couplings, Part No. D.A.S.393/20/2.5 in. long 1.25 in. bore for the coupling just aft of bulkhead 2 and Part No. D.A.S. 393/16/2.5 in. long 1.0 in. bore for the other two couplings.

6) Refit the starboard outer cannon as detailed in A.P.4099G. Vol. 1. Sect. 12, Chap. 1, raise and secure the cannon bay doors, raise and secure the starboard lower engine cowling panel and lower and secure the front upper engine cowling panel. Refit to the top face and the under face of the starboard mainplane the respective access panels removed in operations 1) and 2), using their retained attaching items.

B.

1) Drain all fuel from the aircraft in accordance with the relevant Air Publication. Remove necessary upper & lower mainplane access panels.

2) Remove No. 1 starboard fuel tank and its supporting cradle, (This item being held in position by nine 2 BA. bolts), and retain these items for re-assembly.

3) With this support cradle removed access is immediately gained to the now redundant nine inch long rubber hose - Pt. No. DHS. 184/E/9.5 fitted between No. 1 rib and the cold air unit. This item may be removed and the replacement hose Pt. No. DAS.393/16/9" x 1" bore fitted in lieu, utilising the existing hose clips.

4) Access to the redundant hoses on the starboard side of the intercooler is also gained by the removal of the tank support **cradle.** In this case through the inspection hole immediately out-board of the rib to which the C.A.U. is attached, Pt. Nos. of the replacement hoses being DAS.393/16/2.5" x 1" bore.

5) Raise the front upper starboard engine cowling panel and locate the air pipe which is connected to the air supply and temperature control valve at one end, and a pipe adaptor on rib No. 1 at the other. Unscrew the jubilee clips at rib 1, securing the rubber pipe coupling and remove this coupling, replacing it by a new coupling, Part Number DAS. 393/16/2.5 in. long 1.0 in. bore, retightening the jubilee clips.

6) Lower the front lower starboard engine cowling panel and locate the air supply and temperature control valve. To this valve is fitted two pipes with rubber hose couplings, disconnect

3/........

B 6) Contd.

and remove these couplings and replce them with two new couplings, Part Number DAS.393/16/2.0 in. long and 1 in. bore, secure them with the original four jubilee clips.

(7) Lower the cannon bay doors and remove the starboard outer gun, as detailed in A.P.4099G, Vol. 1, Sect. 12. Chap. 1. Locate the air pipe which runs from bulkhead No. 2 to bulkhead No. 4., adjacent to the cannon heater pipe on the starboard fuselage wall in the cannon bay, remove the three rubber hose couplings in this assembly and replace them by three new couplings, Part Number DAS. 393/20/2.5 in. long 1.25 in. bore for the coupling just aft of bulkhead No. 2 and Part Number DAS./393/16/2.5in. long 1.0 in. bore for the other two couplings.

(8) Refit the starboard outer cannon as detailed in A.P.4099G, Vol. 1, Sect. 12, Chap. 1, raise and secure the cannon bay doors, raise and secure the starboard lower engine cowling panel and lower and secure the front upper engine cowling panel. Refit to the top face and the under face of the starboard mainplane the respective access panels removed in operations (1).

(9) Replace No. 1. fuel tank and cradle.

8. TESTING AFTER EMBODIMENT

(a) No tests required after embodiment using sequence of operations to Para (7) (A).

(b) If the modification is embodied to sequence of operations detailed in para (7) (B); carry out the flow checks as detailed in 4099E & G Vol 1 Sect. 4. Chap 3. (AL.59). para 59.

10. RECORDING ACTION

Record in Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS.

The following items are to be disposed of as scrap.

Ref. No.	Part No.	Nomenclature.	Qty.
	D.H.S. 184/E.2.0 in.	Pipe Coupling.	2
	D.H.S. 184/E.2.5 In.	Pipe Coupling.	4
	D.H.S. 184/E/9.5 in.	Pipe Coupling.	1
	D.H.S. 401/F/2.5 in.	Pipe Coupling.	1

12. CHANGE OF WEIGHT AND MOMENT.

There is no change of Weight or Moment as a result of embodying this Mod.

I Scott

(I. SCOTT)
Squadron Leader
S.T.S.O.
A.H.Q. R.R.A.F.

Source : 4099G. Vol. 2. B. Leaflet.

Distribution :

One copy to essential recipients
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W.O. No. 2. Sqdn. (2) W.O. No. 1. Sqdn. (2) W.O. C.T.D. (2)

Air Headquarters,
Royal Rhodesian Air Force.

30th July, 1959.

R.R.A.F. Technical Order.

Vol.3,Sect.2,Sub.Sect.B.68.(Issue 1)

For information and recording only.

Vampire T.Mk.11 Aircraft Only
Canopy Headrest.
Vampire/Modification/3448.

INTRODUCTION

This Modification introduces an improved canopy Headrest of Sorbo strips covered with black leather, (Pt.No. 15FC.3517, Ref.No.26FC/11902) and at the same time the method of positioning, and attachment is changed.

EMBODIMENT

This Modification is only embodied when it becomes necessary to replace old Headrest (Pt.No. 15FC.3115, Ref.No.26FC/10261) with the improved Headrest (Pt.No. 15FC.3517, Ref.No.26FC/11902).

SEQUENCE OF OPERATIONS

Position the modified Head Pad so that its front edge is eight inches aft of the centre of the handle pivot and attach directly to the centre beam using Bostik 1410 Ref. 33C/1327 or similar adhesive; the leather flaps, being wrapped over the top of the centre beam bottom flange.

RECORDING ACTION

Record in Aircraft Form 700 and 4801 as VAMP/MOD/3448 Embodied.

I. Scott

(I. SCOTT)
Squadron Leader,
S.T.S.O.

SOURCE:- A.199466/54/AIR ENG. 12 a.

DISTRIBUTION:-

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Air Headquarters,
Royal Rhodesian Air Force,
NEW SARUM.

R.R.A.F. Technical Order.
Vol.3, Sect.2, Sub.Sect.B.67. (Issue 1).

28th July, 1959.

Vampire T.Mk. 11 And F.B.9. Aircraft - Fuel System - To Introduce Protection for Fuel Pipes at Rib No. 2.

(Mod. No. Vampire/3412.)

1. INTRODUCTION

Chafing of the fuel feed pipes where they pass through rib No.2, in the mainplanes, has occurred. This modification protects the pipes at rib No. 2 to obviate this chafing.

(1) This modification does not cancel, supersede or render unnecessary, any work called for by approved modifications, Command modifications, S.T.I.s, S.I., or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied within 28 days of receipt of this Technical Order.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 3 man-hours.

4. DRAWINGS REQUIRED

There are no drawings required for the embodiment of this modification.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts and materials are required, and are to be provided under Unit arrangements:

Stores Ref.	Part No.	Nomenclature	Qty.	Class of Store.
32C/376	-	Rubber Tubing, 1 in. I.D. D.T.D. 625-1, 3 in. long	4	C
33C/1327	-	Adhesive Bostik 1410	As Reqd.	C

(2) Special Tools and Test Equipment

There are no special tools or test equipment required for the embodiment of this modification.

6. SPARES AFFECTED

There are no spares affected by this modification.

7. CHANGE OF STORES REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes of Stores Ref., Part or Assembly Nos., as a result of this modification.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations, and is applicable to both port and starboard mainplanes.

(1) Working in the tank bay, outboard of rib No.2, locate the 1 in. o.d. fuel balance pipe running between tank No.3 and tank No.1. This pipe passes through rib No.2 approximately two-thirds of the way aft from the forward end of rib No.2 and connects into fuel tank No.1 at its aft outboard connection.

/2.........

Also locate the 1 in. o.d. balance pipe running between tank No.2 and tank No.1. This pipe passes through rib No.2 approximately one-third of the way along the rib from its forward end and connects into fuel tank No.1 at its forward, outboard connection.

(2) Working with two new 3 in. lengths of 1 in. i.d. rubber tubing (Stores Ref. 32C/376), cut them lengthwise and coat the inside of the tubing with Bostik 1410, adhesive (Stores Ref. 33C/1327). Open the split rubber tubing and ease one piece over each pipe where it passes through rib No.2. Position the two new split pieces of rubber tubing so that 1.5 in. of tubing is showing each side of rib No.2.* These fuel pipes, with the split rubber tubing attached become Part No. P00.3985A/ND, left-hand P00.3986A/ND right-hand, for the pipe between fuel tank No.3 and No.1, and the pipe between fuel tank No.2 and No.1 becomes Part No. P00.3987A/ND.

9. TESTING AFTER EMBODIMENT

There are no special tests required after the embodiment of this modification.

10. RECORDING ACTION

Record on Aircraft Form 700, and 4801.

11. DISPOSAL OF REDUNDANT PARTS

There are no parts rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of + 0.31 lb., and a change of moment of + 1.0 lb. ft.

(Insert) "and secure with two Jubilee Clips".

(I. SCOTT)
Squadron Leader,
S.T.S.O.

SOURCE: 4099J H.20.

DISTRIBUTION:-

One copy to essential recipients plus the following:-

W.O. No.1, and 2 Squadron. (2) (2)
W.O. A.R.S. (2).

Air Headquarters,
Royal Rhodesian Air Force.

1st May, 1959.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B66 (Issue 1).

Vampire F.B.Mk.9 and T.Mk.11 Aircraft - Mainplanes - To Introduce Reinforced Outer Flap Shrouds and Dive Brake Shrouds.

(Mod.No. VAMPIRE/3493) (Class C/3).

NOTE*

1. INTRODUCTION

Rivets have become loose on the outer flap shroud and dive brake shroud stiffener-rib attachments and several cracks have occurred in these shroud skins. To obviate this defect this modification introduces reinforcing to strengthen these areas.

(1) This modification does not cancel, supersede, or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s or S.R.I.M.s.

NOTE*
1. Where reference is made to 28Q/6646. A.G.S. 2045/406 Rivet, Chobert $\frac{1}{8}$" dia, add "or 28Q"16374. 402/407 Rivet, Avdel $\frac{1}{8}$" dia."

2. Where reference is made to 28Q/6886. A.G.S. 2045/506 Rivet, Chobert 5/32" dia, add "or 28Q/16380. 402/508 Rivet, Avdel 5/32" dia.

~~This modification is to be embodied by :-~~
~~C.T.D. : Before issue of aircraft.~~ *
~~Squadrons : At the first opportunity (not later than 6 months after receipt of parts).~~
~~NOTE: Present stocks of Mod/V/3493 are not sufficient to modify all aircraft, therefore only aircraft found with the defects outlined in para 1 are to be embodied.~~

AL594

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 30 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P. 4099G/G.1/57, Sheets 1-10, is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and /or Materials

(a) The Modification Kit, which consists of the following items supplied by the contractor, will be demanded from O.C. C.E.D. under Ref. 26FC/103493.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7967	Angle cleat, 90 deg.	4	-
26FC/-	D00.7969	Angle cleat, 97 deg.	6	-
26FC /-	D00.7971	Angle cleat, 83 deg.	6	-
26FC/-	D00.7975	Angle cleat (port) 97 deg.	2	-
26FC/-	D00.7976	Angle cleat (starboard) 97 deg.	2	-
26FC/-	D00.7977	Angle cleat (port) 83 deg.	2	-
26FC/-	D00.7987	Angle cleat (starboard) 83 deg.	2	-
26FC/-	D00.7979	Stiffener, top hat, dive brake shroud (port)	1	-
26FC/-	D00.7980	Stiffener, top hat, dive brake shroud (stbd)	1	-
26FC/-	D00.7981	Stiffener, top hat, dive brake shroud (port)	1	-
26FC/-	D0C.7982	Stiffener, top hat, dive brake shroud (stbd)	1	-
26FC/-	D00.7983	Stiffener, top hat, dive brake shroud (port	1	-
26FC/-	D0..7984	Stiffener, top hat, dive brake shroud (stbd.)	1	

2/........

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7985	Gusset Plate	2	-
26FC/-	D00.7987	Gusset plate (Port)	1	-
26FC/-	D00.7988	Gusset plate (Stbd.)	1	-
26FC/-	D00.7989	Stiffener, top hat, outer flap shroud (port)	1	-
26FC/-	D00.7990	Stiffener, top hat, outer flap shroud (stbd.)	1	-
26FC/-	D00.7991	Stiffener, top hat, outer flap shroud (port)	1	-
26FC/-	D00.7992	Stiffener, top hat, outer flap shroud (stbd.)	1	-
26FC/-	D00.7993	Stiffener, No. 2 Flap shroud (Port)	1	-
26FC/-	D00.7994	Stiffener, No. 2. Flap shroud (Stbd.)	1	-
26FC/-	D00.7995	Stiffener, out flap shroud (port)	1	-
26FC/-	D00.7996	Stiffener, outer flap shroud (stbd.)	1	-
26FC/-	D00.7997	Stiffener, outer flap shroud (port)	1	-
26FC/-	D00.7998	Stiffener, outer flap shroud (stbd.)	1	-
26FC/-	D00.7999	Angle cleat, 80 deg.	2	-
26FC/-	D00.8001	Angle cleat, 80 deg.	10	-
26FC/-	D00.8003	Angle cleat, 100 deg.	2	-
26FC/-	D00.8005	Angle cleat, 100 deg.	10	-
28D/12846	A.25/15B	Bolt, hex/hd. 4 B.A.	4	C
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia. *	82	C
28Q/6886	AGS.2045/506	Rivet, Chobert, 5/32 in. dia.	6	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	32	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	48	C
28Q/6799	AS.2227/505	Rivet, sp/hd., 5/32 in. dia.	4	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd., $\frac{1}{8}$ in. dia.	198	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd., $\frac{1}{8}$ in. dia	36	C
28Q/6797	AS.2229/504	Rivet 90 deg. csk/hd., 5/32 in. dia.	66	C

(b) The following materials are also required, and are to be provided under Unit arrangements:-

30A/3055	Wire, nickel alloy, 22 s.w.g.	As reqd.	C
33B/9428859	Stopper, oil base	As reqd.	C
33B/9429196	Primer, etch base	As reqd.	C
33B/9429195	Primber, etch accelerator	As reqd.	C
33B/9428777	Finish, cellulose, aluminium, Spec. D.T.D. 772	As reqd.	C
33C/647	Paper, abrasive, water proof silicon carbide grade 280C	As reqd.	C
33C/1264	Compound, pigmented varnish jointing, Spec. D.T.D.369A		
33B/942	Finish, cellulose, light slate grey Spec. D.T.D. 772	As reqd.	C
33B/939	Finish, cellulose, medium sea grey, Spec. D.T.D.772	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

The following list shows the spares affected by this modification, and the parts required to modify them :-

* OR 28Q/16374.. 402/407 RIVET AVDEL 1/8" DIAM.

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Air Headquarters,
Royal Rhodesian Air Force.

1st May, 1959.

Vampire F.B.Mk.9 and T.Mk.11 Aircraft - Mainplanes - To Introduce Reinforced Outer Flap Shrouds and Dive Brake Shrouds.

(Mod.No. VAMPIRE/3493) (Class C/3).

NOTE.*

1. INTRODUCTION

Rivets have become loose on the outer flap shroud and dive brake shroud stiffener-rib attachments and several cracks have occurred in these shroud skins. To obviate this defect this modification introduces reinforcing to strengthen these areas.

(1) This modification does not cancel, supersede, or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT: THIS MODIFICATION IS TO BE EMBODIED AS AND WHEN NECESSARY SEE PARA 1. ABOVE.

~~This modification is to be embodied by :-~~

~~C.T.D. : Before issue of aircraft.~~

~~Squadrons : At the first opportunity (not later than 6 months after receipt of parts).~~

~~NOTE: Present stocks of Mod/V/3493 are not sufficient to modify all aircraft, therefore only aircraft found with the defects outlined in para 1 are to be embodied.~~

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3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 30 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P. 4099G/G.1/57, Sheets 1-10, is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and /or Materials

(a) The Modification Kit, which consists of the following items supplied by the contractor, will be demanded from O.C. C.E.D. under Ref. 26FC/103493.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7967	Angle cleat, 90 deg.	4	-
26FC/-	D00.7969	Angle cleat, 97 deg.	6	-
26FC /-	D00.7971	Angle cleat, 83 deg.	6	-
26FC/-	D00.7975	Angle cleat (port) 97 deg.	2	-
26FC/-	D00.7976	Angle cleat (starboard) 97 deg.	2	-
26FC/-	D00.7977	Angle cleat (port) 83 deg.	2	-
26FC/-	D00.7987	Angle cleat (starboard) 83 deg.	2	-
26FC/-	D00.7979	Stiffener, top hat, dive brake shroud (port)	1	-
26FC/-	D00.7980	Stiffener, top hat, dive brake shroud (stbd)	1	-
26FC/-	D00.7981	Stiffener, top hat, dive brake shroud (port)	1	-
26FC/-	D00.7982	Stiffener, top hat, dive brake shroud (stbd)	1	-
26FC/-	D00.7983	Stiffener, top hat, dive brake shroud (port	1	-
26FC/-	D00.7984	Stiffener, top hat, dive brake shroud (stbd.)	1	

2/...

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/357	D00.1951A	Assy. of outer flap shroud (Port)		

The method for modifying the above spare is detailed in para 8. operations (2) to (10) inclusive and on sheets 1 to 7 inclusive, of the drawing.

Parts required:-

26FC/-	D00.7985	Gusset plate	1	-
		Attaching parts for D00.7985, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	6	C
and				
26FC/-	D00.7987	Gusset plate	1	-
		Attaching parts for D00.7987, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	4	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	2	C
26FC/-	D00.7989	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7989, stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7991	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7991, stiffener		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	30	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7993	Stiffener No. 2 flap shroud	1	-
		Attaching parts for D00.7993, stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	1	C
28Q/6886	AGS.2045/506	Rivet, Chobert, 5/32 in. dia.	3	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	19	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in. dia.	19	C
and				
26FC/	D00.7995	Stiffener, outer flap shroud	1	-
26FC/-	D00.7997	Stiffener, outer flap shroud	1	-
		Attaching parts for D00.7995 and D00.7997 stiffeners.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6799	AS.2227/505	Rivet, sp/hd. 5/32 in. dia.	2	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in. dia.	28	C
and				
26FC/	D00.7999	Angle cleat, 80 deg.	1	-
26FC/-	D00.8001	Angle cleat, 80 deg.	5	-
26FC/-	D00.8003	Angle cleat, 100 deg.	1	-
26FC/-	D00.8005	Angle cleat, 100 deg.	5	-
		Attaching parts for D00.7999, D00.8001 D00.8003, D00.8005, angle cleats.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	10	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	18	C

Spare affected :-

26FC/531	D00.1952	Assy. of outer flap shroud (stbd.)		

The method for modifying the above spares is detailed in para. 8. operations (2) to (10) inclusive and on sheets 1 to 7 inclusive of the drawing.

Parts required :-

26FC/-	D00.7985	Gusset plate	1	-
		Attaching parts for D00.7985, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd, $\frac{1}{8}$ in. dia.	6	C
and				
26FC/-	D00.7988	Gusset plate	1	-
		Attaching parts for D00.7988, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	4	C

4/.....

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	2	C
and				
26FC/-	D00.7990	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7990, stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	DOC.7992	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7992, stiffener		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	30	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7994	Stiffener, No. 2 Flap shroud	1	-
		Attaching parts for D00.7994, stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	1	C
28Q/6686	AGS.2045/506	Rivet, Chobert, 5/32 in. dia.	3	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	19	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32in. dia.	19	C
and				
26FC/	D00.7996	Stiffener, outer flap shroud	1	-
26FC/-	D00.7998	Stiffener, outer flap shroud	1	-
		Attaching parts for D00.7996 and D00.7998 stiffeners.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6799	AS.2227/505	Rivet, sp/hd. 5/32 in. dia.	2	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in.dia.	28	C
26FC/-	D00.7999	Angle cleat, 80 deg.	1	-
26FC/-	D00.8001	Angle cleat, 80 deg.	5	-
26FC/-	D00.8003	Angle cleat, 100 deg.	1	-
26FC/-	D00.8005	Angle cleat, 100 deg.	5	-
		Attaching parts for D00.7999, D00.8001, D00.8003, D00.8005 angle cleats		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	10	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	18	C

Spares affected:-

26FC/-	D00.6715A/10	Arrangement of wing, port (spares)		

The method for modifying any of the above spares is detailed in para 8, operations (2) to (13) and on sheets 1 to 10 of the drawing.

Parts required for each spare:-

Items required for dive brake shroud (ref. only).

26FC/-	D00.7967	Angle cleat, 90 deg.	2	-
26FC/-	D00.7969	Angle cleat, 97 deg.	3	-
26FC/-	D00.7971	Angle cleat, 83 deg.	3	-
		Attaching parts for D00.7967, D00.7969, D00.7971, angle cleats.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	18	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
and				
26FC/-	D00.7975	Angle cleat, 97 deg.	2	-
26FC/-	D00.7977	Angle cleat, 83 deg.	2	-
		Attaching parts for D00.7975, D00.7977, angle cleats.		
28D/12846	A25/15B	Bolt, hex/hd. 4 B.A.	2	C
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	8	C
and				
26FC/-	D00.7979	Stiffener, top hat, dive brake shroud	1	-
		Attaching parts for D00.7979, stiffener		
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
28Q/6679	AS.2229/405	Rivet, 90 deg. Csk/hd. $\frac{1}{8}$ in. dia.	2	C
and				
26FC/-	D00.7981	Stiffener, top hat, dive brake shroud	1	-
		Attaching parts for D00.7981, stiffener		
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	12	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7983	Stiffener, top hat, dive brake shroud	1	-
		Attaching parts for D00.7983, stiffener		
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. sck/hd. $\frac{1}{8}$ in. dia.	4	C
and				

Items required for outer flap shroud (ref. only).

Parts required:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7985	Gusset plate	1	-
		Attaching parts for D00.7985, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	6	C
and				
26FC/-	D00.7087	Gusset plate	1	-
		Attaching parts for D00.7987, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	4	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia	2	C
and				
26FC/-	D00.7989	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7989, stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7991	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7991, stiffener		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	30	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7993	Stiffener No. 2 flap shroud	1	-
		Attaching parts for D00.7993, Stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	1	C
28Q/6886	AGS.2045/506	Rivet, Chobert, 5/32 in. dia.	3	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	19	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in. dia.	19	C
and				
26FC/-	D00.7995	Stiffener, outer flap shroud	1	-
26FC/-	D00.7997	Stiffener, outer flap shroud	1	-
		Attaching parts for D00.7995 and D00.7997, stiffeners.		
28Q/6646	AGS.2045/406	Rivet, Chobert $\frac{1}{8}$ in. dia.	2	C
28Q/6799	AS.2227/505	Rivet, sp/hd. 5/32 in. dia.	2	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in.dia.	28	C
and				
26FC/-	D00.7999	Angle cleat, 80 deg.	1	-
26FC/-	D00.8001	Angle cleat, 80 deg.	5	-
26FC/-	D00.8003	Angle cleat, 100 deg.	1	-
26FC/-	D00.8005	Angle cleat, 100 deg.	5	-
		Attaching parts for D00.7999, D00.8001, D00.8003, D00.8005, angle cleats.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	10	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	18	C

Spare affected:-

6/......

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7611A/5	Arrangement of wing, stbd. (spares)		

The method for modifying any of the above spares is detailed in para. 8, operations (2) to (13) and on Sheets 1 to 10 of the drawing.

Parts required for each spare:-

Items required for dive brake shroud (ref. only).

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7967	Angle cleat, 90 deg.	2	-
26FC/-	D00.7969	Angle cleat, 97 deg.	3	-
26FC/-	D00.7971	Angle cleat, 83 deg.	3	-
		Attaching parts for D00.7967, D00.7969, D00.7971, angle cleats.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	18	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
and				
26FC/-	D00.7976	Angle cleat, 97 deg.	2	-
26FC/-	D00.7978	Angle cleat, 83 deg.	2	-
		Attaching parts for D00.7976, D00.7978 angle cleats.		
28D/12846	A.25/15B	Bolt, hex/hd. 4 B.A.	2	C
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	8	C
and				
26FC/-	D00.7980	Stiffener, top hat, dive brake shroud	1	-
		Attaching parts for D00.7980, stiffener		
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	2	C
and				
26FC/-	D00.7982	Stiffener, top hat, dive brake shroud	1	
		Attaching parts for D00.7982, stiffener		
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	12	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7984	Stiffener, top hat, dive brake shroud	1	-
		Attaching parts for D00.7984, Stiffener		
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				

Items required for outer flap shroud (Ref. only).

Parts required:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	D00.7085	Gusset plate	1	-
		Attaching parts for D00.7085, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	6	C
and				
26FC/-	D00.7988	Gusset plate	1	-
		Attaching parts for D00.7988, gusset plate		
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	4	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	2	C
and				
26FC/	D00.7990	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7990, stiffener.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	14	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7992	Stiffener, top hat, outer flap shroud	1	-
		Attaching parts for D00.7992, stiffener		

7/.......

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	30	C
28Q/6679	AS.2229/405	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	4	C
and				
26FC/-	D00.7994	Stiffener, No. 2 flap shroud	1	-
		Attaching parts for D00.7994, stiffener		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	1	C
28Q/6886	AGS.2045/506	Rivet, Chobert, 5/32 in. dia.	3	C
28Q/6640	AS.2229/404	Rivet, 90 deg. csk/hd. $\frac{1}{8}$ in. dia.	19	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in. dia.	19	C
and				
26FC/-	D00.7996	Stiffener, outer flap shroud	1	-
26FC/-	D00.7998	Stiffener, outer flap shroud	1	-
		Attaching parts for D00.7996 and D00.7998, stiffeners		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	2	C
28Q/6799	AS.2227/505	Rivet, sp/hd. 5/32 in. dia.	2	C
28Q/6797	AS.2229/504	Rivet, 90 deg. csk/hd. 5/32 in. dia.	28	C
and				
26FC/-	D00.7999	Angle cleat, 80 deg.	1	-
26FC/-	D00.8001	Angle cleat, 80 deg.	5	-
26FC/-	D00.8003	Angle cleat, 100 deg.	1	-
26FC/-	D00.8005	Angle cleat, 100 deg.	5	-
		Attaching parts for D00.7999, D00.8001, D00.8003, D00.8005, angle cleats.		
28Q/6646	AGS.2045/406	Rivet, Chobert, $\frac{1}{8}$ in. dia.	10	C
28Q/6638	AS.2227/404	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	2	C
28Q/6639	AS.2227/405	Rivet, sp/hd. $\frac{1}{8}$ in. dia.	18	C

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Nos., as follows :-

Old Ref. No.	Old Part/Assy. No.	Nomenclature	New Part/Assy. No.	New Ref. No.
26FC/357	D00.1951A	Assy. of outer flap shroud (port)	D00.8009A	26FC/12448
26FC/531	D00.1952A	Assy. of outer flap shroud (stbd.)	D00.8010A	26FC/12449
26FC/-	D00.3933A	Assy. dive brake shroud on wing (port)	D00.8007A	26FC/-
26FC/-	D00.3934A	Assy. dive brake shroud on wing (stvd.)	D00.8008A	26FC/-
26FC/-	D00.6527A/11	G.A. of wing, port	D00.6527A/12	26FC/-
26FC/-	D00.6715A/10	Arrangement of wing, spares, port	D00.6715A/11	26FC/11985
26FC/-	D00.7539A/6	G.A. of wing, stbd.	D00.7539A/7	26FC/-
26FC/-	D00.7611A/5	Arrangement of wing, spares, stbd.	D00.7611A/6	26FC/11986

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations and is applicable to both port and starboard mainplanes:-

(1) Lower the flaps and place the dive brakes in the "out" position. Release the hydraulic pressure and drain the fluid from the system in accordance with current authorized procedure. Remove the lower detachable panel from the dive brake shroud, retaining its attaching items for subsequent reassembly. Disconnect the hydraulic pipes in the flap bay, which run to the dive brake jack, and remove and retain the pipe clamps which secure these pipes together with their attaching items.

NOTE: Extreme care must be taken to ensure that all pipe lines are blanked off to prevent the ingress of foreign matter.

(2) Working in the outer flap bay, locate the inboard longitudinal stiffeners, Part No. D00.1719 (port) ; D00.1720 (starboard) (ref. only) and its two attaching outboard transverse stiffeners, Part Nos. D00.2843

87/....

(port aft); D00.2844 (starboard aft); D00.2845 (Port forward); D00.2846(starboard forward) (ref. only), remove these redundant stiffeners from the aircraft by drilling out their attaching rivets using a No. 30 (0.1285 in. dia.) drill. Increase the dia. of the 90 deg. dimple countersinks on the top surface of the flap shroud to 0.27 in. dia. and increase the size of the rivet holes using a No. 21 (0.1590 in. dia.) drill.

(3) Refer to sheets 1, 2 and 6 of the drawing. Using the inboard longitudinal row of existing rivet holes as guides, position the new top hat stiffener, Part No. D)).7993 (port); D00.7994 (starboard) on the underside of the flap shroud, ensuring that the inboard flange of the stiffener fits under the ends of the two existing transverse stiffeners, Part Nos. D0C.1843 (port forward); D00.1845 (port aft); D0C.1844 (starboard forward); D00.1846 (starboard aft) (ref. only) and that the double joggled end of the new top hat stiffener is seated on the false spar. Working from the top of the shroud and using the existing rivet holes as guides, drill through the inboard flange o the top hat stiffener using a No. 28 (0.1405 in. dia.) drill. Thoroughly deburr the stiffener. Working from the underside of t flap shroud enlarge the existing hole in the trailing edge member u a No. 20 (0.160 in. dia.) drill and drill a hole in the rear end of inboard flange on the new stiffener using the No. 20 drill to mate with the hole just drilled, and remove all burrs.

(4) Mark off and drill the outboard flange of the stiffener and shroud skin using a No. 35 (0.110 in. dia.) drill as shown on sheet and 2 of the drawing. Drill one hole at the rear end of the stiff and trailing edge member using the No. 30. drill. Remove the stif and thoroughly deburr all the holes. Dimple countersink the No. 3 holes in the flap shroud 90 deg. x 0.22 x 0.22 in. dia. and the No. 28 holes in the stiffener flange to suit the dimpling in the shroud

(5) Coat the mating surfaces of the stiffener and the shroud with pigmented varnish jointing compound (Ref. No. 33C/1264) and rivet t stiffener to the flap shroud using approximately nineteen 5/32 in. 90 deg. countersunk-head rivets, Part No. AS.2229/504, for the inbo row and approximately nineteen 1/8 in. dia. 90 deg. countersunk-head r Part No. AS.2229/404 for the outboard row. At the trailing edge me secure the inboard flange with a 5/32 in. dia. Chobert rivet, Part N AGS.2045/506, and the outboard flange with a 1/8 in. dia. Chobert rive Part No. AGS.2045/406. Secure the ends of the two existing transve stiffeners to the new top hat stiffener, using two 5/32 in. dia. Ch rivets, Part No. AGS.2045/506 having first drilled two holes, using No. 20 drill, in the top hat stiffener to mate with the existing hol the transverse stiffeners.

(6) Refer to fig. 1 on sheet 7 of the drawing and drill the angle attachments on the two new transverse stiffeners, Part No. D00.7995 aft); D00.7997 (port forward), D00.7996 (starboard aft); D00.7998 (starboard forward) using the No. 30 drill for the inboard ends and No. 21 drill for the outboard ends. Refer to sheets 1, 2 and 3 of drawing and position these two new stiffeners to the underside of th flap shroud taking up the same positions as those of the redundant stiffeners removed in operation (2). Using the existing holes in t flap shroud as guides and using the No. 28 drill, drill through the stiffeners. Remove the stiffeners and thoroughly deburr them. Dimple countersink the No. 28 sholes in the stiffeners to suit the dimpling in the shroud skin. Coat the mating surfaces of the stiffeners and the shroud with pigmented varnish jointing compound, and, using approximately fourteen 5/32 in. dia. 90 deg. countersunk-head rivets, Part No. AS.2229/504, rivet the stiffeners to the shroud skin. The outboard angle attachments of the new stiffeners are to be secured to the existing trailing edge rib No. 2 and stiffeners with two 5/32 in. dia. snaphead rivets, Part No. AS.2227/505, first enlarging the existing rivet holes using a No. 21 drill. The inboard angle attachments are to be secured to the new top hat stiffener using two 1/8 in. dia. Chobert snaphead rivets, Part No. AGS.2045/406, having first drilled two No. 30 holes in the top hat stiffener to mate up with the holes in the angle attachments.

9/........

(7) Mark a centre line for the new top hat stiffener, Part No. D00.7989 (port); D00.7990 (starboard) the whole length of the outer flap bay, measuring on its underside 8.07 in. to the rear of the false spar and alor the centre line of the new top hat stiffener which was fitted in operatior (3) and 7.51 in. to the rear of the false spar along the outboard edge of rib 3, as shown on sheet 1 of the drawing. Refer to fig. 2 on sheet 7 of the drawing and drill the angle attachments at each end of the stiffener using the No. 30 drill, as shown. Referring to sheets 2 and 3 of the drawing, mark out and centre punch the rivet pitches on the new top hat stiffener as detailed. Offer up the stiffener to the centre line just marked on the undersurface of the flap shroud, adjacent to the new top hat stiffener fitted in operation (3) and using the No. 35 drill, drill through the stiffener and flap shroud. Dimple countersink these holes on the top surface of the flap shroud 90 deg. x 0.22 in. dia. and the holes in the stiffener to suit the dimpling in the shroud. Coat the mating surfaces of the stiffener and shroud with pigmented varnish jointing compound and using approximately fourteen $\frac{1}{8}$ in. dia. 90 deg. countersunk-head rivets, Part Nos. AS.2229/404 (ten off) and AS.2229/405 (four off) using the longer rivets at the ribs and the shorter rivets between the ribs, rivet the stiffener to the flap shroud.

(8) Refer to fig. 3 on sheet 7 of the drawing and working with the new top hat stiffeners, Part No. D00.7991 (port); D00.7992 (starboard) drill off the end angle attachments using the No. 30 drill at each end of the stiffener. Working to the centre line marked in the previous operation, offer up this new top hat stiffener to the flap shroud so that its centre line corresponds with that on the shroud and that it is positioned as shown on sheets 1, 3 4 and 5 of the drawing. Mark out and centre punch the rivet pitches on the flanges of this new stiffener as detailed and then drill through the stiffener and flap shroud using the No. 35 drill. Remove the stiffener and thoroughly deburr both the stiffener and flap shroud. Dimple countersink these holes on the top surface of the shroud 90 deg. x 0.22 in. dia. and the holes in the stiffener to suit the dimpling in the shroud. Coat the mating surfaces of the stiffeners and shroud with pgimented varnish jointing compound and using approximately thirty-two $\frac{1}{8}$ in. dia. 90 deg. countersunk-head rivets, Part No. AS.2229/404 (twenty eight off) and AS.2229/405(four off) using the longer rivets at the ribs and the shorter rivets between the ribs, rivet the stiffener to the flap shroud.

(9) Refer to sheet 4 of the drawing and locate the existing longitudinal stiffener, Part No. D00.1721 (port; D00.1722 (starboard) (ref. only) and at its intersections where its transverse stiffeners are attached, offer up the two new gusset plates, Part Nos. D00.7985 (port aft) and D00.7087 (port forward); D00.7985 (starboard aft) and D00.7988 (starboard forward) and position them as detailed. With the No. 30 drill and using the holes in the gusset plates as guides drill through the stiffeners. Throughly deburr the stiffeners and then, coating the mating surfaces with pigmented varnish jointing compound, rivet these plates into position using six $\frac{1}{8}$ in. dia. snaphead rivets, Part No. AS.2227/404, for the aft gusset plate and four $\frac{1}{8}$ in. dia. snaphead rivets, Part No. AS.2227/404, and two $\frac{1}{8}$ in. dia. 90 deg. countersunk-head rivets, Part No. AS.2229/404, for the forward gusset plate.

(10) Refer to sheets 1, 2, 3, 4 and 5 of the drawing and establish the positions of the twelve new angle attachment cleats, Part Nos. D00.7999 (one off); D00.8001 (five off); D00.8003 (one off); D00.8005 (five off). Offer up these new angle cleats to their respective positions, as detailed, then using the No. 30 drill, drill the stiffeners, using the holes in the angle cleats as guides, also drill the rivet holes for attaching the new transverse top hat stiffeners using the holes in the angle attachments as guides. Remove the cleats and thoroughly deburr all holes. Coat the mating surfaces of all these cleats with pigmented varnish jointing compound and rivet them to their respective stiffeners using twenty-two $\frac{1}{8}$ in. dia. snaphead rivets, Part No. AS.2227/405, for the stiffeners with the No. 30 holes drilled in them and twelve $\frac{1}{8}$ in. dia. Chobert rivets, Part No. AGS.2045/406, for the No. 30 holes drilled in the top hat stiffenors and four $\frac{1}{8}$ in. dia. snaphead rivets, Part No. AS.2227/404, for securing the outboard angle attachments to the trailing edge rib No. 3. Refereence to sheets 1, 2, 3, 4 and 5 of the drawing will clarify these rivet positions.

/10.......

(11) Refer to sheets 8, 9 and 10 of the drawing. Working in the dive brake compartment mark off two centre lines along the undersurface of the dive brake shroud, the line between trailing edge rib No. 3 and the main hinge bracket on the inboard portion of the shroud is to measure 5.82 in. to the rear of, and parallel to, the false spar. The line between the main hinge bracket and trailing edge rib No. 5 in the outboard portion of the dive brake shroud is to measure 5.98 in. to the rear of, and parallel to, the false spar as shown on sheet 8 of the drawing. Refer to sheet 8 of the drawing and mark out anc centre punch the rivet pitches on the three new top hat stiffeners Part Nos. D00.7979 (port outboard); D00.7981 (port centre) and D00.7983 (port inboard); D00. 7980 (starboard outboard; D00.7982 (starboard centre) and D00.7984 (starboard inboard) as detailed. Offer up the stiffeners to the centre lines on the undersurface of the dive brake shroud, and position them as detailed. Using the No. 35 drill, drill through the stiffeners and dive brake shroud. Remove the stiffeners and deburr the newly drilled holes in them and the shroud skin. Dimple countersink these holes on the top surface of the dive brake shroud. 90 deg. x 0.22 in. dia. and holes in the stiffeners to suit the dimpling in the shroud. Coat the mating surfaces of the stiffeners and the shroud with pigmented varnis compound and rivet the stiffeners to the undersurface of the shroud us approximately fifty $\frac{1}{8}$ in. dia. 90 deg. countersunk-head rivets, Part N AS.2229 /404 (forty off) and AS.2229/405) ten off), the shorter rivets to be used for riveting two thickness os of metal together and the lon rivets for riveting three thicknesses at the intersections, as detaile on sheet 9 of the drawing.

(12) Refer to sheets 8 and 9 of the drawing and establish the positio of the twelve new angle cleats, Parts Nos. D00.7967 (two off) D00.7969 (three off), D00.7971 (three off); D00.7975 (port); D00.7976 (starbo (two off), D00.7977 (port); D00.7978 (starboard) (twoo off). Offer up these cleats to their respective positions, then using a No. 30 dri and using the holes in the cleats as guides, drill through the respect top hat stiffeners and the respective trailing edge ribs. Remove the cleats and thoroughly deburr all holes. Coat the mating surfaces of cleats, stiffeners and ribs with pigmented varnish jointing compound a rivet the cleats in their respective positions using twenty-six $\frac{1}{8}$ in. di Chobert rivets, Part No. AGS.2045/406, for the top hat stiffeners and training edge rib No. 5, two $\frac{1}{8}$ in dia. snaphead rivets, Part No. AS.22 405, for trailing edge rib No. 4 and two $\frac{1}{8}$ in. dia. snaphead rivets, P No. AS.2227/404, for trailing edge rib No. 3.

(13) Refer to sheets 8 and 9 of the drawing and remove the two existi bolts which secure the angles to the main hinge bracket, adjacent to w the new top hat stiffener has been secured and replace them with two new longer 2 B.A. bolts, Part No. A.25/15B, at the same time securing the four new cleats, refit the original nuts and washers.

(14) Remove the blanks from the disconnected hydraulic pipes, reconn and secure them in their correct positions using the retained pipe cla and attaching items. Replenish the hydraulic system and check all disturbed unions for leaks, wire lock with 22 s.w.g. nickel alloy lock wire (Ref. No. 30A/3055).

(15) Repair the finish to the top surface of the flap and dive brake shrouds by first applying an equal mixture of etch primer base and accelerator, Spec. D.T.D. 868 (Ref. No. 33B/1021 and 33B/1023) respectively, fill any local indentations with oil base stopper (Ref. No. 33B/534), rub down the stopped area, using fine abraaive paper (Ref. No. 33C/647). Again apply a further coat of primer, and finally apply a coat of finish, cellulose, light slate grey or medium sea greay (Ref. No. 33B/1068 or 33B/1070 or 939) as applicable.

(16) Repair the finish to the undersurface of the flap and dive brake shrouds by applying an equal mixture of etch primer, base and accelerator and finally apply a coat of aluminium cellulose finish, Spec D.T.D. 772 (Ref. No. 33B/1060 or 865). Replace the lower detachable panel to the dive brake shroud using the orignal retained attaching items.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected in accordance with current procedure, the following tests are to be carried out:-

Function and check the flaps and dive brakes to ensure there are no fouls in the housed position.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts rendered redundant by the embodiment of this modificiation are to be disposed of as scrap in accordance with current Equipment Regulations.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/368	D00.1719	Stiffener No. 2 Flap shroud, port	1	C
26FC/541	D00.1720	Stiffener No. 2. Flap shroud, Stbd.	1	C
26FC/-	D00.2843	Stiffener (port, aft)	1	-
26FC/-	D00.2844	Stiffener (stbd, aft)	1	-
26FC/-	D00.2845	Stiffenr (port, forward)	1	-
26FC/-	D00.2846	Stiffener (stbd. forward)	1	-

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.46 lb., and a change of moment of -3.0 lb. ft.

(B.H. GIBBONS)
Wing Commander
S.T.S.O.
A.H.Q. R.R.A.F.

Source : A.P.4099G. Vol. 2. G.1.

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Air Headquarters,
Royal Rhodesian Air Force.

5th May, 1959.

R.R.A.F. Technical Order,
Vol. 3. Sect. 2. Sub.Sect. B65 (Iss 1).

Vampire F.B.Mk.9 Aircraft - Flying Controls - To Introduce Existing Rear Override Stops as Primary Stops for Rudder and Introduce Class 1 Locking.

(Mod. No. VAMPIRE/3482) (Class C/3)

1. INTRODUCTION

The existing method of using quadrant pulley and bracket, and the rudder pedals and bulkhead as primary stops has proved unsatisfactory. This is due to the existing rear override stops, which are set with a clearance of 0.030 in., preventing excessive control surface travel from being correctly adjusted. To facilitate correct adjustment, this modification introduces the existing override stops as primary stops and introduces Class 1 locking.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command Modifications, S.T.I.s, S.I.s or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons : At the first opportunity and not later than six months after receipt of this leaflet.

C.T.D. : Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 4 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099G/D.6/57 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts and materials are required and are to be provided under Unit arrangements:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
28M/13375	A27/G.P.	Nut, plain, 5/16 in. B.S.F.	8	C
30A/3055	-	Wire, locking, nickel alloy	As reqd.	C
	-	Finish, high gloss cellulose, alluminium	As reqd.	C
33B/865	942877			
33B/1021	9429196	Primer, etch, base	As reqd.	C
33B/1023	9429195	Primer, etch, accelerator	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

The following list shows the spares affected by this modification and the parts required to modify them :-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/10401	J00.1007A/3	Fin and tail boom assembly, L.H.	-	-
26FC/10402	J00.1008A/1	Fin and tail boom assembly, R.H.	-	-
26FC/-	J00.1951A/ND	Sub-assy. fin and tail boom, L.H.	-	-
26FC/-	J00.1952A/ND	Sub-assy, fin and tail boom, R.H.	-	-

The method for modifying each of the above spares is detailed in para 8, operations (2) to (7).

Parts required for each spare:

28M/13375	A.27/GP	Nut, plain, 5/16 in. B.S.F.	4	C
30A/3055	-	Wire, locking, nickel alloy	As reqd.	C

Spares affected:

26FC/4013	J00.1659	Pin, stop	-	-
26FC/4625	J00.1899	Pin, stop	-	-

The method for modifying these spares is detailed in para. 8, operation (4). There are no parts required to modify the spares.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows :-

Ref. No.	Old Part/Assy No.	Nomenclature	New Part/Assy. No.	Ref
26FC/-10401	J00.1007A/3	Fin and tail boom assy., L.H.	J00.1007A/4	26F
26FC/10402	J00.1008A/1	Fin and tail boom assy. R.H.	J00.1008A/2	26F
26FC/4013	J00.1659	Pin, stop	J00.1963	26F
26FC/4625	J00.1899	Pin, stop	J00.1961	26F
26FC/-	J00.1951A/ND	Sub-assy, fin and tail boom, L.H.	J00.1957A/ND	26F
26FC/-	J00.1952A/ND	Sub-assy, fin and tail boom, R.H.	J00.1959A/ND	26F
26FC/-	K00.349A	Assy. of rudder and elevator levers	K00.349A/1	26F

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations and is applicable t both port and starboard tail booms:-

(1) Place the aircraft in rigging position as detailed in A.P.409 Vol. 1. Sect. 4. Chap. 3.

(2) At the rear end of the tail boom, remove the tail boom rear en fairing and the outboard rear inspection panel, together with attaching items; retain all parts for subsequent reassembly.

(3) Locate the two rudder override stops and the two elevator override stops, Part Nos. J00.1899 (one off) and J00.1659 (Three off), which extend through the rear diaphragm in the tail boom. Remove the split pins, then remove these stops from the aircraft; dispose of the redundant stiffnuts and split pins but retain the stop pins for further use.

(4) Refer to the drawing. On the stop pins measure 0.125 in. from the end with the screwdriver slot and drill a No. 58 hole (0.042 in. dia.) perpendicularly through each pin; remove the burrs. Drill two No. 58 holes in each new 5/16 in. B.S.F. plain nut, Part No. A.27/GP; remove the burrs.

3/.........

(5) Reassemble the stop pins in their original positions together with their newly-drilled plain nuts and set the stops so that they now act as the primary stops, ensuring that the rudder and elevator have the correct range of movement detailed in A.P. 4099G, Vol. 1. Sect. 4. Chap. 3. Wire-lock the stop pins and their locking nuts as detailed on the drawing, using 22 S.W.G. nickel alloy locking wire (Ref. No. 30A/3055).

(6) Revert to the cockpit and ensure that the original rudder and elevator stops have a minimum gap of 0.030 in. These stops may be relieved locally to obtain this requirement, and, if relieved, must be finished with base and accelerator etch primers (Ref. Nos. 33B/1021 and 33B/1023) and cellulose aluminium finish (Ref. No. 33B/1060 or 865).

(7) On completion of special tests replace the rear end fairing and tail boom inspection panel, using the original attaching items, then lower the aircraft from the rigging position.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied, functionally test the rudder and elevator, ensuring a full, free and correct range of movement.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

No parts are rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification has no effect on weight or C. of G.

(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

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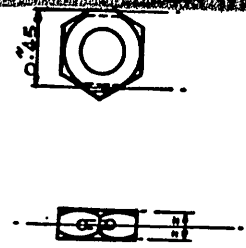
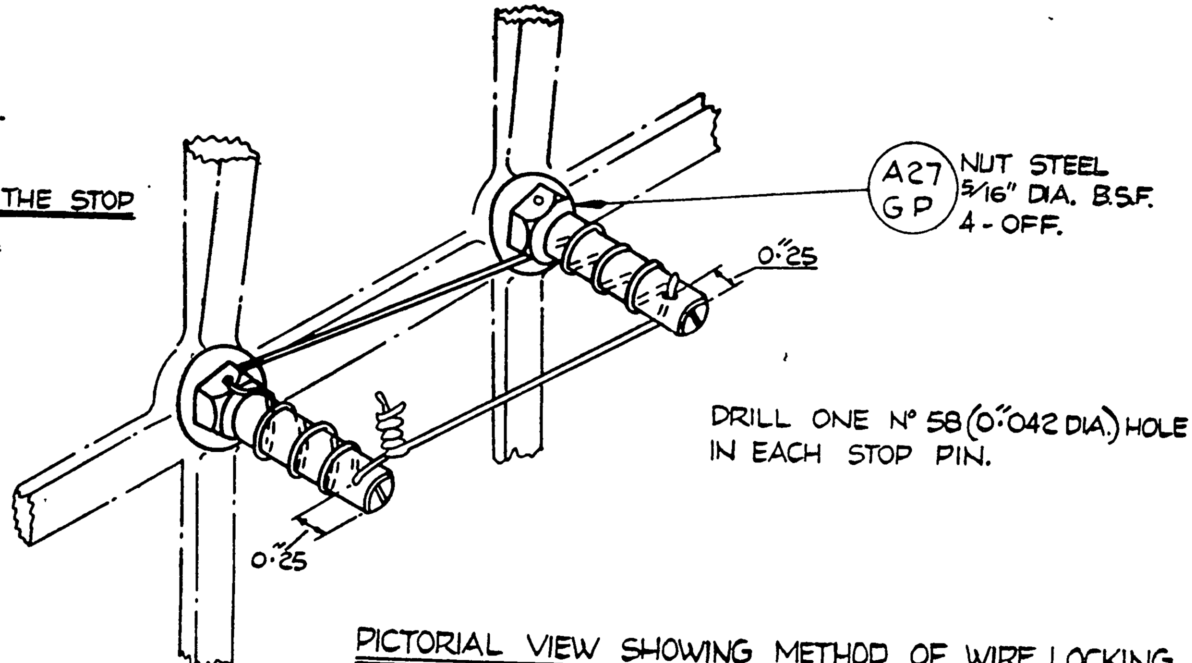
SE 22 SWG NICKEL ALLOY LOCKING WIRE (REF Nº 30A/3055)

HOLES AND THOROUGHLY DEBURR.



DETAIL FOR DRILLING THE STOP PIN'S RETAINING NUTS.

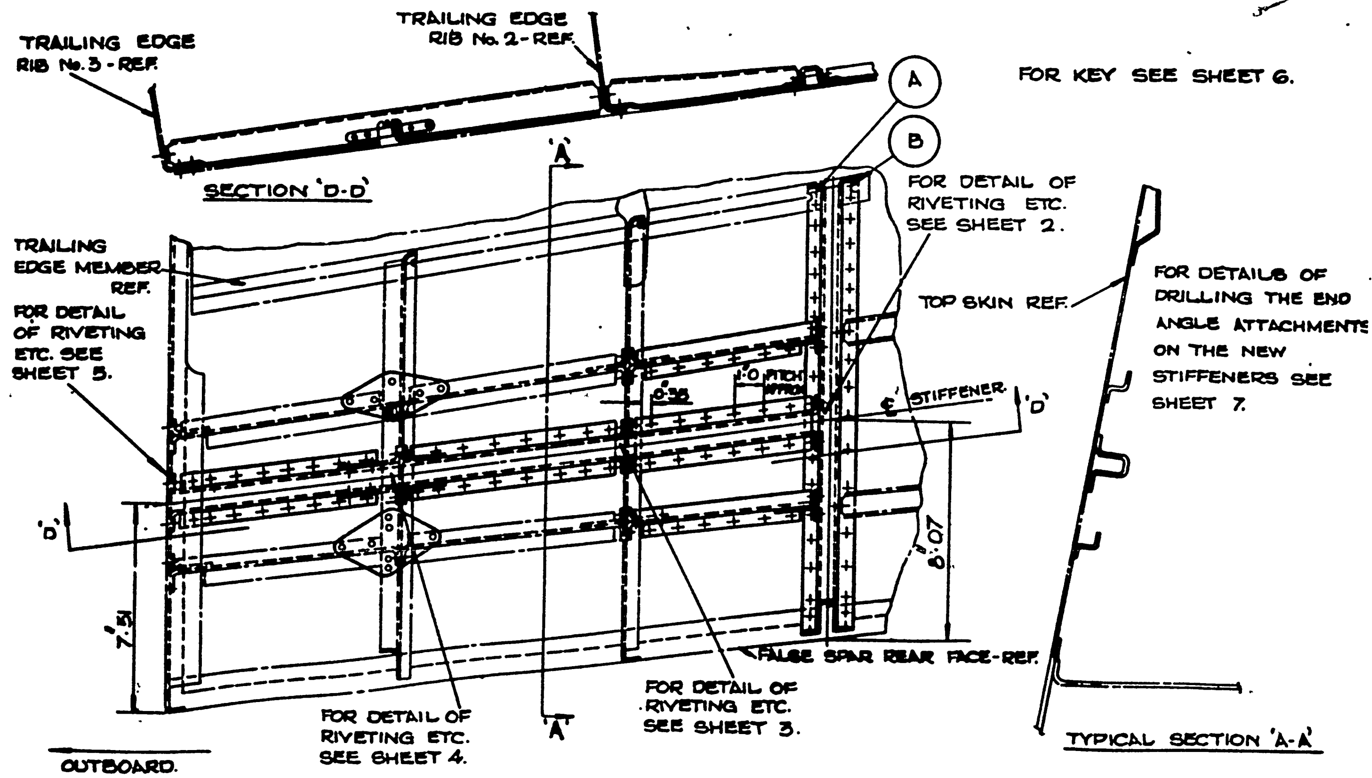


PICTORIAL VIEW SHOWING METHOD OF WIRE LOCKING RUDDER AND ELEVATOR STOPS IN REAR BOOM.

RESTRICTED

MOD/VAM/3482.

Drg. No. A.P.4099G/D.6/57

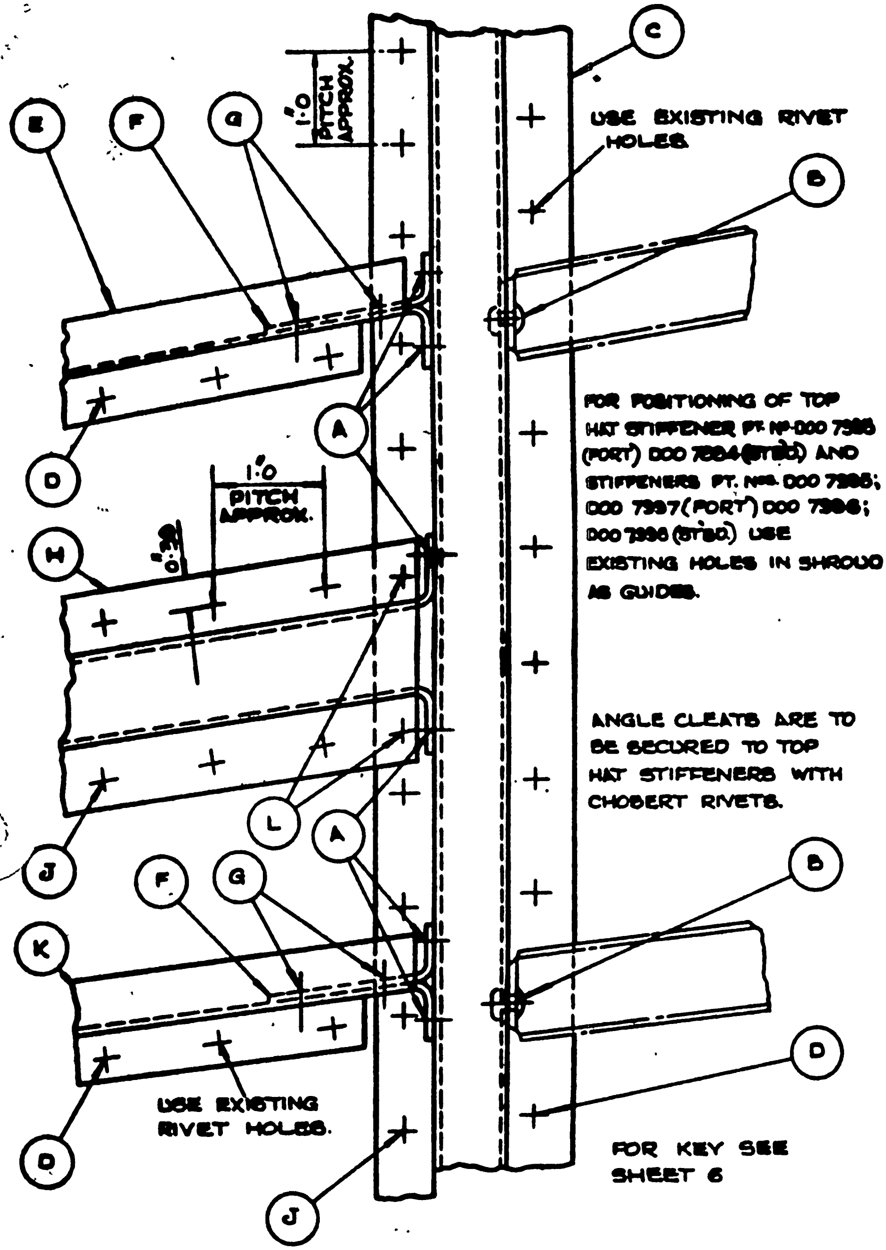


OUTER FLAP SHROUD. PORT DRAWN.

RESTRICTED

DRG. No. A.P. 4099 G/G 1/57
VAMP/34 93
SHEET 1

LP32099 5/57 625 C&P Gp. 959 (4)



DETAIL OF RIVETING ETC. FROM SHEET 1.

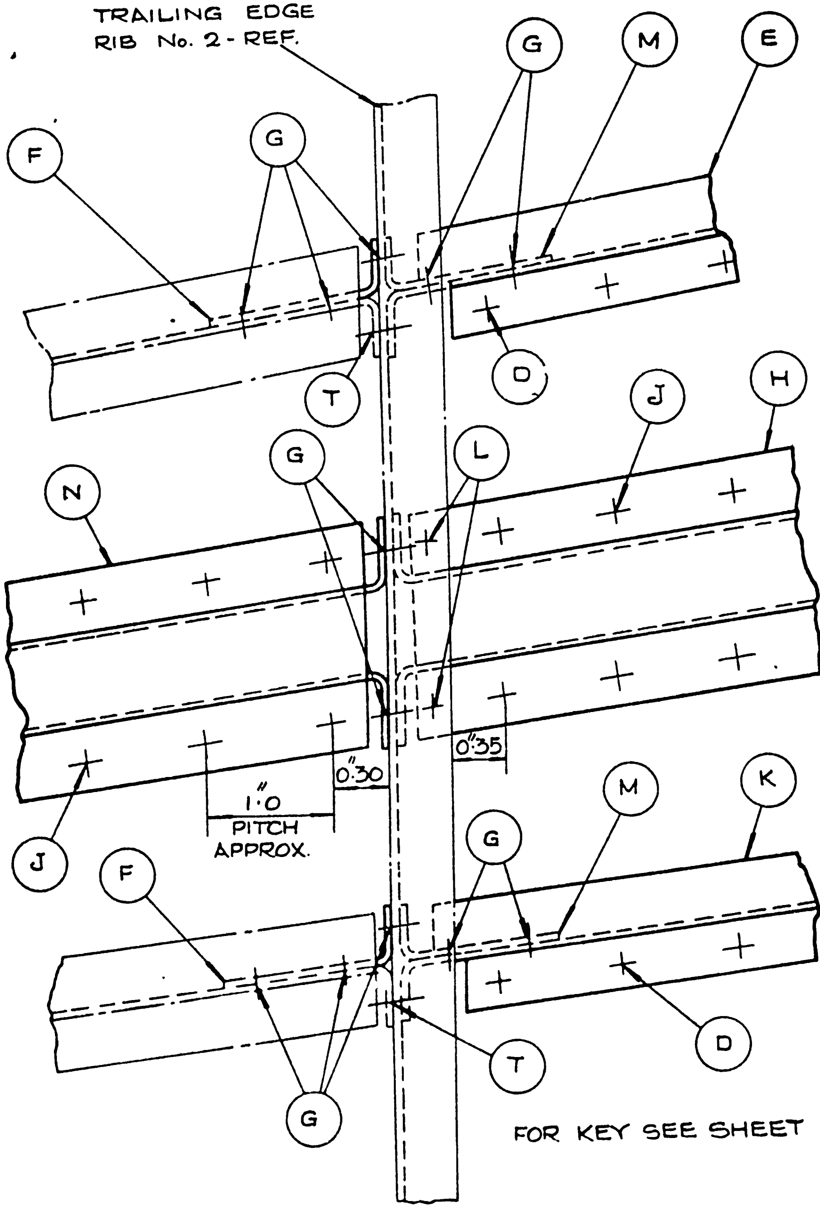
DRG. No. A.R. 4099 G/G 1/57

VAMP/3493

SHEET 2

RESTRICTED

LP32099 5/57 625 C & P Gp. 959 (4)

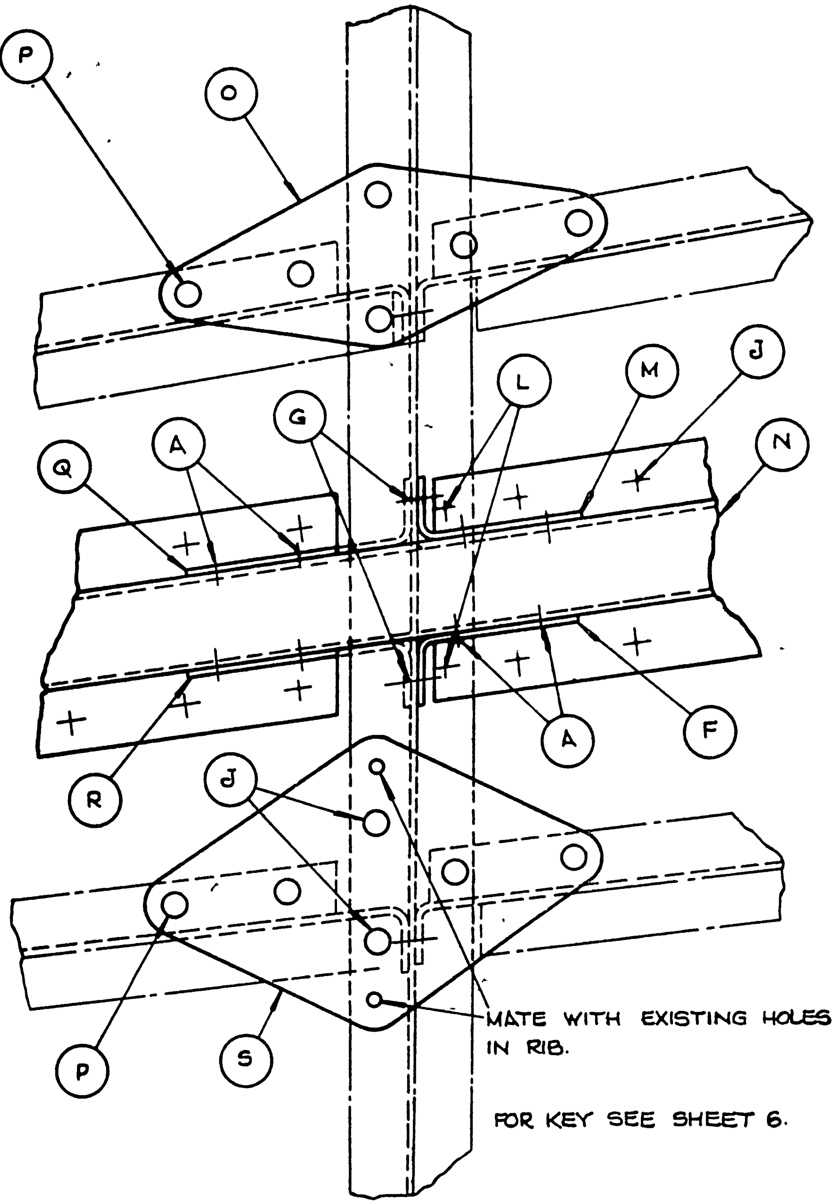


FOR KEY SEE SHEET 6

DETAIL OF RIVETING ETC. FROM SHEET 1.

DRG. Nº A.P. 4099 G/G 1/57
VAMP/3493
SHEET 3

RESTRICTED

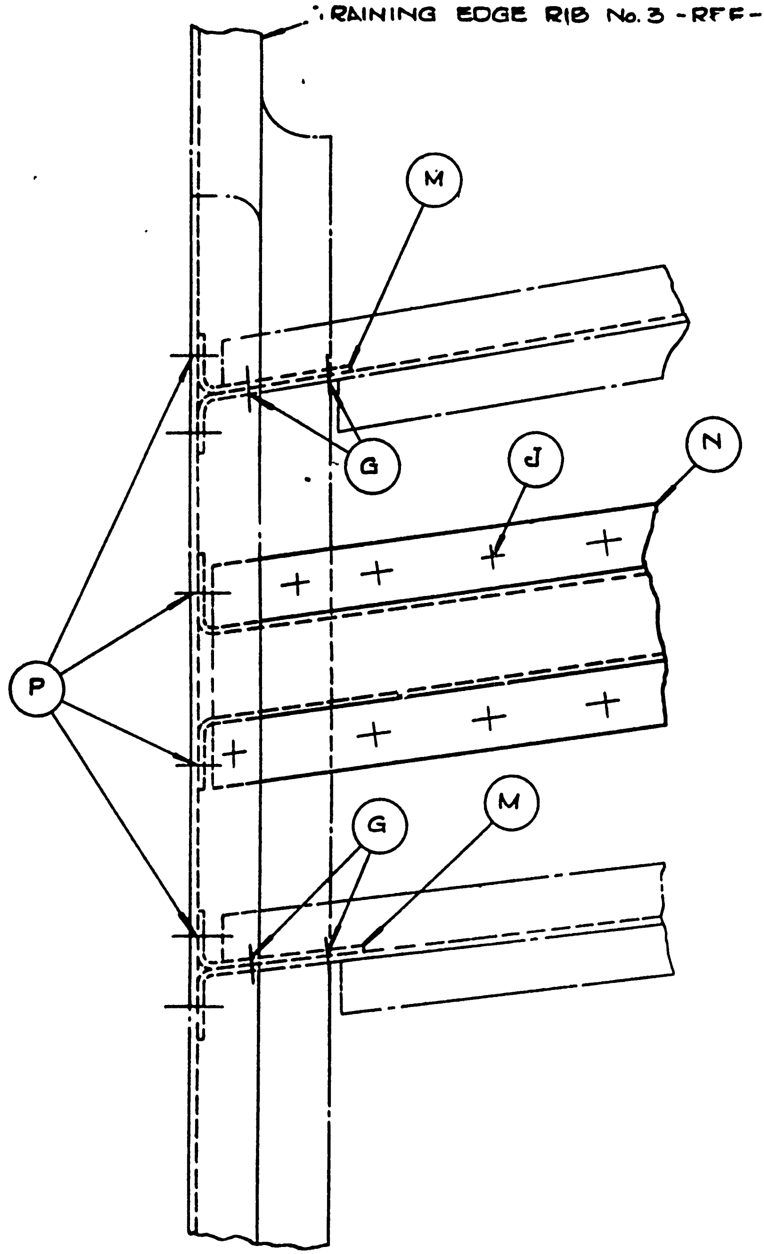


DETAIL OF RIVETING ETC. FROM SHEET 1.

DRG. Nº A.P. 4099 G/G 1/57
VAMP/3493
SHEET 4

RESTRICTED

LP32099 5/57 625 C & P Gp. 959 (4)



DETAIL OF RIVETING ETC. FROM SHEET 1.

DRG. Nº A.P. 4099 G/G 1/57
VAMP/34/93
SHEET 5

RESTRICTED

LP32099 5/57 625 C & P Gp. 959 (4)

KEY TO SHEETS 1, 2, 3, 4 AND 5			
CODE	PART No.	NOMENCLATURE	QTY.
A	AGS 2045/406	RIVET CHOBERT $\frac{1}{8}$ IN. DIA.	15
B	AGS 2045/506	RIVET CHOBERT $\frac{5}{32}$ IN. DIA.	3
C	DOO 7993	TOP HAT STIFFENER PORT	1
	DOO 7994	TOP HAT STIFFENER STARBOARD	1
D	AS 2229/504	RIVET 90 DEG. CSK. HEAD $\frac{5}{32}$ IN. DIA.	33
E	DOO 7995	STIFFENER PORT	1
	DOO 7996	STIFFENER STARBOARD	1
F	DOO 8005	ANGLE CLEAT	5
G	AS. 2227/405	RIVET SNAP HEAD $\frac{1}{8}$ IN. DIA.	22
H	DOO 7989	TOP HAT STIFFENER PORT	1
	DOO 7990	TOP HAT STIFFENER STARBOARD	1
J	AS 2229/404	RIVET 90 DEG. CSK. HEAD $\frac{1}{8}$ IN. DIA.	59
K	DOO 7997	STIFFENER PORT	1
	DOO 7998	STIFFENER STARBOARD	1
L	AS 2229/405	RIVET 90 DEG. CSK. HEAD $\frac{1}{8}$ IN. DIA.	8
M	DOO 8001	ANGLE CLEAT	5
N	DOO 7991	TOP HAT STIFFENER PORT	1
	DOO 7992	TOP HAT STIFFENER STARBOARD	1
O	DOO 7985	GUSSET PLATE	1
P	AS 2227/404	RIVET SNAP HEAD $\frac{1}{8}$ IN. DIA.	14
Q	DOO 8003	ANGLE CLEAT	1
R	DOO 7999	ANGLE CLEAT	1
S	DOO 7987	GUSSET PLATE PORT	1
	DOO 7988	GUSSET PLATE STARBOARD	1
T	AS 2227/505	RIVET SNAP HEAD $\frac{5}{32}$ IN. DIA.	2

KEY FOR DRAWING SHEETS Nos 1, 2, 3, 4 AND 5 SHOWING ITEMS REQUIRED FOR FLAP SHROUDS.

DRG. Nº A.P. 4099 G/G 1/57
VAMP/3493
SHEET 6

RESTRICTED

LP32099 5'57 625 C & P Gp.989 (4)

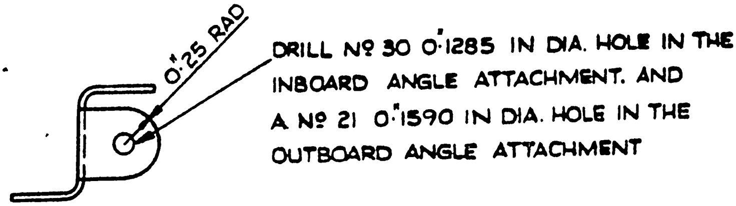


FIG. 1. TYPICAL VIEW OF THE ENDS OF STIFFENERS PART Nos DOO 7995, DOO 7996, DOO 7997 AND DOO 7998

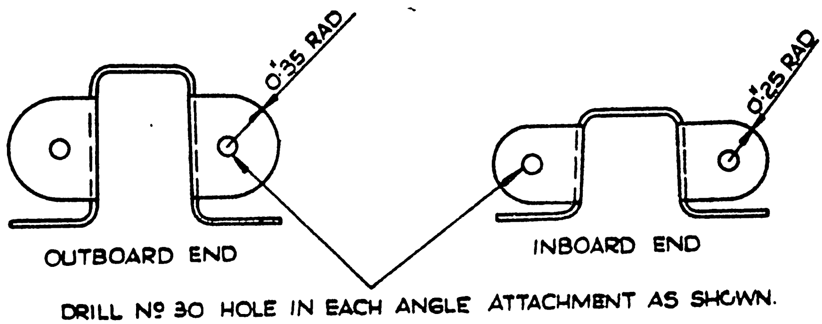


FIG. 2 TYPICAL VIEW OF THE ENDS OF TOP HAT STIFFENERS PART Nos DOO 7989 AND DOO 7990

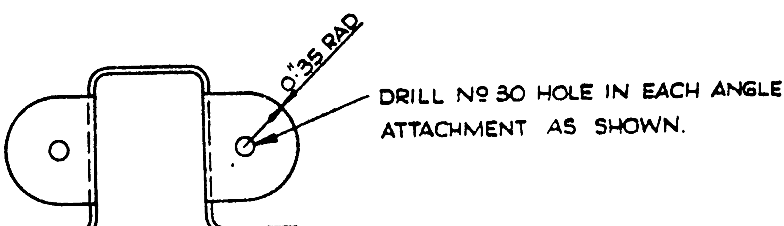


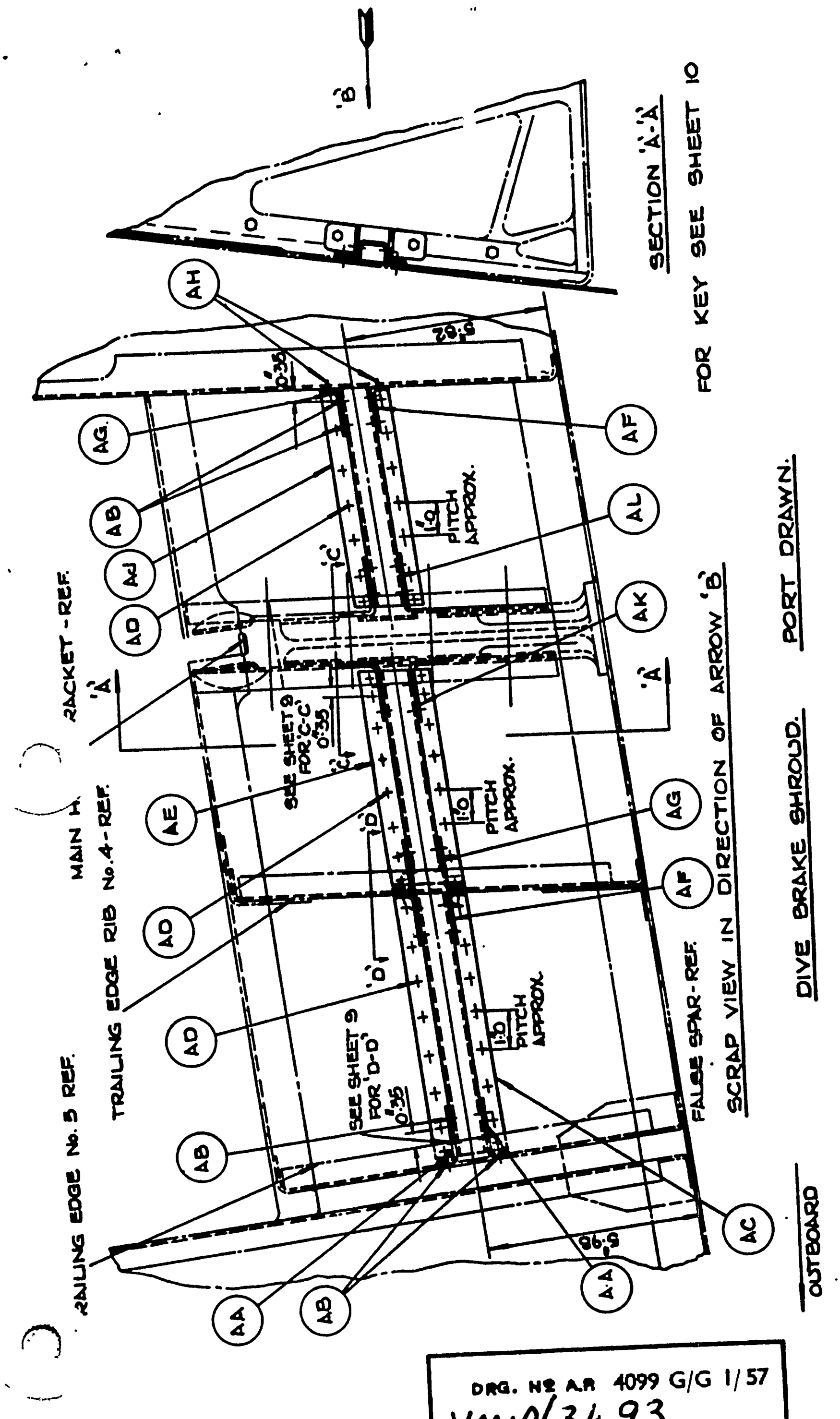
FIG. 3 TYPICAL VIEW OF THE ENDS OF TOP HAT STIFFENERS PART Nos DOO 7991 AND DOO 7992

POSITIONS OF RIVET ATTACHMENT HOLES IN THE ANGLE ATTACHMENTS ON THE ENDS OF THE NEW STIFFENERS ON THE OUTER FLAP SHROUDS.

DRG. Nº A.P. 4099 G/G 1/57
VAMP/3493 SHEET 7

RESTRICTED

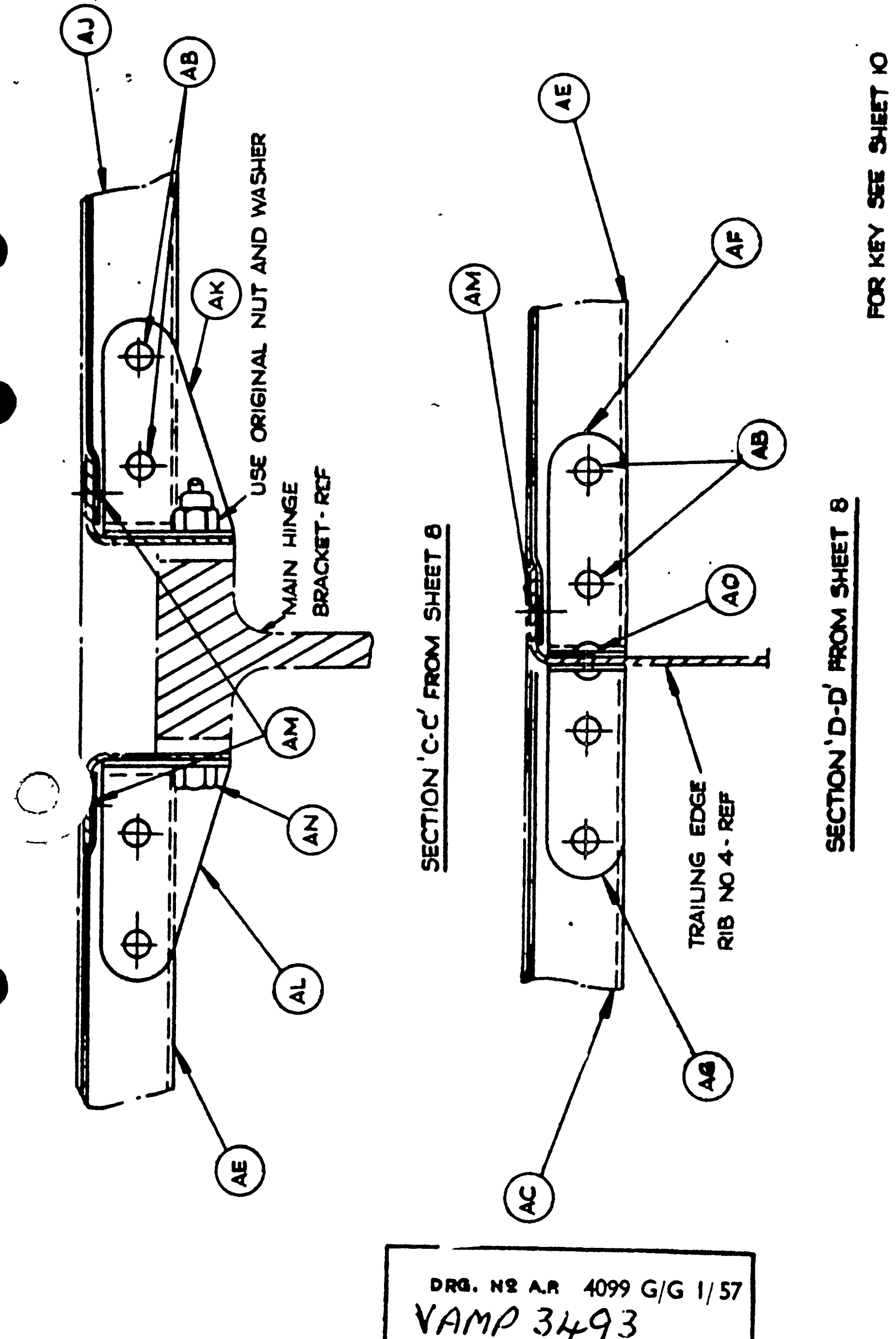
LP32099 5/57 625 C & P Gp. 959 (4)



DRG. No A.R 4099 G/G 1/57
VAMP/3493
SHEET 8

RESTRICTED

LP32099 5/57 625 C&P Gp. 959 (4)



DRG. Nº A.R 4099 G/G 1/57

VAMP 3493

SHEET 9

LP32099 5/57 625 C & P Gp. 959 (4)

KEY TO SHEETS 8 AND 9			
CODE	PART NO	NOMENCLATURE	Q.T.Y
AA	DOO 7967	ANGLE CLEAT	2
AB	AGS 2045/406	RIVET CHOBERT $\frac{1}{8}$ IN DIA.	26
AC	DOO 7979	TOP HAT STIFFENER PORT	1
	DOO 7980	TOP HAT STIFFENER STARBOARD	1
AD	AS 2229/404	RIVET 90 DEG C'S'K HEAD $\frac{1}{8}$ IN DIA	40
AE	DOO 7981	TOP HAT STIFFENER PORT	1
	DOO 7982	TOP HAT STIFFENER STARBOARD	1
AF	DOO 7971	ANGLE CLEAT	3
AG	DOO 7969	ANGLE CLEAT	3
AH	AS 2227/404	RIVET SNAPHEAD $\frac{1}{8}$ IN DIA	2
AJ	DOO 7983	TOP HAT STIFFENER PORT	1
	DOO 7984	TOP HAT STIFFENER STARBOARD	1
AK	DOO 7977	ANGLE CLEAT PORT	2
	DOO 7978	ANGLE CLEAT STARBOARD	2
AL	DOO 7975	ANGLE CLEAT PORT	2
	DOO 7976	ANGLE CLEAT STARBOARD	2
AM	AS. 2229/405	RIVET 90 DEG C'S'K HEAD $\frac{1}{8}$ IN DIA	10
AN	A25/158	BOLT HEX HEAD 4BA	2
AO	AS 2227/405	RIVET SNAPHEAD $\frac{1}{8}$ IN DIA	2

KEY FOR DRAWING SHEETS NOS. 8 AND 9 SHOWING ITEMS REQUIRED FOR DIVE BRAKE SHROUDS.

DRG. Nº A.R 4099 G/G 1/57
VAMP/3493
SHEET 10

RESTRICTED

LP32099 5/57 625 C&P Gp. 959 (4)

Air Headquarters,
Royal Rhodesian Air Force.

9th June, 1959.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B64 (Issue 1).

+ T11. A.L. 317

Vampire F.B.Mk.9. Aircraft - Fuel System - To Introduce Main Fuel Tank Filler Cap Incorporating Rubber Seating.

(Mod. No. VAMPIRE/3573) (Class B/2.)

1. INTRODUCTION

This modification introduces a rubber seating to the venting valve in the main fuel tank filler cap, to prevent the escape of fuel, during inverted flying or under negative "G" conditions, on to the outside cowling panels thence into the engine bay, thus creating a fire-hazard.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command Modifications, S.T.I.s, S.I.s, or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons	:	At the first opportunity (not later than 1 month after receipt of parts).
C.T.D.	:	Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT.

The work will take approximately 2 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099G/H.27/58 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED.

(1) Parts and Materials

(a) The Modification Kit which consists of the following items will be demanded from O.C. C.E.D. under Ref. No. 26FC/103573:-

(i) Items supplied by the Contractor:

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26DV/2884	12PT.1511	Seating, rubber, valve	1	C
26FC/-	15PT.17A	Plate, backing complete with valve boss	1	-
28M/13086	A.27/BP	Nut, 4 B.A.	4	C
28D/8303	AS.1242/4B	Bolt, csk. 4 B.A.	4	C
28W/9419401	SP.10/B	Washer, 0.018 in. thick	4	C

(ii) Service Supply items :

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/NIV	-	Tubes Testing Filler Cap. VAMP/3573.	4	

NOTE: O.C. C.T.D. will arrange for the manufacture of four (4) Test Tubes from surplus irrigation tubing in accordance with Drg. No. A.P.4099/H27/58, and on completion, the tubes will be stamped :-

26FC/-NIV Tubes Testing. Vamp/3573 and returned to C.E.D. for allocation of 2 for T' Hill & 2 for N.S.A.

2/........

(b) The following materials are also required, and are to be provided under Unit arrangements:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26BY/1021	691234	Washer, filler cap jointing	1	C
33C/1117	-	Cement, Boscoprene 2413, parts 1-2, Spec. DTD.900/4130	As Reqd.	C
33C/1122	-	Boscolite 9247, Spec. D.T.D.900/4130.	As Reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

The following list shows the spares affected by this modification and the parts required to modify them:-

Ref.No.	Part No.	Nomenclature	Qty.	Class Equipme
26FC/2960	P00.1154	Valve		

The work involved in modifying the above spare is detailed in Para. 8, operation (4), and on the drawing.

Part required:

26DV/2884	12PT.1511	Seating, rubber	1	C

Spares affected:

26FC/2958	P00.1152A	Cap, filler, complete	1	-
26FC/-	P00.3279A/1	Tank, fuel, fuselage complete	1	-
26FC/6889	P00.3937A/ND	Tank, fuel, fuselage, less fuel transmitter and booster pump	1	-

The work involved in modifying these spares is detailed in Para operations (3), (4), (5) and (7) and on the drawing.

Parts required:

26DV/2884	12PT.1511	Seating, rubber	1	C
26FC/-	15PT.17A	Plate, backing complete with valve boss.	1	-
28M/13086	A.27/BP	Nut, plain, 4 B.A.	4	C
28D/8303	AS.1242/4B	Bolt, csk. 4 B.A.	4	C
28W/12346	SP.10/B	Washer, 0.018 in. thick	4	C

Record Mod. No. "3573" as having been embodied.

Spares will be modified by the Stock Holding Unit as directed by O.C. C.T.D.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows :-

Old Ref. No.	Old Part/Assy. No.	Nomenclature	New Part/Assy.No.	New Ref. No.
26FC/2958	P00.1152A	Cap, filler complete	15PT.19A	26FC/-
26FC/6889	P00.3937A/ND	Tank, fuel, fuselage, less fuel transmitter and booster pump	-	26FC/-
26FC/-	P00.3279A/1	Tank, fuselage, complete	-	26FC/-

This information is incomplete.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations:-

(1) Refer to Fig. 3 of the drawing, and make up a fuel filler cap valve leak testing tube from 2.92 in. dia. bore round tubing as illustrated. Cut an internal thread at one end to suit the filler cap body. To give a testing pressure of

3/.....

8. Contd.(1) $\frac{1}{3}$ p.s.i. this tube must be long enough to provide a 12 in. head of fuel.

(2) Remove from the main fuselage fuel tank, the existing fuel tank cap assembly, Part No. P00.1152A.

(3) Dismantle the fuel tank cap by removing the four 4 B.A. nuts and bolts. Remove, from the redundant backing plate, Part No. P00.1155A, the swivel plate with the chain and locking ring attached. Retain all items, with the exception of the backing plate and the four 4 B.A. nuts and bolts, for subsequent re-assembly.

(4) Before offering up the new rubber seating, Part No. 12PT.1511, to the existing valve, Part No. P00.1154, remove from it all stray strands of reinforcing Madapolam, and ensure that its mating face, and the mating face of the valve, are scrupulously clean. Refer to Fig. 1 of the drawing and, as illustrated, affix the rubber seating to the valve by first coating the mating surfaces with Boscolite Primer 9247 (Ref. No. 33C/1122), and finally with a mixture of Parts 1 and 2 of Boscoprene cement 2413 (Ref. No. 33C/1117), ensuring that a good adhesion is obtained between the valve and the rubber seating over the whole area, taking great care to avoid the formation of air pockets. This assembly now becomes Part No. 15PT.13A.

(5) Refer to Fig. 2 of the drawing, attach the retained swivel plate, with the chain and locking ring complete, to the new backing plate, Part No. 15PT.17A, and assemble to it the remaining fuel tank cap components retained in operation (3), placing the four new 0.018 in. thick washers, Part No. SP.10/B, between the filler cap body and the backing plate. Secure the assembly with the four new 4 B.A.nuts and countersunk bolts, Part Nos. A.27/BP and AS.1242/4B, respectively. The fuel tank cap complete now becomes Part No. 15PT.19A, and is to be numbered as such.

(6) Record Mod. No. "3573" as having been embodied.

(7) On satisfactory completion of the fuel leak test on the filler cap valve, the ends of the four bolts, securing the filler cap assembly, are to be peened over. Replace the filler cap into the main fuselage tank renewing the filler cap jointing washer, Part No. 691234, if necessary.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected the following tests are to be carried out :-

Refer to Fig. 2 and 3 of the drawing, and using a filler cap jointing washer as a seal, screw the fuel tank filler cap into the threaded end of the testing tube. Fill the tube to a 12 in. head with paraffin, or aircraft fuel (refer to the appropriate aircraft hand-book for the correct specification) this being sufficient to give $\frac{1}{3}$ p.s.i. Check that the leak rate is not more than 10 drops per minute.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermention part rendered redundant by the embodiment of this modification is to be disposed of as scrap in accordance with current equipment regulations.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/-	P00.1155A	Plate, backing, complete with valve boss.	1	-

4/.........

12. EFFECT ON WEIGHT AND C. OF G.

This modification has no effect on weight or C. of G.

f/s ~~Scott~~ S/Ldr

(B.H. GIBBONS)
Wing Commander
S.T.S.O.
A.H.Q. R.R.A.F.

Source : 4099G. Vol. 2.-H27.

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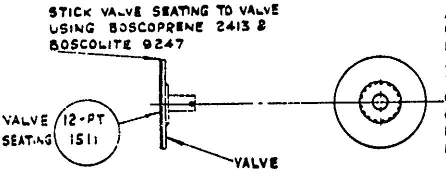
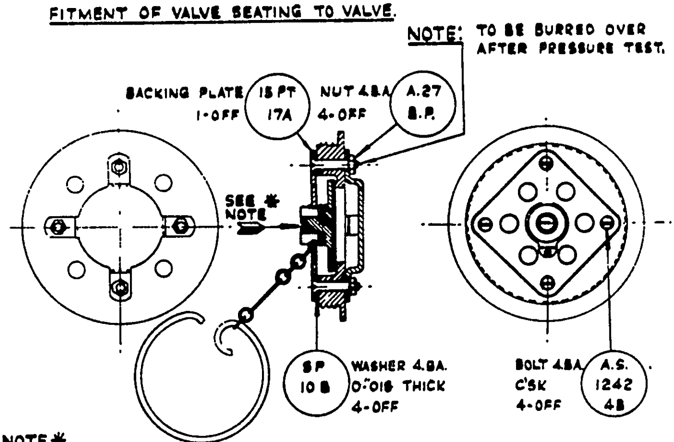


IMPORTANT

A GOOD ADHESION MUST BE OBTAINED BETWEEN VALVE AND RUBBER SEATING OVER THE WHOLE AREA, AND CARE MUST BE TAKEN TO AVOID AIR POCKETS. THE FACE OF THE VALVE SEATING MUST BE QUITE SMOOTH AND FREE FROM BLEMISHES, SCRATCHES AND PROTRUSIONS.

FIG. 1.

FITMENT OF VALVE SEATING TO VALVE.



NOTE *

ENSURE THAT AT 1/3 P.S.I. OF PARAFFIN APPLIED IN DIRECTION OF ARROW, THE LEAK RATE IS NOT MORE THAN 10 DROPS PER MIN.

FIG. 2. ASSEMBLY OF FUEL TANK FILLER CAP.

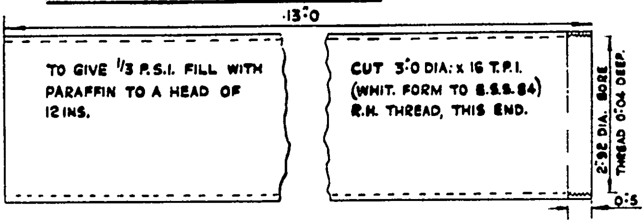


FIG. 3. TUBE FOR PRESSURE TESTING FUEL TANK FILLER CAP ASSEMBLY.

RESTRICTED

DRG. No. A.P. 4099G/H.27/58

MOD/Vamp/3573

Air Headquarters,
Royal Rhodesian Air Force.

6th March, 1959.

Vampire T.Mk. 11 and F.B.9. Aircraft - Main Undercarriage -To extend Grease Nipple on Main Undercarriage Jack Upper Attachment Bolt.

(MOD. NO. VAMPIRE 3596)

(Class B/2, to aircraft embodying Mod. No. 3495)

1. INTRODUCTION

This modification introduces a longer extension grease nipple assembly on the main undercarriage jack upper attachment bolt, to prevent the nipple being fouled by the main undercarriage attachment bolt, when the undercarriage is in the retracted position.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s, or S.R.I.M.s.

(2) This modification is applicable only if Mod. No. Vampire 3495 (Main Undercarriage - To Introduce Strengthened Radius Rod Assembly and Attachment Fittings); is already embodied.

2. EMBODIMENT

This modification is to be embodied concurrently with Mod. 3495 by CTD at major inspection.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 5 man-hours.

4. DRAWINGS REQUIRED

No drawings are required for the embodiment of this modification.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(a) The Modification Kit which consists of the following items will be demanded from O.C. C.E.D. under Ref. No. 26FC/103596:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/4474	G00.1765ND	Shim, brass	2	C
26FC/13101	15-UN.107A	Nipple extension assy., port spare	1	C
26FC/13102	15-UN.108A	Nipple extension assy., Stbd. spare	1	C
28P/9429528	SP.9/C8	Pin, split, 1/16 in. dia.	6	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

The following list shows the spares affected by this modification and the parts required to modify them:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	15-W0193A/11	Wing complete, port	-	-
26FC/13051	15-W.195A/11	Wing complete, stbd.	-	-

The method for modifying either of the above spares is detailed in Para. 8 operations (1) to (5).

2/......

Parts required:-

NOTE:- Items not common to all spares are listed with their application adjacent to Qty. required:-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
26FC/4474	G00.1765ND	Shim, brass	1	C
26FC/13101	15-UN.107A	Nipple ext. assy., port spare	1	C
26FC/13102	15-UN.108 A	Nipple ext. assy., stbd. spare	1	C
28P/9429528	SP.9/C8	Split, pin 1/16 in. dia.	3	C

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows :-

Old Ref. No.	Old Part/Assy.No.	Nomenclature	New Part/Assy.No.	New Ref.
26FC/-	G00.1787A/4	Retracting mechanism, main U/C, port	G00.1787A/5	26FC[illegible]
26FC/-	G00.1788A/4	Retracting mechanism, main U/C, stbd.	G00.1788A/5	26FC[illegible]
26FC/-	G00.2001A/ND	Assy. of jack and radius rod, port	G00.2019A/ND	26FC[illegible]
26FC/-	G00.2002A/ND	Assy. of jack and radius rod, stbd.	G00.2020A/ND	26FC[illegible]
26FC/-	13-U 11A/ND	Assy. of wheel and leg, port	13-U 13A/ND	26FC[illegible]
26FC/-	13-U 12A/ND	Assy. of wheel and leg, stbd.	13-U 14A/ND	26FC[illegible]

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations, and is applicable to both port and starboard mainplanes:-

(1) Remove the main undercarriage radius rod, as detailed in A.P.4099J, Vol. 1, Sect. 3, Chap. 5 and retain.

(2) Partially remove the bolt securing the jack to the jack lever on the radius rod, for clearance purposes only, and remove the redundant grease nipple extension assembly, Part No. G00.731A (port); G00.732A (stbd.) from the bolt.

(3) Replace the redundant nipple extension assembly with a new nipple extension assembly, Part No. 15-UN 107A (port); 15-UN 108A (stbd.) and one new brass shim, Part No. G00.1765ND, to ensure that, when the jack attachment bolt is fully home, the nipple is positioned downwards, as was the redundant nipple. Re-secure the jack attachment bolt with the existing nut, and one new split pin, Part No. SP.9/C8.

(4) Refit the main undercarriage radius rod as detailed in A.P. 4099J, Vol. 1. Sect. 3, Chap. 5, using the existing items and two new split pins, Part No. SP.9/C8.

(5) Add the Mod. No. "3596" to the appropriate Mod. plates.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected, the following tests are to be carried out:-

(1) Carry out full undercarriage retraction tests.

(2) Carry out an operational check on the brakes.

(3) Carry out operational checks on all hydraulically operated components.

3/.......

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801 "SECT F".

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts rendered redundant by the embodiment of this modification are to be returned to O.C. C.E.D. as scrap in accordance with current Equipment Regulations.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/3907	G00.731A	Nipple ext. assy., grease L.H.	1	C
26FC/3908	G00.732A	Nipple ext. assy., grease, R.H.	1	C

12. EFFECT ON WEIGHT AND C. OF G.

This modification has no effect on weight or moment.

(B.H. GIBBONS)
Wing Commander
S.T.S.O.
A.H.Q. R.R.A.F.

Source : AP.4099J. V2.B12.

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Air Headquarters,
Royal Rhodesian Air Force.

2nd April, 1959.

R.R.A.F. Technical Order.

Vol. 3. Sect. 2. Sub.Sect. B62. (Issue 2)
Vol. 7. Sect. 2. Sub.Sect. B24. (Issue 2)

Vampire T.Mk. 11 Aircraft-Electrical-To Introduce Duplicate Emergency Over-ride Switch (Ref. No. 5CW/4179 or 5CW/5823) for U/C Selector.

(Mod. No. VAMPIRE/3447)

(Class C/3)

1. INTRODUCTION

In an emergency, difficulty may be experienced in operating the undercarriage emergency over-ride switch, situated forward of the centre throttle quadrant, due to the pilot having to release his right-hand from the control column. To simplify the emergency undercarriage retraction procedure this modification introduces a duplicate over-ride switch on the Port lower corner of the instrument panel.

(1) This modification does not cancel, supersede, or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s. or S.R.I.M.s.

(2) This modification is applicable only if Mod. No. Vampire/3167 Part B (To introduce Provision for Fully Automatic Mk. 3 Ejection Seats - Part A Fixed Parts. Part B. Other Associated Parts) is already embodied.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons : At the first opportunity (not later than 6 months after receipt of parts).

C.T.D. : Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 6 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099J/F.20/57, Sheets 1 & 2, is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(a) The Modification Kit, which consists of the following items, will be demanded from O.C. Equipment Depot under Ref. No. 26FC/103447.

(i) Items supplied by the Contractor:

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
5F/2279	-	Strapping, Helvin 5/16 in. wide	As reqd.	C
5F/2280	-	Studs	As reqd.	C
26FC/-	15F-3273	Label	1	-
26FC/-	DHS.117/18	Ferrule, outer	1	-
26FC/-	DHS.118/18	Ferrule, inner	1	-
26FC/-	DHS.181/14	Tubing, P.V.C. length 11 in.	1	-
26FC/-	DHS.181/16	Tubing P.V.C., length 8 in.	1	-
28S/14680	A.44/B10	Screw, brass, roundhead, 4 B.A.	2	C
28Q/11970	AS.160/504	Rivet, 90 deg. csk.hd., 5/32 in. dia.	2	C
28Q/6692	AS.2227/204	Rivet, snaphead, 1/16 in. dia.	1	C
28Q/6664	AS.2227/[illegible]	Rivet, snaphead, 3/32 in. dia.	2	C

2/...

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
5H/9400053	AS.2673	Ferrule	3	C
5K/9107348	T1A	Sleeve, marking, 2.5 mm., coded 'L' (2.0 mm).	8	C
5K/91047465	T1A	Sleeve, marking 2.5 mm., coded 'U' (2.0 mm.)	8	C
5K/9107543	T1A	Sleeve, marking 2.5 m.m. coded '+' (2.0 mm.)	4	C
5K/9109116	T1A	Sleeve, marking, 2.5. mm., coded '2' (2.0 mm.)	4	C
5K/9107065	TWAP	Sleeve, marking, 1.5 mm. x $\frac{3}{4}$ in. long.	8	C

(ii) Service Supply items:

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
5CW/4179 or 5CW/5823	D.5406	Switch, S.P., change-over	1	B
5CW/4222	ZA.2401	Guard, switch, locking	1	B
		Cable, electric, unipren 12 amp. Spec. B.S.F.21. length 14 ft. 0. in.	1	C
5H/125	AS.2606/2	Socket, double tier	1	C
5X/3146	Z.49397	Sleeve, cable	2	C
5X/3150	Z.28010	Thimble, socket	2	C

The following materials are also required, and are to be provided under Unit arrangements :-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
33C/1264	-	Compound, pigmented varnish jointing, Spec. D.T.D.369A.	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED.

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Nos. as follows :-

Old Ref. No.	Old Part/Assy. No.	Nomenclature	New Pt/Assy. No.	New Ref. No.
26FC/-	15F-1645A/8	Instrument panel detail	15F-1645A/9	26FC/-
26FC/-	15F-1925A/9	Assy. of instrument panel with piping	15F-1925A/10	26FC/-
26FC/-	15-F-2027A/9	Assy. of instruments to panel	15F-2027A/10	26FC/-
26FC/-	15F-3275ND	Instrument panel bare	15F-3341ND	26FC/-
26FC/-	15N-965A/10	Instrument panel installation of electrics	15N-965A/11	26FC/-
26FC/-	15N-1467A/3	Instrument panel cable loom assy.	15N-1467A/4	26FC/-
26FC/-	15N-2875A	Plug bracket assembly - complete	15N-2875A/1	26FC/-

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Raise the nosecap and disconnect the aircraft batteries.

(2) Lower the main instrument panel and disconnect and remove the 3-way terminal block (Ref. No. 5H/2) from the Port lower aft face of the panel. Retain the terminal block and attachment items for subsequent reassembly. Refer to sheet 1 of the drawing and open up the terminal block's two redundant holes with a No. 21 (0.159 in. dia.) drill, countersinking the forward and aft faces of the holes 90 deg x 0.27 in. dia.

3/.....

Contd.. (2)

Blank off the holes with two 5/32 in. dia. 90 deg. countersunk-head aluminium rivets, Part No. AS.160/504, the rivets being flush on both faces.

(3) Refer to sheet 1 of the drawing and mark off and cut-out the 1.27 in. x 0.68 in. over-ride switch aperture as detailed, removing any rough edges. Offer up the new label, Part No. 15F-3273, to the switch aperture and align the respective cut-outs, the label being trimmed as necessary to clear existing components. Next, drill two No. 26 (0.1470 in. dia.) screw attachment holes and two No. 41 (0.0960 in. dia.) rivet holes in the instrument panel to mate with the pre-drilled holes in the label. Remove the label. Mark off and drill, 0.375 in. above the top screw attachment hole, a 0.125 in. dia. switch guard locating hole. Deburr the holes.

(4) Coat the mating surfaces of the switch label Part No. 15F-3273 and the main instrument panel with pigmented varnish jointing compound (Ref. No. 33C/1264) and rivet the switch label, in position, using two 3/32 in. dia. snaphead rivets, Part No. AS.2227/304. Secure in position, with terminal 1 uppermost, a new S.P. change-over switch (Ref. No. 5CW/4179) and switch guard (Ref. No. 5CW/4222), using two 4 B.A. Roundhead brass screws, Part No. A.44/B10.

(5) Locate the "red" cockpit light label, fitted directly above the new over-ride switch, and carefully drill and remove the left-hand rivet securing the label in position. Countersink the rivet hole in the back of the panel 90 deg x 0.11 in. dia. and fit a new 1/16 in. dia. snaphead rivet, Part No. AS.2227/204, the aft face being riveted flush.

(6) Referring to sheet 1 of the drawing, mark off and drill the two No. 26 screw attachment holes for the repositioned terminal block, countersinking the face of the panel at the holes 90 deg. x 0.27 in. dia. Secure the retained terminal block (Ref. No. 5H/2) in position using the original attachment items. Re-make the electrical connections.

(7) Locate plug bracket, Part No. 15N-2875A. situated on the upper central aft face of bulkhead No. 1. Refer to the wiring diagram on Sheet 2 of the drawing and manufacture two new Unipren 12 cable assemblies (Ref. No. 5E/3040) to link terminals 21 and 22 of the bottom right terminal block with terminals 5 and 6 of the centre left terminal block. Code the cable ends as detailed on the drawing with twelve 2.5 mm. marking sleeves, Part No. T1A and assemble to the cable ends four rubber binding sleeves. Part No. TWAP. and four ferrules (Ref. No. 5H/9400053). Route and secure the cables with existing cable looms, using 5/16 in. wide strapping and studs (Ref. No. 5F/2279 and 5F/2280, respectively) and then connect the new cable assemblies to their respective points of termination as coded. Replace the now redundant single tier terminal socket (Ref. No. 5H/124) in terminal 5 with a double tier socket (Ref. No. 5H/125) blanking off the vacant socket entry with a ferrule (Ref. No. 5H/9400053). Plug bracket now becomes Part No. 15N/2875A/1, and is to be renumbered accordingly.

(8) Dismantle socket 'C22'. Dispose of the redundant inner and outer ferrules, Part No. D.H.S.118/17 and D.H.S. 117/17 respectively. Replace the 8 in. length of 14 mm. and the 11 in. length of 12 mm. P.V.C. tubing with identical lengths of 16 mm and 14 mm. P.V.C. tubing, Part No. D.H.S.181/16 and D.H.S.181/14 respectively. Fit to the socket end of the 16 mm. tubing a new inner and outer ferrule, Part No. D.H.S. 118/18 and D.H.S. 117/18 respectively.

4/......

(9) Connect to pins 3 and 4 of the socket 'C22' two new 6 ft. 3 in. lengths of unipren 12 amp. cable (Ref. No. 5E/3040) using two thimbles and cable sleeves (Ref. No. 5X/3150 and 5X/3146 respectively). Code the cable ends as detailed in the wiring diagram on sheet 2 of the drawing with ~~twelve~~ 2.5 mm. marking sleeves, Part No. T1A, and assemble to the cable ends four rubber binding sleeves, Part No. TWAP. Route the two new cables through the new P.V.C. tubing and with the existing instrument panel cable loom to the over-ride switch fitted in operation (4). Connect the cable ends to their respective terminals as coded, and as detailed in the wiring diagram. Reassemble socket 'C22', and connect the socket to the plug bracket.

(10) Secure the instrument panel back in position, reconnect the aircraft batteries and lower the nose cap.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied the following tests are to be carried out :-

(1) Carry out a continuity check of cables introduced under this modification in conjunction with the wiring diagram on sheet 2 of the drawing.

(2) Carry out a functional check of all electrical equipment associated with the main instrument panel in accordance with current authorized procedure.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts rendered redundant by the embodiment of this modification are to be disposed of as scrap in accordance with current R.R.A.F. Equipment Regulations.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment
5H/124		Socket, single-tier	1	C
26FC/-	DHS.117/17	Ferrule, outer	1	-
26FC/-	DHS.118/17	Ferrule, inner	1	-

12. EFFECT ON WEIGHT AND C. OF G.

This modification has no effect on weight or C. of G.

(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : 4099J.B2.F20.

Distribution :-

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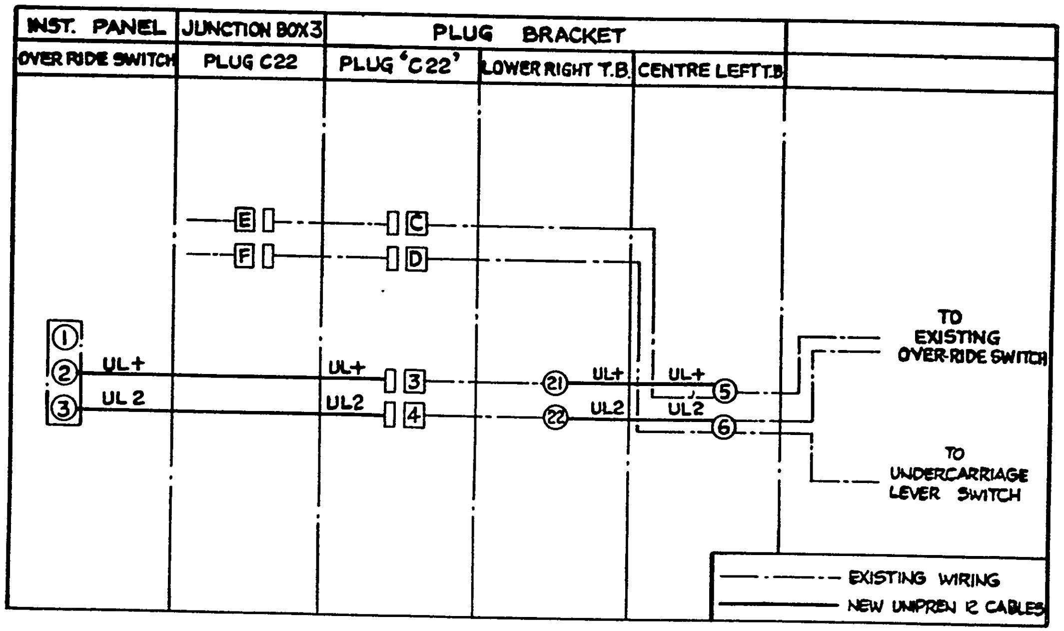

UNDERCARRIAGE LEVER LOCK WIRING DIAGRAM. AFTER MODIFICATION

3-2-R62.
7-2-R24

Air Headquarters,
Royal Rhodesian Air Force.

29th January, 1959.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B61 (Issue 1).

Vampire F.B. Mk. 9 Aircraft - Flying Controls - To Blank Off Holes in Elevator Control Quadrant Pulleys in Cockpit. Part (A) : Production and Part (B) : Retrospective.

(Mod. No. VAMPIRE/3547)

(Class B/2, N.C.P.)

1. INTRODUCTION

It has been reported that controls have jammed due to loose articles fouling the elevator quadrant pulleys. This modification blanks off the holes in the elevator quadrant pulleys, thus obviating any possible entry of loose articles which could cause the loss of elevator control.

Part (A) - Production version of this modification introduces new quadrant pulleys, without any holes, Part No. K00.1581.

Part (B) - Retrospective version of this modification blanks off the holes in the existing pulleys with blanking plates, as detailed in para 8, of this leaflet.

(1) This modification does not cancel, supersede or render unnecessary, any work called for by approved modifications, Command Modifications, S.T.I.s, S.I.s. or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons : At the first opportunity and not later than 3 months after receipt of this leaflet.

C.T.D. : Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 20 man-hours (6 to strip; 5 to embody; 9 to re-assemble).

4. DRAWINGS REQUIRED

Drawing No. A.P.4099G/D.5/57 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts and materials are required and are to be provided under Unit arrangements:-

Ref. No.	Part No.	Nomenclature	qty.	Class of Equipment.
28D/12546		Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F.	8	C
28M/12928	A.27/EP	Nut, plain, $\frac{1}{4}$ in. B.S.F.	8	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia.	16	C
28P/12465	SP.9/G12	Pin, split. $\frac{1}{8}$ in. dia.	2	C
28Q/6667	AS.2227/406	Rivet, $\frac{1}{8}$ in. dia. sp/hd.	20	C
30A/3055	-	Wire, nickel alloy, 22 s.w.g. Spec. D.T.D.189	As reqd.	C
30B/1734	-	Aluminium alloy sheet. 22 s.w.g. Spec. B.S.L.72 (9 in. x 10 in.)	1	C
33B/1021	-	Primer, etch, base	As reqd.	C
33B/1023	-	Primer, etch, accelerator	As reqd.	C
33B/205 (Overseas		Finish, synthetic, matt, night, Spec. D.T.D.314	As reqd.	C

2/........

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
33C/1139	-	Compound, sealing, Bostik primer 1751, D.T.D.900/4058	As reqd.	C
33C/1264	-	Compound, pigmented varnish jointing, Spec. D.T.D.369A.	As reqd.	C

(2) Special Tools and Test Equipment.

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

The following list shows the spares affected by this modification and the parts required to modify them :-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
Sparess affected :				
26FC/1638	K00.62	Pulley, quadrant, elevator controls.	-	-
26FC/3467	K00.89A/1	Pulley assy., elevator controls. L.H.	-	-
26FC/3468	K00.90A/1	Pulley assy., elevator controls, R.H.	-	-

The work involved in modifying these spares is detailed in para 8, operations (3), (4) and (5) and on the drawing.

Parts required for each spare :

30B/1734	-	Alum, alloy sheet, 22 s.w.g. spec. B.S.L.72.	1	C
28Q/6667	AS.2227/406	Rivet, $\frac{1}{8}$ in. dia., sp/hd.	10	C

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modific tion changes Reference, Part and Assembly Numbers as follows :-

Old Ref. No.	Old Part/Assy. No.	Nomenclature	New Part/Assy. No.	New Ref. No.
26FC/1638	K00.62	Pulley, quadrant, elevator controls	K00.1581	26FC/12543.
26FC/3467	K00.89A/1	Pulley assy., elevator controls. L.H.	K00.1583A	26FC/-
26FC/3468	K00.90A/1	Pulley assy., elevator controls. R.H.	K00.1584A	26FC/-

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Remove the pilot's seat in accordance with current authorised procedure, retaining its attaching items for subsequent reassembly. Remove the port and starboard gun blast fairings and the cannon bay doors. Disconnect the aircraft batteries in accordance with current authorized procedure. Locate the turn-buckles in the elevator control cables, cut the locking wire and release the tension of these cables, in accordance with current authorized procedure.

(2) Working in the cockpit locate the R.P's auto selector switch, attached to the aft end of junction box No. 1 on the starboard cockpit wall; temporarily remove this selector switch from the junction box, retaining its attaching items for subsequent re-assembly. Unscrew all the electrical sockets from the plugs on the underside of junction box No. 1. The starboard elevator quadrant pulley and pulley bracket, situated adjacent to junction box No. 1, is now accessible. The port elevator quadrant pulley and pulley bracket is situated on the cockpit floor on the port side of thecockpit aft of the throttle control box.

(3) From both the port and starboard elevator quadrant pulleys remove the nuts, bolts and cable guards securing the control cables to the pulley, retaining them all, with the exception of the split,

(3) contd. pins, for subsequent reassembly. Also disconnect from the pulleys the control connecting rods from the control column and from the quadrant brackets the stay tubes which are attached to bulkhead No. 2; retain all the attaching items, with the exception of the split pins, for subsequent re-assembly. Remove and retain the nuts securing the pulleys to their respective brackets. To permit the removal of these pulleys remove their mounting brackets from the cockpit floor; dispose of the bracket securing bolts and nuts, retain the washers.

(4) Refer to the drawing. From 22 s.w.g. aluminium alloy sheet, Spec. B.S.L.72 (Ref. No. 30B/1734) make the three blanking plates for each pulley, to the dimensions shown. Place the blanking plates on the inboard side of the port pulley and on the outboard side on the starboard pulley and mark out the positions for the rivet attachment holes. Using a No. 30 drill (0.1285 in. dia.) drill through the plates and the pulleys; deburr the holes and remove any sharp edges from the newly-made plates. Finish the new plates with base and accelerator etch primers (Ref. Nos. 33B/1021 and 33B/1023 respectively) and synthetic matt night finish, Spec. D.T.D.314 (Ref. No. 33B/1108 or 205), and number them with their respective part numbers as shown on the drawing. Rivet the plates to the pulleys after coating the mating surfaces with pigmented varnish jointing compound (Ref. No. 33C/1264), using twenty $\frac{1}{8}$ in. dia. snap/head rivets. Part No. AS.2227/406. The modified quadrant pulleys now become Part No. K00.1581.

(5) Reassemble the modified pulleys to their respective brackets using the retained attaching items and two new split pins. Part No. SP.9/C8; these assemblies now become Part Nos. K00.1583A (port) and K00.1584A (starboard). Refit the two assemblies into their correct positions in the cockpit, using eight new bolts and nuts, Part Nos. A.25/13E and A.27/EP respectively, and the retained washers; before fitting the bolts dip them in Bostik primer cabin sealant 1751 (Ref. No. 33C/1139) and when they are finally fitted peen them to lock. Reconnect the control cables to their respective pulleys, reattach the cable guards, reconnect the control rods to the pulleys, also the stay tubes to the pulley brackets, using the retained attaching items and twelve new split pins, Part No. SP.9/C8.

(6) Reconnect the electrical sockets into their correct plugs in junction box No. 1 on the starboard side of the cockpit and refix the R.P's selector switch on to junction box No. 1, using the retained attaching items.

(7) Tension the elevator control cables as detailed in A.P.4099G. Vol. 1, Section 7, Chap. 4, Lock the turnbuckles with 22 s.w.g. locking wire (Ref. No. 30A/3055) and refit the pilot's seat in accordance with current authorized procedure, using two new 1/16 in. dia. split pin,s Part No. SP.9/C8, and two new $\frac{1}{8}$ in. dia. split pins, Part No. SP.9/G12. Reconnect the aircraft batteries, raise and secure the cannon bay doors; refit and secure the gun blast fairings.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected the following tests are to be carried out:-

(1) A functional test of all the electrical circuits disturbed by the embodiment of this modification.

(2) Check the elevator controls for correct and free full range of movement.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

No parts are rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of + 0.26 lb. and a change of moment of - 2.0 lb. ft.

(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : 4099G.B2.D5.

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O.C. C.E.D.	(1)
W.O. i/c Electrical Sect.	(2).

Air Headquarters,
Royal Rhodesian Air Force.

28th January, 1959.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B60 (Issue 1)

Vampire T.Mk.11 Aircraft - Brake Control - To Introduce Improved Method of Securing Brake Control Cable to Nose Wheel Well Structure.

(Mod. No. Vampire/3592) B/2 N.C.P.
(Superseding S.T.I./Vampire/168)

1. INTRODUCTION

This modification introduces an improved method of clipping the brake cables below the cockpit false floor to prevent the cables from fouling the flying controls operating levers and so restricting the fore and aft movement of the control column.

(1) This modification supersedes but is not satisfied by the work called for by S.T.I. No. Vampire 168. (Vol.3.Sect. 2. Sub.Sect. D64).

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons : At the first opportunity (not later than 2 months after receipt of this leaflet).

C.T.D. : Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 7 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099J/B.14/58 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and /or Materials

The following parts and materials are required, and are to be provided under Unit arrangements :-

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
28E/14038	AS.3180/5B	Clip, "P", rubber covered 4 B.A.	2	C
28M/10287	AGS.2001/B1	Nut, stiff, 4 B.A.	2	C
28Q/6679	AS.2229/405	Rivet, 90 deg. Csk./Hd. $\frac{1}{8}$" in. dia.	4	C
28S/2809	A.33/B12	Screw, sck./hd. 4 B.A.	2	C
30B/1728	-	Aluminium alloy sheet, 16 s.w.g. spec. B.S.L.72 2.50 in. x 1.90 in.	1	C
33B/9429196	-	Paint, priming etching base	As reqd.	C
33B/9429195	-	Paint, priming etching accelerator	As reqd.	C
33B/1108 (Home) 33B/9428837 (Overseas)	-	Paint, finish, synthetic, mat night	As reqd.	C
33C/1264	-	Compound, pigmented varnish jointing	As reqd.	C

2/........

(2) Special Tools and/or Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows :-

Ref. No.	Old Part/Assy. No.	Nomenclature	New Part/Assy. No.	Ref. No.
26FC/-	15FS.393A/2	Detail and assembly of nose-wheel fairing	15FS.393A/3	26FC/-
26FC/-	15FS.971A	Support angle, false floor (R.H.).	15FS.5633A	26FC/-
26FC/15FS.973A		Support angle, false floor (L.H.)	15FS.5635A	26FC/-
26FC/-	15FS.2039A/ND	Sub, assembly nose-wheel fairing and pedestal	15FS.5643A/N D	26FC/

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Refer to fig. 2 on the drawing and make up two new clip brackets, Part No. 15FS.5637, as detailed.

(2) Remove both pilot's seats in accordance with current authorised procedure.

(3) Working on the cockpit floor, remove both of the protecting gaiters from the base of each control column. Remove the false floor centre panel, retaining all items for reassembly

(4) Refer to fig. 1 on the drawing and position the two new clip brackets, Part No. 15FS.5637, on the underside of the false floor support angles equidistant between the existing anchor nuts as shown. Using a No. 30 (0.1285 in. dia.) drill and using pre-drilled pilot holes in the clip brackets as guides, drill through the brackets and support angles. Countersink upper surface of the support angles 0.22 in. dia x 90 deg. ar deburr. Remove all swarf.

(5) Coat the mating surfaces with pigmented varnish jointing compound (Ref. No. 33C/1264) and rivet the clip brackets to the support angles using four $\frac{1}{8}$ in. dia. 90 deg. countersunk head rivets, Part No. AS.2229/405.

(6) Fit a new "P" clip, Part No. AS.3180/5B, on the port and starboard brake cables and attach them to the new clip brackets using two 4 B.A. countersunk head screws and stiffnuts, Part Nos. A.33/B12 and AGS.2001/B1, as shown on the drawing. The "P" clips must not fit tightly around the brake cables and must ensure a run clear of any obstructions.

(7) Replace the false floor centre panel using all the retained attaching items and refit the protecting gaiters to the base of each control column.

(8) Replace both pilot's seats in accordance with current authorised procedure.

3/.......

9. TESTING AFTER EMBODIMENT

No special tests are required after the embodiment of the modification.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

No parts are rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.05 lb., with no change in moment.

(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : 4099J.B2.B14.

Distribution :-

One copy to essential recipients
plus the following :-

O.C. Equipment Depot	(1)
W.O. A.R.S.	(1)
W.O. No.1 Sqdn.	(1)
W.O. No. 2. Sqdn.	(1)

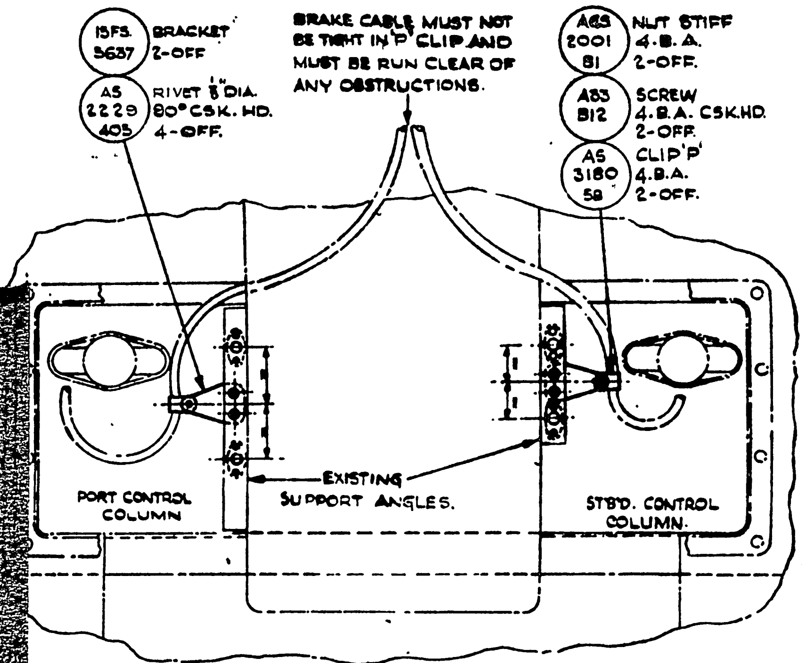
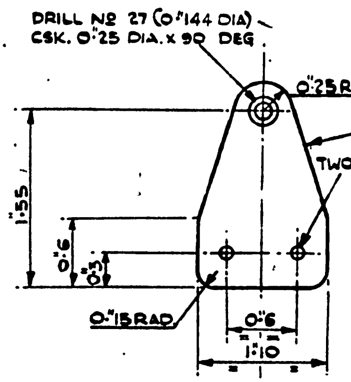


FIG. 1. INSTALLATION OF CLIP BRACKETS UNDER FALSE FLOOR.



TO FINISH GIVE ONE COAT PRIMER ETCH BASE AND ACCELERATOR REF. Nº 33B/1021 AND 33B/1023) AND MATT NIGHT SYNTHETIC FINISH (REF. Nº 33B/1108)

DL 3-2-B60

[redacted]

DRG. Nº A.R 4099J /6/4/58

MOD/VAMP/3592.

Air Headquarters,
Royal Rhodesian Air Force.

25th August, 1958.

Vampire T. Mk. 11 Aircraft - Hydraulics - To Increase Gauge of Pressure Pipe from Bulkhead No. 4 to Cut-out and Introduce Protection to Pipe in Vicinity of Connections

(Mod. No. VAMPIRE/3554)

(Class B/2, applicable to aircraft embodying Mod.3500).

1. INTRODUCTION

There is a possibility that on replacing or tightening the main fuel tank hoses, connecting between the base of the tank and the port forward face of bulkhead No. 4, inadvertent damage can be inflicted on the hydraulic pressure pipe line routed between bulkhead No. 4 and the cut-out valve, resulting in a fracture of the pipe with a subsequent loss of hydraulic pressure. To obviate this possibility, this modification replaces the existing hydraulic pipe with a stronger pipe which has an extended sleeve attachment nut at one end to give it added protection.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.Is, or S.I.s.

(2) This modification is applicable only if Mod. No. Vampire/3500 (Fuel System - To extend Fuselage Fuel Tank Vent and Introduce Improved Sealing between Vent and Cowling) is already embodied.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons - At the first opportunity (not later than 2 months after receipt of parts).

Maintenance Unit - Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 3 man-hours.

4. DRAWINGS REQUIRED

No drawings are required for the embodiment of this modification.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and/or Materials

(a) The Modification Kit which consits of the following items supplied by the Contractor will be demanded from O.C. Equipment Depot. 26FC/103554 :-

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/12551	15.S.1393A/ND	Pipe, hydraulic, pressure	1	C

(b) The following materials are also required and are to be provided under Unit arrangements :-

30A/3055	-	Wire, nickel alloy, 22 s.w.g. Spec. D.T.D.189	As reqd.	C
32B/896	-	Tape, self adhesive, P.V.C.	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

2/

6. SPARES AFFECTED

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes of Reference, Part or Assembly Numbers as a result of this modification.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Release the toggle fasteners securing the port gun bay door and remove the door from the aircraft. Refer to A.P.4099J. Vol. 1, Sect. 3, Chap. 6, and, as detailed, operate the pressure release valve to release all the pressure in the hydraulic accummulator.

NOTE: Prior to fitment of the new hydraulic pipe, Part No. 15.S.1393A/ND, in the following operation (2), ensure that the bore of the pipe is thoroughly clean and free from forei matter.

(2) Locate the redundant $\frac{3}{8}$ in. o/dia, hydraulic pressure pipe, Part No. 13.S.1079A/ND, on the port side of the gun bay, connecting between the forward face of bulkhead No. 4 and th automatic cut-out; taking every precaution against fluid spillage, release the two clamp blocks securing the redundan pipe, remove it from the aircraft and replace it with a new hydraulic pressure pipe, Part No. 15.S.1393A/ND, following the same route. Connect the "extended sleeve" attachment out on the pipe to the forward face of bulkhead No. 4 and connect the other end to the automatic cut-out. Dot not finally tighten the pipe attachment nuts at this stage.

(3) Tighten up the two clamp blocks to secure both the new pipe just fitted and the existing adjacent pipe run in position, and tighten the new pipe attachment nuts where they connect to bulkhead No. 4 and the cut-out, wire-locking them with 22 s.w.g. nickel alloy locking wire, Spec. D.T.D. 189 (Ref. No. 30A/3055).

NOTE: Care must be taken in the preceding operation to avoi damaging the flared joints of the new pipe line by overtight

(4) Check the run of the pipe to ensure that it does not chafe, applying a P.V.C. self adhesive tape (Ref. No. 32B/896) over suspected area. Remove any traces of spilled hydraulic flu from the aircraft. Refer to A.P.4099J, Vol. 1, Sect. 3, Ch 6, and, as detailed, top up the hydraulic reservoir and ensu that the air pressure in the hydraulic accummulator is corre Refit the port gun bay door, securing its toggle fasteners.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected, the following tests are to be carried out :-

Refer to A.P.4099J, Vol. 1, Sect. 3, Chap. 6, and, as detailed, carry out a functional test to ensure correct functioning of the hydraulic system. Check the new pipe connections for leaks.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4081.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned part, rendered redundant by the embodiment of this

Air Headquarters,
Royal Rhodesian Air Force.

10th December, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B59 (Iss 1)

Vampire T.mk. 11 Aircraft - Engine Cowling - Redesigned Tail Cone with increased diameter Jet Orifice - Introduction

(Mod. No. Vampire/3226.)

(Class C/3 on fitment of Mod. No. Goblin/938)

1. INTRODUCTION

This modification introduces a larger rear ring for the tail cone, to give increased clearance between the jet pipe and the rear cone to accommodate the increase in diameter of the jet pipe orifice.

(1) This modification does not cancel or supsede, or render unnecessary, any work called by approved modifications or Command modifications, or S.T.I.s, S.I.s, or S.R.I.M.s.

(2) This modification is applicable only if Mod. No. Goblin/938 (Propelling Nozzle fitted with Detachable Strips - Introduction) is already embodied, or if a 16.5 in. jet pipe is fitted.

2. EMBODIMENT

(1) This Modification is to be embodied at the next Minor Servicing and/or when Engines to Gob/Mod/938 are installed.

(2) The following aircraft are affected, R.R.A.F. 116, 117, 118, 119, 120, 121, 122 and 123.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 8 man-hours, not including drying time.

4. DRAWINGS REQUIRED

There are no drawings required for the embodiment of this modification.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) The following item is required for embodiment of this modification:

Stores Ref	Pt No.	Nomenclature	Qty.	Class.
26FC/11462	L003961A	Rear Ring	1	-

(2) Parts and Materials

The following materials are also required, and are to be provided under Unit arrangements:-

Stores Ref.	Pt No.	Nomenclature.	Qty.	Class.
28Q/6640	AS.2229/404	Rivets, $\frac{1}{8}$ in. dia. 90 deg. csk.	230	C
33B/261	-	Primer, universal, light grey	As reqd.	C
33B/501	-	Finish, grey-green matt, synthetic D.T.D.314	" "	C
33B/510	-	Primer, synthetic, D.T.D.314	As reqd.	C
33B/865	-	Finish, high gloss, alum. silver, D.T.D. 772.	As reqd.	C
33C/1264	-	Compound, pigmented varnish jointing	As reqd.	C

(3) Special Tools and Test Equipment

There are no special tools or test equipment required for the embodiment of this modification.

2/........

6. SPARES AFFECTED

The following list shows the spares affected by this modification, and the parts required to modify them :-

Stores Ref.	Part No.	Nomenclature.	Qty.	Class of Store.
26FC/-	15-EC.1A/1	Rear Cone		
Parts required:				
26FC/-	L00.3961A	Rear ring	1	-
		Attaching parts for L00.3961A, rear ring		
28Q/6640	AS.2229/404	Rivets, $\frac{1}{8}$ in. dia. 90 deg. csk. head	230	C

7. CHANGE OF STORES REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Stores Ref., Part, and Assembly Nos., as follows:-

Old Stores Ref.	Part/Assy No.	Nomenclature.	New Pt/Assy. No.	Stores Ref
26FC/-	16-EC.1A	Rear cone	15-EC.1A/1	26FC/-

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations:-

(1) Remove the rear cone from aircraft, retaining the attaching items.

(2) Using a No. 30 (0.1285 in. dia.) drill, drill out the existing flush rivets securing the aft ring to the skin. Do not remove the Chobert snaphead rivets. Remove the existing aft ring, Part No. L00.854 (ref. only), and to its position offer up the new aft ring, ensuring that the vertical centre line of the aft ring coincides with the vertical centre line of the rear cone. Using the existing rivet holes in the rear cone skin as a guide and using the No. 30 drill, drill in a pilot hole each side of the vertical and horizontal centre lines through the new aft ring, and secure the ring to the skin through these pilot holes with $\frac{1}{8}$ in. dia. skin pins. Continue with the No. 30 drill and drill through all the existing rivet holes into the ring.

(3) Carefully mark the position of the ring in relation to the cone skin and remove it from the cone. Deburr all the new rivet holes, and to the mating surfaces of the ring and cone apply compound pigmented varnish jointing (Stores Ref. 33C/1264). Offer up the completed new aft ring, Part No. L00.3961A, to the cone and rivet in position, using two hundred and thirty $\frac{1}{8}$ in. dia. 90 deg. countersunk head rivets, Part No. AS.2229/404, ensuring that all rivets are a flush fit on the cone skin.

(4) Repair the finish internally and locally in the rear cone using primer synthetic D.T.D.314 (Stores Ref. 33B/510) and finish, grey-green matt, synthetic D.T.D.314 (Store Ref. 33B/501). Repair the finish locally externally using primer universal light grey (Stores Ref. 33B/261) and finish aluminium D.T.D.772 (silver) Stores Ref. 33B/865) all over.

(5) Replace the rear cone to the aircraft using the existing attaching items.

9. TESTING AFTER EMBODIMENT

There are no special tests required after the embodiment of this modification.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

3/........

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts redndered redundant by the embodiment of this modification are to be returned to O.C. Equipment Depot.

Stores Ref.	Part No.	Nomenclature.	Qty.	Class of Store
26FC/970	L00.854	Rear ring	1	C

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.2 lb. and no change of moment.

(B.H. GIBBONS)
Wing Commander
S.T.S.T. A.H.Q. R.R.A.F.

Source : 4099J-V2-P11.

Distribution : One copy to essential recipients plus the following :

O.C. Equipment Depot	(1)
W.O. i/c No. 1. Sqdn.	(2)
W.O. i/c No. 2. Sqdn.	(2)
W.O. i/c C.T.D.	(2)

Air Headquarters,
Royal Rhodesian Air Force.

25th August, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub. Sect. B57.(Issue 1).

Vampire T. Mk. 11 Aircraft - Hydraulics - To Increase Gauge of Pressure Pipe from Bulkhead No. 4 to Cut-out and Introduce Protection to Pipe in Vicinity of Connections

(Mod. No. VAMPIRE/3554)

(Class B/2, applicable to aircraft embodying Mod.3500).

1. INTRODUCTION

There is a possibility that on replacing or tightening the main fuel tank hoses, connecting between the base of the tank and the port forward face of bulkhead No. 4, inadvertent damage can be inflicted on the hydraulic pressure pipe line routed between bulkhead No. 4 and the cut-out valve, resulting in a fracture of the pipe with a subsequent loss of hydraulic pressure. To obviate this possibility, this modification replaces the existing hydraulic pipe with a stronger pipe which has an extended sleeve attachment nut at one end to give it added protection.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.Is, or S.I.s.

(2) This modification is applicable only if Mod. No. Vampire/3500 (Fuel System - To extend Fuselage Fuel Tank Vent and Introduce Improved Sealing between Vent and Cowling) is already embodied.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons - At the first opportunity (not later than 2 months after receipt of parts).

Maintenance Unit - Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 3 man-hours.

4. DRAWINGS REQUIRED

No drawings are required for the embodiment of this modification.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and/or Materials

(a) The Modification Kit which consits of the following items supplied by the Contractor will be demanded from O.C. Equipment Depot. 26FC/103554 :-

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/12551	15.S.1393A/ND	Pipe, hydraulic, pressure	1	C

(b) The following materials are also required and are to be provided under Unit arrangements :-

30A/3055	-	Wire, nickel alloy, 22 s.w.g. Spec. D.T.D.189	As reqd.	C
32B/896	-	Tape, self adhesive, P.V.C.	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

2/

Air Headquarters,
Royal Rhodesian Air Force.

25th August, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub. Sect. B57.(Issue 1).

Vampire T. Mk. 11 Aircraft - Hydraulics - To Increase Gauge of Pressure Pipe from Bulkhead No. 4 to Cut-out and Introduce Protection to Pipe in Vicinity of Connections

(Mod. No. VAMPIRE/3554)

(Class B/2, applicable to aircraft embodying Mod.3500).

1. INTRODUCTION

There is a possibility that on replacing or tightening the main fuel tank hoses, connecting between the base of the tank and the port forward face of bulkhead No. 4, inadvertent damage can be inflicted on the hydraulic pressure pipe line routed between bulkhead No. 4 and the cut-out valve, resulting in a fracture of the pipe with a subsequent loss of hydraulic pressure. To obviate this possibility, this modification replaces the existing hydraulic pipe with a stronger pipe which has an extended sleeve attachment nut at one end to give it added protection.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.Is, or S.I.s.

(2) This modification is applicable only if Mod. No. Vampire/3500 (Fuel System - To extend Fuselage Fuel Tank Vent and Introduce Improved Sealing between Vent and Cowling) is already embodied.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons	- At the first opportunity (not later than 2 months after receipt of parts).
Maintenance Unit	- Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 3 man-hours.

4. DRAWINGS REQUIRED

No drawings are required for the embodiment of this modification.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and/or Materials

(a) The Modification Kit which consits of the following items supplied by the Contractor will be demanded from O.C. Equipment Depot. 26FC/103554 :-

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/12551	15.S.1393A/ND	Pipe, hydraulic, pressure	1	C

(b) The following materials are also required and are to be provided under Unit arrangements :-

30A/3055	-	Wire, nickel alloy, 22 s.w.g. Spec. D.T.D.189	As reqd.	C
32B/896	-	Tape, self adhesive, P.V.C.	As reqd.	C

(2) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

2/

modification, is to be returned to O.C. Equipment Depot.

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/8689	13.S.1079A/ND	Pipe, hydrulic pressure	1	C

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of + 0.20 lb. and no change of moment.

for (B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : 4099J V2. P18.

Distribution :-

W.O. A.R.S. (2)
W.O. No. 1. Sqdn. (2)
W.O. No. 2. Sqdn. (2)

Air Headquarters,
Royal Rhodesian Air Force.

21st August, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B58 (Issue 1)

Vampire F.B. Mk. 9 Aircraft - Fuel System - To extend Fuselage Fuel Tank Vent and introduce Improved Sealing between Vent and Cowling

(Mod. No. Vampire/3534)

(Class B/2)

1. INTRODUCTION

The existing main fuel tank vent allows fuel to be carried back into the cowling under negative 'G' flight conditions. This modification introduces an extended vent to clear the boundary layer and improved sealing at the cowling vent aperture.

(1) This modification does not cancel, supersede, or render unnecessary any work called for by approved modifications, Command Modifications, S.T.I.s, S.I.s

(2) This modification is applicable only if Mod. Nos. Vampire/3044 (To introduce relief valve in fuel system vent line) and Vampire/3045 (To introduce lightweight packing in wing tank bays between tanks and wing structure) are already embodied.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons	-	At the first opportunity and not later than one month after receipt of parts.
Maintenance Unit	-	Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 9 man-hours, not including drying time (2 to strip, 6 to embody, 1 to reassemble).

4. DRAWINGS REQUIRED

Drawing No. A.P.4099G/H.26/56, Sheets 1-5, is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(a) The modification kit, which consists of the following items supplied by OC. Equipment Depot, under Stores Ref. 26FC/103534:-

(2) PSCO will raise issue orders for a/c at Thornhill.

Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
26FC/-	15EC.81	Blanking plate	1	-
26FC/-	15EC.83	Insert plate	1	-
26FC/-	15FS.3669	Packing	1	-
26FC/-	15FS.3671ND	Ferobestos tape	1	-
26FC/-	15FS.3679	Packing block	1	-
26FC/-	15FS.3681ND	Ferobestos tape	1	-
26FC/-	15S.1355A	Vent pipe and bracket sub-assembly	1	-
26FC/-	15S.1357A/ND	Pipe	1	-
26FC/-	15S.1359A/ND	Pipe	1	-
26FC/-	15S.1375	Clamp block	2	-
28D/12528	A.25/1B	Bolt, hex/hd., 4 B.A. x 0.5 in	6	C
28D/12624	A.25/7B	Bolt, hex/hd., 4 B.A. x 1.1 in	2	C

2/..........

Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
28D/12512	A.25/1C	Bolt, hex/hd., 2 B.A. x 0.55 in	2	C
28M/10287	AGS.2001/B1	Nut, stiff, 4 B.A.	14	C
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	2	C
28M/12153	AGS.2007/B1	Nut, stiff, double anchor, 4 B.A.	2	C
28D/8300	AS.1242/1B	Bolt, 90 deg. csk/hd., 4 B.A. x 0.45 in.	8	C
28Q/6619	AS.2229/303	Rivet, 90 deg. csk/hd., 3/32 in. dia.	4	C
28Q/6870	AS.2229/406	Rivet, 90 deg. csk/hd., ⅛ in. dia.	4	C
28Q/6680	AS.2229/408	Rivet, 90 deg. csk/hd., ⅛ in. dia.	2	C
28Q/10432	AS.2230/304	Rivet, 120 deg. csk/hd., 3/32 in. dia.	16	C
28Q/10412	AS.2230/404	Rivet, 120 deg. csk/hd., ⅛ in. dia.	12	C
28Q/10413	AS.2230/405	Rivet, 120 Deg. csk/hd., ⅛ in. dia.	6	C
28Q/10872	AS.2230/505	Rivet, 120 deg. csk/hd., 5/32 in. dia.	5	C
28W/12305	SP.13/B	Washer, 4 B.A.	14	C

(b) The following materials are also required and are to be provided under Unit arrangements :-

30A/3055	Wire, locking, nickel alloy 22 s.w.g.	As reqd.	C
33B/1021	Primer, etch, base	As reqd.	C
33B/1023	Primer, etch, accelerator	as reqd.	C
33B/865	Finish, cellulose, aluminium, spec. D.T.D.772.	-- As reqd.	C
33B/945	Finish, cellulose, P.R.U., blue Spec. D.T.D.772.	As reqd.	C
33C/1264	Compound, pigmented varnish jointing Spec. D.T.D. 369A.	As reqd.	C

(2) Special Tools and Test Equipment

There are no special tools or test equipment required for the embodiment of this modification.

6. SPARES AFFECTED

The following list shows the spares affected by this modification and the parts required to modify them :-

Stores Ref.	Part No.	Nomenclature	Qty	Class of Store
26FC/6814	L00.51A/1	Door, inspection, lower complete with hinge rail	-	-

The method of modifying this spare is detailed in Para. 8, operations (8), (9) and (10).

Parts required :

26FC/-	15EC.81	Plate, blanking	1	-
26FC/-	15EC.83	Plate, insert	1	-

Attaching parts for 15EC.81 and 15EC.83 plates :

28Q/10432	AS.2230/304	Rivet, 120 deg. csk/hd., 3/32 in. dia.	8	c
28Q/10412	AS.2230/404	Rivet, 120 deg. csk/hd., ⅛ in. dia.	12	C
and 28Q/6870	AS.2229/406	Rivet, 90 deg. csk/hd., ⅛ in. dia.	4	C

Spare affected :

26FC/1039	L00.66.	Rail, hinge, lower	-	-

The method for modifying this spare is detailed in para. 8, operation (8); there are no parts required to modify this spare.

3/.........

7. CHANGE OF STORES REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Stores Reference, Part and Assembly Numbers as follows :-

Stores Ref.	Old Part/Assy.No.	Nomenclature	New Part/Assy.No.	Stores
26FC/6814	L0051A/1	Door, inspection, lower	L00.51A/2	26FC/-
26FC/1039	L00.66	Rail, hinge, lower	15EC.97	26FC/-
26FC/	L00.82ND	Hinge, lower(spares)	15EC.103ND	26FC/-
26FC/-	L00.4016	Hinge, lower, L.H.	15EC.101	26FC/-
26FC/-	L00.4016	Hinge, lower, R.H.	15EC.102	26FC/-
26FC/-	L00.364	Strip, hinge packing	15EC.99	26FC/-

NOTE: This information is not complete.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Lower and remove the cannon bay doors. Release the hydraulic accumulator pressure and drain the hydraulic fluid from the aircraft in accordance with current authorized procedure. Release and remove the lower engine cowling; retain the screws supporting the hinge to the cowl support channel.

(2) Refer to Sheet 1 of the drawing. On the lower aft face of the fireproof bulkhead, remove the two now redundant hydraulic pipes Part Nos. Q00.3697A/ND and Q00.3701A/ND, from the ground test connection on the port side to the coupling support bracket starboard of the bulkhead centre-line; blank off the adaptors. Retain all clips and attaching items.

(3) Disconnect and retain the lower hose clip connecting the vent pipe assembly to the vent pipe and remove the now redundant vent relief valve assembly and packing, Part Nos. P00.3727A/1 or F.M.B.A./1 and P00.3897 respectively, discarding its attaching items. Remove the now redundant cowling support bracket Part No. A00.1298A, which is situated about the centre-line of the lower bulkhead, and also, the clamp block, Part No. Q00.108A, which is mounted on the port side of the redundant cowling support bracket. Retain the clip securing the main tank vent pipe to the forward face of the fireproof bulkhead.

(4) Refer to Sheet 3 of the drawing. Working on the cowl support channel, cut away the section from the port side of the centre-line. Offer a packing, Part No. 15FS.3669 to the existing cut-out starboard of the centre-line (vacated by the redundant relief valve assembly); trim this packing to suit the contour of the cut-out and remove it. Temporarily offer up to the support channel the new vent pipe and drain assembly, Part No. 15S.1355A, ascertain the landing for this assembly on the port side of the vent pipe on the support channel and drill out the mushroom-head rivets necessary to allow the vent pipe assembly to seat flush. Again temporarily offer up the vent pipe assembly, ensuring that the assembly is centrally mounted by marking a vertical line in the centre of the two vertical rows of three holes which secured the redundant cowling support bracket removed in operation (3).

(5) Using a No. 26 drill (0.1470 in. dia.), drill back from the bulkhead two holes at positions "DE" and two No. 11 holes (0.1910 in. dia.) at positions "BC"; Sheet 3 of the drawing refers. Temporarily secure the assembly at these positions. Working to starboard of the centre-line and using the No. 26 drill, drill three holes back from the bulkhead and four holes from the support channel. Working to port of the centre-line, drill the bulkhead one No. 26 hole to suit the vent pipe assembly; countersink these four holes 90 deg x 0.25 in. on the undersurface. Temporarily secure the vent pipe assembly at all its attaching points.

4/.........

(6) To the cut-out to starboard of the centre-line, in the support channel, offer up the packing which was trimmed to fit in operation (4). Drill this packing eight No. 41 holes (0.0960 in. dia.) to suit the vent pipe assembly and remove the packing. Countersink the eight holes in the packing on the undersurface 120 deg x 0.193 in. dia. Remove the vent pipe assembly from the support channel. Deburr all holes and edges on the packing and rivet it to the vent pipe assembly with eight 120 deg. countersunk-head 3/32 in. dia. rivets, Part No. AS.2230/304 having first coated the mating surfaces with pigmented varnish jointing compound (Stores Ref. 33C/1264). Ascertain which holes on the bulkhead and support channel were being used for attachment, fill up the remainder of the holes with 120 deg. countersunk-head 5/32 in. dia. rivets, Part No. AS.2230/505, and countersink the inner surfaces of the support channel 120 deg. x 0.315 in. dia. Deburr all holes drilled and remove all swarf.

(7) Offer up the vent pipe assembly to its position (refer to Sheets 3 and 4 of the drawing) and secure with two 2 B.A. bolts and stiffnuts, Part Nos. A.25/1B, and eight 4 B.A. 90 deg. countersunk bolts, Part No. A S.1242/1B, using fourteen-stiffnuts, Part No.AGS.2001/B1 and twelve washers, Part No. SP.13/B, reattaching the main fuel tank vent pipe clip at its original position on the forward face of the bulkhead. Reconnect the hose pipe to the exisiting vent pipe with the retained clip.

(8) Refer to Sheets 4 and 5 of the drawing. On the lower cowling, Part No. L00.51A/1, trim back the lower hinge, hinge rail and packing 1.6 in. from the forward edge of the cowling, drill out the rivets securing the redundant part of the hinge and fill the redundant holes to port of the centre-line with two 90 deg. countersunk-head rivets, Part No. AS.2229/406, flush on the outer surface. Refer to Sheet 5 of the drawing. Drill out the two rivets on the hinge as indicated, countersink both surfaces 90 deg. x 0.22 in. dia. and rivet the hinge with two 90 deg. countersunk-head $\frac{1}{8}$ in. dia. rivets, Part No. AS.2229/406; flush these two rivets both sides. Refer to section 'A-A' on Sheet 4 of the drawing. Trim off 0.52 in. from the centre flange of the lower hinge rail and reshape the forward end of the hinge rail as detailed. Deburr all edges.

(9) Refer to Sheet 5 of the drawing. Offer up and insert plate, Part No. 15EC.83, to the cut-out to starboard of the centre-line on the cowling. Trim the plate to the shape required, mark off as detailed on the drawing and drill eight No. 41 holes; deburr the holes. To the underside of the cowling offer up a blanking plate, Part No. 15EC.81, and trim it to suit, then with a No. 30 (0.1285 in dia.) drill, drill twelves holes in the plate to suit the cowling. Remove the plate and countersink these twelve holes on the underside, 120 deg. x 0.25 in dia. and deburr all holes. Coat the mating surfaces with pigmented varnish jointing compound and secure to the cowling with twelve 120 deg. countersunk-head $\frac{1}{8}$ in. dia. rivets, Part No. AS.2230/404.

(10) To the cowling on the inside of the plate just fitted, offer the insert plate (trimmed to suit in the previous operation) and drill the blanking plate eight No. 41 holes to suit the insert plate. Remove the insert plate and countersink the undersurface of the blanking plate 120 deg. x 0.19 in. dia.; remove the burrs. Coat the mating surfaces of the blanking and insert plates with pigmented varnish jointing compound and secure the insert plate to the blanking plate with eight 120 deg. countersunk-head 3/32 in. dia. rivets, Part No. AS.2230/304. Refinish the cowling locally, using a mixture of equal parts of etch accelerator primer (Stores Ref. 33B/1023) and etch base primer (Stores Ref. 33B/1021), internally coat with aluminium cellulose finish, Spec. D.T.D.772 (Stores ref.33B/1060 or 865), and externally with P.R.U. blue cellulose finish, Spec. D.T.D.772 (Stores Ref. 33B/1072 or 945). Renumber the lower cowling "L00.51A/2".

5/..........

(11) Refer to Sheet 2 of the drawing. Ascertain the position of the new clamp block, top anchorage, and drill a No. 26 hole, drill the lower anchorage No. 26 to suit the clamp block. Slave bolt to each of these two holes an anchor nut, Part No. AGS.2007/B1, and drill in the bulkhead four No. 41 holes to suit the anchor nuts; countersink these four holes 90 deg. x 0.16 in. dia. on the aft face of the bulkhead. Deburr all holes drilled and secure the two anchor nuts with four 90 deg. countersunk-head 3/32 in. dia. rivets, Part No. AS.2229/303, on the forward face of the fireproof bulkhead, having first coated the mating surfaces with pigmented varnish jointing compound. Offer up the two new clamp blocks, Part No. 15S.1375, to this position and temporarily secure in position with two 4 B.A. bolts and washers, Part Nos. A.25/7B and SP.13/B respectively.

(12) Refer to Sheet 1 of the drawing. Offer up to the hydraulic test connection on the port side, two new pipes, Part Nos. 15S.1357A/ND (pump suction) and 15S.1359A/ND (pump pressure), route these pipes as detailed and connect to the coupling support bracket to starboard of the centre-line; wire-lock the pipe union nuts with 22 s.w.g. nickel alloy locking wire (Stores Ref. 30A/3055). Route the pump pressure pipe through the new clamp block, lower channel, and the pump suction pipe aft of the new vent drain; ensure a minimum clearance of 0.15 in. between this pipe and the vent assembly bracket. See Sheet 2 of the drawing.

(13) Refit the lower engine cowling at the aft anchorage with its retained attaching items and drill the hinge at its forward anchorage two No. 11 holes to suit the anchor nuts on the vent pipe assembly. Secure the cowling at this front anchorage with its retained attaching items.

(14) Refer to Sheet 3 of the drawing. To the cowling support channel outer face offer up two pieces of ferobestos tape, Part No. 15FS.3671ND, to fit port of the centre-line, and Part No. 15FS.3681ND, to fit starboard of the centre-line; each piece of the ferobestos tape is to finish 0.75 in. from the bulkhead centre-line. Secure this ferobestos tape to the landing channel with 120 deg. countersunk-head $\frac{1}{8}$ in. dia. rivets, Part No. AS.2230/405; where necessary, drill $\frac{1}{8}$ in. dia. holes through the ferobestos tape and landing channel in the centre. Ensure that these rivets do not foul any fittings.

(15) Refer to Sheet 3 of the drawing. Offer up a packing block, Part No. 15FS.3679, to the area aft of the vent pipe and forward of the cowling hinge; trim this packing on the edges indicated on the drawing, ensuring a maximum clearance of 0.020 in. and chamfer the bottom edge 0.030 in. x 45 deg. to clear the cowling. Drill the bracket support to suit this packing and rivet the packing to the support with two 90 deg. countersunk-head $\frac{1}{8}$ in. dia. rivets, Part No. AS.2229/408, having first coated the mating surfaces with pigmented varnish jointing compound.

(16) Recharge the hydraulic system in accordance with current procedure and replace the cannon bay doors.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied, carry out a functional test of the hydraulic system as detailed in A.P.4099G. Vol. 1, Section 3, Chapter 6.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts, rendered redundant by the embodiment of this

6/.........

11. Contd.

modification, are to be returned to O.C. Equipment Depot for disposal in accordance with current equipment Regulations.

Stores Ref.	Part No.	Nomenclature.	Qty.	Class of Store.
26FC/1987	A00.1298A	Bracket, bottom centre	1	C
26FC/6980 or	P00.3727A/1	Valve, vent relief	1	B
27V/-	F.M.B.A./1	Valve, vent relief	1	-
26FC/2380	Q00.108A	Block, clamp	1	C
26FC/8091	P00.3897	Packing	1	C
26FC/6861	Q00.3697A/ND	Pipe assembly, pump pressure	1	C
26FC/8342	Q00.3701A/ND	Pipe assembly, pump suction	1	C

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.67 lb. and no change of moment.

B.H. Gibbons

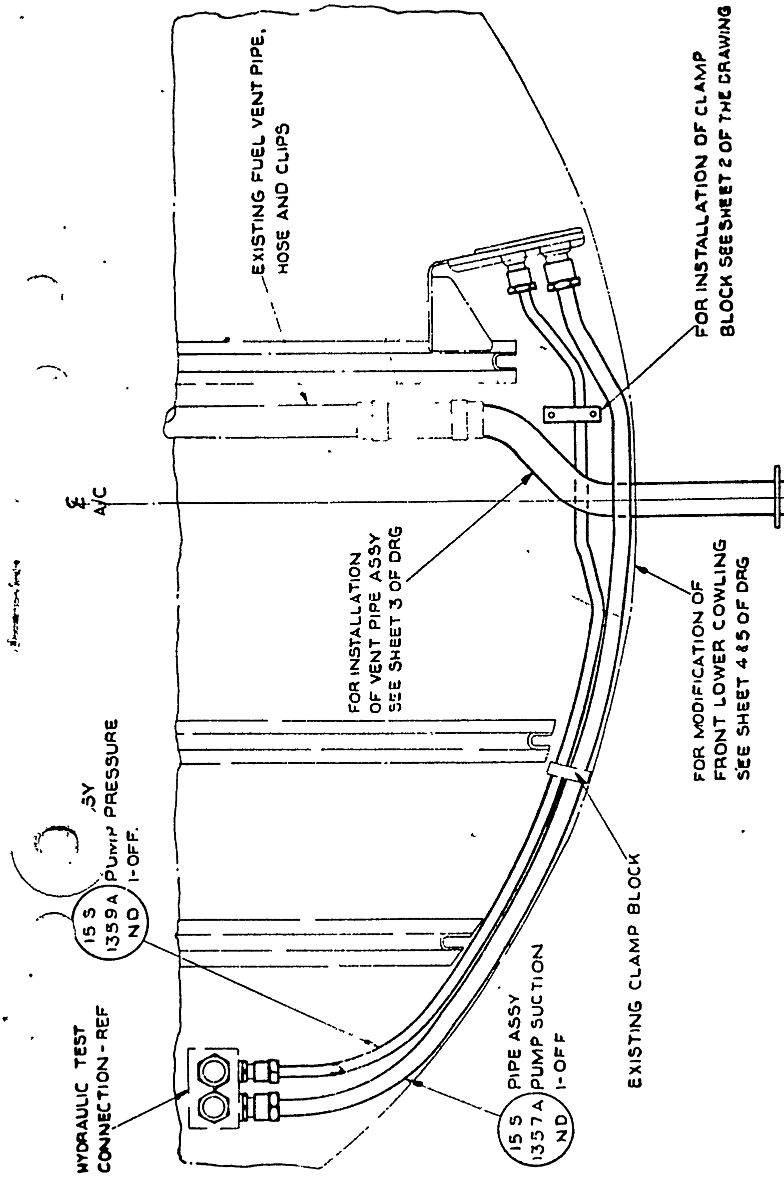
(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : A.P.4099G. Vol 2. Pt. I. Leaflet No. H26.

Distribution :

One copy to essential recipients plus the following :

W.O. Stress Skin Sect. (2)
W.O. A.R.S. (2)
W.O. No. 1 & 2 Sqdns. (2) (2)



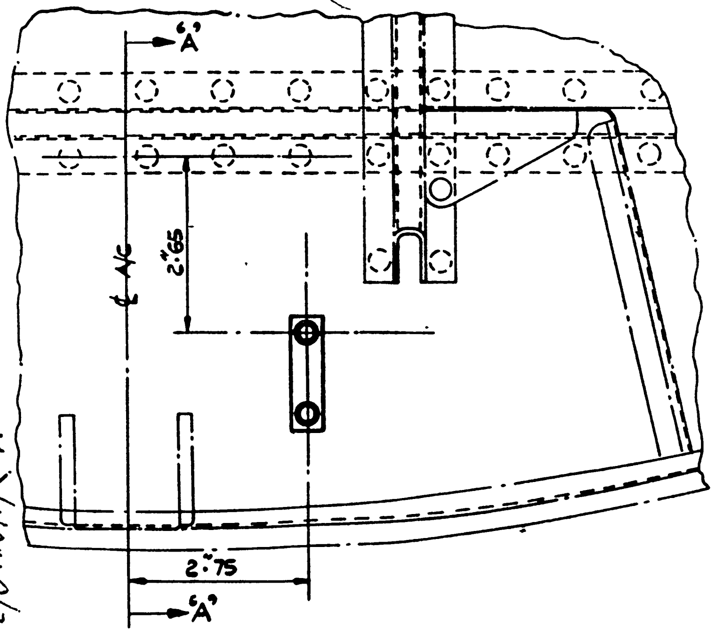
REVISED PIPES ON REAR FACE OF FIREPROOF BULKHEAD

MOD/VAMP/3534

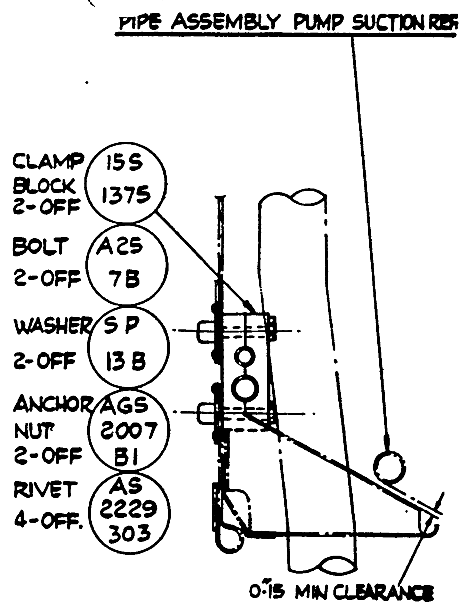
RESTRICTED

Drg. No. A.P.4099G/H.26/56
Sheet 1

RESTRICTED



VIEW LOOKING ON AFT FACE OF FIREPROOF BULKHEAD.



VIEW ON ARROWS 'A'-'A'.

INSTALLATION OF CLAMP BLOCK.

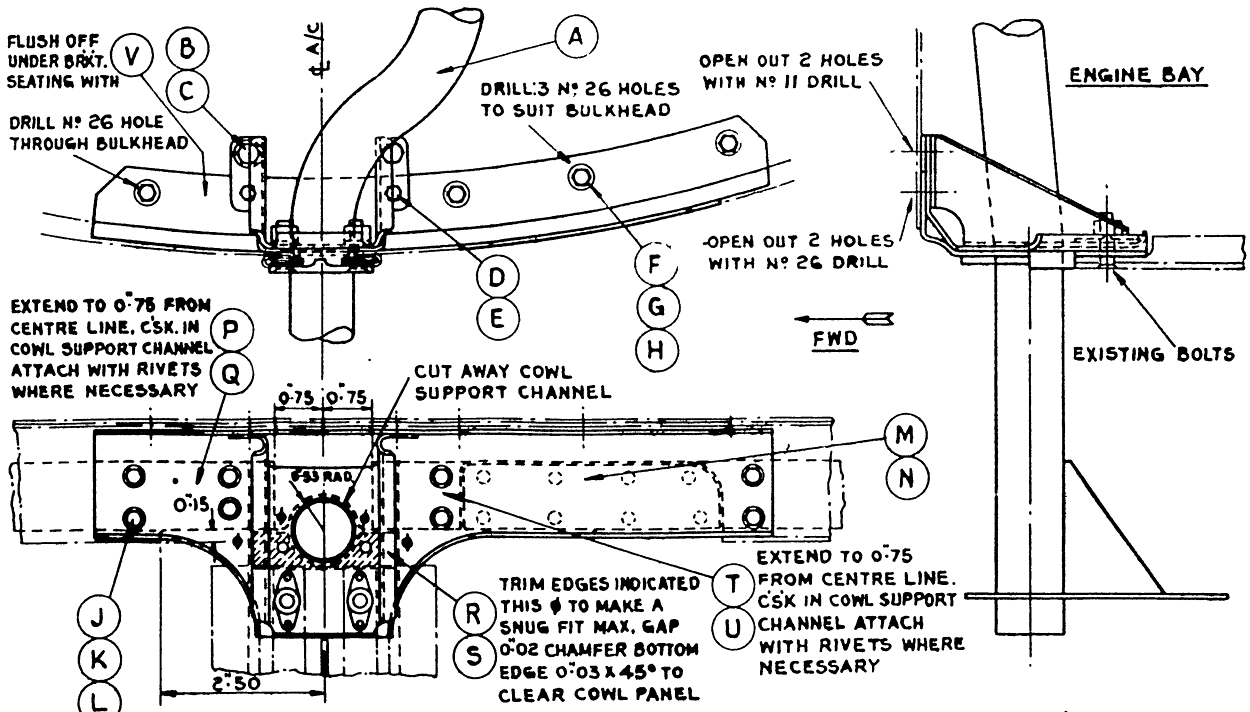
SHEET 2

DRG. No A.P. 4099 G / H. 26 / 56

MOD/VAMP/3534

LP31689 12/56 625 C & P Gp. 959 (4)

RESTRICTED



SEE SHEET 4 FOR KEY

INSTALLATION OF VENT PIPE ASSY. ON REAR FACE OF FIREPROOF BULKHEAD

DRG. Nº A.R 4099 G / H. 26 / 56

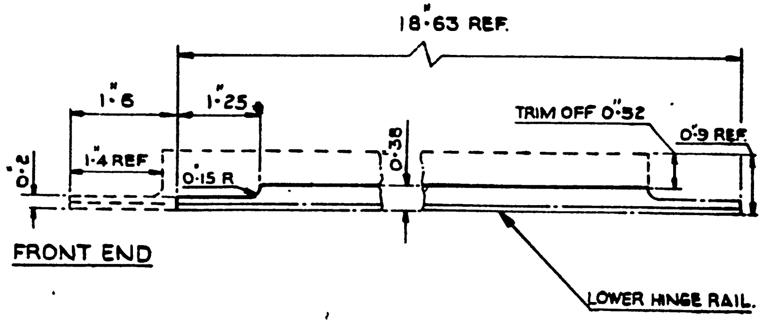
SHEET 3

LP31689 12/56 625 C&P Gp. 959 (4)

RESTRICTED

KEY

CODE	PART No.	NOMENCLATURE	QTY
A	15.S.1355A	VENT PIPE AND BRKT ASSY.	1
B	A25/1C	BOLT 2 BA.	2
C	AGS.2001/C1	NUT 2 BA.	2
D	A25/1B	BOLT 4 BA.	2
E	AGS 2001/B1	NUT 4 BA	2
F	A25 /1B	BOLT 4 BA	4
G	SP 13 /B	WASHER 4 B A.	4
H	AGS 2001/B1	NUT 4 B.A.	4
J	AS1242/1B	BOLT 4 BA	8
K	SP 13/ B	WASHER 4 BA	8
L	AGS.2001/B1	NUT 4 B. A.	8
M	15.FS.3669	PACKING	1
N	AS.2230/304	RIVET 3/32" DIA.	8
P	15.FS.3671ND	FEROBESTOS	1
Q	AS.2230/405	RIVET 1/8" DIA.	3
R	15.FS.3679	PACKING BLOCK	1
S	AS 2229/408	RIVET 1/8" DIA	2
T	15.FS.3681ND	FEROBESTOS.	1
U	AS.2230/405	RIVET 1/8" DIA	3
V	AS.2230/505	RIVET 5/32" DIA.	5



TRIM THE HINGE AND PACKING 1"·6
TRIM THE HINGE RAIL TO THE NEW SHAPE DETAILED
FINISH THE HINGE RAIL WITH MATCHING CELLULOSE
TO SPEC. DTD. 772 ALUMINIUM.

SECTION 'A-A' SEE SHEET 5

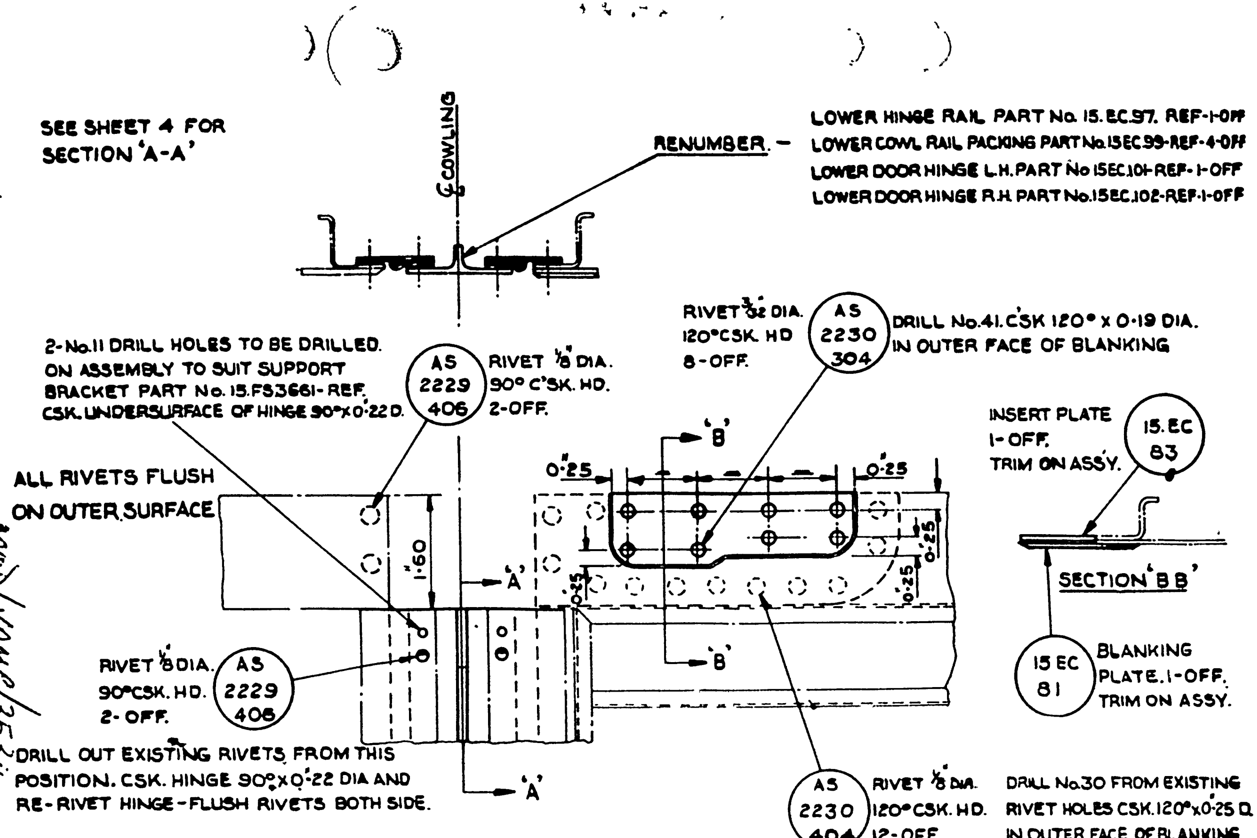
EQUIPMENT FOR VENT PIPE INSTALLATION AND FURTHER DETAILS OF COWLING.

DRG. No A.P. 4099 G/ H. 26 / 56
SHEET 4

MOD/VAMP/3534

LP31689 12/56 625 C&P Gp. 959 (4)

RESTRICTED



VIEW INSIDE LOWER COWLING

MOD/VAMP/3534

DRG. No AR 4099 G / H. 26 / 56

SHEET 5.

LP3169 12/56 625 C&P Gp. 959 (4)

Air Headquarters,
Royal Rhodesian Air Force.

19th July, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B56.(Issue 1)
To Vol. 7. Sect. 2. Sub.Sect. B21.(Issue 1)

Vampire T. Mk. 11 Aircraft - Electrical - To Revise Connections of Fire Extinguisher and Fire Warning to Give Direct Operation from Battery.

(Mod. No. Vampire/3524.)

(Class C/3.N.C.P)

1. INTRODUCTION

In the event of a forced landing, the pilot, to observe fire warning or to operate the fire extinguishers, must keep his "GROUND/FLIGHT" master switch in the "FLIGHT" position which renders the aircraft electrically "ALIVE" and greatly enhances the possibility of fire on impact. To obviate this necessity, this modification takes the fire services electrical supply direct from the batteries: this, being entirely independent of the master switch, will enable the pilot, in the event of an emergency, to switch to "GROUND" and still have the fire warning and fire extinguisher services at his disposal.

(1) This modification does not cancel, supersede or render unnecessary, any work called for by approved modifications, Command Modifications, S.T.I.s. S.I.s or S.R.I.M.s.

(2) This modification is applicable only if Mod. No. Vampire/3167 (To introduce provision for fully-automatic Mk. 3B Ejection ~~Seats.~~ Part A: fixed parts and Part B: other associated parts) is already embodied.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons : - At the first opportunity and not later than 6 months after receipt of this leaflet.

Maintenance Units : - Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 9 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099J/F.21/57, Sheets 1 & 2 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts and materials are required and are to be demanded from OC. Equipment Depot.

(2) PSCO to raise issue orders for a/c at Thornhill.

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/-	D.H.S.181/5	Tubing, P.V.C., 5 mm. i/d., length 6 in. (make locally from 5F/2303)	1	-
5E/3040	-	Cable, electric, Unipren 12, Spec. B.S.E.21, length 14 ft. 0 in.	1	C
5H/9400053	A.S.2673	Ferrule, No.4	7	C
5H/76	A.S.2747	Socket, terminal	3	C
5H/77	A.S.2753	Cover, fuse block, 3-way	1	C
5H/80	A.S.2737	Base, fuse holder, 3-way	1	C
5H/83	A.S.2765	Link, commoning, 2-way	1	C
5H/125	A.S.2606/2	Socket, terminal, double tier	1	C

2/....

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
5K/107065	TWAP	Sleeve, binding, 1.5 mm. i/d	12	C
5K/107066	TWBP	Sleeve, binding, 3.0 mm. i/d	2	C
5K/107205	T.I.A.	Sleeve, marking, 2.5 mm., coded 'A' (2.0 mm.)	12	C
5K/107270	T.I.A.	Sleeve, marking, 2.5 mm., coded 'F' (2.0 mm.)	12	C
5K/107543	T.I.A.	Sleeve, marking, 2.5 mm., coded '+' (2.0 mm.)	12	C
5K/109116	T.I.A.	Sleeve, marking, 2.5 mm., coded '2' (2.0 mm.)	8	C
5K/107209	T.3	Sleeve, marking, 5.0 mm., coded 'A'	2	C
5K/107287	T.3	Sleeve, marking, 5.0 mm., coded 'G'	2	C
5K/107313	T.3	Sleeve, marking, 5.0 mm., coded 'I'	2	C
5K/107391	T.3	Sleeve, marking, 5.0 mm., coded 'O'	2	C
5X/3149	Z.27329	Thimble, socket pin	3	C
5X/3237	Z.27330	Insert, socket	2	C
5X/3238	Z.27323	Pin, plug	3	C
5X/9400385	Z.77859	Terminal, lug, crimp type No. 5A.	1	C
28S/2664	AGS.253/39	Screw, wood, rd/hd. No. 6 x $\frac{1}{4}$ inlong	2	C
32A/94	-	Cord, stringing, braided, Spec. 4F-35, Sect. 2	As reqd.	C
33C/10	-	Beeswax, Spec. C.S.2177(1)	As reqd.	C

(3) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

Details are not yet available. If spares are affected, an amendme to this Technical Order will be issued in due course.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

Details are not yet available. If Reference, Part and Assembly Numbers are affected an amendment to this leaflet will be issued in due course.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Raise the nosecap and disconnet the aircraft batteries. Remove the second pilot's ejection seat and guide rail in accordance with the procedure detailed in A.0.4099J. Vol. 1. Sect. 3. Chap. 11.

(2) Refer to fig. 1 on Sheet 1 of the drawing. Make the new cable assembly, Part No. 15N.3005A, as detailed, using a 6in. length of Unipren 12 cable, Spec. B.S.E.21 (Ref. No. 5E/3040), one ferrule (Ref. No. 5H/9400053), one 2 B.A. crimp type terminal lug (Ref. No. 5X/9400385), two rubber binding sleeves, Part No. TWBP, eight 4.0 mm. marking sleeves, Part No. T3, and a 6 in. length of P.V.C. tubing, Part No. DH.S.181/5. The cable assembly now becomes Part No. 15.N.3005A and is to be numbered accordingly.

(3) Refer to fig. 2 on Sheet 1 of the drawing. Secure to the Starboard aft portion of the nose compartment floor a new 3-way fuse block base (Ref. No. 5H/80) using two No. 6 x $\frac{3}{4}$ in. round/head wood-screws, Part No. A.G.S.253/39. Assemble to the fuse block base a two-way commoning link(Ref.No.5H/83) and

8. Contd.

three terminal sockets (Ref. No. 5H/76). Code the indentification lable of the new fuse block cover (Ref. No. 5H/77) as shown on the drawing, using marking ink. Fit the cover to the fuse block.

(4) Locate the main 120 amp. fuse box, fitted adjacent to the new fuse block; remove the cover. Refer to the wiring diagram on Sheet 2 of the drawing. To terminal G.A.10 of the main fuse box connect the terminal lug of the new cable assembly, Part No. 15.N.3005A, the terminal lug being fitted underneath the existing 135 amp, lug. Connect the ferrule end of the cable assembly to terminal "G.A.10" of the new fuse block. Refit the cover to the main fuse block.

(5) Disconnect cable loom socket C2A from the starboard forward face of bulkhead no. 1 and dismantle the socket. Route two 1 ft. 9 in. lengths of Unipren 12 cable through the existing 9 in. length of 20 mm. P.V.C. tubing and crimp to pins 'M' and 'Y' of the socket, using two new thimbles (Ref. No. 5X/3149). Code the cable ends with the circuit code "FA2+" and "FA+" respectively, with fourteen 2.5 mm. marking sleeves, Part No. TIA, and then assemble four rubber binding sleeves, Part No. TWAP, to the cable ends. Reassemble the socket. Route the disconnected ends of the cables to the new fuse block, following the existing cable run as far as possible, cut the cables to the length required and crimp to the ends two new ferrules (Ref. No.5H/9400053). Connect the cables to the fuse block as coded and refit the fuse block cover. Re-secure the P.V.C. tubing at each end and to the cut ferrule of the socket, using beeswax-coated braided stringing cord (Ref. No. 33C/10 and 32A/94 respectively).

(6) Locate junction box No. 1 on the starboard forward face of bulkhead No.2; remove the 5 amp. and 20 amp. type S fuses (Ref. Nos. 5CZ/880 and 5CZ/4057 respectively) from positions 14 and 35 respectively. These fuses are now to be fitted to the appropriate holders of the new 3-way fuse block in the nose compartment.

(7) Remove junction box No. 1 from the forward face of bulkhead No. 2 and lower it sufficiently to enable the following alterations to be carried out. Firstly remove the coding from the fuse block covers, positions 14 and 35, from which the redundant fuses were removed in the previous operation. Next disconnect and remove the cable coded "FA2+" routed from fuse No. 14 to terminal 4 of the 5-way terminal block. Finally remove the cable coded "FA+" routed from fuse No. 35 to plug C1 pin Y, replacing the damaged plug pin with a new plug pin (Ref. No. 5X/3228). Refit junction box No. 1 in exactly the same manner as before.

(8) Lower the main instrument panel. From the starboard cockpit wall, forward of the main instrument panel, disconnect and remove junction box No.3 complete with the attaching cables. To facilitate replacement ensure all cables are kept in their individual loom formations and that careful note is taken of individual connections and the routing of same.

(9) Working on the removed junction box No.3 carry out the wiring alterations as detailed below.
Remove the following redundant cables:

From	To	Circuit Code
Plug C6-L	Socket C1-Y	FA+
Plug C5-Z	Socket C3-C	FA2+

Replace the damaged socket insert in socket C1-Y by a new socket insert (Ref. No. 5X/3237).
Add the following new cable, using Unipren 12:

4/........

8. Contd.

From	To	Circuit Code	Approx. Cable length.
Plug C2-M	Inboard terminal of 5-way terminal block	FA2+	1 ft. 0 in.
Plug C5-Z	Inboard terminal of 5-way terminal block	FA2+	1 ft. 0 in.
Socket C3-C	Inboard terminal of 5-way terminal block	FA2+	7 ft. 0 in.
Plug C6-L	Plug C2-Y	FA+	1 ft. 0 in.

Code the cable ends as detailed above, using thirty 2.5 mm. marking sleeves, Part No. TIA, then assemble to the cable ends eight rubber binding sleeves, Part No. TWAP. Mark off the cable ends, using three ferrules (Ref. No. 5H/9400053), two plug pins (Ref. No. 5X/3238) and one socket insert and thimble (Ref. Nos. 5X/3237 and 5X/3149 respectively). To the inboard terminal of the 5-way terminal block new double tier socket (Ref. No. 5H/125) and blank off the vacant so entry with a ferrule (Ref. No. 5H/9400053).

(10) Refit junction box No. 3 to the cockpit wall, re-route and re-conne all disconnected cables, plugs and sockets in exactly the same mann as before. Re-secure the instrument panel.

(11) Re-connect the aircraft batteries and lower the nosecap. Refit th second pilot's ejection seat and guide rail in accordance with the procedure detailed in A.P.4099J, Vol. 1. Sect. 3 Chap. 11.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected in accordanc with current procedure, the following tests are to be carried out :-

(1) Carry out a continuity check of all cables introduced or altered during the embodiment of this modification in conjunction with the wiring diagram on Sheet 2 of the drawing.

(2) Carry out a functional check of the fire warning and fire extinguis circuits in accordance with the procedure detailed in A.P.4099J, Vo Sect. 5. Chap. 1, ensuring the fire services operate irrespective o the position of the "GROUND/FLIGHT" master switch.

(3) Carry out a functional check of all electrical circuits disturbed b the embodiment of this modification in accordance with the procedure detailed in the aforementioned publication.

10. RECORDING ACTION

Record on Aircraft Form 700 and Form 4801.

11. DISPOSAL OF REDUNDANT PARTS

There are no parts rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification has no effect on weight or C.of G.

for (B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source: AP4099J. Vol.2. Part 1.
Leaflet No. F21.

Distribution:- One copy to essential recipients plus the following:- (46)
Specialist Officer M.U. (1)
W.O. Electrical Section (2)
OC. Equipment Depot.

RESTRICTED

DRG. No. A.P. 4091/F.21/57

MOD/VAMP/3524

SHEET 1

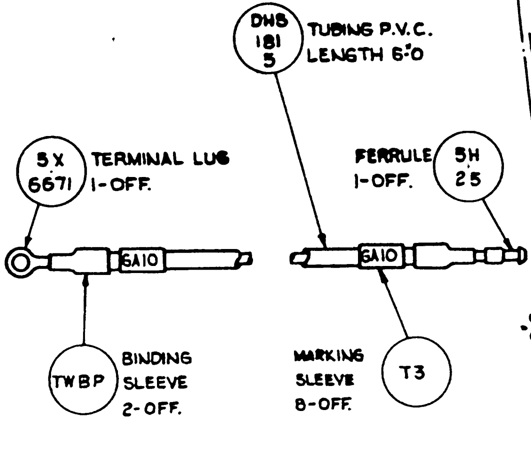


FIG.1. CABLE ASSEMBLY. PT. No. 15.N.3005 A.

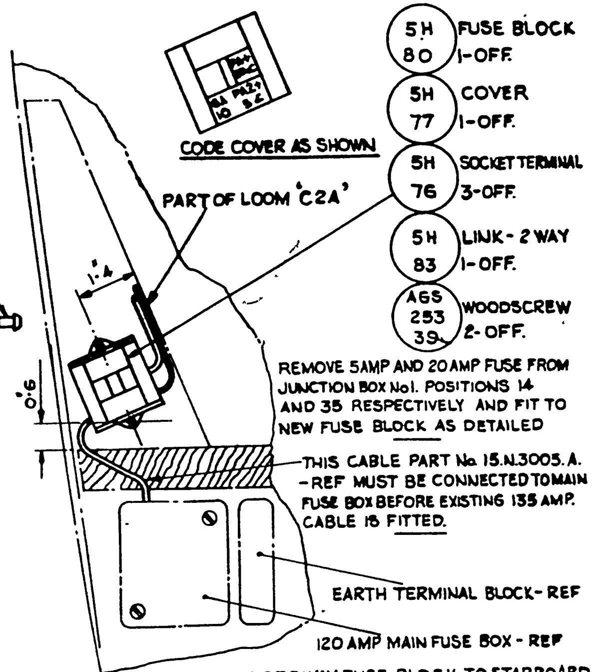
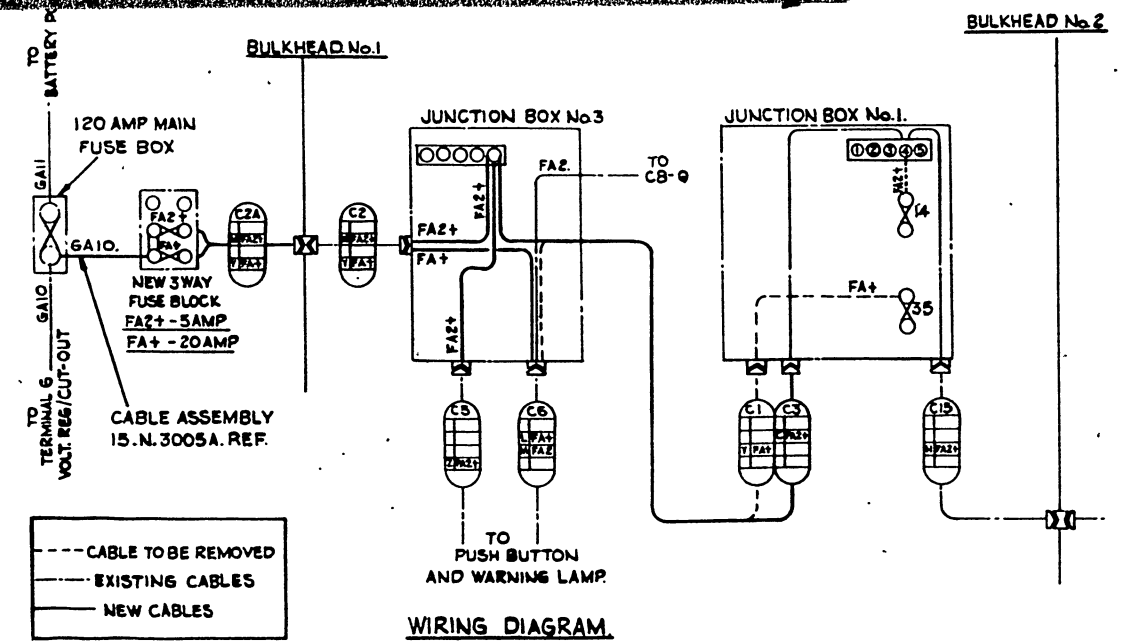


FIG. 2. INSTALLATION OF 3 WAY FUSE BLOCK TO STARBOARD AFT PORTION OF NOSE COMPARTMENT FLOOR



WIRING DIAGRAM.

MOD/VAMP/3524

DRG. No. A.P. 4099J/F.21/57

SHEET 2

RESTRICTED

Air Headquarters,
Royal Rhodesian Air Force.

18th July, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B55. (Issue 1).

Vampire F.B. Mk.9 & T. Mk.11 Aircraft - Engine Installation - To extend Outlet to Common Drain Box.

(Mod. No. Vampire/3567).

(Class B/2, N.C.P.)

1. INTRODUCTION

The existing outlet from the drain box allows the residual fuel and oil to seep back into the engine bay. This modification increases the length of the outlet, which will allow the fuel and oil to be drained clear of the aircraft.

(1) This modification does not cancel, supersede or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons: - At the first opportunity (not later than 2 months after receipt of this leaflet).

Maintenance Unit : - Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 10 man-hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.4099J/P/21/58 is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

The following parts and materials are required, and are to be demanded from OC. Equipment Depot.

(2) PSCO to raise issue orders for aircraft at Thornhill.

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
28Q/6886	AGS.2045/506	Rivet, Chobert, 5/32 in. dia.	2	C
28Q/6755	AGS.2047/506	Pin, Chobert, sealing	2	C
28Q/11659	AS.2228/506	Rivet, mushroom head, 5/32 in. dia.	14	C
30A/1828	-	Tube, mild steel, 1.0 in. o/dia. x 20 s.w.g. x 4.26 in. long, Spec. T.45	1	C
30A/3055	-	Wire, locking, nickel alloy 22 s.w.g.	As reqd.	C
33B/1021	-	Primer, etch, base	As reqd.	C
33B/1023	-	Primer, etch, accelerator	As reqd.	C
33B/1105 (Home)) 33B/501 (Overseas))	-	Finish, synthetic, matt, grey-green	As reqd.	C
33C/1264	-	Compound, pigmented varnish jointing.	As reqd.	C

(3) Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

2/......

6. SPARES AFFECTED

The following list shows the spares affected by this modification and the parts required to modify them:-

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/3110	L00.1047A	Drain Box Assembly		

The method for modifying the above spare is detailed in paragraph 8, operations (2) and (3), and on the drawing.

Parts required :-

Ref. No.	Part No.	Nomenclature	Qty	
26FC/-	15EC.93ND	Pipe, drain	1	-

(Make from 1.0 in. o/dia. x 20 s.w.g. x 4.26 in. long mild steel tube (Ref.No. 30A/1828).).

Spare affected :-

26FC/12456	L00.1060A/3	Lower Cowl Support Ring assembly		

The method of modifying the above spare is detailed in paragraph 8, operations (1) to (4) inclusive, and on the drawing.

Parts required :-

26FC/-	15EC.93ND	Pipe, drain	1	-

(Make from 1.0 in. o/dia. x 20 s.w.g. x 4.26 in. long mild steel tube (Ref. No. 30A/1828).)

28Q/6886	AGS.2045/506	Rivet Chobert 5/32 in. dia.	2	C
28/6755	AGS.2047/506	Pin, Chobert, sealing	2	C
28Q/11659	AS.2228/506	Rivet, mushroom head, 5/32. in. dia.	14	C

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows :-

Ref. No.	Old Pt/Assy. No.	Nomenclature	New Pt/Assy. No.	Ref. No.
26FC/3110	L00.1047A	Drain box assembly	15EC.189A	26FC/13005
26FC/12456	L00.1060A/3	Assy. of lower cowl support ring	15EC.251A	26FC/13006

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

(1) Remove the lower engine cowlings and locate, on the lower cowl support ring, Part No. L00.1060A/3, the existing drain box assembly, Part No. L00.1047A, and disconnect is attached pipe assemblies. Using a $\frac{1}{8}$ in. dia. drill, very carefully drill out the sixteen drain box attachment rivets, and remove the drain box from the aircraft.

(2) Working on the bottom of the drain box carefully cut off the existing external drain pipe, Part No. L00.1050ND, and flush it up with the base of the box, taking great care not to damage the internal drain pipe.

(3) Make up a new drain pipe from 1.0 in. o/dia x 20 s.w.g. mild steel tube, spec. T.45 (Ref. No. 30A/1828) to the dimensions given on the drawing, and number it, Part No.15EC.93ND. Refer to the drawing, then Sif-Bronze Weld the new pipe to the base of the drain box, as detailed, taking care not to overheat the drain box, as the attached drain box adaptors are silver soldered in position. The drain box assembly becomes, Part No. 15EC/189A, and is to be re-part numbered thus..

3/.......

(4) Open up the existing rivet attachment holes in both the drain box assembly and the cowl support ring with a No. 21 (0.159 in. dia.) drill, then after coating the mating surfaces with pigmented varnish jointing compound (Ref. No. 33C/1264), resecure the modified drain box assembly in position with fourteen 5/32 in. dia. mushroom-head rivets and two 5/32 in. dia. Chobert rivets and sealing pins, Part Nos. AS.2228/506 and AGS.2047/506 respectively. Reconnect the pipes which were disconnected in operation (1) and wire-lock them, one to another, with 22 s.w.g. nickel alloy locking wire (Ref. No. 30A/3055). The lower cowl support ring now becomes Part No. 15EC.251A, and is to be re-part numbered thus.

(5) Repair the finish to the drain box assembly and its new pipe with etch primer, accelerator and base (Ref. Nos. 33B/1023 and 33B/1021) and finish synthetic matt grey-green (Ref. No. 33B/1105 or 501). Replace the lower engine cowlings.

9. TESTING AFTER EMBODIMENT

No special tests are required after the embodiment of this modification.

10. RECORDING ACTION

Record on Aircraft Form 700 and Form 4801.

11. DISPOSAL OF REDUNDANT PARTS

No parts are rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.10 lb., and a change of moment of +2.0 lb. ft.

(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : AP4099G Vol 2. Part 1
Leaflet No. P.18.
AP4099J Vol 2 Part 1
Leaflet No. P.21.

Distribution :-

One copy to essential recipients plus the following :- (23)

W.O. E.R.S.	(2)
OC. Equipment Depot	(1)

[redacted] Nº L00 1050 N.D.,

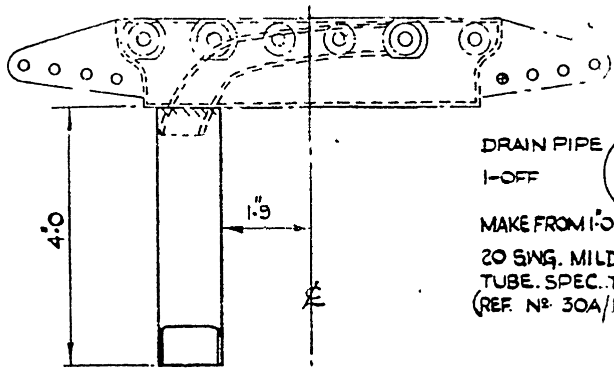
NOT TO OVERHEAT THE ASSEMBLY AS ALL ADAPTORS ARE SILVER SOLDERED

FLUSH WITH DRAIN BOX SIF BRONZE WELD THE NEW PIPE TO BOX OVER AREA MARKED THUS \\\\\\

RESTRICTED

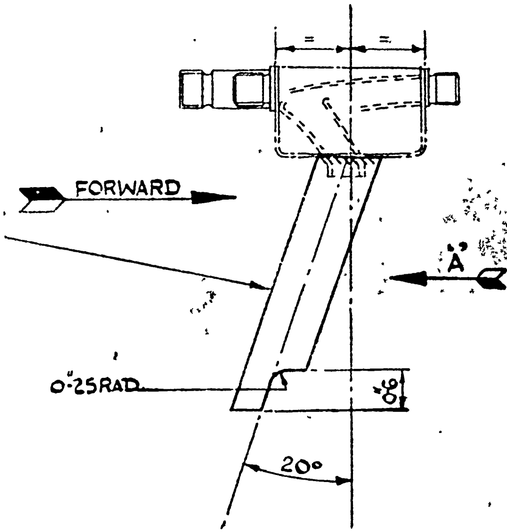
Drg. No. A.P.4091/P.21/58

RE-NUMBER THE DRAIN BOX ASSEMBLY 15EC 189A



VIEW ON ARROW 'A'

DRAIN PIPE 15EC 93 N.D.
1-OFF
MAKE FROM 1.0 O/DIA
20 SWG. MILD STEEL
TUBE. SPEC. T.45.
(REF. Nº 30A/1828.)



ON REASSEMBLY, DRAIN BOX TO BE RERIVETTED TO COWL RING WITH FOURTEEN MUSH. HEAD RIVETS PART Nº AS 2228/506, AND TWO CHOBERT RIVETS AND SEALING PINS, PART Nºs AGS 2045/506 AND AGS. 2047/506 IN HOLES MARKED THUS ⊕

OPEN UP THE SIXTEEN ATTACHMENT HOLES TO Nº 21 (0.159 DIA.) ON REMOVAL FROM AIRCRAFT.

Air Headquarters,
Royal Rhodesian Air Force.

20th August, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub.Sect. B54.

Vampire Mk F.B.9. & T.Mk. 11 Aircraft - Main Undercarriage To Introduce Strengthened Radius Rod Assembly and Attachment Fittings.

(Mod. No. Vampire/3495)

(Class B/2)

1. INTRODUCTION

A number of heavy or drift landings may cause failure of the radius rod upper link, jack operating sleeve and the special bolts at the front and rear end fittings. This modification introduces a stronger upper link and jack operating sleeve and also special bolts of increased diameter.

The micro-switch operating spigot on the latch plate is replaced by a bracket to accommodate the stronger upper link and to improve the operation of the micro-switch. The end fittings on the radius rod and on the undercarriage diaphragms are changed to accommodate the increased diameter of the special bolts.

Fixing holes through the undercarriage diaphragms found oversize during the embodiment of this modification are to be dealt with in accordance with Repair Instruction Sheet No. 60.

(1) This modification plus Mod. No. Vampire/3494 satisfies the work called for by Mod. No. Vampire/3306 (Main undercarriage - To Improve Locking of Attachment Bolts to Facilitate Replacement) and supersedes S.T.I./Vampire/101.

(2) This modification is essentially connected with Mod. No. Vampire/3494 (Mainplanes - To Introduce Stiffeners on Rib No. 2 and U/C Diaphragm); if that work is not already embodied it must be effected concurrently.

2. EMBODIMENT

This modification is to be embodied by the M.U. at Major Inspection.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 45 man-hours (15 to Strip; 15 to Embody; 15 to Reassemble).

4. DRAWINGS REQUIRED

(1) Drawing No. A.P.4099J/B.10/57, is incorporated in this leaflet.

(2) The following additional drawings may be required, on loan from i/c Drawing Office.

Drawing No.	Title
R.OOD.403	R.I.S.60, Bushing of elongated holes in U/G diaphragms

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(a) The Modification Kit consists of the following items supplied by Equipment Depot under Ref. No. 26FC/103495 :

2/..........

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia.	10	C
28W/12666	SP.14/G	Washer, S.S., 5/16 in. B.S.F.	22	C
and				
26FC/11915	G00.1979A	Sleeve, jack operating	1	C
Renewed attaching parts for G00.1979A Sleeve				
28Q/1911	AS.455/512	Rivet, M.S., sp/hd., 5/32 in. dia.	2	C
and				
26FC/-	G00.1997	Bracket, switch contact, port	1	-
Attaching parts for G00.1997 bracket				
26FC/682	G00.91	Screw, special, ch/hd.	1	C
and				
26FC/11890	G00.1983A	Link, upper, radius rod, port	1	B
Renewed attaching parts for G00.1983A link				
26FC/690	G00.51	Bolt, special, $\frac{3}{8}$ in. B.S.F.	1	C
28P/12462	SP9/C8	Pin, split, 1/16 in. dia.	1	C
and				
26FC/11889	G00.1971	Fitting, radius rod end, rear	1	B
26FC/11887	G00.1973	Fitting, radius rod end, front, port	1	B
Renewed attached parts for G00.1971 and G00.1973 fittings.				
26FC/10062	G00.1014	Nut, special	2	C
28D/12543	A25/6E	Bolt, $\frac{1}{4}$ in. B.S.F. x1.1 in.	2	C
and				
26FC/11894	G00.1999	Screw, special, switch contact	1	C
26FC/11886	G00.1977	Bolt, special, hinge pick-up	4	C
28P/12462	SP9/C8	Pin, split, 1/16 in. dia.	4	C
28W/12500	SP14/J	Washer, S.S., $\frac{3}{8}$ in. B.S.F.	6	C
Spares affected :-				
26FC/-	15.W.195A/3	Wing Complte, Stbd.		

The method for modifying any of the above spares is detailed in para. 8, operations (1) to (11) and on the drawing.

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
Parts required for each spare :-				
26FC/11895	G00.1975	Bracket, radius rod hinge pick-up	2	C
Attaching parts for G00.1975 brackets				
26FC/-	G00.2015A	Plate assy., nut	1	-
26FC/-	G00.2017	Bolt, special, 5/16 in. B.S.F.	2	-
28D/12774	A.25/4G	Bolt, 5/16 in. B.S.F. x 0.95 in.	4	C
28D/12787	A.25/5G	Bolt, 5/16 in. B.S.F. x 1.05 in.	4	C
28D/12819	A.25/12G	Bolt, 5/16 in. B.S.F. x 1.75 in.	2	C
28M/13122	A27/GS	Nut, slotted, 5/16 in. B.S.F.	10	C
28P/12462	SP9/C8	Pin, split, 1/16 in. dia.	10	C
28W/12666	SP14/G	Washer, S.S., 5/16 in B.S.F.	22	C
and				
26FC/11915	G00.1979A	Sleeve, jack operating	1	C
Renewed attaching parts for G00.1979A sleeve				
28Q/1991	AS.455/512	Rivet, M.S., sp/hd., 5/32 in. dia.	2	C
and				
26FC/-	G00.1998	Bracket, switch contact, stbd.	1	-
Attaching part for G00.1998 bracket				
26FC/682	G00.91	Screw, special, ch/hd.	1	C
and				
26FC/11891	G00.1984A	Link, upper, radius rod, stbd.	1	B
Renewed attaching parts for G00.1984A link				
26FC/690	G00.51	Bolt, special, $\frac{3}{8}$ in. B.S.F.	1	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia.	1	C
and				
26FC/11889	G00.1971	Fitting, radius rod end, rear	1	B
26FC/11888	G00.1974	Fitting, radius rod end, front stbd.	1	B

4/..........

Renewed attaching parts for G00.1971 and G00.1974 fittings.

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/10062	G00.1014	Nut, special	2	C
28D/12543	A.25/6E	Bolt, $\frac{1}{4}$ in. B.S.F. x 1.1 in	2	C
and				
26FC/11894	G00.1999	Screw, special, switch contact	1	C
26FC/11886	G00.1977	Bolt, special, hinge pick-up	4	C
29P/12462	SP.9/C8	Pin, split, 1/16 in. dia.	4	C
28W/12500	SP.14/J	Washer, S.S., $\frac{3}{8}$ in. B.S.F.	6	C

Spares affected :-

26FC/3856	G00.1085A	Plate, Latch, Radius Rod, Port		

The method for modifying the above spare is detailed in para. 8, operations (6) and (7).

Parts required :-

26FC/11915	G00.1979A	Sleeve, jack operating	1	C

Renewed attaching parts for G00.1979A sleeve

28Q/1991	AS.455/512	Rivet, M.S., sp/hd, 5/32 in. dia.	2	C
and				
26FC/-	G00.1997	Bracket, switch contact, port	1	-

Attaching part for G00.1997 bracket

26FC/682	G00.91	Screw, special, ch/hd.	1	C

Spares affected :-

26FC/3857	G00.1086A	Plate, Latch, Radius Rod, Stbd.		

The method for modifying the above spare is detailed in para. 8, operations (6) and (7).

Parts required :-

26FC/11915	G00.1979A	Sleeve, jack operating	1	C

Renewed attaching parts for G00.1979A sleeve

28Q/1991	AS.455/512	Rivet, M.S., sp/hd., 5/32 in.	2	C
and				
26FC/-	G00.1998	Bracket, switch contact, stbd.	1	C

Attaching part for G00.1998 bracket

26FC/682	G00.91	Screw, special ch/hd.	1	C

Spare affected :-

26FC/4575	G00.1094A/1	Rod, Radius, Main U/C, Port		
26FC/10391	G00.1094A/2	Rod, Radius, Main U/C, Port		

The method for modifying any of the above spares is detailed in para. 8, operations (5) to (10).

Parts required for each spare :-

26FC/11915	G00.1979A	Sleeve, jack operating	1	C

Renewed attaching parts for G00.1979A sleeve

28Q/1991	AS.455/512	Rivet, M.S., sp/hd, 5/32 in. dia.	2	C
and				
26FC/-	G00.1997	Bracket, switch contact, port	1	-

Attaching part for G00.1997 bracket

26FC/682	G00.91	Screw, special, ch/hd.	1	C
and				
26FC/11890	G00.1983A	Link, upper, radius rod, port	1	B

Renewed attaching parts for G00.1983A link

26FC/690	G00.51	Bolt, special, $\frac{3}{8}$ in. B.S.F.	1	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia.	1	C
and				
26FC/11889	G00.1971	Fitting, radius rod end, rear	1	B
26FC/11887	G00.1973	Fitting, radius rod end, front port	1	B

5/..........

Renewed attaching parts for G00.1971 and G00.1973 fittings.

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment
26FC/10062	G00.1014	Nut, special	2	C
28D/12543	A.25/6E	Bolt, $\frac{1}{4}$ in B.S.F. x 1.1. in.	2	C
and				
26FC/11894	G00.1999	Screw, special, switch contact	1	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia.	1	C

Spare affected :-

26FC/4576	G00.1095A/1	Rod, Radius, Main U/C, Stbd.
26FC/10392	G00.1095A/2	Rod, Radius, Main U/C, Stbd.

The method for modifying any of the above spares is detailed in para. 8, operations (5) to (10).

26FC/11915	G00.1979A	Sleeve, jack operating	1	C

Renewed attaching parts for G00.1979A sleeve

28Q/1991	AS.455/512	Rivet, M.S., sp/hd, 5/32 in. dia.	2	C
and				
26FC/-	G00.1998	Bracket, switch contact, stbd.	1	-

Attaching part for G00.1998 bracket

26FC/682	G00.91	Screw, special, ch/hd.	1	C
and				
26FC/11891	G00.1984A	Link, upper, radius rod, stbd.	1	B

Renewed attaching parts for G00.1984A link

26FC/690	G00.51	Bolt, special, $\frac{3}{8}$ in. B.S.F.	1	C
28P/12462	SP9/C8	Pin, split, 1/16 in. dia.	1	C
and				
26FC/11889	G00.1971	Fitting, radius rod end, rear	1	B
26FC/11888	G00.1974	Fitting, radius rod end, front stbd.	1	B

Renewed attaching parts for G00.1971 and G00.1974 fittings

26FC/10062	G00.1014	Nut, special	2	C
28D/12543	A25/6E	Bolt, $\frac{1}{4}$ in. B.S.F. x 1.1 in.	2	C
and				
26FC/11894	G00.1999	Screw, special, switch contact	1	C
28P/12462	SP9/C8	Pin, split, 1/16 in. dia.	1	C

Spare affected :-

26FC/5655	G00.1503	Shim, Radius Rod Hinge

The method for modifying the above spare is detailed in para. 8, operation (3). There are no parts required to modify the above spare.

Spare affected :-

26FC/577	Q00.164	Bracket, Brake Hose

The method for modifying the above spare is detailed in para. 8, operation (4). There are no parts required to modify the above spare.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

The embodiment of this modification changes Reference, Part and Assembly Numbers as follows :-

	Ref. No.	Old Part/Assy. No.	Nomenclature	New Part/Assy. No.	Ref. No.
	26FC/3856	G00.1085A	Plate, latch, radius rod port.	G00.1987A	26FC/11892
	26FC/3857	G00.1086A	Plate, latch, radius rod, stbd.	G00.1988A	26FC/11893
*	26FC/4575	G00.1094A/1)	Rod, radius, main U/C, port.	G00.1094A/3	26FC/11884
+	26FC/10391	G00.1094A/2)			
*	26FC/4576	G00.1095A/1)	Rod, radius, main, U/C, Stbd.	G00.1095A/3	26FC/11885
+	26FC/10392	G00.1095A/2)			
	26FC/5655	G00.1503	Shim, radius rod hinge	G00.2009	26FC/12607
*	26FC/-	G00.1823A/ND)	Jack and radius rod assy. port.	G00.1991A/ND	26FC/-
+	26FC/-	G00.1931A/ND)			

6/.........

Ref. No.	Old Part/Assy. No.	Nomenclature	New Part/Assy. No.	Ref. No.
* 26FC/-	G00.1824A/ND	Jack and radius rod assy. stbd.	G00.1992A/ND	26FC/-
+ 26FC/-	G00.1932A/ND			
26FC/577	Q00.164	Bracket, brake hose	Q00.3789	26FC/12606
* 26FC/-	G00.1787A/1	Retracting mechanism, main U/C port	G00.1787A/3	26FC/-
+ 26FC/-	G00.1787A/2			
* 26FC/-	G00.1788A/1	Retracting mechanism, main U/C stbd.	G00.1788A/3	26FC/-
+ 26FC/-	G00.1788A/2			
26FC/-	15.W.189A/4	G.A. of wing, port	15.W.189A/5	26FC/-
26FC/-	15.W.191A/4	G.A. of wing, stbd.	15.W.191A/5	26FC/-
26FC/-	15.W.193A/3	Wing complete (spares) stbd.	15.W.193A/4	26FC/-

NOTE: * Items pre. Mod. No. Vampire/3306.

NOTE: + Items Post Mod. No. Vampire/3306.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations, and is applicable to bot port and starboard mainplanes :-

(1) Remove the main undercarriage compression leg and the radius rod assembly as detailed in A.P.4099J. Vol. 1. Sect. 3. Chap. 5 Retain all attachment items for reassembly except split pins an the four redundant radius rod special attachment bolts, Part No G00.726ND or G00.1929 (Pre or Post Mod. No. Vampire 3306 respectively). Remove and retain the fuel balance pipe access panel and the bolts securing it to the undersurface of the wing forward of the front undercarriage diaphragm.

(2) Remove the two redundant radius rod hinge pick-up brackets, Part No. G00.79, from the undercarriage diaphragms and replace with two new hinge pick-up brackets, Part No. G00.1975, coating all mating surfaces with pigmented varnish jointing compound (Ref. No. 33C/1264). At the front diaphragm fit six 5/16 in. B.S.F. hexagon-head bolts, Part Nos. A.25/4G (four off) and A25/12G (two off). At the rear diaphragm offer up the new nut plate assembly, Part No. G00.2015A, on the rear face and fit fo bolts, Part No. A25/5G. All these bolts are to be positioned as shown on the drawing, secured with ten 5/16 in. B.S.F. slott nuts and twenty washers, Part Nos. A.27/GS and SP.14/G respectively, drilled No. 51 (0.067 in. dia.) and locked with ten 1/16 dia. split pins, Part No. SP.9/C8. Fit two special 5/16 in. B.S.F. bolts and washers, Part Nos. G00.2017 and SP.14/G respec ively, to the centre holes of the hinge pick-up on the rear dia ragm and lock the bolts together through their heads with 22 s. nickel alloy wire (Ref. No. 30A/3055).

NOTE: It is important that only one Part No. SP.14/G washer is fitted under each special bolt head to maintain clearance for the radius rod in its retracted position.

It is recommended that all bolts are fitted prior to locking.

(3) Englarge the holes in the existing radius rod hinge pick-up shims, Part No. G00.1503 with a 25/64 (0.391 in.) dia. drill and deburr. The shims become Part No. G00.2009.

(4) Englarge the bolt hole in the existing brake hose mounting bracket, Part No. Q00.164, detached from the radius rod rear hinge special bolt in operation (1), again using the 25/64 in. dia. drill. Countersink the lower face of the bracket at this hole 90 deg x 0.03 in. deep and deburr. The mounting bracket becomes Part No. Q00.3789.

(5) Refer to the drawing of the radius rod assembly in the aircraft handbook. Remove from the radius rod assembly, Part No. G00. 1094A/1 or G00.1094A/2 (port); G00.1095A/1 or G00.1095A/2 (stbd) (Pre or Post Mod. No. Vampire 3306 respectively), the redundant rear end fitting attachment block, Part No. G00.1055 or G00.1937 (Pre or Post Mod. No. Vampire/3306) respectively, and the front

7/.........

(5.) Cont.

end attachment block, Part No. G00.1057 or G00.1939 (port); G00.1056 or G00.1940 (starboard) (Pre or Post Mod. No. Vampire/3306) respectively. Discard the burred over bolts and special nuts from the end fittings. Remove the latch plate assembly, disconnecting the lock roller and lock plate spring. Retain all items except the split pin for reassembly.

(6) From the latch plate assembly, Part No. G00.1085A (port); G00.1086A (starboard), remove and retain the Teleflex wrapped wheel and box and the three special attachment screws, disposing of the redundant micro-switch operating spigot, Part No. G00.90. Using a 5/32 (0.156) in. dia. drill, carefully remove the two 5/32 in. dia. snaphead mild steel rivets. Replace the now redundant jack operating sleeve, Part No. G00.43A, with a new sleeve, Part No. G00.1979A. With the new sleeve lug set 12 deg. inboard from the latch plate centre line, drill off two rivet holes with the 5/32 in. dia. drill and four screw holes with a No. 11(0.191 in. dia.) drill to suit the existing holes in the latch plate. Remove all burrs.

(7) Secure the new sleeve between the latch side plates with two 5/32 in. dia. snaphead mild steel rivets, Part No. AS.455/512. Resecure the Teleflex wrapped box and wheel with the three special screws retained in operation (6). Secure a new switch contact bracket, Part No. G00.1997 (Port); G00.1998 (starboard), at the position vacated by the spigot, with a new special screw, Part No. G00.91. Lock all four special screws through their heads with 22 s.w.g. nickel alloy wire. The latch plate assembly becomes Part No. G00.1987A (port); G00.1988A(Starboard).

(8) Thoroughly degrease the upper and the lower bearings of the existing lower link assembly, the new special upper pivot bolt, Part No. G00.51, and the existing lower pivot bolt, Part No. G00.53, using Trichlorethylene (Ref. No. 33C/547); and treat the bearing surfaces of the pivots and the bolts, by rubbing on Molybdenum, disulphide powder (Ref. No. 34B/9429867) with a felt pad, finally brushing on Molyoote G compound (Ref. No. 34B/9428473) overall, leaving the threads of the bolts untreated. Lightly work the paired components together prior to assembly.

(9) Transfer all the radius rod components and equipment from the redundant upper link assembly, Part No. G00.1002A (port); G00.1001A (starboard), to the new upper link assembly, Part No. G00.1983A (port); G00.1984A (starboard), coating the components fed by grease nipples with grease XG-275 (Ref. No. 34B/9100512 and 34B/9100513). Renew the special bolt and split pin, Part Nos. G00.51 and SP.9/C8, respectively on assembly of the existing lower link. Replace the redundant switch contact screw, Part No. G00.357, with a new screw, Part No. G00.1999. Renew all wire locking with 22 s.w.g. nickel alloy wire.

(10) Install the modified latch plate assembly, reconnect the lock spring and the lock roller, using a new split pin, Part No. SP9/C8, to lock the roller nut and bolt. Ensure that the existing washers are reassembled in their original positions on the bearer tube. Secure the new rear end fitting, Part No. G00.1971, and the front end fitting, Part No. G00.1973 (port), G00.1974 (starboard) to the bearer tube with two renewed special nuts and $\frac{1}{4}$ in. B.S.F. bolts, Part No. G00.1014 and A25/6E respectively. Cut the bolts to leave two threads protruding through the special nuts. Do not peen until final assembly to mainplane. The radius rod assembly is to be adjusted in accordance with the aircraft handbook and becomes Part No. G00.1094A/3 (port); G00.1095A/3 (starboard).

(11) Reassemble the main undercarriage compression leg and the modified radius rod assembly as detailed in the aircraft handbook, using the attachment items retained in operation (1) and the three new 1/16 in. dia. split pins Part No. SP9/C8. Attach

8/.........

(11) Contd.

the modified radius rod assembly to the hinge pick-up on the diaphragms with four new special 3/8 in. B.S.F. bolts, Part No. G00.1977, positioning the modified brake hose mounting bracket under the head of the rear inboard bolt and two washers, Part No. SP14/J, under the head of each of the other three bolts. Lock each pair of bolts with 22 s.w.g. nickel-alloy wire. Resecure the access panel with its bolts retained in operation (1).

NOTE: To correct cases where the bottom eye end of the radius rod assembly fails to centralise with the pick-up castin on the compression leg, fit modified shims as required between the hinge pick-up on the diaphragm and the radiu rod end fitting on one side only.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected in accordance with current procedure, the following tests are to be carried out :-

Carry out a retraction test of the main undercarriage in accordance with current authorized procedure.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts rendered redundant by the embodiment of this modification are to be returned to Station Equipment Depot.

	Ref. No.	Part No.	Nomenclature	Qty	Class o Equipmen
	26FC/-	G00.43A	Sleeve, jack operating	2	-
	26FC/228	G00.79	Bracket, radius rod hinge pick-up	4	C
	26FC/683	G00.90	Spigot, switch contact	2	C
	26FC/694	G00.357	Screw, switch contact	2	C
*	26FC/-	G00.726ND	Bolt, special, hinge pick-up	8	-
	26FC/3854	G00.1001A	Link, upper, radius rod, stbd.	1	B
	26FC/3855	G00.1002A	Link, upper, radius rod, port	1	B
*	26FC/3860	G00.1055	Fitting, radius rod end, rear	2	B
*	26FC/3858	G00.1056	Fitting, radius rod end, front, stbd.	1	B
*	26FC/3859	G00.1057	Fitting, radius rod end, front port	1	B
+	26FC/11131	G00.1929	Bolt, special, hinge pick-up	8	C
+	26FC/11132	G00.1937	Fitting, radius rod end, rear	2	B
+	26FC/11133	G00.1939	Fitting, radius rod end, front, port	1	B
+	26FC/11134	G00.1940	Fitting, radius rod end, front stbd.	1	B

NOTE: * Items Pre Mod. No. Vampire/3306.

NOTE: + Items Post Mod. No. Vampire/3306.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.34 lb., and a change of moment of +1.0 lb. ft.

for (B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source: 4099J.V2.B10.
Dist: One copy to essential recipients plus the following:
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W.O. No. 1, 2, Sqdns. (2) (2) N.C.O. i/c Stressed Skin Sect. (2).

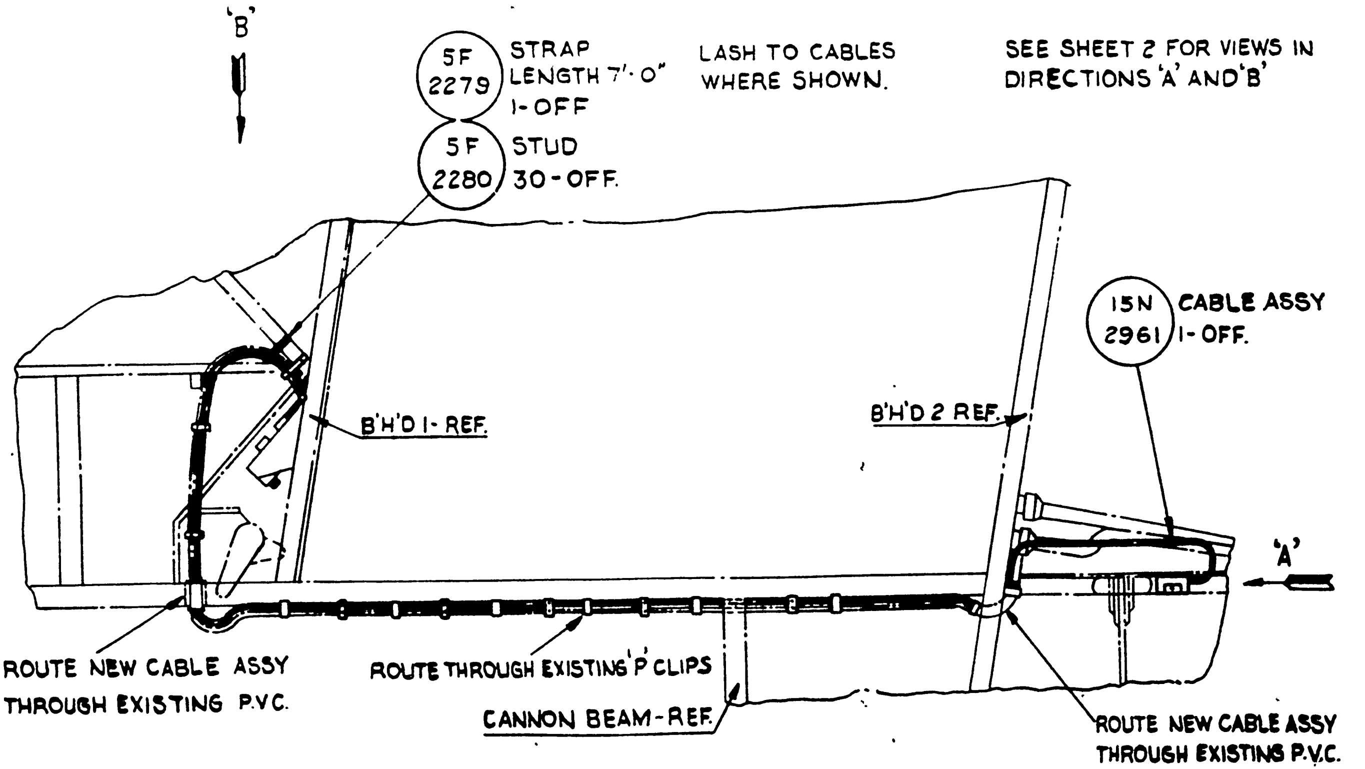
RESTRICTED

MOD/VAMP/3490

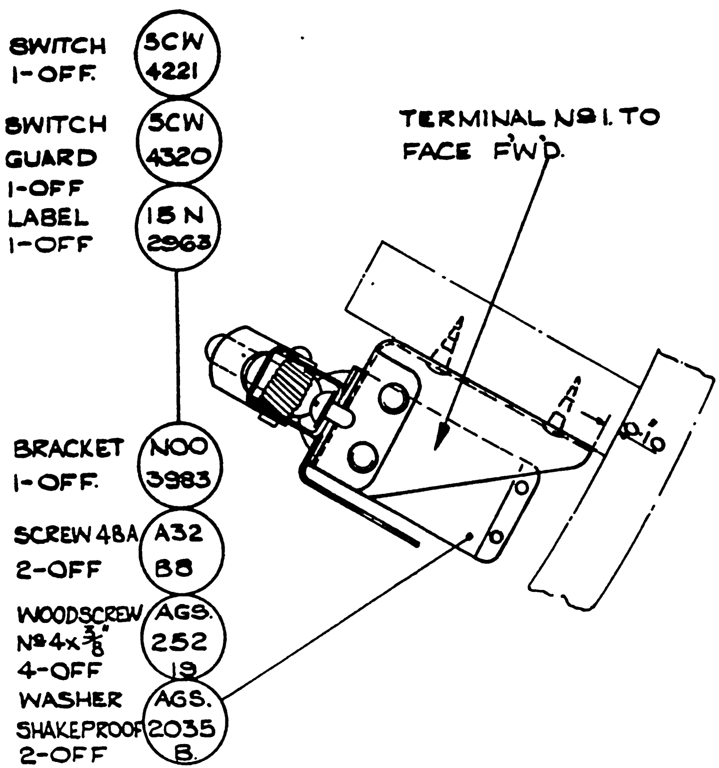
DRG. No. A.P. / 4099J / F22/57

SHEET 1

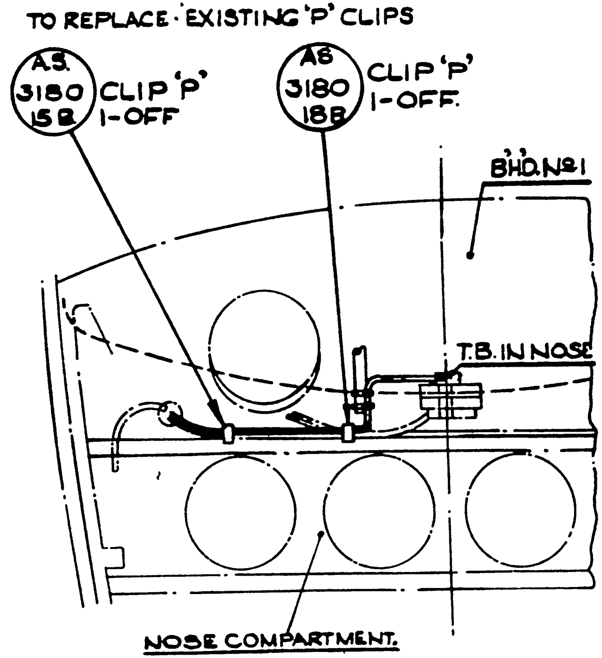
LP32124 6/57 1000 C&P Gp. 959 (4)



VIEW ON STARBOARD FUSELAGE SHOWING INSTALLATION OF GUN TEST SWITCH AND WIRING.



VIEW ON ARROW 'A'
FROM SHEET 1 OF THE DRAWING



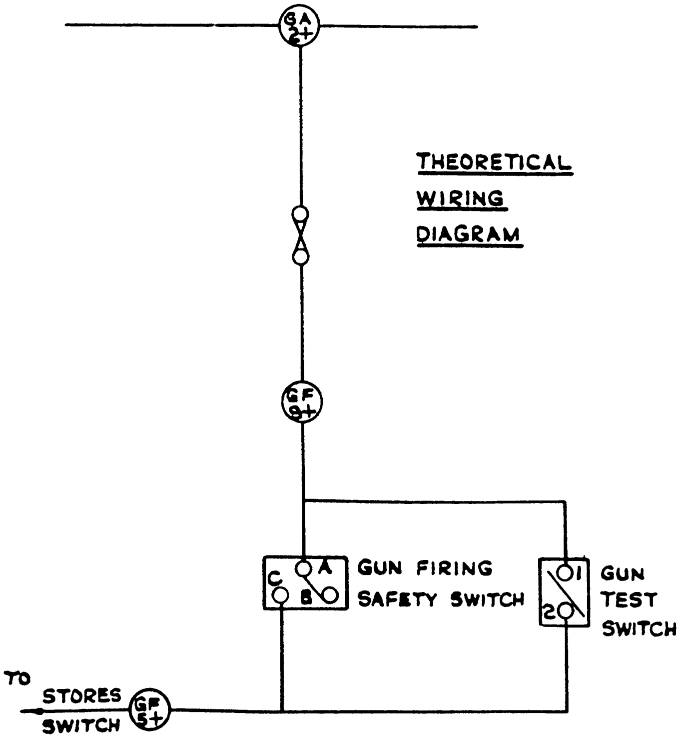
VIEW ON ARROW 'B'
FROM SHEET 1 OF THE DRAWING.

RESTRICTED

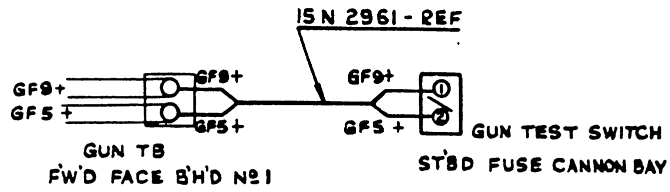
DRG. No. A.P.	4099 J / F 22 / 57
SHEET 2	

LP32124 6/57 1000 C & P Gp. 959 (4)

RESTRICTED

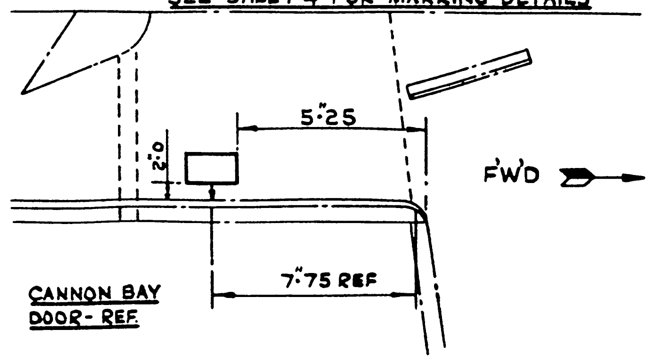


THEORETICAL WIRING DIAGRAM



WIRING DIAGRAM

SEE SHEET 4 FOR MARKING DETAILS

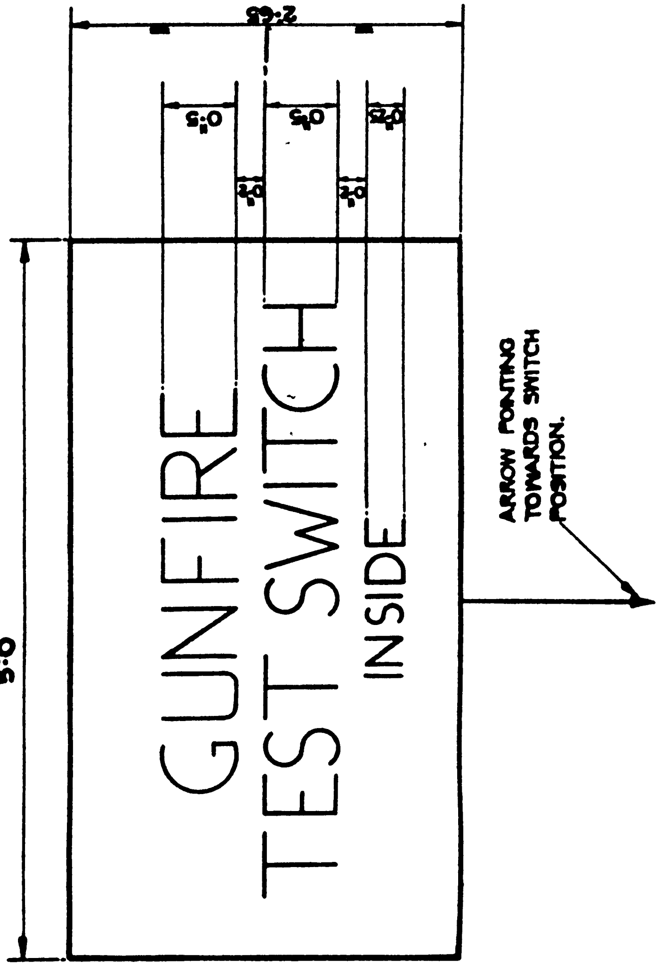


VIEW SHOWING POSITION OF EXTERNAL MARKING ON ST'BD FUSE.

DRG. No. A.P. 4099J/F22/57
SHEET 3

MOD/VAMP/3490

LP32124 6/57 1000 C&P Gp. 959 (4)



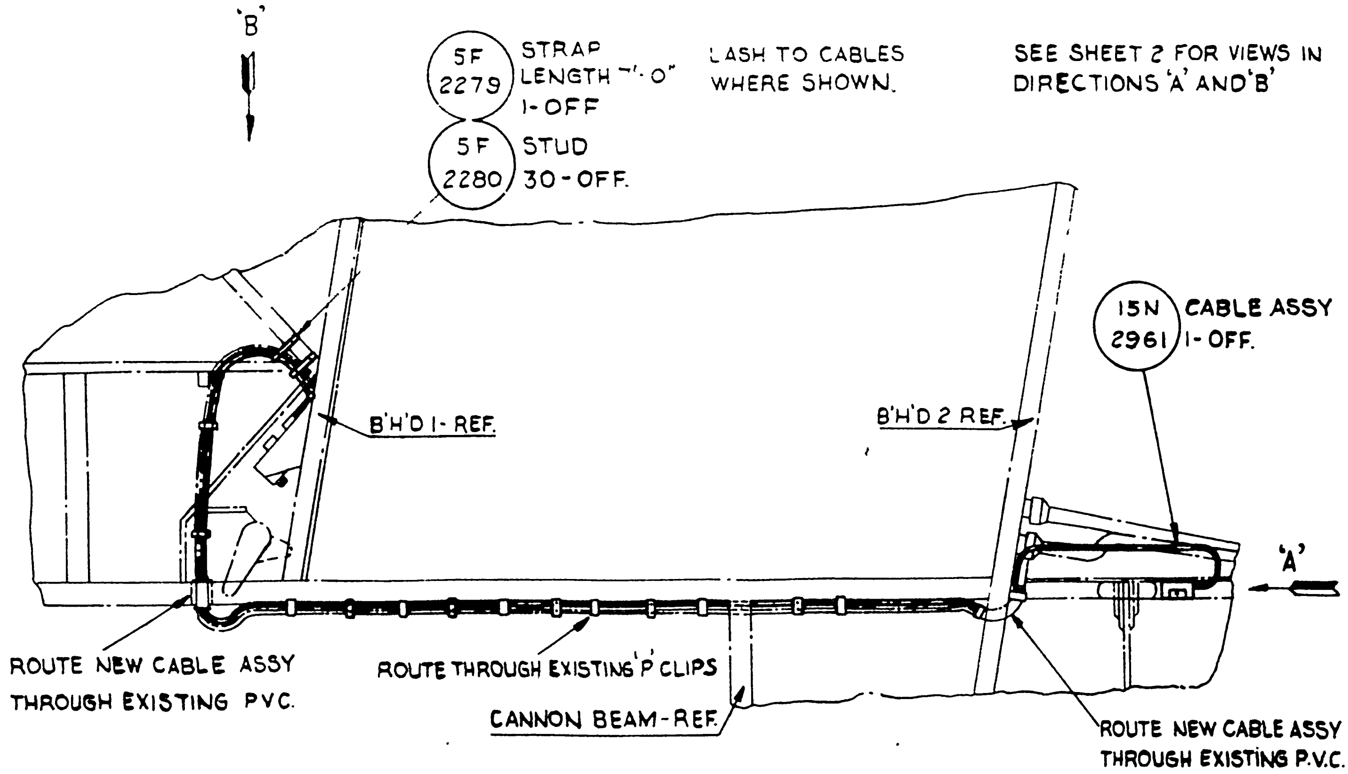
DETAILS OF EXTERNAL MARKING.

PAINT ON THE ST'BD FUSE SIDE WITH MATCHING CELLULOSE TO MATCH EXISTING DIRECTION NOTICES.

RESTRICTED

DRG. No. A.P.	4099 J / F 22 / 57
SHEET 4	

LP32124 6/57 1000 C & P Gp. 959 (4)



VIEW ON STARBOARD FUSELAGE SHOWING INSTALLATION OF GUN TEST SWITCH AND WIRING.

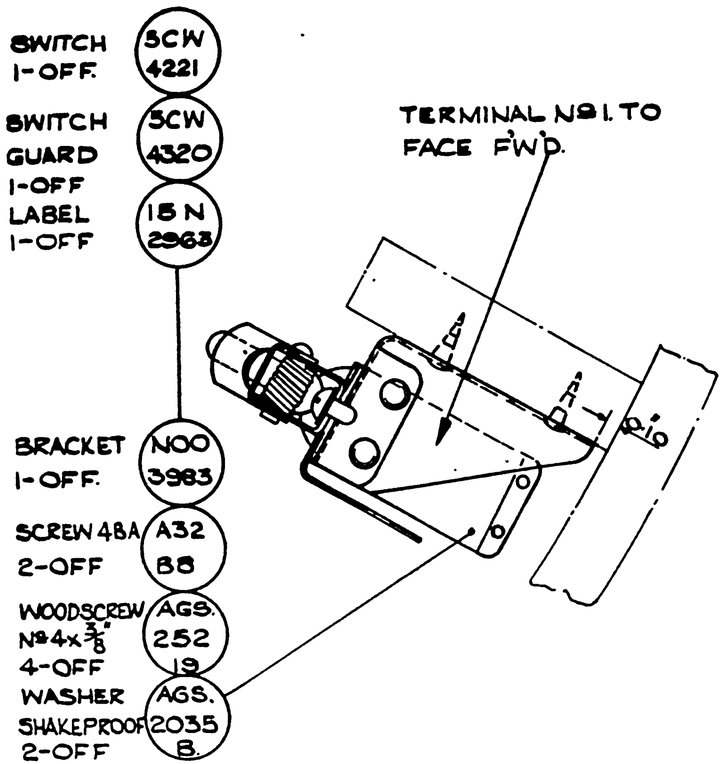
MOD/VAMP/3490

DRG. No. A.P. 4099 J / F 22 / 57

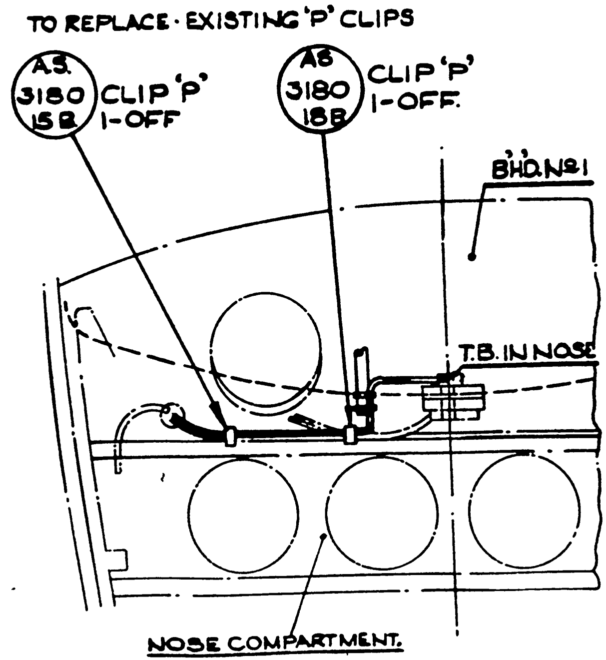
SHEET 1

RESTRICTED

LP32124 6/57 1000 C & P Gp. 959 (4)



VIEW ON ARROW 'A'
FROM SHEET 1 OF THE DRAWING



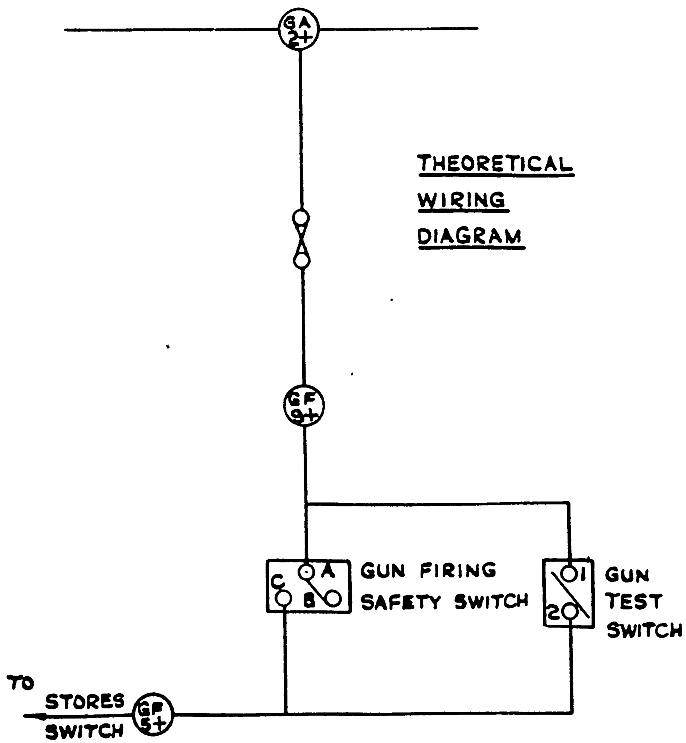
VIEW ON ARROW 'B'
FROM SHEET 1 OF THE DRAWING.

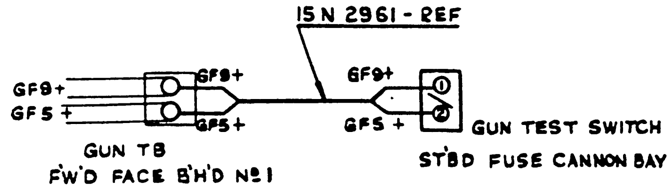
RESTRICTED

DRG. No. A.P. 4099 J / F 22 / 57
SHEET 2

LP32124 6/57 1000 C & P Gp. 959 (4)

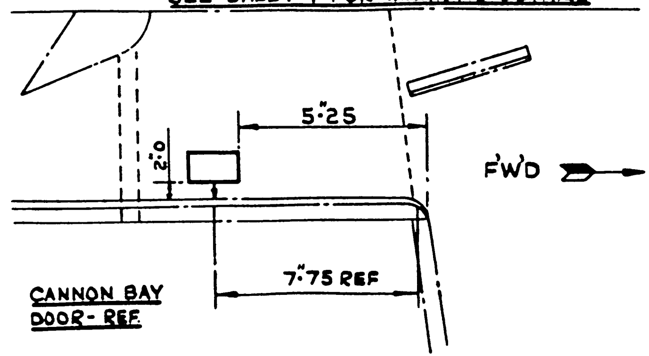
THEORETICAL WIRING DIAGRAM





WIRING DIAGRAM

SEE SHEET 4 FOR MARKING DETAILS



VIEW SHOWING POSITION OF EXTERNAL MARKING ON ST'B'D FUSE.

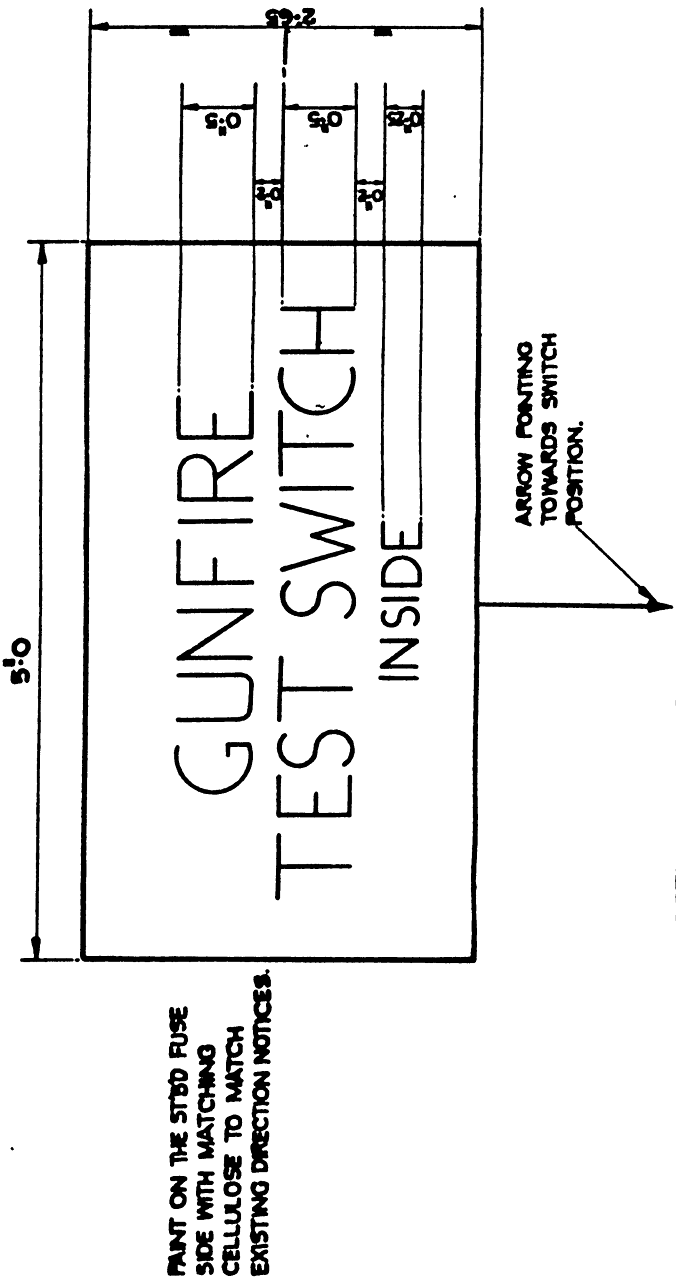
RESTRICTED

MOD/VAMP/3490

DRG. No. A.P. 4099 J / F 22 / 57

SHEET 3

LP32124 6/57 1000 C & P Gp. 959 (4)



DETAILS OF EXTERNAL MARKING.

RESTRICTED

DRG. No. A.P.	4099 J / F 22 / 57
SHEET 4	

LP32124 6/57 1000 C & P Gp. 959 (4)

Air Headquarters, [redacted] .A.F. Technical Order.
Royal Rhodesian Air Force [redacted] l. 3. Sect. 2. Sub Sect. B53.

22nd August, 1958.

Vampire [redacted] ll Aircraft - Mainplanes - To
Intro[redacted]s on Rib No.2 and U/G Diaphragm

36cc/103494

[redacted]d. No. VAMPIRE/3494)

(Class B/2) Also After AL 307

1. INTRODUCTION

Reports indicate that Rib No.2 may crack and buckle in the vicinity of the undercarriage aperture. This modification introduces additional steel reinforcing plates and stiffeners on both sides of Rib No. 2 and on the back face of the rear undercarriage diaphragm and on the forward face of the front undercarriage diaphragm. Fixing holes through Rib 2 and the diaphragms found oversize during the embodiment of this modification are to be dealt with in accordance with Repair Instruction Sheet No. 152, Issue 2.

(1) This modification plus Mod. No. Vampire/3495 satisfies the work called for by Mod. No. Vampire/3306 (Main Undercarriage-To Improve Locking of Attachment Bolts to Facilitate Replacement) and supersedes S.T.I./Vam/101. This modification supersedes the work called for by R.I.S. Nos. 1 and 137.

(2) This modification isessentially connected with Mod. No. Vampire/3495 (Main Undercarriage-To Introduce Strengthened Radius Rod Assembly and Attachment Fittings); if that work is not already embodied it must be effected concurrently.

2. EMBODIMENT

This modification will be embodied by Maintenance Unit at Major Inspection only.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 80 man-hours (15 to strip; 45 to embody; 20 to re-assemble).

DRAWINGS REQUIRED

(1) Drawing No. A.P. 4099J/A.10/56, Sheets 1-7, is incorporated in this leaflet.

(2) The following drawing is also required and is to be demanded from Drawing Office on loan.

The de Havilland Aircraft Co., Ltd., R.I.S. No. 152, Issue No. 3, Drawing No. R.0.0.D.465-Assembly of reinforcing plates to Rib 2.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and Materials

(a) The Modification Kit, which consists of the following items supplied by the contractor, will be demanded from O.C. Equipment Depot.

Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
26FC/-	D00.7919ND	Strip, lower, U/C diaphragm packing	2	-
26FC/-	D00.7945ND	Plate, Rib 2 reinforcing L.H.	1	-
26FC/-	D00.7946ND	Plate, Rib 2 reinforcing R.H.	1	-
26FC/-	D00.7947ND	Plate, Rib 2 reinforcing L.H.	1	-
26FC/-	D00.7948ND	Plate, Rib 2 reinforcing R.H.	1	-

2/........

Stores Ref.	Part No.	[redacted]e	Qty	Class of Store.
26FC/-	D00.7949	Pla[redacted]forcing	2	-
26FC/-	D00.7955	Stif[redacted]front U/C diap[redacted]	1	-
26FC/-	D00.7956	Stiffen[redacted]t U/C diaphra[redacted]	1	-
26FC/-	D00.7957	Stiffener[redacted] U/C Diaphragm[redacted]	1	-
26FC/-	D00.7958	Stiffener, [redacted]/C diaphragm, [redacted]	1	-
26FC/-	D00.7959	Stiffener, up[redacted] diaphragm, L.H[redacted]	1	-
26FC/-	D00.7960	Stiffener, upper[redacted] diaphragm, R.H.	1	
26FC/-	D00.7961	Stiffener, lower, [redacted] diaphragm, L.H.	1	
26FC/-	D00.7962	Stiffener, lower, rear U/C diaphragm, R.H.	1	
26FC/-	D00.7963ND	Strip, rear U/C diaphragm packing	2	
26FC/-	D00.7965ND	Strip, front U/C diaphragm packing	2	
26FC/-	D00.8019ND	Strip, upper, U/C diaphragm packing	4	
26FC/-	Q00.2620	Strip, clamp block packing	4	
26FC/-	Q00.3783	Strip, clamp block packing	4	
28D/12513	A.25/2C	Bolt, hex/hd. 2 B.A. x 0.65 in.	38	
28D/12531	A.25/3C	Bolt, hex./hd., 2 B.A. x 0.75 in.	22	
28D/12532	A.25/4C	Bolt, hex./hd. 2 B.A. x 0.85 in.	12	
28D/12566	A.25/6C	Bolt, hex./hd. 2 B.A. x 1.05 in.	66	
28D/12516	A.25/11C	Bolt, hex./hd. 2 B.A. x 1.55 in.	2	
28D/12535	A.25/12C	Bolt, hex/hd., 2 B.A. x 1.65 in.	2	
28D/13105	A.25/26C	Bolt, hex/hd. 2 B.A. x 3.05 in.	3	
28D/12934	A.25/28C	Bolt, hex./hd. 2 B.A. x 3.25 in.	1	
28D/12714	A.25/29C	Bolt, hex./hd. 2. B.A. x 3.35. in.	3	
28D/12715	A.25/31C	Bolt, hex/hd. 2 B.A. x 3.55 in.	1	
28D/12519	A.25/3E	Bolt, hex/hd. ¼ in. B.S.F. x 0.8 in.	18	
28D/12520	A.25/4E	Bolt, hex./hd. ¼ in. B.S.F. x 0.9 in.	10	
28D/12542	A.25/5E	Bolt, hex./hd. ¼ in. B.S.F. x 1.0 in.	24	
28D/12543	A.25/6E	Bolt, hex./hd. ¼ in. B.S. F. x 1.1 in.	14	
28D/12633	A.25/7E	Bolt, hex./hd. ¼ in. B.S.F. x x 1.2 in.	12	
28D/12674	A.25/9E	Bolt, hex./hd. ¼ in. B.S.F. x x 1.4 in.	10	
28D/12553	A.25/6J	Bolt, hex./hd. ⅜ in. B.S.F. x 1.25 in.	12	
28M/12929	A.27/CP	Nut, plain, 2 B.A.	76	
28M/13123	A.27/JS	Nut, slo ted, ⅜ in. B.S.F.	32	
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	62	
28M/10290	AGS.2001/E1	Nut, stiff, ¼ in. B.S.F.	10	
28M/11957	AGS.2007/C1	Nut, stiff, double anchor, 2 B.A.	8	
28D/8308	AS.1242/3C	Bolt, 90 deg. csk./hd., 2 B.A. x 0.7 in.	4	
28D/10904	AS.1242/15J	Bolt, 90 deg. csk./hd., ⅜ in. B.S.F. x 2.1 in.	20	
28D/12183	AS.1246/5E	Bolt, rd./hd. ¼ in. B.S.F. x 0.95 in.	2	C
28Q/6672	AS.2227/506	Rivet, sp/hd. 5/32 in. dia. x ⅜ in.	36	C
28Q/10406	AS.2227/507	Rivet, sp/hd. 5/32 in. dia. x 7/16 in.	28	C
28Q/6673	AS.2227/508	Rivet, sp/hd. 5/32 in. dia. x ½ in.	8	C
28Q"11258	AS.2227/509	Rivet, sp/hd. 5/32. in. dia. x 9/16. in.	30	C
28Q/6830	AS.2227/512	Rivet, sp/hd. 5/32. in. dia. x ¾ in.	8	C
28Q/6827	AS.2227/608	Rivet, sp/hd. 3/16 in. dia. x ½ in.	12	C
28Q/10905	AS.2229/307	Rivet, 90 deg. csk/hd., 3/32 in. dia. x 7/16 in.	16	C

3/..........

Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
28Q/11162	AS.2229/505	Rivet, 90 deg. csk./hd., 5/32 in. dia. x 5/16 in.	20	C
28Q/10411	AS.2229/606	Rivet, 90 deg. csk./hd., 3/16 in. dia. x $\frac{3}{8}$ in.	12	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia x 1 in.	32	C
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	62	C
28W/12253	SP.13/E	Washer, M.S., $\frac{1}{4}$ in. B.S.F.	10	C
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	64	C
/12296	SP.15/C	Washer, L.A., 2 B.A.	46	C

(b) The following materials are also required, and are to be provided under Unit arrangements :

/3055	-	Wire, nickel alloy, 22 s.w.g.	As Reqd.	C
/1730	-	Alum. alloy sheet, B.S.L.72 18 s.w.g. 0.6x 3.5 in.	As reqd.	C
/9429196	-	Primer, etch, base	As reqd.	C
/9429195	-	Primer, etch, accelerator	As reqd.	C
/865	-	Finish, cellulose, alumimium D.T.D.772	As reqd.	C
/1264	-	Compound, pgimented varnish jointing.	As reqd.	C

(2) Special Tools and Test Equipment

There are no special tools or test equipment required for the embodiment of this modification.

SPARES AFFECTED

The following list shows the spares affected by this modification, and the parts required to modify them:

C/3880	D00.5159A	Diaphragm, u/c, front port	-	-
C/3881	D00.5160A	Diaphragm, u/C, front, stbd.		

The method for modifying either of the above spares is detailed in para operation (23), and on sheet 6 of the drawing.

Parts required for each spare :-

/11162	AS.2229/505	Rivet, 90 deg. csk./hd., 5/32 in. dia. x 5/16 in.	6	C
/10411	AS.2229/606	Rivet, 90 deg. csk./hd. 3/16 in. dia. x $\frac{3}{8}$ in.	2	C

Spare affected :

C/3878	D00.5161A	Diaphragm, u/c, rear, port
C/3879	D00.5162A	Diaphragm, u/c, rear, stbd.

The method for modifying either of the above spares is detailed in para operations (13) and (14), and on sheet 4 of the drawing.

Parts required for each spare :

/11162	AS.2229/505	Rivet, 90 deg. csk./hd., 5/32 in. dia. x 5/16 in.	4	C
28Q/10411	AS.2229/606	Rivet, 90 deg. csk./hd. 3/16 in. dia. x $\frac{3}{8}$ in.	4	C

Spare affected :

26FC/4605	D00.5197A/2	Rib No. 2, port
26FC/5738	D00.7673A/ND	Rib No. 2 and joint fittings, port

The method for modifying either of the above spares is detailed in para 8, operations (4) and (12), and on sheets 1 and 2 of the drawing.

Parts required for each spare :

26FC/-	D00.7945ND	Plate, Rib 2 reinforcing, L.H.	1	-
26FC/-	D00.7947ND	Plate, Rib 2 reinforcing, L.H.	1	-
26FC/-	D00.7949	Plate, Rib 2 reinforcing	1	-

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Attaching parts for D00.7945ND, D00.7947ND and D00.7949 plates.

Stores Ref.	Part No.	Nomenclature	Qty	Class of store.
28D/12531	A.25/3C	Bolt, hex/hd., 2 B.A. x 0.75 in.	5	C
28D/12566	A.25/6C	Bolt, hex/hd., 2 B.A. x 1.05 in.	33	C
28M/12929	A.27/CP	Nut, plain, 2 B.A.	38	C
28Q/6672	AS.2227/506	Rivet, sp/hd. 5/32 in. dia. x $\frac{3}{8}$ in.	18	C
28Q/10406	AS.2227/507	Rivet, sp/hd. 5/32. in. dia. x 7/16 in.	14	C
28Q/6673	AS.2227/508	Rivet, sp/hd. 5/32. in. dia. x $\frac{1}{2}$ in.	4	C
28Q/12358	AS.2227/509	Rivet, sp/hd. 5/32 in. dia. x 9/16 in.	15	C
28Q/6827	AS.2227/608	Rivet, sp/hd. 3/16 in. dia. x $\frac{1}{2}$ in.	6	C
28M/11957	AGS.2007/C1	Nut, stiff, double anchor, 2 B.A.	4	C

Attaching parts for AGS.2007/C1 nuts.

28Q/10905	AS.2229/307	Rivet, 90 deg. csk/hd. 3/32. in. dia. x 7/16 in.	8	C

Spare affected :

26FC/4606	D00.5198A/2	Rib No. 2, stbd.
26FC/5739	D00.7674A/ND	Rib No. 2 and joint fittings. stbd.

The method for modifying either of the above spares is detailed in para 8, operations (4) to (12), and on sheets 1 and 2 of the drawing.

Parts required for each spare :

26FC/-	D00.7946ND	Plate, rib 2 reinforcing R.H.	1
26FC/-	D00.7984ND	Plate, rib 2 reinforcing, R.H.	1
26FC/-	D00.7949	Plate, rib 2 reinforcing	1

Attaching parts for D00.7946ND, D00.7948ND and D00.7949 plates.

28D/12531	A.25/3C	Bolt, hex/hd., 2 B.A. x 0.75 in.	5	C
28D/12566	A.25/6C	Bolt, hex/hd. 2 B.A. x 1.05 in.	33	C
28M/12929	A.27/CP	Nut, plain, 2 B.A.	38	C
28Q/6672	AS.2227/506	Rivet, sp/hd. 5/32. in. dia. x $\frac{3}{8}$ in.	18	C
28Q/10406	AS.2227/507	Rivet, sp/hd. 5/32. in. dia. x 7/16 in.	14	C
28Q/6673	AS.2227/508	Rivet, sp/hd. 5/32. in. dia. x $\frac{1}{2}$ in.	4	C
28Q/12358	AS.2227/509	Rivet, sp/hd. 5/32. in. dia. x 9/16 in.	15	C
28Q/6827	AS.2227/608	Rivet, sp/hd. 3/16 in. dia. x $\frac{1}{2}$ in.	6	C
and 28M/11957	AGS.2007/C1	Nut, stiff, double anchor, 2 B.A.	4	C

Attaching parts for AGS.2007/C1 nuts.

28Q/10905	AS.2229/307	Rivet, 90 deg. csk/hd. 3/32. in. dia. x 7/16 in.	8	C

Spare affected :

26FC/-	15.W.193A/4	Wing complete, port.

The method for modifying the above spare is detailed in para, 8, operations (1) to (30) and on sheets 1 to 7 of the drawing.

Parts required :

26FC/-	D00.7919ND	Strip, lower, U/C diaphragm packing	1	-
26FC/ -	D00.7945ND	Plate, rib 2, reinforcing, L.H.	1	-
26FC/-	D00.7947ND	Plate, rib 2, reinforcing L.H.	1	-
26FC/-	D00.7949	Plate, rib 2 reinforcing	1	-

Attaching parts for D00.7945ND, D00.7947ND and D00.7949 plates

28D/12531	A.25/3C	Bolt, hex/hd. 2 B.A. x 0.75 in.	7	C
28D/12566	A.25/6c	Bolt, hex/hd. 2 B.A. x 1.05 in.	33	C
28D/12519	A.25/3E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 0.8 in.	9	C

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Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
28D/12520	A.25/4E	Bolt, hex/hd. ¼ in. B.S.F. x 0.9 in.	5	C
28D/12542	A.25/5E	Bolt, hex/hd. ¼ in. B.S.F. x 1.0 in.	4	C
28D/12543	A.25/6E	Bolt, hex/hd. ¼ in. B.S.F. x 1.1 in.	1	C
28M/12929	A.27/CP	Nut, plain, 2 B.A.	38	C
28M/10290	AGS.2001/EI	Nut, stiff, ¼ in B.S.F.	5	C
28D/12183	AS.1246/5E	Bolt, rd/hd. ¼ in B.S.F. x 0.95 in.	1	C
28Q/6672	AS.2227/506	Rivet, sp/hd. 5/32 in. dia. x ⅜ in.	18	C
…Q/10406	AS.2227/507	Rivet, sp/hd. 5/32. in. dia. x 7/16 in.	14	C
…Q/6673	AS.2227/508	Rivet, sp/hd. 5/32. in. dia. x ½ in.	4	C
…Q/12358	AS.2227/509	Rivet, sp/hd. 5/32. in. dia. x 9/16 in.	15	C
…Q/6827	AS.2227/608	Rivet, sp/hd. 3/16 in. dia. x ½ in.	6	C
…W/12253	SP.13/E	Washer, M.S. ¼ in. B.S.F.	5	C
…d				
…M/11957	AGS.2007/C1	Nut, stiff, double anchor 2 B.A.	4	C
		Attaching parts for AGS.2007/C1 nuts.		
…Q/10905	AS.2229/307	Rivet, 90 deg. csk/hd. 3/32 in. dia. x 7/16 in.	8	C
…d				
…Q/11162	AS.2229/505	Rivet, 90 deg. csk/hd. 5/32. in. dia. x 5/16 in.	10	C
…Q/10411	AS.2229/606	Rivet, 90 deg. csk/hd. 3/16 in. dia. x ⅜ in.	6	C
…i				
…FC/-	D00.8019ND	Strip, upper, U/C diaphragm packing	1	-
…FC/-	D00.7955	Stiffener, upper, front U/C diaphragm L.H.	1	-
		Attaching parts for D00.7955 stiffener.		
…D/12513	A.25/2C	Bolt, hex/hd. 2 B.A. x 0.65 in.	10	C
…D/12531	A.25/3C	Bolt, hex/hd. 2 B.A. x 0.75 in.	2	C
…D/12542	A.25/5E	Bolt, hex/hd. ¼ in. B.S.F. x 1.0 in.	8	C
…D/12633	A.25/7E	Bolt, hex/hd. ¼ in. B.S.F. x 1.2 in.	3	C
…D/12674	A.25/9E	Bolt, hex/hd. ¼ in. B.S.F. x 1.4 in.	2	C
…/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	12	C
…/6830	AS.2227/512	Rivet, sp/hd. 5/32 in. dia. x ¾ in.	2	C
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	12	C
28W/12296	SP.15/C	Washer, L.A., 2 B.A.	12	C
and				
26FC/-	D00.7965ND	Strip, front U/C diaphragm packing	1	-
26FC/-	D00.7957	Stiffener, lower, front U/C diaphragm L.H.	1	-
		Attaching parts for D00.7957 stifener		
28D/12532	A.25/4C	Bolt, hex/hd., 2 B.A. x 0.85 in.	3	C
28D/12553	A.25/6J	Boltm hex/hd., ⅜ in. B.S.F. x 1.25 in.	3	C
28M/13123	A.27/JS	Nut, slotted, ⅜ in. B.S.F.	3	C
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	4	C
28D/8308	AS.1242/3C	Bolt, 90 deg. csk/hd., 2 B.A. x 0.7 in.	1	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia. x 1 in.	3	C

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Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	4	C
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	6	C
and				
26FC/-	D00.80ØND	Strip, upper, U/C diaphragm packing	1	-
26FC/-	D00.7959	Stiffener, upper, rear U/C diaphragm L.H.	1	-
	Attaching parts for D00.7959 stiffener			
28D/12513	A.25/2C	Bolt, hex/hd., 2 B.A. x 0.65 in.	9	C
28D/12531	A.25/3C	Bolt, hex/hd., 2 B.A. x 0.75 in.	2	C
28D/12543	A.25/6E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 1.1 in.	6	C
28D/12633	A.25/7E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 1.2 in.	3	
28D/12674	A.25/9E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 1.4 in.	3	
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	11	
28Q/6830	AS.2227/512	Rivet, sp/hd. 5/32 in. dia. x $\frac{3}{4}$ in.	2	
28W/12252	SP.13/C	Washer, M.S. 2 B.A.	11	
28W/12296	SP.15/C	Washer, L.A., 2 B.A.	11	
and				
26FC/-	D00.7963ND	Strip, rear U/C diaphragm packing	1	
26FC/-	D00.7961	Stiffener, lower, rear U/C diaphragm L.H.	1	
	Attaching parts for D00.7961 stiffener			
28D/12532	A.25/4C	Bolt, hex/hd., 2 B.A. x 0.85 in.	3	
28D/12553	A.25/6J	Bolt, hex/hd. $\frac{3}{8}$ in. B.S.F. x 1.25 in.	3	
28M/13123	A.27/JS	Nut, slotted, $\frac{3}{8}$ in. B.S.F.	3	
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	4	
28D/8308	AS.1242/3C	Bolt, 90 deg. csk/hd., 2 B.A. x 0.7 in.	1	
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia. x 1 in.	3	
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	4	
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	6	
and				
26FC/-	Q00.2620	Strip, clamp block packing	2	
	Attaching parts for Q00.2620 strip			
28D/12714	A.25/29C	Bolt, hex/hd., 2 B.A. x 3.35 in.	3	
28D/12715	A.25/31C	Bolt, hex/hd., 2 B.A. x 3.55 in.	1	
and				
26FC/-	Q00.3783	Strip, clamp block packing	2	
	Attaching parts for Q00.3783 strip			
28D/12516	A.25/11C	Bolt, hex/hd., 2 B.A. x 1.55 in.	1	
28D/12535	A.25/12C	Bolt, hex/hd., 2 B.A. x 1.65 in.	1	
and				
28M/13123	A.27/JS	Nut, slotted, $\frac{3}{8}$ in. B.S.F.	10	C
28D/10904	AS.1242/15J	Bolt, 90 deg. csk/hd., $\frac{3}{8}$ in. B.S.S. x 2.1. in.	10	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia. x 1 in.	10	C
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	20	C

Spare affected :

26FC/- 15.W.195A/4 Wing complete, stbd.

The method for modifying the above spare is detailed in para 8, operations (1) to (30) and on Sheets 1 to 7 of the drawing.

Parts required :

Stores Ref.	Part No.	Nomenclature	Qty	Class of Store.
26FC/-	D00.7919ND	Strip, lower, U/C diaphragm packing	1	-
26FC/-	D00.7946ND	Plate, rib 2 reinforcing R.H.	1	-
26FC/-	D00.7948ND	Plate, rib 2 reinforcing R.H.	1	-
26FC/-	D00.7949	Plate, rib 2 reinforcing	1	-

Attaching parts for D00.7946ND, D00.7948ND and D00.7949 plates

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Stores Ref:	Part No.	Nomenclature	qty	Class of Store
28D/12531	A.25/3C	Bolt, hex/hd., 2 B.A. x 0.75 in.	7	C
28D/12566	A.25/6C	Bolt, hex/hd., 2 B.A. x 1.05 in.	33	C
28D/12519	A.25/3E	Bolt, hex/hd. ¼ in. B.S.F. x 0.8 in.	9	C
28D/12520	A.25/4E	Bolt, hex/hd. ¼ in. B.S.F. x 0.9 in.	5	C
28D/12542	A.25/5E	Bolt, Hex/hd. ¼ in. B.S.F. x 1.0 in.	4	C
28D/12543	A.25/6E	Bolt, hex/hd. ¼ in. B.S.F. x 1.1 in.	1	C
28M/12929	A.27/CP	Nut, plain, 2 B.A.	38	C
28M/10290	AGS.2001/E1	Nut, stiff, ¼ in. B.S.F.	5	C
/12183	AS.1246/5E	Bolt, rd/hd. ¼ in. B.S.F. x 0.95 in.	1	C
/6672	AS.2227/506	Rivet, sp/hd, 5/32 in. dia. x ⅜ in.	18	C
/10406	AS.2227/507	Rivet, sp/hd. 5/32 in. dia. x 7/16 in.	14	C
/6673	AS.2227/508	Rivet, sp/hd. 5/32. in. dia. x ½ in.	4	C
/12358	AS.2227/509	Rivet, sp/hd. 5/32. in. dia. x 9/16 in.	15	C
/6827	AS.2227/608	Rivet, sp/hd. 3/16 in. dia. x ½ in.	6	C
/12253	SP.13/E	Washer, M.S. ¼ in. B.S.F.	5	C
/11957	AGS.2007/C1	Nut, stiff, double anchor, 2 B.A.	4	C
Attaching parts for AGS.2007/C1 nuts				
/10905	AS.2229/307	Rivet, 90 deg. csk/hd. 3/32 in. dia. x 7/16 in.	8	C
/11162	AS.2229/505	Rivet, 90 deg. csk/hd., 5/32. in. dia. x 5/16 in.	10	C
/10411	AS.2229/606	Rivet, 90 deg. csk/hd. 3/16 in. dia x ⅜ in.	6	C
C/-	D00.8019ND	Strip, upper, U/C diaphragm packing	1	-
C/-	D00.7956	Stiffener, upper, front U/C diaphragm R.H.	1	-
Attaching parts for D00.7956 stiffener				
/12513	A.25/2C	Bolt, hex/hd. 2 B.A. x 0.65 in.	10	C
/12531	A.25/3C	Bolt, hex/hd. 2 B.A. x 0.75 in.	2	C
/12542	A.25/5E	Bolt, hex/hd. ¼ in. B.S.F. x 1.2 in.	3	C
/12674	A.25/9E	Bolt, hex/hd. ¼ in. B.S.F. x 1.4 in.	2	C
/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	12	C
/6830	AS.2227/512	Rivet, sp/hd. 5/32 in. dia. x ¾ in.	2	C
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	12	C
28W/12296	SP.15/C	Washer, L.A., 2 B.A.	12	C
and 26FC/-	D00.7965ND	Strip, front U/C diaphragm packing	1	-
26FC/-	D00.7958	Stiffener, lower, front U/C diaphragm, R.H.	1	-
Attaching parts for D00.7985 stiffener				
28D/12532	A.25/4C	Bolt, hex/hd. 2 B.A. x 0.85 in.	3	C
28D/12553	A.25/6J	Bolt, hex/hd. ⅜ in. B.S.F. x 1.25 in.	3	C
28M/13123	A.27/JS	Nut, slotted, ⅜ in. B.S.F.	3	C
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	4	C
28D/8308	AS.1242/3C	Bolt, 90 deg. csk/hd., 2 B.A. x 0.7 in.	1	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia. x 1 in.	3	C
28W/12252	SP.13C	Washer, M.S., 2 B.A.	4	C

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Stores Ref.	Part No.	Nomenclature	Qty.	Class of Store.
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	6	C
and 26FC/-	D00.8019ND	Strip, upper, U/C diaphragm packing	1	-
26FC/-	D00.7960	Stiffener, upper, rear U/C diaphragm, R.H.	1	-

Attaching parts for D00.7960 stiffener

28D/12513	A.25/2C	Bolt, hex/hd. 2 B.A. x 0.65 in.	9	C
28D/12531	A.25/3C	Bolt, hex/hd. 2 B.A. x 0.75 in.	2	C
28D/12543	A.25/6E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 1.1 in.	6	C
28D/12633	A.25/7E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 1.2 in	3	C
28D/12674	A.25/9E	Bolt, hex/hd. $\frac{1}{4}$ in. B.S.F. x 1.4 in.	3	C
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	11	C
28Q/6830	AS.2227/512	Rivet, sp/hd. 5/32 in. dia. x $\frac{1}{4}$ in.	2	C
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	11	C
28W/12296	SP.15/C	Washer, L.A., 2 B.A.	11	C
and 26FC/-	D00.7963ND	Strip, rear U/C diaphragm packing	1	-
26FC/-	D00.7962	Stiffener, lower, rear U/C diaphragm R.H.	1	-

Attaching parts for D00.7962 stiffener

28D/12532	A.25/4C	Bolt, hex/hd., 2 B.A. x 0.85 in.	3	C
28D/12553	A.25/6J	Bolt, hex/hd. $\frac{3}{8}$ in. B.S.F. x 1.25 in.	3	C
28M/13123	A.27/JS	Nut, slotted, $\frac{3}{8}$ in. B.S.F.	3	C
28M/10288	AGS.2001/C1	Nut, stiff, 2 B.A.	4	C
28D/8308	AS.1242/3C	Bolt, 90 deg. csk/hd., 2 B.A. 0.7 in.	1	C
28P/12462	SP.9/C8	Pin, split, 1/16 in. dia. x 1 in.	3	C
28W/12252	SP.13/C	Washer, M.S., 2 B.A.	4	C
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	6	C
and 26FC/-	Q00.2620	Strip, clamp block packing	2	-

Attaching parts for Q00.2620 strip

28D/13105	A.25/26C	Bolt, hex/hd. 2 B.A. x 3.05 in.	3	C
28D/12934	A.25/28C	Bolt, hex/hd. 2 B.A. x 3.25 in.	1	C
and 26FC/-	Q00.3783	Strip, clamp block	2	-

Attaching parts for Q00.3783 strip

28D/12516	A.25/11C	Bolt, hex/hd. 2 B.A. x 1.55 in.	1	C
28D/12535	A.25/12C	Bolt, hex/hd., 2 B.A. x 1.65 in.	1	C
28M/13123	A.27/JS	Nut, slotted, $\frac{3}{8}$ in. B.S.F.	10	C
28D/10904	AS.1242/15J	Bolt, 90 deg. sck/hd. $\frac{3}{8}$ in. B.S.F. x 2.1 in.	10	C
28P/12462	SP.9/C8	Pin, split 1/16 in. dia. x 1 in.	10	C
28W/12500	SP.14/J	Washer, S.S. $\frac{3}{8}$ in. B.S.F.	20	C

7. CHANGE OF STORES REFER NCE, PART AND ASSEMBLY NUMBERS

The emodiment of this modification changes Stores Ref., Part and Assembly Nos. as follows :

Stores Ref.	Old Part/Assy No.	Nomenclature	New Pt/Assy. No.	Stores Ref.
26FC/3880	D00.5159A	Diaphragm, U/C, front, port	D00.5159A/1	26FC/11909
26FC/3881	D00.5160A	Diaphragm, U/C, front, stbd.	D00.5160A/1	26FC/11910
26FC/3878	D00.5161A	Diaphragm, U/C. rear, port	D00.5161A/1	26FC/11907
26FC/3879	D00.5162A	Diaphragm, U/C rear, stbd.	D00.5162A/1	26FC/11908
26FC/4605	D00.5197A/2	Rib No. 2, port	D00.5197A/3	26FC/11903

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Stores Ref.	Old Pt/Assy. No.	Nomenclature	New Pt.Assy.No.	Stores Ref.
26FC/4606	D00.5198A/2	Rib No. 2, stbd.	D00.5198A/3	26FC/11904
26FC/5738	D00.7673A/ND	Rib No. 2 and joint fittings, port	D00.8013A/ND	26FC/11905
26FC/5739	D00.7674A/ND	Rib No. 2 and joint fittings, stbd.	D00.8014A/ND	26FC/11906
26FC/-	15.W.189A/5	G.A. of wing, port	15.W.189A/6	26FC/-
26FC/-	15.W.191A/5	G.A. of wing, stbd.	15.W.191A/6	26FC/-
26FC/-	15.W.193A/4	Wing complete (spares) port	15.W.193A/5	26FC/-
/-	15.W.195A/4	Wing complete (spares) stbd.	15.W.195A/5	26FC/-

SEQUENCE OF OPERATIONS

The following is the sequence of operations :-

NOTE : The following operations (1) to (30) apply to both port and starboard mainplanes.

(Refer to sheets 1 to 7 of the drawing)

(1) Remove the main undercarriage as detailed in A.P.4099J, Vol 1, Sect. 3, Chap. 5, and the No. 1 wing fuel tank as detailed in A.P.4099J, Vol. 1, Sect. 4, Chap. 2. Remove and retain the No. 1 fuel tank strap structure and its attachment bolts. Remove and retain the fuel balance pipe access panel and the bolts securing it to the under-surface of the wing, forward of the front undercarriage dia-phragm.

(2) In No. 1 fuel tank bay, release the clips securing the electric cables, disconnect and remove the pipes, routed over Rib No. 2 in the vicinity of the reinforcing shown on sheet 1 of the drawing. Blank off the disconnected pipe ends. Remove the blanking plate and the bolts securing it to Tib No. 2 aft of the rear undercarriage diaphragm. Retain all items for re-assembly.

NOTE: On mainplanes repaired to Repair Instruction Sheet No. 1 remove the redundant upper stiffener, Part No.R.00D.351ND, from the front diaphragm and, Part No. R.00D.352ND, from the rear diaphragm. Remove the lower stiffener, Part No. R.00D.354ND (port); R.00D.355ND (Starboard), from the front diaphragm and, Part No. R.00D.356ND (port); R.00D.357ND (starboard), from the rear diaphragm and, if in good condition, retain and re-assemble in place of the new lower stiffeners introduced on this modification.

(3) Refer to sheets 1, 2 and 3 of the drawing and remove the forty-seven bolts securing the undercarriage diaphragms to Rib No. 2, retaining the packing strip, stiffnuts and washers for re-assembly. Using a No. 21(0.159 in. dia.) drill, carefully remove the four 5/32 in. dia. rivets securing the top of the diaphragms to the rib.

NOTE : Repair Instruction Sheet No. 137 Issue 3 introduced a reinforcing plate, Part No. R.00D.424 (port); R.00D.425 (starboard) on the inboard side of Rib No. 2 similar to that shown on sheet 1 of the drawing and two reinforcing plates, Part Nos. R.00D.378 and R.00D.380 (port); R.00D.379 and R.00D.381 (starboard) on the outboard side of Rib No. 2 similar to those shown on sheet 2 of the drawing. Examine the latter two outboard plates and ensure that their flanges do not exceed 0.125 in.. Reduce the flanges to this di-mension and remove all sharp edges where necessary. The following operations (4) to (12) do not apply to mainplanes with the aforementioned reinforcing plates already installed.

(4) Using the No. 21 drill, carefully remove the 5/32 in. dia. rivets securing the existing reinforcing channels to Rib No. 2. If the 3/32 in. dia. rivets for the small clamp block anchor nut pass through the reinforcing channel carefully drill out these rivets with a No. 41

10/.......

(4) (0.096 in. dia.) drill. Remove the peened bolts and nuts securing the reinforcing channels to Rib No. 2. Retain the reinforcing channels, packing and washers for re-assembly.

NOTE: On mainplanes with Mod. No. Vampire/698 embodied retrospectively, dispose of the redundant reinforcing plate, Part No. R.00D.287 (port); R.00D.288 (starboard).

(5) Refer to sheet 1 of the drawing. Using the No. 41 drill remove the existing anchor nuts that lie within the periphery of the new reinforcing plate, Part No. D00.79 Remove the six 3/16 in. dia. rivets securing the 'T' section stiffener to Rib No. 2 above the undercarriage cutaway using a No.11 (0.191 in. dia.) drill. Offer the new reinforcing plate, trim and radius its edge lo ally to suit the flange of the undercarriage cutaway.

(6) Drill the new reinforcing plate with the No. 11 drill, thirty-eight holes to suit the 2 B.A. bolt holes throu Rib No. 2 and the existing reinforcing channels, four holes to suit the 2 B.A. anchor nut bolt holes through Rib No. 2 and six holes to suit the 3/16 in. dia. rive holes through Rib No. 2 and the 'T' section stiffener. Drill eight holes with the No. 41 drill to suit the 3/ in. dia. rivet holes for the anchor nuts. Countersin the inboard face of the new reinforcing plate at these eight holes 90 deg. x 0.16 in. dia.

(7) Drill two holes with a No. 14 (0.182 in. dia.) drill through the new reinforcing plate and ream to 2 B.A. t suit the 2 B.A. bolt holes through Rib No. 2 and the r diaphragm below the existing reinforcing channels.

(8) Drill thirty-six holes with a 15/64 (0.234) in. dia. d through the new reinforcing plate to suit the $\frac{1}{4}$ in. B. F. bolt holes through Rib No. 2 and the undercarriage diaphragms, opening up the existing smaller diameter h except the two dealt with in operation (7), plus the r hole through the front diaphragm below the new reinforci plate as shown on sheet 1 of the drawing. Ream all thirty-seven holes to $\frac{1}{4}$ in. dia.

(9) Offer up the two new undercarriage cutaway reinforcing plates, Part Nos. D00.7945ND and D00.7947ND (port); D0 7946ND and D00.7948ND (starboard), to the outboard sid of Rib No. 2 as shown on sheet 2 of the drawing. Dri off seven holes in each plate with the No. 11 drill to suit the 2 B.A. bolt holes through Rib No. 2 and the r inforcing channels. Temporarily bolt the plates in position. Cut a 45/64 (0.703? in. dia. hole through t reinforcing plates just forward of the rear diaphragm suit Rib No. 2 and the existing reinforcing channel.

(10) Drill twenty-seven holes with the No. 21 drill through the new reinforcing plates to suit the 5/32 in. dia. rivet holes through Rib No. 2 and the existing reinforcing channels as shown on sheet 1 of the drawing. Mark off and drill twenty-four additional holes with the No. 21 drill as shown on sheet 2 of the drawing. Remove the plates and channels and thoroughly deburr all holes.

(11) Secure the reinforcing plate and original channels to Rib No. 2 as shown on sheets 1 and 2 of the drawing, coating all the mating surfaces with pigmented varnish jointing compound (Stores Ref. 33C/1264). Bolt up with five 2 B.A. bolts, Part No. A.25/3c, thirty-three 2 B. A. bolts, Part No. A.25/6C, and thirty-eight 2 B.A. plain nuts, Part No. A.27/CP, using the original washers. Lock the bolts by peening. Rivet up with 5/32 in. dia. snap-head rivets, eighteen off, Part No. AS.2227/506,

11/............

(11) fourteen off, Part No. AS.2227/507, four off, Part No. AS.2227/508, and fifteen off, Part No. AS.2227/509.

NOTE: In cases where the items called for in operation (11) are unsuitable due to the holes being oversize ¼ in. B.S.F. items may be used in place of the 2 B.A. items and 3/16 in. dia. rivets may be used in place of the 5/32 in. dia. rivets.

(12) Rivet up the existing 'T' stiffener to Rib No. 2 and the new reinforcing plate with six 3/16 in. dia. snap-head rivets, Part No. AS.2227/608. Secure four new 2 B.A. anchor nuts, Part No. AGS.2007/C1, to the original positions with eight 3/32 in. dia. 90 deg countersunk-head rivets, Part No. AS.2229/307. Coat all mating surfaces with pigmented varnish jointing compound.

NOTE: The following operations (13) to (30) apply to all mainplanes.

(13) Refer to Sheet 4 of the drawing. Remove the eight redundant ⅜ in. B.S.F. bolts, nuts and washers securing the undercarriage hinge pick-up to the rear diaphragm. Remove the upper two 2 B.A. bolts, nuts and washers, and using the No. 11 drill, remove the existing three 3/16 in. dia. rivets to permit the new lower stiffener, Part No. D.007961 (port); D00.7962 (starboard), to fit flush against the diaphragm. Countersink the rear face of the diaphragm at the two 2 B.A. bolt holes and the lower two rivet holes 90 deg. x 0.33 in. dia. Flush up these holes with four 3/16 in. dia. 90 deg. countersunk-head rivets, Part No. AS.2229/606, cut to suit.

NOTE: Care must be taken to ensure that the undercarriage pick-up and its shims are retained for re-assembly at their original position. On mainplanes repaired to Repair Instruction Sheet No. 1 the rivets dealt with in operations (13) and (14) will have already been flushed up.

(14) Using the No. 21 drill, carefully drill out the existing four 5/32 in. dia. snap-head rivets through the diaphragm 'Z' member to permit the new upper stiffener, Part No. D00.7959 (port); D00.7960 (starboard), to fit flush on the 'Z' member. Countersink the diaphragm and its 'Z' member at both sides of these four rivet holes 90 deg. x 0.27 in. dia. Flush up the holes with four 5/32 in. dia. 90 deg. countersunk-head rivets, Part No. AS.2229/505.

(15) Refer to Sheet 3 of the drawing. Fit two 2 B.A. bolts, Part No. A.25/3C, through the rear undercarriage diaphragm and Rib No. 2, adjacent to the 'Z' member, and secure with the original 2 B.A. stiffnuts and washers. Coat all mating surfaces with pigmented varnish jointing compound.

(16) At the forward row of holes below the 'Z' member, replace the original packing strip, Part No. D00.7919ND retained in operation (3) and fit four ¼ in. B.S.F. hexagon-head bolts, Part No. A.25/5E, with one ¼ in. B.S.F. round-head bolt, Part No. AS.1246/5E, at the top hole. At the rear row of holes fit five ¼ in. B.S.F. hexagon-head bolts, Part No. A.25/3E. Secure with the original stiffnuts and washers. Coat all mating surfaces with pigmented varnish jointing compound.

NOTE: On mainplanes without an existing packing strip, make up one from aluminium-alloy, 18 s.w.g. Spec. B.S.L. 72 (Stores Ref. 30B/1730) 0.6 in. x 3.5 in. radius one edge and drill to suit the rear diaphragm. In cases where the original stiffnuts and washers are unsuitable fit new ¼ in. B.S.F. stiffnuts and washers, Part Nos. AGS.2001/E1 and SP.13/E. Fit additonal washers where

12/........

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Note Contd.

necessary to prevent nuts bottoming. In cases of oversize holes refer to Repair Instruction Sheet No. 152.

(17) Refer to Sheet 4 of the drawing. Offer up the new packing strip, Part No. DOO.8019ND, with a radius on one edge to suit the diapragm above the 'Z' member. Position the new upper stiffener on the 'Z' member and agains the new packing strip. Drill two holes at the top with the No. 21 drill and twelve holes with the 15/64 in. dia. drill reamed to $\frac{1}{4}$ in. dia. to suit the existing holes through Rib No. 2 and the diapragm flange.

NOTE: On mainplanes repaired to Repair Instruction Sheet [illegible] the following operations (18) and (19) do not apply. Th[illegible] upper stiffener is to be drilled to suit the existing No.[illegible] holes in the diaphragm and 'Z' member. The existing low[illegible] stiffener, if in good condition, can be re-assembled in p[illegible] of the new lower stiffener.

(18) Mark off and drill eleven holes through the new upp[illegible] stiffener and diaphragm with the No. 11 drill to th[illegible] dimensions detailed on Sheets 4 and 5 of the drawin[illegible] Position the new packing strip, Part No. DOO.7963ND[illegible] the new lower stiffener under the 'Z' member and dr[illegible] three holes with the No. 11 drill to the dimensions [illegible] tailed on Sheet 5 of the drawing. Drill one hole [illegible] the No. 11 drill through the lower stiffener to sui[illegible] existing hole in the diaphragm.

(19) Drill three holes with a 23/64 (0.359) in. dia. dri[illegible] through the lower stiffener to suit the upper three [illegible] through the diapragm and the undercarriage hinge pi[illegible] Part No. GOO.1010. Ream out the three holes to $\frac{3}{8}$ [illegible] $\frac{+}{-}$ 0.0004.

NOTE: In cases of oversize holes refer to Repair Instruct[illegible] Sheet No. 152.

(20) Remove all burrs. Refer to Sheets 3 and 4 of the [illegible] and secure the upper stiffener and packing to the d[illegible] flange and Rib No. 2 with $\frac{1}{4}$ in. B.S.F. bolts, six off[illegible] No. A.25/6E, three off, Part No. A.25/7E, and three [illegible] Part No. A.25/9E, using the original stiffnuts and [illegible] Fit two 5/32 in. dia. snap-head rivets, Part No. AS[illegible] to the two top holes. Coat all mating surfaces wi[illegible] mented varnish jointing compound.

NOTE: In cases where the original stiffnuts and washers ar[illegible] able, fit new $\frac{1}{4}$ in. B.S.F. stiffnuts and washers, P[illegible] AGS.2001/E1 and SP.13/E. Fit additional washers w[illegible] necessary to prevent nuts bottoming. In cases of [illegible] holes refer to Repair Instruction Sheet, No. 152.

(21) Secure the upper stiffener to the diaphragm with nine 2 B.A. bolts, Part No. A.25/2C, two 2 B.A. bolts, Part No. A.25/[illegible] and eleven 2 B.A. stiffnuts, Part No. AGS.2001/C1, position -ing a L.A. washer, Part No. SP.15/C, under the head of each bolt, and a M.S. washer, Part No. SP.13/C, under each nut. Position the lower stiffener and packing, secure them to the 'Z' member and upper stiffener with three 2 B.A. bolts, stiffnuts and washers, Part Nos. A.25/4C, AGS.2001/ C1 and SP.13/C respectively. Secure the lower stiffener to the diaphragm with one 2 B.A. 90 deg. countersunk-head bolt, stiffnut and washer, Part Nos. AS.1242/3C, AGS.2001/ C1 and SP.13/C respectively. Coat all mating surfaces with pigmented varnish jointing compound.

(22) Resecure the undercarriage hinge pick-up and its shims to the diaphragm with three $\frac{3}{8}$ in. B.S.F. hexagon-head bolts, Part No. A.25/6J, five $\frac{3}{8}$ in. B.S.F. 90 deg. counter-sunk-head bolts, Part Nos. AS.1242/15J, and eight $\frac{3}{8}$ in.

13/........

(22) Contd.

B.S.F. slotted nuts, Part No. A.27/JS, with two washers Part No. SP.14/J, under each nut, as shown on Sheets 4 and 5 of the drawing. Drill off the bolts with a No. 51 (0.067 in. dia.) drill and fit eight 1/16 in. dia. split pins, Part No. SP.9/C8. Coat all mating surfaces with pigmented varnish jointing compound.

NOTE: Fit additional washers where necessary to prevent nuts bottoming.

(23) Refer to Sheet 6 of the drawing and reinforce the front undercarriage diaphragm, adopting a procedure similar to that detailed for the rear diaphragm in operations (13 to (22). Flush up the existing rivets through the 'Z' member with six 5/32 in. dia. rivets and through the diaphragm with two 3/16 in. dia. rivets, Part Nos. AS.2229/505 and AS.2229/606 respectively.

(24) At the rear row of holes below the 'Z' member fit a new packing strip, five ¼ in. B.S.F. bolts, stiffnuts and washers, Part Nos. DOO.7919ND, A25/4E, AGS.2001/E1 and SP.13/E respectively, as shown on Sheet 3 of the drawing. At the forward row of holes fit four bolts, Part No. A.25/3E. Fit one bolt, part No. A.25/6E, above the 'Z' member and trim the new packing, Part No. DOO.8019ND, to clear this bolt. Trim the new upper and lower stiffeners, Part Nos. DOO.7955 and DOO.7957 (port); DOO.7956 and DOO.7958 (starboard), as necessary to suit the diaphragm.

(25) Secure the upper stiffener and packing to the diaphragm flange and Rib No. 2 with ¼ in. B.S.F. bolts, eight off, Part No. A.25/5E, three off, Part No. A.25/7E, and two off, Part No. A.25/9E. Fit two 5/32 in. dia. snap-head rivets, Part No. AS.2227/512, to the two top holes.

(26) Secure both stiffeners to the diaphragm and the new packing strip, Part No. DOO.7965ND, under the 'Z' member, with 2 B.A. hexagon-head bolts, ten off, Part No. A.25/2C, two off, Part No. A.25/3C, three off, Part No. A.25/4C, and one off 2 B.A. 90 deg. countersunk-head bolt, Part No. AS.1242/3C, using sixteen 2 B.A. stiffnuts and M.S. washers, Part Nos. AGS.2001/C1 and SP.13/C respectively, positioning twelve L.A. washers, Part No. SP.15/C, under the heads of the bolts through the diaphragm.

(27) Resecure the undercarriage hinge pick-up and its shims to the diaphragm with three ⅜ in. B.S.F. hexagon-head bolts, Part No. A.25/6J, five ⅜ in. B.S.F. 90 deg. countersunk-head bolts, Part No. AS.12412/5J, and eight ⅜ in. B.S.F. slotted nuts, Part No. A.27/JS, with two washers, Part No. SP.14/J, under each nut, as shown on Sheets 5 and 6 of the drawing. Drill off the bolts with a No. 51 drill and fit eight 1/16 in. dia. split pins, Part No.SP.9/C8.

(28) Remove all foreign matter from the mainplane and repair the finish of the undercarriage diaphragms and Rib No. 2 with etch primer, base and accelerator, and aluminium cellulose finish, Spec. D.T.D.772 (Stores Refs. 33B/1021, 33B/1023 and 33B/1060 or 865 respectively.

(29) Resecure the blanking plate to Rib No. 2 with its original bolts retained in operation (2). Reconnect the pipes disconnected in operation (2). Refer to Sheet 7 of the drawing. Fit an additional packing strip, Part No. QOO. 2620, under the two large clamp blocks and secure the blocks and pipes to Rib No. 2 using three new 2 B.A. bolts, Part No. A.25/29C (port); A.25/26C (starboard), and also secure the cable 'P' clips with one new 2 B.A. bolt, Part No. A.25/31c (port); A.25/28C (~~starboard~~). Fir a new

14/.......

(29) Contd.

packing strip, Part No. Q00.3783, in place of the redundant strip, Part No. Q00.2621 under the two small clamp blocks and secure the blocks and the pipes to Rib No. 2, with one 2 B.A. bolt at the rear position and one at the forward position, Part Nos. A.25/11C and A.25/12C respectively. Lock the pipe couplings with 22 s.w.g. nickel alloy wire (Stores Ref. 30A/3055).

(30) Replace the No. 1 fuel tank strap structure. Replace the No. 1 wing fuel tank and the main undercarriage in accordance with the procedure detailed in the appro-priate Aircraft Handbook.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected in accor with current procedure, the following tests are to be carried out :-

(1) Leak, pressure and fuel flow test the wing fuel tanks in accordance with current authorized procedure.

(2) Carry out a retraction test of the main undercarriage in accordance with current authorized procedure.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

The undermentioned parts rendered redundant by the embodiment of this modification are to be returned to O.C. Equipment Depot for disp

Stores Ref.	Part No.	Nomenclature	Qty	Cla
26FC/-	Q00.2621	Strip, clamp block packing	4	

The following items are also redundant on aircraft with Mod. No Vampire/698 embodied retrospectively.

26FC/7817	R.00D.287	Plate, Rib 2 reinforcing L.H.	1	
26FC/7818	R.00D.288	Plate, Rib 2 reinforcing R.H.	1	

The following items are also redundant on aircraft repaired to Repair Instruction Sheet No. 1:

26FC/-	R.00D.351ND	Stiffener, upper, front U/C diaphragm	2	
26FC/-	R.00D.352ND	Stiffener, upper, rear U/C diaphragm	2	

12. EFFECT ON WEIGHT AND C. OF G.

The modification causes a weight change of +5.82 lb., and a change of moment of +12.0 lb. ft.

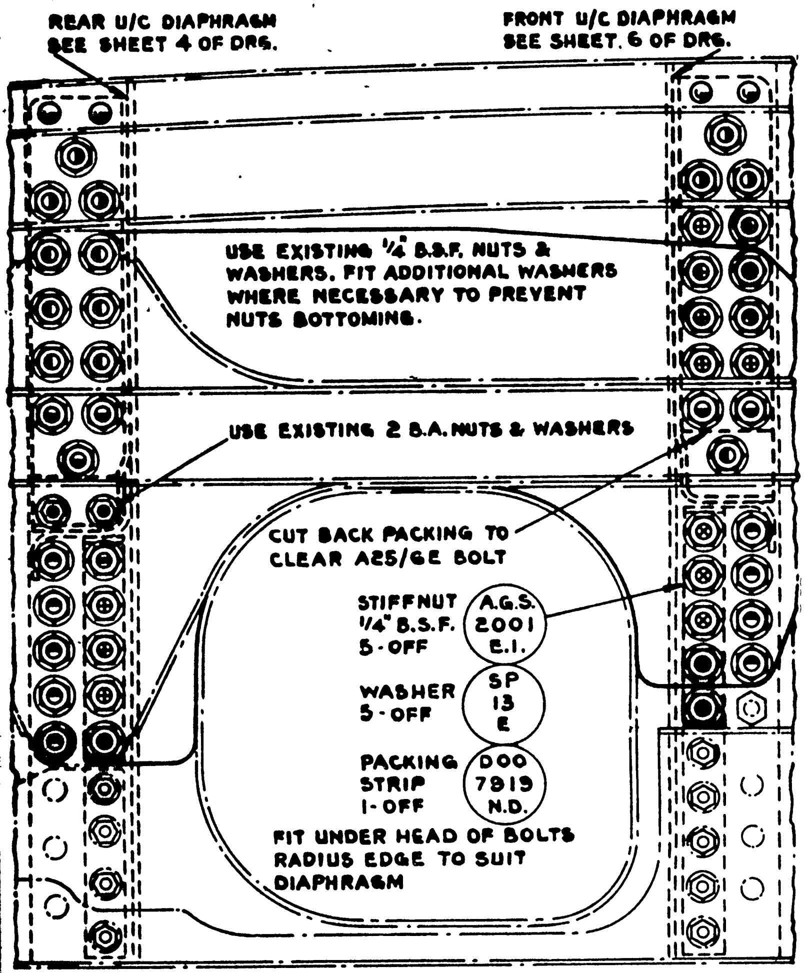
(B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : 4099J. V2.A10

Distribution :-

One copy to essential recipients plus the following :-

W.O. A.R.S. (2)
W.O. 1 & 2 Sqdns. (2) (2)
N.C.O. i/c Stress ~~&~~ Skin Sect. (2)



AS 2227/512	RIVET	4-OFF
A25/3C	BOLT	2-OFF
A25/3E	BOLT	9-OFF
A25/4E	BOLT	5-OFF
A25/5E	BOLT	12-OFF

AS 1246/5E	BOLT	1-OFF
A25/6E	BOLT	7-OFF
A25/7E	BOLT	6-OFF
A25/9E	BOLT	5-OFF

ATTACHMENTS BETWEEN RIB No 2 & U/C DIAPHRAGMS (PORT DRAWN)

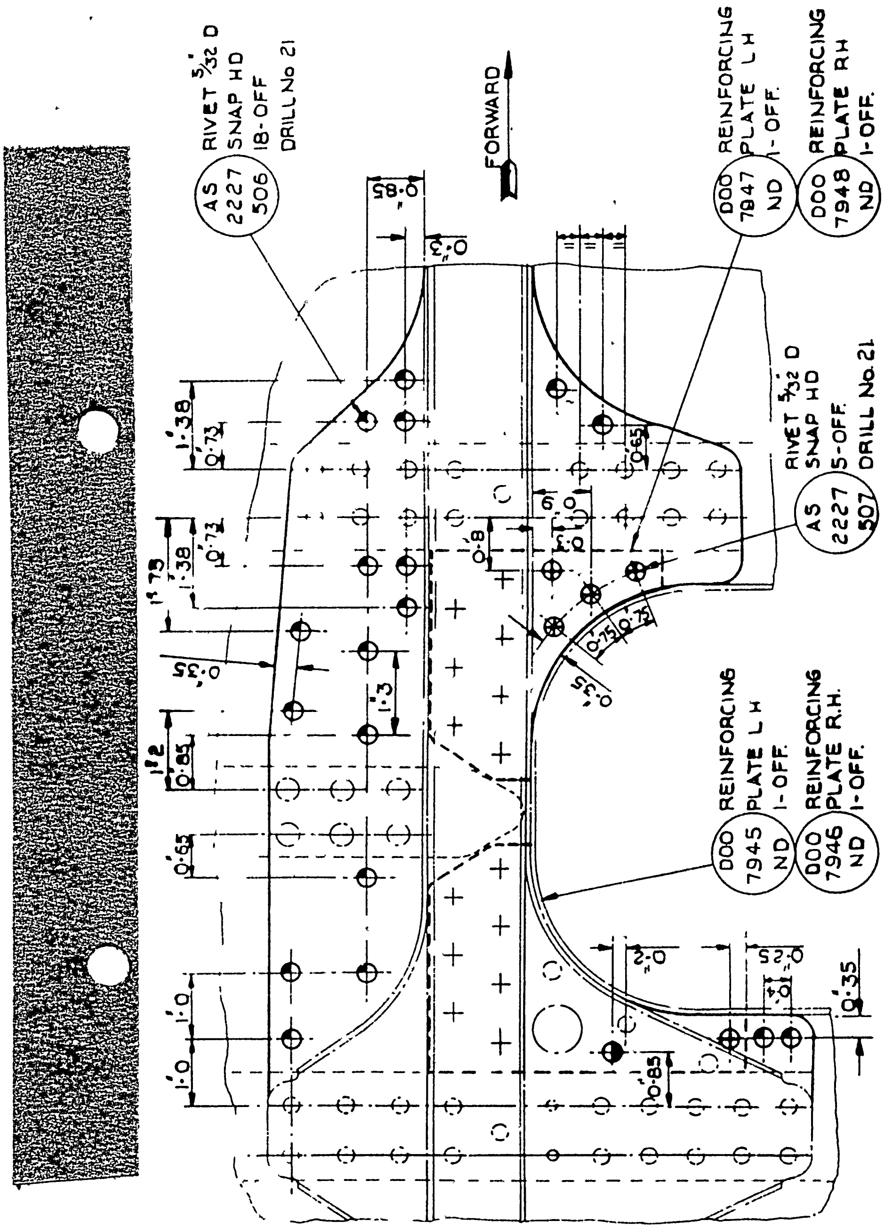
MCD/[illegible]/3494

DRG. No A.P. 4099 J / A 10 / 56

SHEET 3

RESTRICTED

LP31459 9/56 1000 C & P Gp. 959 (4)



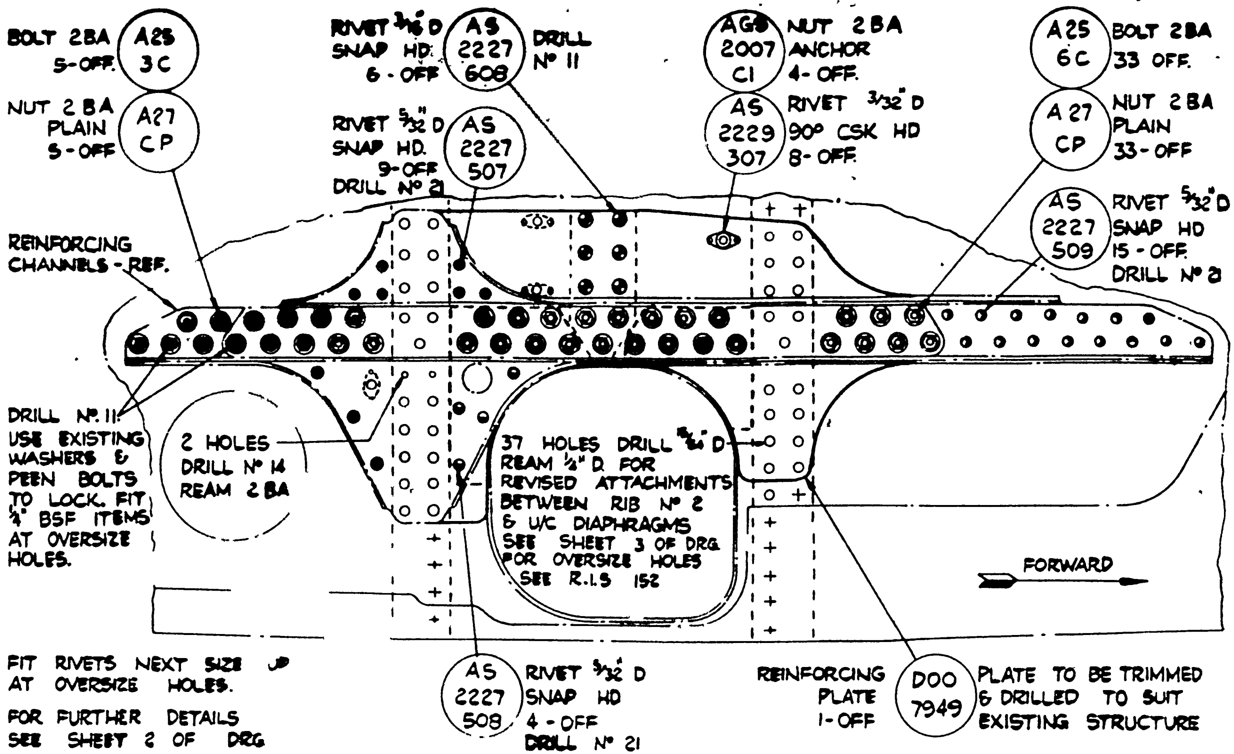
FURTHER DETAILS OF REINFORCING PLATES ON RIB No.2 (PORT DRAWN, STARBOARD OPPOSITE HAND)

DRG. Nº A.P. 4099 J / A. 10 / 56
SHEET 2

RESTRICTED

LP31459 9/56 1000 C & P Gp. 959 (4)

RESTRICTED



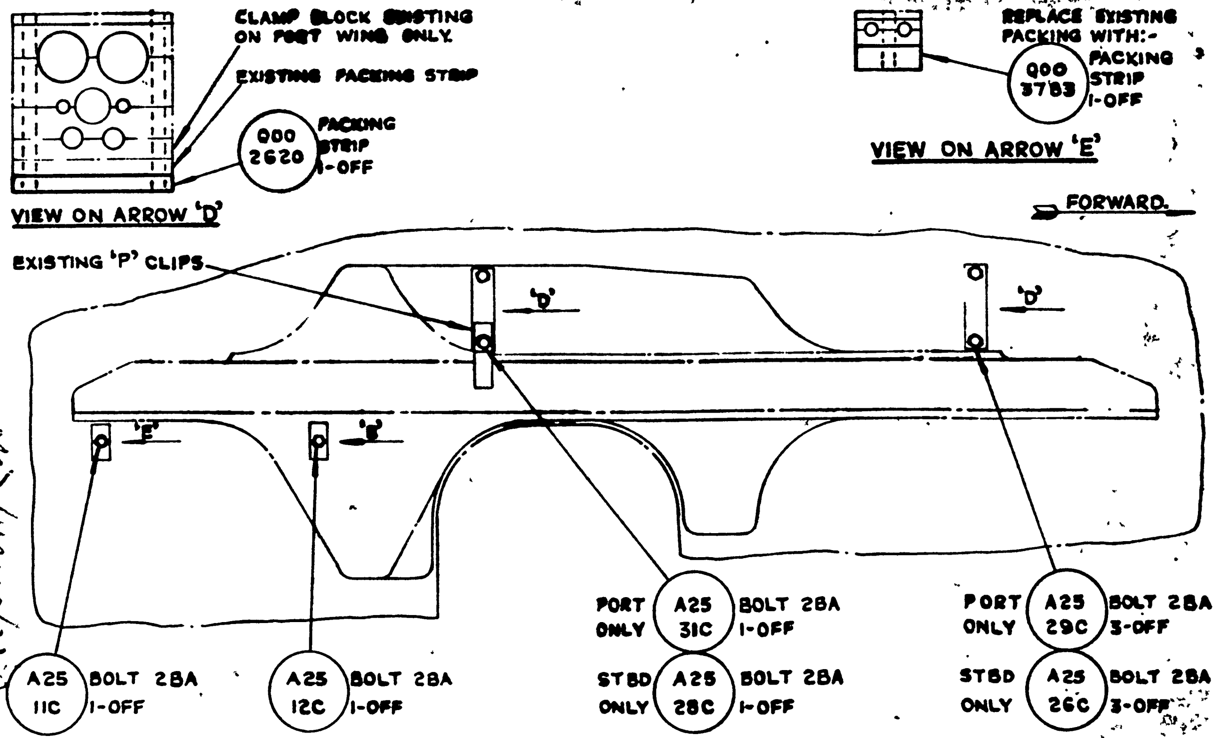
ADDITIONAL REINFORCING PLATE ON INBOARD FACE OF RIB No 2 (PORT SHOWN)

DRG. No A.R 4099 / I / A. 10 / 56

SHEET 1

LP31459 9/56 1000 C & P Gp. 959 (4)

RESTRICTED



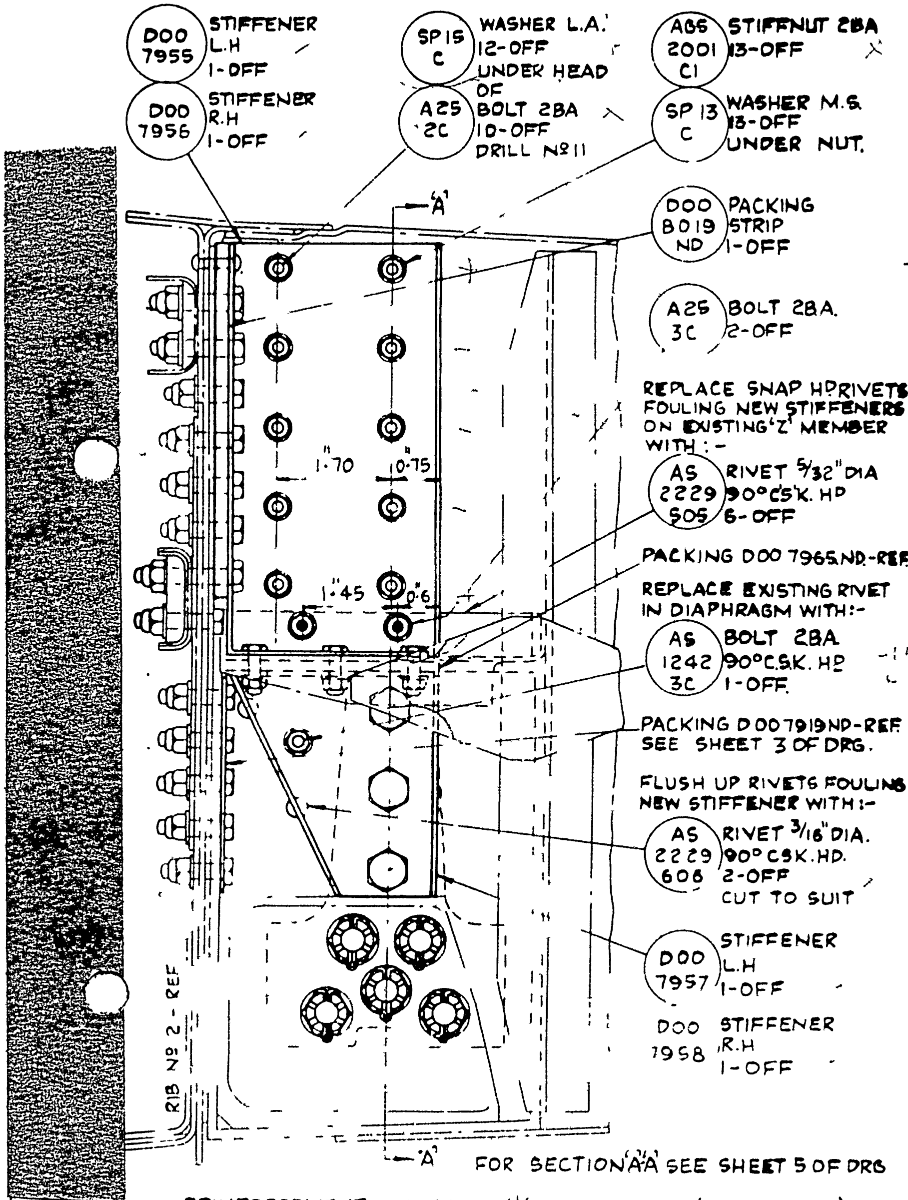
REVISED PACKING UNDER EXISTING CLAMP BLOCKS ON RIB No 2 (PORT DRAWN)

DRG. No A.R. 4099 J/A. 10/56

SHEET 7

MOD/VAMP/3494

LP31459 9/56 1000 C&P Gp.959(4)



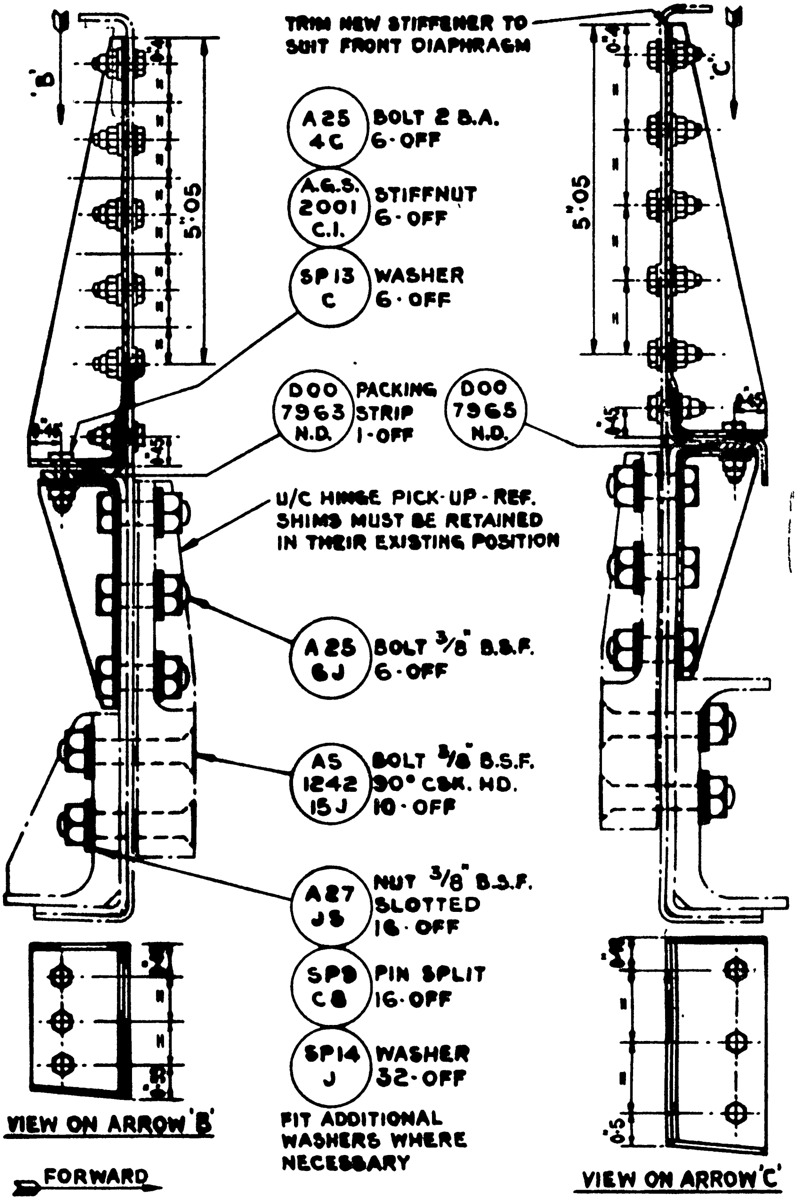
REINFORCEMENT OF FRONT U/C DIAPHRAGM (PORT DRAWN)

DRG. Nº A.P 4099 J A 10 / 56

SHEET 6

RESTRICTED

159 9 56 1000 C & P Gp. 959 (4)



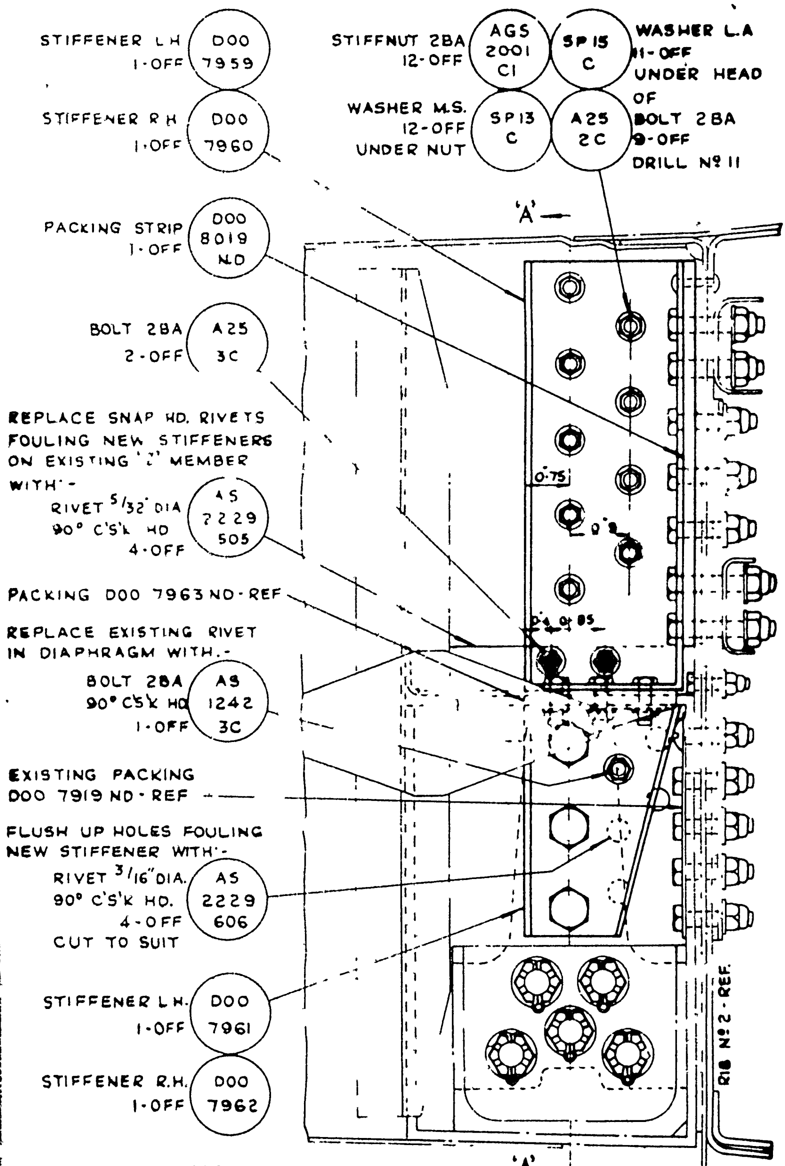
SECTION 'A-A' THROUGH U/C DIAPHRAGMS (PORT DRAWN) SEE SHEETS 4&6

MOD/VAMP/344.

DRG. Nº A.R. 4099 J / A. 10 / 56
SHEET 5

RESTRICTED

LP31459 9/56 1000 C&P Gp. 959 (4)



FOR SECTION 'A'-'A' SEE SHEET 5 OF DRG.

REINFORCEMENT OF REAR U/C DIAPHRAGM (PORT DRAWN)

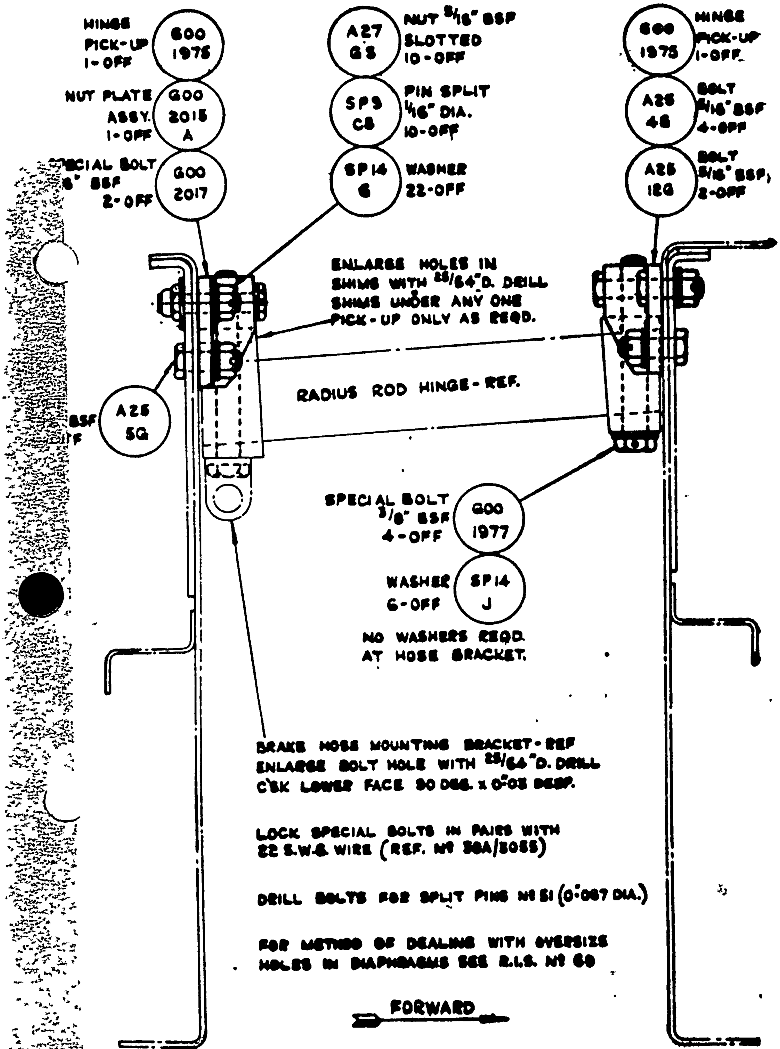
DRG. Nº A.P. 4099 J / A. 10 / 56

SHEET 4

RESTRICTED

LP31459 9/56 1000 C & P Gp. 959 (4)

Vol 3-2-B54
MOD VAMP/3495



...NGTHENED ATTACHMENT FITTINGS AT U/C DIAPHRAGMS (PORT DRAWN)

...STRICTED

Drg. No. A.P.4099J/B.J0/57

Air Headquarters,
Royal Rhodesian Air Force.

16th July, 1958.

R.R.A.F. Technical Order.
Vol. 3. Sect. 2. Sub Sect. B52. (Issue 1)
Vol. 7. Sect. 2. Sub Sect. B20. (Issue 1).

Vampire T. Mk. 11 Aircraft - Electrical - To Introduce Switch (Ref. No. 5CW/5830) for Testing Guns with Aircraft on the Ground.

(Mod.No. Vampire/3490) (Class B/2).

1. INTRODUCTION

To eliminate the danger to personnel when operating the gun firing micro switch in the nose, a gun firing test switch is introduced in the circuit. This will obviate the necessity of operating the nose micro switch. The switch is mounted on the starboard cannon bay rail, so that personnel will not be in the firing line whilst testing the operation of the guns.

(1) This modification does not cancel, supersede, or render unnecessary any work called for by approved modifications, Command modifications, S.T.I.s, S.I.s or S.R.I.M.s.

(2) This modification is not essentially connected with any other approved modification.

2. EMBODIMENT

This modification is to be embodied by :-

Squadrons : - At the first opportunity (not later than 2 months after receipt of parts).

Maintenant Unit - Before issue of aircraft.

3. APPROXIMATE TIME REQUIRED FOR EMBODIMENT

The work will take approximately 7 man hours.

4. DRAWINGS REQUIRED

Drawing No. A.P.40995/F.22/57, Sheets 1-4, is incorporated in this leaflet.

5. PARTS AND SPECIAL TOOLS REQUIRED

(1) Parts and/or Materials

(a) The Modification Kit, which consists of the following items, will be demanded from OC. Equipment Depot, under Ref. No. 26FC/103490.

(b) P.S.C.O. to raise issue orders for aircraft at Thornhill.

Ref. No.	Part No.	Nomenclature	Qty.	Class of Equipment.
26FC/-	N00.3983	Bracket, gun test switch	1	-
26FC/-	15N.2961	Cable assembly	1	-
26FC/-	15N.2963	Label, gun test switch	1	-
28S/3426	A.32/B8	Screw, Rd/hd. 4 B.A. x 0.25 in.	2	C
28S/2288	AGS.252/19	Screw, wood, rd/hd., 4 gauge x $\frac{3}{8}$ in.	4	C
28L/11067	AGS.2035/B	Washer, shakeproof, 4 B.A.	2	C
28E/14048	AS.3180/15B	Clip 'P' rubber covered 4 B.A.	1	C
28E/14811	AS.3180/18B	Clip, 'P' rubber covered 4 B.A.	1	C

/2.........

Service Supply items:-

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment.
5CW/5830		Switch, tumbler, 20 amp.	1	B
5CW/4320	ZA.2403	Guard, locking	1	B
5F/2279		Strapping, length 7 ft.	1	C
5F/2307		Studs	30	C

The following materials are also required, and are to be provided under Unit arrangements:-

Ref. No.	Part No.	Nomenclature	Qty	Class of Equipment.
33B/912		Colour, cellulose, bright red, Spec D.T.D.772	As reqd.	C

Special Tools and Test Equipment

No special tools or test equipment are required for the embodiment of this modification.

6. SPARES AFFECTED

No spares are affected by this modification.

7. CHANGE OF REFERENCE, PART AND ASSEMBLY NUMBERS

There are no changes of Reference, Part or Assembly Nos., as a resul of this modification.

8. SEQUENCE OF OPERATIONS

The following is the sequence of operations:-

(1) Raise the nose cap and disconnect the aircraft batteries. Lower the cannon bay doors and remove the starboard outer and inner ca nons in accordance with current authorized procedure. Remove the starboard nose blastfairings.

(2) Working in the cannon bay and referring to sheet 2 of the drawing, the view on arrow 'A', offer up to the cannon bay rai a new bracket, Part No. N.003983, and secure it in position aft of the cannon bay door hinge, sheet 1 of the drawing refers, a 0.1 in. in from the door, using four No. 4 x $\frac{3}{8}$ in. woodscrews, Part No. AGS.252/19. Offer up to this bracket a new switch (Ref. No. 5CW/5830) - ensuring that terminal No. 1 is facing forward - a new label, Part No. 15N.2963, and a new switch guar (Ref. No. 5CW/4320? securing these items to the bracket with tw 4 B.A. screws and shakeproof washers, Part Nos. A.32/B8 and AGS.2035/B, respectively.

(3) Offer up and connect to the new switch just fitted a new cable assembly, Part No. 15N.2961, a wiring diagram is contained on sheet 3 of the drawing. Refer to sheet 1 of the drawing and route the new cable assembly through the existing P.V.C. sleeving, along the starboard fuselage rail with existing clips and again through the existing P.V.C. sleeve into the nose compartment. Route as detailed to the gun firing terminal block and connect as coded. Lash the cable to existing support tubes with strapping (Ref. No.5F/2279) and studs (Ref.No. 5F/2307). Refer to sheet 2 of the drawing, the view on arrow 'B' and replace the two existing clips as detailed with two new 'P' clips, Part No. AS.3180/15B and AS.3180/18B, respectively, re-using existing attaching items.

(4) Refer to sheets 3 and 4 of the drawing and mark out the position of the instruction notice on the starboard side of the fuselage as detailed. Paint on the instruction notice using, Colour cellulose, bright red, Spec. D.T.D.772 (Ref. No. 33B/1058.

(5) Replace the starboard outer and inner cannons in accordance with current authorized procedure, replace the nose blastfairings, raise the cannon bay doors. Reconnect the aircraft batteries and lower the nose cap.

9. TESTING AFTER EMBODIMENT

When this modification has been embodied and inspected in accordance with current procedure, the following tests are to be carried out :-

Check the gun firing circuit for correct functioning.

10. RECORDING ACTION

Record on Aircraft Form 700 and 4801.

11. DISPOSAL OF REDUNDANT PARTS

There are no parts rendered redundant by the embodiment of this modification.

12. EFFECT ON WEIGHT AND C. OF G.

This modification causes a weight change of +0.20 lb., and a change of moment of -1.0 lb. ft.

for (B.H. GIBBONS)
Wing Commander
S.T.S.O. A.H.Q. R.R.A.F.

Source : 4099T V2-F22.

Distribution :-

One copy to essential recipients
plus the following :-

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Air Headquarters,
Royal Rhodesian Air Force.

5th May, 1958.

R.R.A.F. Technical Order

Vol. 3, Sect. 2, Sub Sect. B51 (Issue 1)

Vampire T.11 Aircraft, Main Undercarriage. De-modification of Mod/Vamp/3320

1. INTRODUCTION

Mod/Vamp/3320 introduced wider rubbing strips in order to prevent the possibility of a foul occurring on complete deflation of Main Wheel Tyre. It has been decided that there is no requirement in the R.R.A.F. for this modification. and therefore aircraft embodying Mod/Vamp/3320 are to be de-modified.

NOTE: Records show that Mod/Vamp/3320 is embodied on the following aircraft:- RRAF 124, 125, 126, 127, 128, 129, 130 and 131, however all T.11 aircraft are to be physically checked for embodiment of this modification.

2. ACTION

Within 28 days of receipt of this Order.

3. MAN HOURS

4 hours per aircraft.

4. DRAWINGS REQUIRED

Incorporated in this Order.

5. SEQUENCE OF OPERATIONS

Locate the main undercarriage door frame and remove and retain the five 2 B.A. bolts securing the rubbing/s strips Part No. G001595A/1 L.H. and Part No. G001596A/1 R.H. Refer to drawing, scribe line AA and remove material shown by the shaded portion and chamfer as indicated so that the outside dimension is reduced to 1 inch. Delete any Reference and Part Nos., with suitable number/letter punches stamp the following Reference Nos. on the rubbing strip. Ref. No. RH 26FC/739, LH 26FC/737.

6. RECORDING ACTION

Record in Form 700 and 4801 in red ink Mod/Vamp/3320 deleted.

7. CHANGE OF WEIGHT AND C. OF G.

No change.

Source: File RRAF/7504/3/Eng

Distribution:

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(B.H. GIBBONS)
Wing Commander
S.T.S.O.
A.H.Q. R.R.A.F.