

A.P. 4099 E & G VOL. 5, PART 5 1st. EDITION, DECEMBER, 1958

Superseding

A.P. 4099 E & G, Vol. 4, Pt. 5

Ist. Edition, July, 1957

REMOVAL AND INSTALLATION
AND CHANGE OF ROLE
SERVICING SCHEDULE

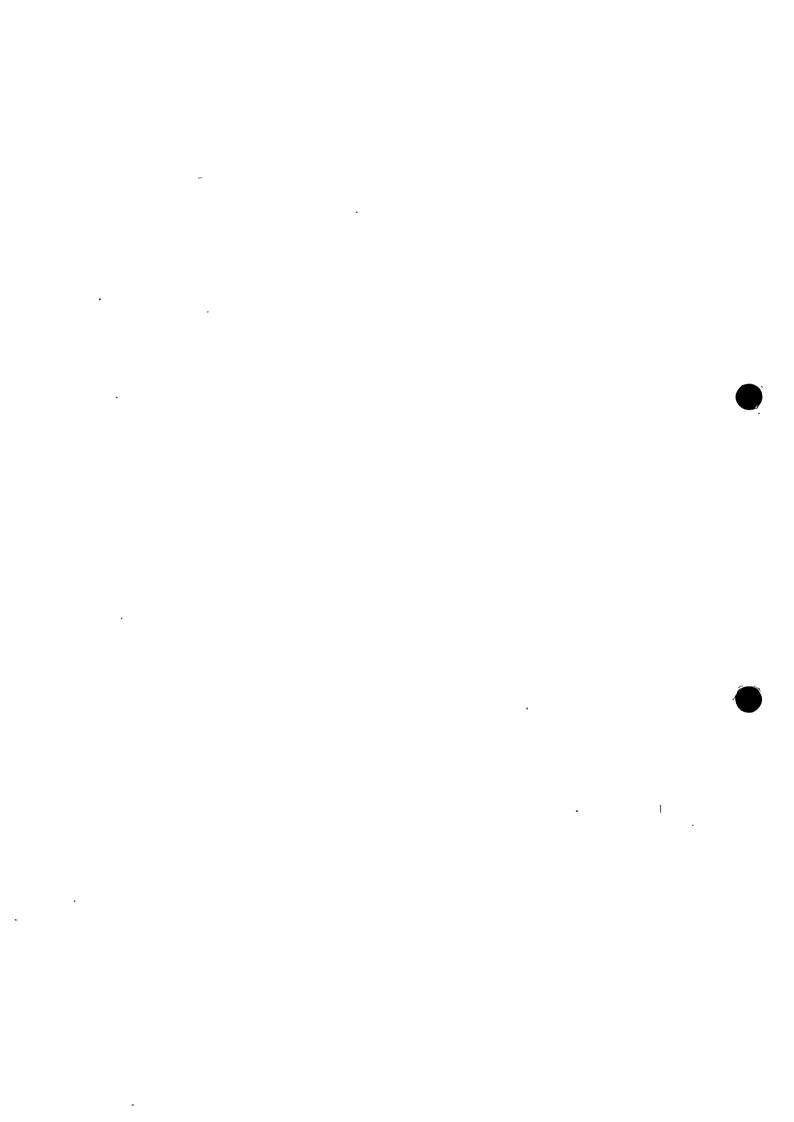
VAMPIRE F.B. MKS. 5 & 9

WITH ONE GOBLIN 2 ENGINE

PROMULGATED BY COMMAND OF THE AIR COUNCIL

L. J. Sean

AIR JINISTRY



A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS 5 & 9 AIRCRAFT 1st. Edition, December 1958

AMENDMENT RECORD CERTIFICATE

The incorporation of an Amendment List in this publication is to be recorded by entering full details in the columns of the certificate.

1. 15

Amendments are to be inserted in strict numerical sequence, the only permitted exception to this rule being when a 'Non-availability Slip' for a particular amendment is issued. This certificate is for official AIR MINISTRY A.L.'s only.

A.L. MONTH AND YEAR OF ISSUE	AMENDMENT INCORPORATED SIGNATURE	DATE OF INCORPORATION	
INC BY A.P.F.S.		JUN 1959	
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A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958

INTRODUCTION

- 1. This Servicing Schedule constitutes the 1st Edition of A.P.4099E & G Vol.5 Pt.5 Servicing Schedule for the Vampire F.B. Mks. 5 & 9 Aircraft and was produced by C.S.D.E.
- 2. The Schedule is divided into 3 sections as follows:-

SECTION 1 gives in correct sequence the operations considered necessary when removing and installing aircraft components in Vampire F.B. Mks. 5 & 9 Aircraft. When necessary the preparation prior to installation is covered in Part 6 of this Volume (Bay Servicing Schedule). In addition, the schedule is complementary to Parts 3 and 4 of this Volume (Aircraft Servicing Schedules) in that provision is made for attention to certain components inaccessible at normal servicing periods and which do not, therefore, receive the routine servicing normally covered by the latter publication.

SECTION 2 gives in correct sequence the operations considered necessary when removing and installing equipment that changes the role of the aircraft.

(Continued overleaf)

SECTION 3 contains the Supplementary Servicing required to sustain the role equipment in use in a serviceable and airworthy condition.

AMENDMENTS

- 3. No amendments other than the official A.M. amendments produced by C.S.D.E. are to be inserted in the schedule.
- 4. Amendments to the technical content necessitated by Modifications, Servicing Instructions, geographical, climatic or operational necessity may, if approved by Command Headquarters, be inserted by users on Supplementary Sheets.
- 5. The additional work inserted on Supplementary Sheets by Command is only to be forwarded to C.S.D.E. when it has universal application.

SCHEDULE NOTES

- 6. No instructions contained in this schedule is to be interpreted as absolving personnel from the responsibility of acquainting themselves with, or acting upon any circumstances indicating the need for additional servicing.
- 7. Tradesmen are to sign the relevant aircraft servicing record when completing that portion of the servicing for which they have been detailed.

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A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958

SCHEDULE NOTES (CONTD.)

- 3. Command Headquarters are to co-ordinate throughout their Command the work indicated by this schedule which is to be kept constantly under review to ensure that:-
 - (a) All operations shown by experience to be necessary are included.
 - (b) Servicing no longer considered essential is reported to Command Headquarters.
 - (c) Information given in technical leaflets and other information is included.

GLOSSARY OF TERMS

- 9. Servicing operations referred to in the text of this schedule are indicated by words having the following meanings, in accordance with A.P. 3158, Vol.1, Section 1, Chapter 1:-
 - (a) Inspect:-
 - (b) Check:-

Review the work done by tradesmen to ensure that it has been performed satisfactorily.

Make a comparison of measurements of time, pressure, temperature, resistance, dimension or other quantity with a known figure for that measurement.

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GLOSSARY OF TERMS (CONTD.)

- (c) Test:-
- (d) Examine:-
- (e) Replenish:-
- (f) Refit:-
- (g) Fit:-
- (h) Disconnect:-
- (j) Reconnect:-

Ascertain whether a component functions correctly by using the appropriate test equipment. Carry out a visual survey of the condition of an item.

Refill a tank, bottle or other container to a pre-determined level, pressure or quantity.

Replace an item which has been previously been

removed.
Correctly attach one item to another.
Uncouple or detach cables, pipelines or controls.

RReverse of Operation (h).

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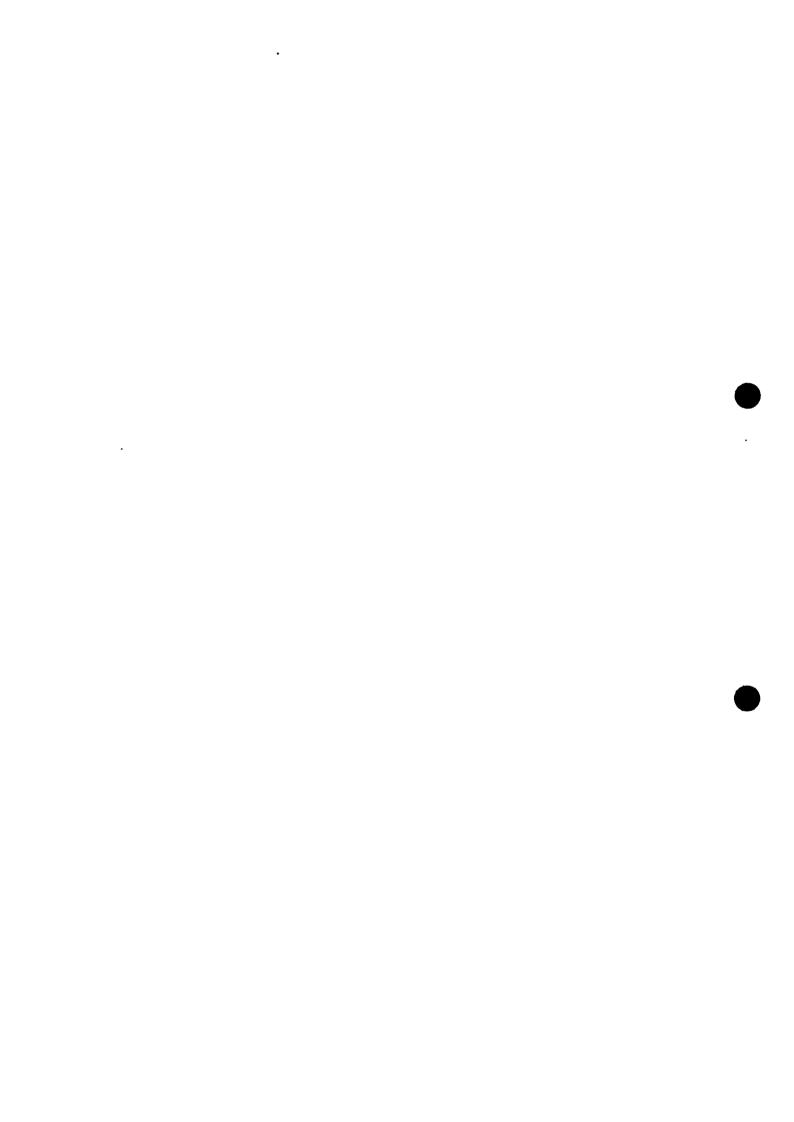
A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958

LIST OF SECTIONS

Section	•	
1		Removal and Installation Schedule - Major Components
2	•	Removal and Installation Schedule - Role Equipment (To be issued later if necessary.)
3	,	Supplementary Servicing - Role Equipment. (To be issued later if necessary.)

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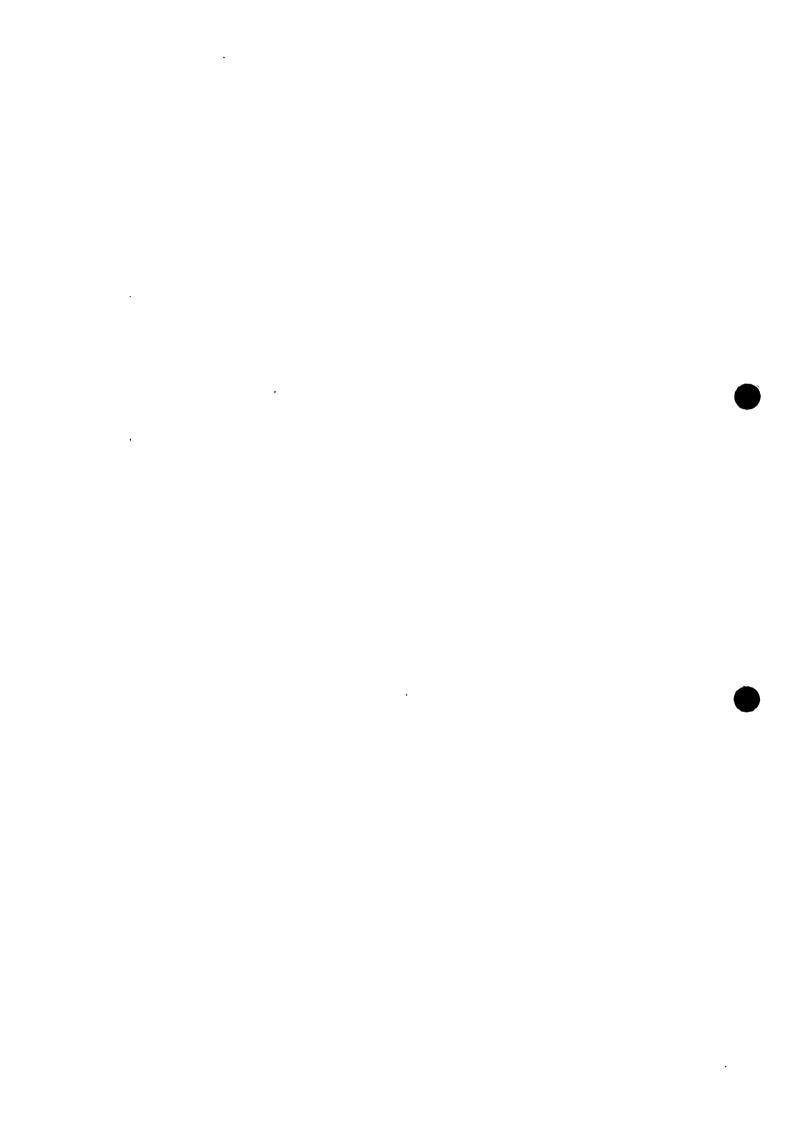
A.P.4099E & G Vcl.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December,1958

INDEX

SECTION I

Removal and Installation Schedule - Major Components

Chapter		Title	Sheet' No.	No of Sheets
1.	Engine Change Engine N.C.O. Engine Man 'A'. Engine Man 'B'. Electrical N.C.O. Electrical Man, Instrument Man.		1-11 12-24 25-36 37-45 46-54 55-57	11 13 12 9 9



Sheet No. 1 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE. CHANGE SUPPLEMENTARY SERVICING

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1 ENGINE N.C.O.

Item No.

ITEM

OPERATION

(Continued overleaf)

OPERATION

ITEM

Item No.

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Sheet No. 2 GOBLIN 2 ENGINE

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REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O. A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

REF. No.	EQUIPMENT AND TOOLS
1A/3965 1C/2275 1C/2433 1C/8183 1L/59 1L/73 4G/1019 4G/2872 4G/3964 4G/4033 4G/4342 5A/2011 OR 5A/3908	Kits, tool, Engine Fitters((\$), to scale A.3, A.P.830, Vol.3, Pt.'A'. Cans, oil replenishing, 2 gallon. Spanner, O.J., S.E., 1 1/4 in. B.S.W. Syringe. Spanner, 'C', adjustable, medium. Spanner, O.J., D.E., 9/16 in. x 5/8 in. B.S.W. Spanner, O.J., D.E., 11/16 in. x 3/4 in. B.S.W. Trays, drip, 6ft. x 4ft. Slings, aero engine, Goblin. Stands, engine, Goblin. Creepers, servicing. Mats, mainplane, Type 'C'. Torches, electric, Type 'C'.

Required by:- NCO A B Total				
NCO	A	В	Total	
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1	_	_	1	

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	•
21C/367 26FC/5722 26FC/9012 26FC/9046 26FC/9047 26FC/9054 26FC/9055 or	Pails, iron, galvanised. Bullet, guide, engine mounting bolts. Board, blanking, tail pipe. Board, blanking, air intake, port. Board, blanking, air intake, starboard. Guard, wire, air intake, port. Guard, wire, air intake, starboard. (Mk.5 aircraft).
26FC/9057	Guard, wire, air intake, starboard,
	(Mk.9 aircraft).
26FC/9104	Tool, adjusting, cowl ring stirrup.
27F/1951	Priming pump, Ki-gass, Type 40 N.
N.I.V.	Beaker, calibrated.
Loc. Man.	Blanks, air intake, engine.
· 	MATERIALS N.A.T
	**** 00 0 W C

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2	_	-	1 2 1 2
1	-	-	1
1 2 1 2	-	-	2

T.O. Code no.

30A/3055	Wire, non-corrodible, 22 S.W.G.	**	•
32B/242 34B/9100512 34B/9100550 34C/9105054	Rags, cotton. Grease, XG-275. Oil, OM-150 Kerosine. Engine oil, specification as	••••	G-350 0-140 F-58

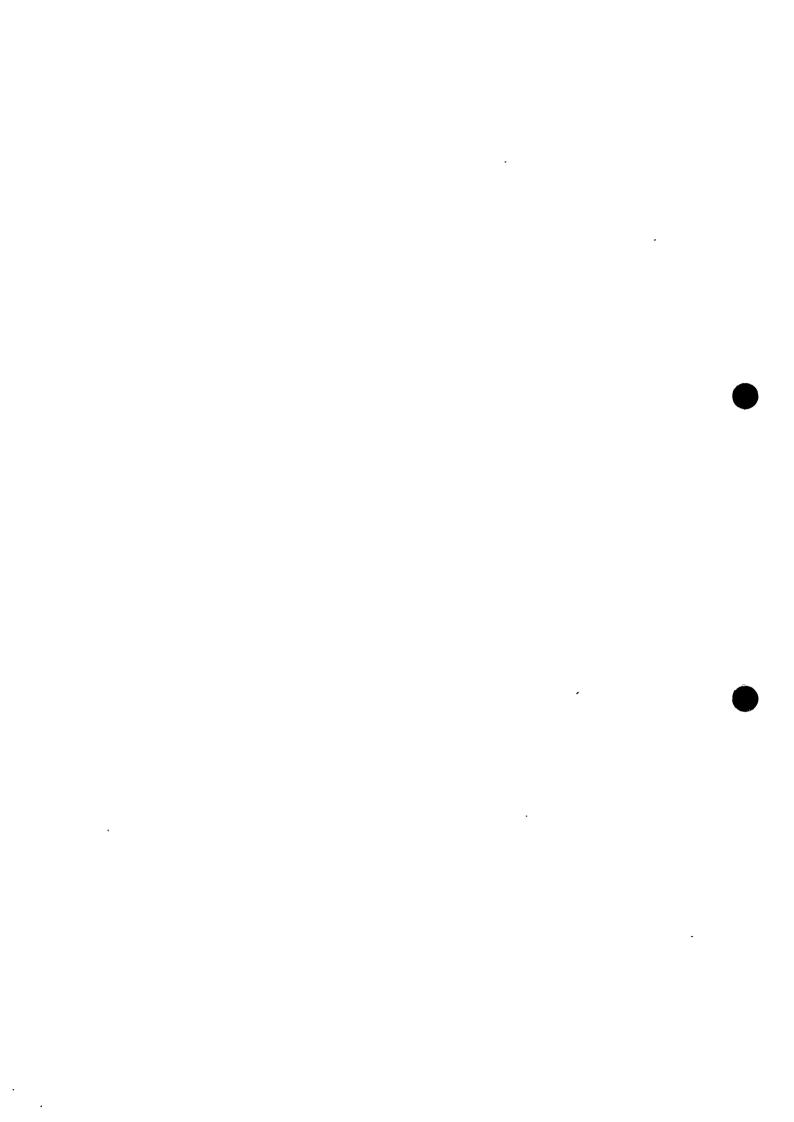
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Sheet No. 3 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SAFETY PRECAUTIONS

- The discharge from the high energy ignition equipment can be lethal. Therefore, before commencing any servicing on the high energy igniter plugs, or on the H.T. wiring, the low tension plug is to be disconnected by the Electrical Man and a period of one minute permitted to elapse. This allows the dissipation of stored capacitor energy and prevents inadvertant discharge. The ignition units are not to be operated with the H.T. leads disconnected. A.D. 5589 is to be displayed.
- Prior to operation of the nose wheel micro switches ascertain from Armament Man that all stoppages have been cleared and all guns unloaded.
- Ground running of the engine is to be avoided, wherever possible, under conditions of dense fog and outside air temperatures in the region of 32 degrees Fahrenheit. These conditions can cause overheating of the engine and collapse of the intermediate air intake casings, due to icing up of the air intake guards.



Sheet No. 4
GOBLIN 2 ENGINE

REMOVAL AND INSTALLIATION SCHEDULE ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SERVICING NOTES

- 1. Inspect all repairs, replacements and modifications carried out.
- 2. Where any connection are broken, either for routine servicing or repair, inspect reconnections for security of attachment and correct locking.
- 3. If a mobile crane is to be used ensure that it is available at correct times for engine removal and engine replacement.
- 4. Ensure Instrument Man is available at correct times for disconnections and reconnections.
- DAMAGE 'Examine for damage' in this schedule means an examination to ascertain the the value or usefulness of the item has not been impaired by:-
 - (a) Insecurity of attachment.
 - (b) Cracks or fractures.
 - (c) Corrosion or contamination.
 - (d) Any form of distortion.
 - (e) Loose rivets.
 - (f) Chafing, fraying or scoring.
 - (g) Broken locking

- the following operations where necessary:
 (a) Remove cap(s) or cover(s) from filler orifices and/or drains.

 (b) Clear orifices.

 (c) Fill container as directed in the item operations.

 (d) Ensure drains are free from obstructions.

 (e) Ensure gasket(s) and cap(s) or cover(s) are free from damage.

 (f) Refit cap(s) or cover(s)

 (g) Fit locking devices as necessary. REPLENISH - The word 'replenish" when applied to liquids in this schedule incorporates

Ensure drains are free from obstructions.

Ensure gasket(s) and cap(s) or cover(s) are free from damage.

Refit cap(s) or cover(s)

Fit locking devices as necessary.

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Sheet No. 5
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O. A.P.4099E & G Wol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item
No.

ITEM

OPERATION:

PRE HANGAR SERVICING

Carry out general supervision as required and the following Items as detailed:-

1. General.

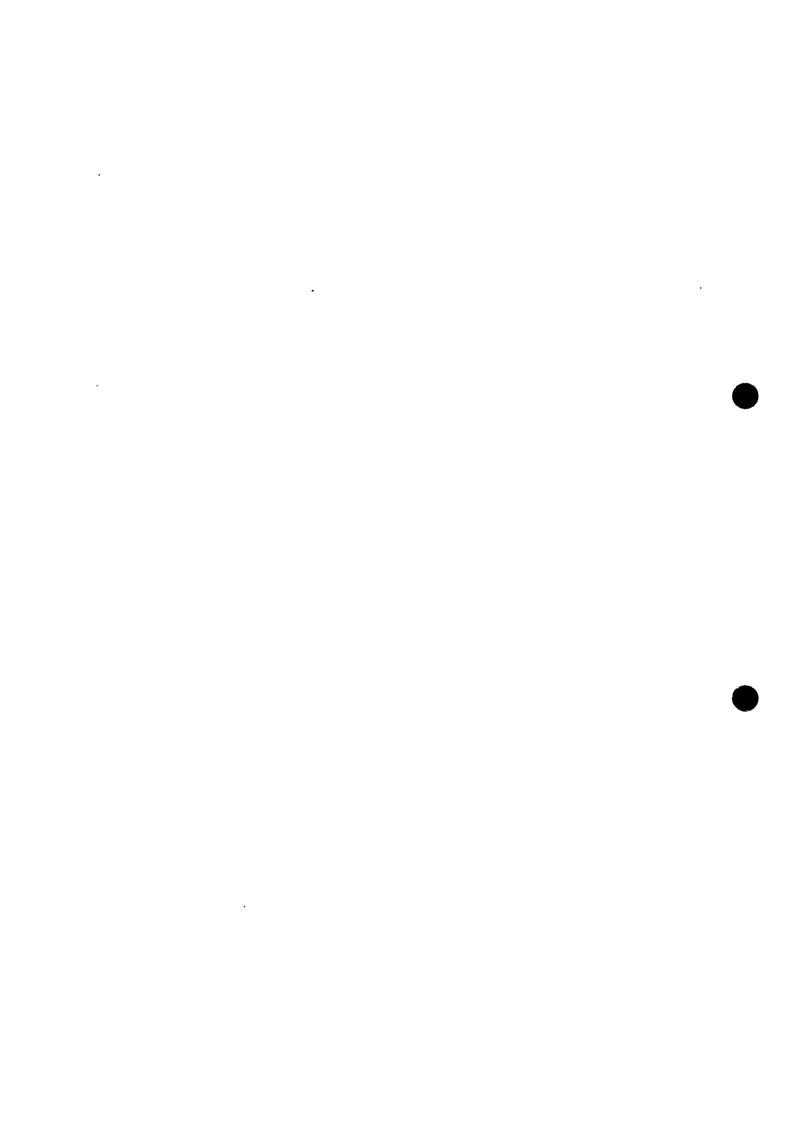
- (i) Read Safety Precautions and Servicing Notes.
- (ii) Examine Form 700E for reports of defects and life expired components and detail men for rectification and replacement as necessary.
- 2. (a) Air intake blanking boards.
 - (b) Tail pipe blank.

Ensure fitted.

This Item is applicable only if the hangar gantry is to be used.
Ensure correctly positioned beneath gantry.

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Sheet No. 6
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

HANGAR SERVICING

Carry out the general supervision as required and the following Items as detailed:-

1. Engine.

Ensure all disconnections have been made prior to removal.

2. Engine.

(i) Supervise fitting of sling.

(ii) Supervise removal from airframe and fitting to stand.

3. Air intake joint rubbers.

(i) Examine for deterioration and damage.

(ii) Fold back in preparation for engine installation.

4. Replacement engine.

(i) Examine prior to installation,(ii) Examine flexible fuel pines for

(ii) Examine flexible fuel pipes for date of manufacture.

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(Continued overleaf)

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- 5. Replacement Engine.
 - Teleflex conduits. Flying control cable pulleys in engine bay.))
- Engine installation.
- Engine Controls. Throttle. H.P. cock. L.P. cock.

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Note: - Pipes which will be time expired (Five years from date of manufacture) within the next six months are to be exchang exchanged for new pipes, or pipes which have been serviced in accordance with instructions detailed in A.P.4121 B and C, Vol.2, Pt. 4, Sect.2, Chap.10.

Supervise cleaning of impeller (iii)

Supervise fitting of sling.

(i) (ii) Supervise removal from stand and installation of airframe.

Examine for damage caused during installation of engine. If found, inform Airframe N.C.O.

Examine for connections, fitting and bonding for damage and correct locking.

Assisted by Man 'A' in cockpit, who will operate controls, as required:-

Examine for full, free and correct movement.

Ensure control positions in cockpit correspond with the settings on components.

(Continued)

Sheet No. 7 GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

(Contd.) Engine Controls.

Throttle. H.P. cock.

L.P. cock.

8. Engine installation.

Aircraft generally.

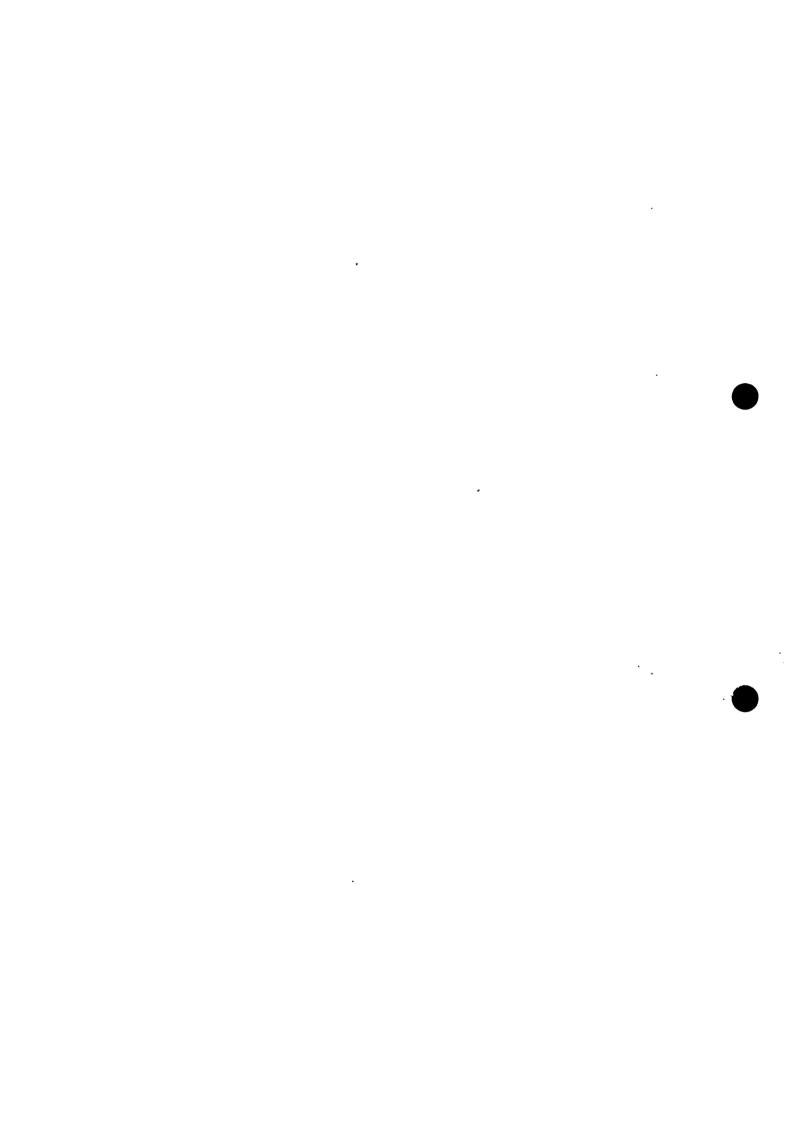
Ground equipment.

Ensure control rods are in safety.

Examine control rods for correct (iv) locking.

Ensure that all tools; rags and other materials used during Engine Change have been removed from the aircraft.

Supervise removal from vicinity of the aircraft.



Sheet No. 8
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O. A.P.4990E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

POST HANGAR SERVICING

Carry out general supervision as required and the following Items as detailed:-

1. (a) Front bearing.

Detail Men to prime with oil as follows:-

(i) Disconnect oil supply pipe banjo union from metering pump body.

(ii) Connect Ki-gass pump to banjo union.

(iii) Gently force 1/3 point of clean engine oil, specification as stated in Form 700G, into front bearing.

Note: Do not disconnect Ki-gass pump until after completion of metered oil supply check.

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(Contd.)(b) Rear Bearing.

- 2. Fuel tanks.
- Engine fuel system.

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Detail Men to prime with oil as follows:-

(i) Disconnect oil supply pipe banjo union from metering pump body.

(ii) Connect flexible pipe to end of rear bearing oil supply pipe

(iii) Connect Ki-gass pump to flexible pipe.

(iv) Gently force 50 to 100 c.c. of clean engine oil, specification as stated in Form 700G. into rear bearing.

Note:- Do not disconnect Ki-gass pump until after completion of metered oil supply check.

Detail and supervise refuelling.

Prime with fuel and de-inhibit as follows:-

(1) Request Electrical N.C.O. to disconnect L.T. cables to high energy ignition units.

(2) Disconrect fuel pipe, L.P. filter to fuel pump inlet at fuel pump inlet.

Connect external power supply to aircraft.

(4) Set Ground/Flight switch to 'GROUND'.

(5) Set H.F. cock lever to 'CLOSED'.

(6) Set L.P. cock lever to 'ON'.

(Continued)

Sheet No. 9
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

(Contd.)
 Engine fuel system.

- (7) Set pulsometer pump switch to 'ON'.

 Collect fuel flow from disconnected pipe in suitable container.
- (8) When fuel is discharging from pipe at full bore reconnect pipe, tighten and lock.
- (9) Set pulsometer pump switch to 'OFF',
- (10) Disconnect fuel pipe, control box to fuel pump inlet at fuel pump inlet.
- (11) Fit blanks to fuel pump inlet and fuel pipe union.
- Disconnect spill return pipe, barostat to bulkhead at barostat. Position suitable container to collect fluid ejected from barostat.
- (13) Set auxiliary starting switch to 'ON'.

(14) Set throttle to 'CLOSED'.

(Continued overleaf)

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- (15)Press starter button and simulate engine start. Collect fluid ejected from barostat.
- (16)Remove blank from fuel pipe, control box to fuel pump inlet and place end of pipe in suitable container.
- Set H.P. cock lever to 'OPEN'.
- (17) (18) Press starter button and simulate engine start. Open throttle as soon as starting cycle has commenced.
- (19)When engine has attained speed of between 1600 and 1700 R.P.M. set H.P. cock lever to 'CLOSED'. Collect fluid expelled from fuel pipe in container.
- Set throttle to 'CLOSED'. (20)
- (21)Set auxiliary starting switch to 'OFF'.
- (22)Disconnect external power supply.
- (23): Remove blank from fuel pump inlet.
- (24)Reconnect fuel pipe from control box to fuel pump inlet at at fuel pump inlet, tighten and lock.
- (25)Reconnect barostat spill return pipe at barostat, tighten and lock.
- (26)Request Electrical N.C.O. to reconnect L.T. cables to high energy ignition units.

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Sheet No. 10 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Ttem No.

ITEM

Set L.P. cock to 'OFF'.

High energy igniter plugs.

(i) (ii) Examine for correct functioning by pressing relight button and listening for sharp crack of electrical discharge in

OPERATION

combustion chambers.

Metered oil supply. 5.

Carry out flow check as follows:-

Start engine in accordance with Ground (i)

Handling Notes.

Run engine at 3000 R.P.M. Man will collect (ii) metered oil supply from pumps in calibrated beaker.

Note: Oil supply from front and rear bearing metering pumps is to be 3 c.c. in 2 minutes and oil supply from overspeed governor metering pumps is to be 1c.c. in 2 minutes.

(Continued overleaf)

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5. (Contd.)

- (iii) While the engine is running the Ki-gass priming pumps are to be gently operated to keep oil feed pipes fully primed with oil.
- (iv) Stop engine.
- (v) Disconnect Ki-gass priming pumps and reconnect banjo unions to metering pumps.

 Note: During this operation care is to be taken to ensure oil feed pipes are kept fully primed with oil.
- (vi) Tighten banjo bolts and lock with wire.
- 6. Sub-item (b) of this Item is to be carried out before completion of Engine Ground Check.
 - (a) Engine.
 - (b) H.P. fuel cock, control.
- 7. Engine installation.

Carry out Engine Ground Check in accordance with Ground Handling Notes.

With the engine running at cruising R.P.M. and with an observer watching the fuel drains, operate the H.P. cock lever towards the 'CLOSED' position. No dumping of fuel is to take place until the control lever has moved at least 1/4 in. to the rear past the spring gate.

Examine for fuel and oil leaks.

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Sheet No. 11
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item
No. ITEM
8. Engine controls.

OPERATION

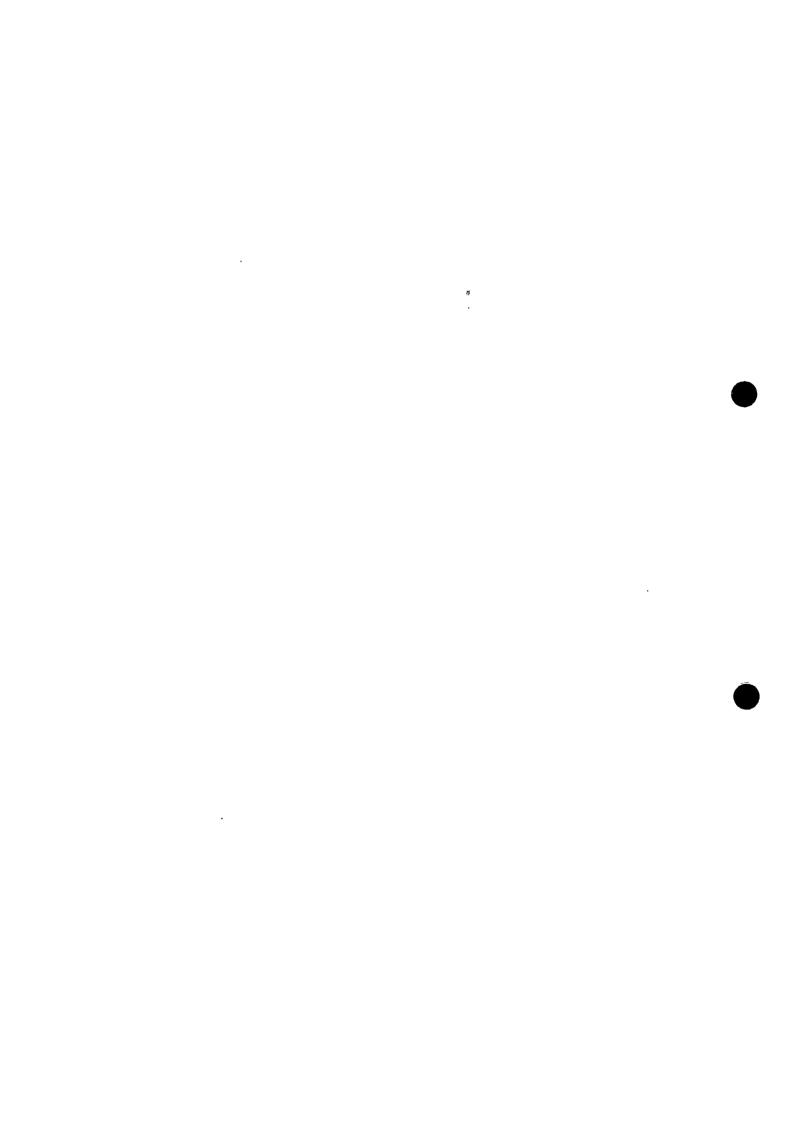
Arrange for an independent control check to be carried out in accordance with A.P.3158, Vol.2, Leaflet B 28.

9. Engine cowlings.

- (i) Detail and supervise refitting.
- (ii) Ensure toggle fasteners are correctly tensioned and locked. Adjust as necessary. Note: The tension of the fasteners is to be such that they can be disengaged by slight leverage from a small screwdriver, applied behind the toggle lever.
- (iii) Ensure cowling fastener indicator markings are clearly marked and correspond with the 'LOCKED' position.

10. (a) Servicing Record
Clips.
(b) Form 700G.
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Sign for completing Engine Change Servicing.



Sheet No. 12
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE
ENGINE CHANGE
SUPPLEMENTARY SERVICING
ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5.

VAMPIRE F.B. MKS.5 & 9 AIRCRAFT

1st. Edition, December 1958

SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

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(Continued overleaf

Item No.

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LTEM

OPERATION

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Sheet No. 13
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE. ENGINE CHANGE ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

EQUIPMENT AND TOOLS

QTY.

Kits, tool, Engine Fitter (S), to scale A.3, A.P.830, Vol.3,
Pt. 'A'.

Spanner, O.J., S.E., 1 1/4 in. B.S.W.

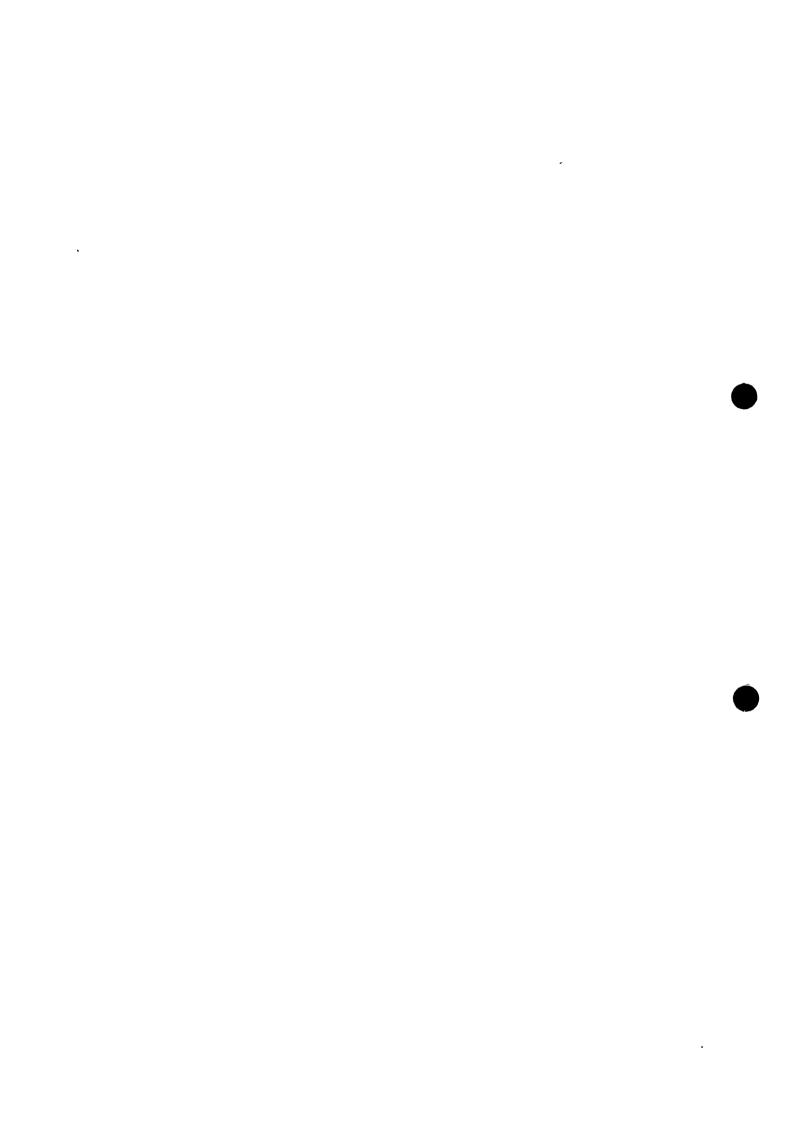
Spanner, O.J., D.E., 9/16 in. x 5/8 in. B.S.W.

Spanner, O.J., D.E., 11/16 in. x 3/4 in. B.S.W.

Bullet, guide, engine, mounting bolts.

Torches, electric, Type 'C' or 'U'.

Obtain from N.C.O.

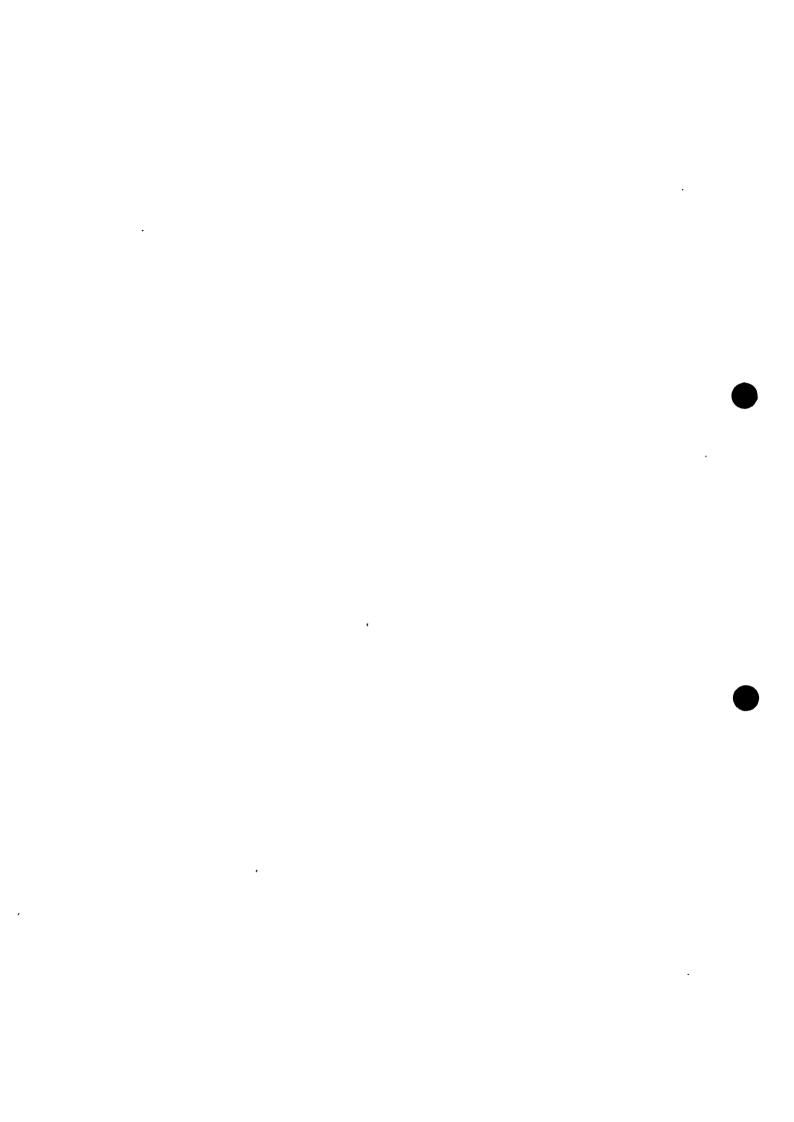


Sheet No. 14 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SAFETY PRECAUTIONS

- The discharge from the high energy ignition equipment can be lethal. before commencing any servicing on the high energy igniter plugs, or on the H.T. wiring, the low tension plug is to be disconnected by the Electrical Man and a period This allows the dissipation of stored capacitor of one minute permitted to elapse. The ignition units are not to be operated energy and prevents inadvertent discharge. A.D.5589 is to be displayed. with the H.T. leads disconnected.
- Prior to operation of the nose wheel micro switches ascertain from Armament Man that all stoppages have been cleared and all guns unloaded.
- Ground running of the engine is to be avoided, wherever possible, under conditions of dense fog and outside air temperatures in the region of 32 degrees Fahrenheit. These conditions can cause overheating of the engine and collapse of the intermediate air intake casings, due to icing up of the air intake guards.



Sheet No. 15 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

- If any connections are broken, other than those detailed in the schedule, inform N.C.O. SERVICING NOTES who will inspect when reconnection and locking has been completed.
- The bonding of all components referred to in the schedule is to be examined for serviceability and good connection during the course of servicing.
- When tightening Bundy Pipe union nuts the instructions given in A.P.4121G and C, Vol.2, Pt.3, Sect.3, Chap.1, Paras. 5(a), (b), (c) and (d) are to be strictly
- DAMAGE 'Examine for damage' in this schedule means an examination to ascertain that the value or usefulness of the item has not been impaired by:-
 - (a) Insecurity of attachment.
 - (b) Cracks or fractures.
 - (c) Corrosion or contamination.
 - Any form of distortion.
 - Loose rivets.
 - Chafing, fraying or scoring.
 - Broken locking.

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(Continued overleaf)

REPLENISH - The word 'replenish' when applied to liquids in this schedule incorporates the following operations where necessary:
(a) Remove cap(s) or cover(s) from filler orifices and/or drains.

(b) Clear orifices.

(c) Fill container as directed in the item operation.

(d) Ensure drains are free from obstructions.

(e) Ensure gasket(s) and cap(s) or cover(s) are free from damage.

(f) Refit cap(s) or cover(s).

Fit locking devices as necessary,

(8362) (40)

Sheet No. 16
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE

ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

OPERATION

PRE HANGAR: SERVICING

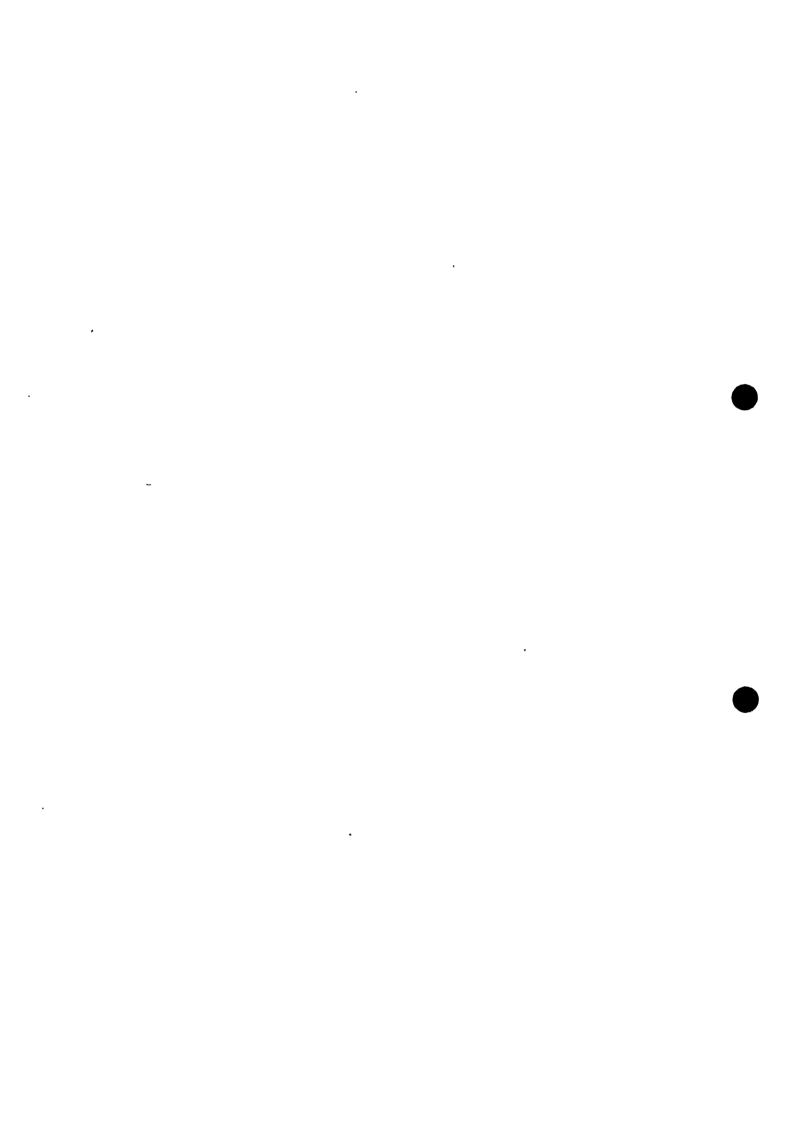
1. General.

Read Safety Precautions and Servicing Notes.

2. Assist N.C.O. as detailed.

(8362)(41)

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Sheet No. 17 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANCE ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

. .)

OPERATION

HANGAR SERVICING

Ground equipment.

Assisted by MAN. 'B' position the following around the aircraft:-

- Drip tray 🖟
- (i) (ii) Mainplane mats.
- Step ladder: (iii)
- Servicing creeper. (iv)

Upper rear cowling. 2.

- Lower rear cowling.
- Upper front cowling.
- Lower front cowling.

Assisted by Man 'A':-

- Release toggle fasteners.
- (i) (ii) Remove and place on cowling rack.
- Release toggle fasteners, (i)
- Remove countersunk bolts securing cowling to fireproof bulkhead and cowl support
- Remove and place on cowling rack.

(Continued overleaf)

(8362) (43)

(i) (a) Rear cone fairing. Ensure electrical cables to downward identification lamps and fire warning circuit have been disconnected by Electrical Man. (ii) Assisted by Man 'B' remove. Examine during removal for accumulations of fuel. oil and foreign materials. (b) Fireguard extensions. Remove and place on cowling rack. Sub-items (a), (b) and (c) of this Item are applicable only to Mk.5 aircraft. Engine (Top Port.) (a) Cabin supercharger Disconnect at cabin supercharger inlet. inlet pipe. Disconnect at air filter. Rotate to clear engine during removal. (b) Cabin supercharger. Disconnect at cabin supercharger outlet. silencer. Disconnect at outlet. (iii) Remove and place on cowling rack. (c) Cabin supercharger clutch control. (d) Hymatic compressor Disconnect at compressor. delivery pipe. (e) Air intake joint rubber. Disconnect at engine.

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(Continued)

Sheet No.18 Issued with:-A.L. No.2 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'A'

*A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958

SECTION 1 CHAPTER 1

Item No.

TTEM

OPERATION

(Contd.) 4. (Top Port.) Engine. Top cowling former. Fire extinguisher.

flexible pipe, spray ring to wing root.

(h) Extension fire shield support bracket on wing root.

Disconnect at wing root.

Remove top securing bolts.

Engine. (Bottom Port)

(a) L.P. filter to L.P. cock fuel pipe.

(b) L.P. filter to fuel pump fuel pipe.

(c) L.P. filter, complete with inlet and outlet pipes.

Disconnect at L.P. cock.

Disconnect at fuel pump.

Remove securing bolts. (i)

Remove. (ii)

Fit blanking caps to inlet and outlet pipes.

(8362)45

(Continued overleaf)

SM.457 (2)

- 5. (Contd.)
 - (d) Throttle control rod.
 - (e) H.P. fuel cock control rod.
 - (f) Pressure limiting valve drain pipe.
 - (g) Dump valve spill pipe.
 - (h) Bulkhead to barostat fuel pipe.
 - (j) Fuel transfer pipe support clip.
 - (k) Extension fire shield support bracket on wing root.
- 6. Bottom cowling former.

Disconnect at throttle valve. Disconnect at H.P. fuel cock.

Disconnect at pressure limiting valve.

Disconnect at dump valve.
Disconnect at barostat.

Disconnect at bottom cowling former.

- (i) Remove bottom securing bolts.
- (ii) Remove.

Assisted by Man 'A':-

- (i) Remove attachment bolts at wing root.
- (ii) Remove attachment bolts to diffuser casing.
- (iii) Remove and place on cowling rack.
- (iv) Remove attachment bolt bushes.

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Sheet No. 19
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

7. Engine.

Supervised by N.C.O. and assisted by Man 'B':-

(i) Fit sling to engine.

(ii) Attach sling to crane and take weight of engine.

(iii) Remove bottom bearer bolts.

(iv) Remove top bearer bolts.

(v) Remove from airframe.

(vi) Fit trunnion mountings.

(vii) Fit to engine stand.

(viii) Fit air intake blanks.

(ix) Remove sling.

8. Engine Bay.

(a) Engine Bay.

(b) Fireproof bulkhead.

Clean with kerosine, paying particular attention to wing root ledges.

(i) Clean with kerosine.

(ii) Examine for cracks.

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(Continued overleaf)

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- (Contd.) 8.
 - (c) Engine bearer struts.
 - Bearer bolts.
 - (e) Pressure reducing. valves.
 - Pipelines.
 - (g) Air intake joint rubbers.
- Intermediate air intake ducts.
- 10. Engine Controls. (Bulkhead.)
 - Teleflex control boxes.
 - Layshafts.

- Examine for cracks in vicinity of welds, and damage.
- Examine bearer bolt holes for elongation. Examine for good fit in bearer struts and wear and damage. Examine for damage.
- Examine for damage. (i)
- Examine hose joints for deterioration.
- Check hose clips for tightness. Examine for deterioration and damage.
- Clean.
- (i) (ii) Examine for damage.

Assisted by Man 'B', who will operate controls, as required:-Examine for damage.

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(Continued)

Sheet No. 20
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'A'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No. ITEM

OPERATION

(e) Tie rods.

(f) Tie rods fairleads.(g) Throttle control rod.(h) H.P. cock control rod.

) Clean with kerosine.

(ii) Examine for correct alignment and damage.

(iii) Lubricate with oil, OM-150.

(i) Clean with kerosine.

(ii) Examine for twist and damage.

(iii) Lubricate with oil OM-150.(i) Examine for correct tension.

(i) Examine for correct tension.
(ii) Check locknuts for tightness.

(iii) Ensure rods are in safety. Examine for cleanliness, and damage.

(i) Examine for damage.

(ii) Examine end fittings for wear.

(iii) Ensure rods are in safety.

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(Continued overleaf)

11. Top cowling former.

- 12. Replacement engine.
- 13. Unserviceable engine.
- 14. Replacement engine. impeller.

(8362) (50)

- (i) Remove attachment bolts to diffuser casing.
- (ii) Remove.
- iii) Remove attachment bolt bushes.
- (iv) Examine for cracks.
- (v) Examine asbestos tape for damage and security of attachment.
- (vi) Examine support stirrups for damage and correct locking.
- (vii) Fit to replacement engine.
- (i) Remove blanks.
- (ii) Examine for damage.
- (iii) Examine pipelines for routeing, damage and correct locking.

Fit blanks.

Remove all traces of inhibitor fluid from impeller blades using white spirit and soft brush as necessary. Great care is to be taken to preserve the normal protective treatment of the impeller.

NOTE:- Failure to remove all traces of inhibitor fluid may result in inaccuracy on subsequent crack detection tests.

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Sheet No. 21 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ENGINE MAN 'A'

A.P. 4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

15. Replacement engine.

OPERATION

Supervised by N.C.C. and assisted by MAN 'B':-

(i) Fit sling to engine.

(ii) Attach sling to crane and take weight of engine.

(iii) Remove from stand.

(iv) Remove trunnion mountings.

(v) Position in airframe.

(vi) Fit top bearer bolts.

(vii) Fit bottom bearer bolts.

. . .

(viii) Examine for correct alignment of engine intakes and intermediate air intake ducts. Note:- Maximum malalignment permitted is a step down of 0.20 in. in direction of air flow only. Gap between intermediate air intake duct and engine intake is to be between 0.10 in. and 0.20 in. at any point.

(Continued overleaf)

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- 15. (Contd.)
- 15. Intermediate air intake duct. (Port.)
- 17. Bottom cowling former.
- 18. Engine. (Bottom Port.)(a) Throttle control rod.
 - (b) H.P.fuel cock control rod.
 - (c) Bulkhead to barostat fuel pipe.
 - (d) L.P. fuel filter. complete with inlet and outlet pipes.

(ix) Fit bearer bolt nuts, tighten and lock.

(x) Remove sling.

- (i) Examine for freedom from tools, rags and foreign materials.
- (ii) Fit blanking boards.

Assisted by Man 'B':-

(i) Fit attachment bolt bushes.

(ii) Fit.

- (iii) Fit attachment bolts to diffuser casing.
- (iv) Fit attachment bolts at wing root.
- i) · Reconnect at throttle valve.
- (ii) Lubricate with grease, XG-275.
- (i) Reconnect at H.P. fuel cock.
- (ii) Lubricate with grease, XG-275. Reconnect at barostat, tighten and lock.
- (i) Remove blanking caps from inlet and outlet pipes.

(ii) Refit to bearer strut. Reconnect at L.P. cock, tighten and lock.

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(Continued)

Sheet No.22
Issued with:A.L. No.2
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENCINE CHANGE. ENGINE MAN 'A'

E A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item
No.

ITEM

OPERATION

18. (Contd.)

Engine. (Bottom Port.)

(e) L.P. filter to L.P. cock fuel pipe.

(f) L.P. filter to fuel pump fuel pipe.

(g) Fuel transfer pipe support clip.

(h) Pressure limiting valve drain pipe.

(j) Dump valve spill pipe.

(k) Extension fire shield support bracket on wing root.

.(1) Starting valve blanking cap.

Reconnect at L.P. cock, tighten and lock.

Reconnect at fuel pump, tighten and lock.

Reconnect to bottom cowling former.

Reconnect at pressure limiting valve, tighten and lock.

Reconnect at dump valve, tighten and lock.

(i) Refit.

(ii) Refit bottom securing bolts.

Ensure blank has been removed from vent hole in adjusting plug.

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(Continued overleaf)

SM-457 (3)

19. Sub-items (e), (f) and (g) of this Item are applicable only to Mk.5 aircraft. Engine. (Top Port.)

(a) Fire extinguisher flexible pipe, spray ring to wing root.

Top cowling former.

(c) Air intake joint rubber.

(d) Hymatic compressor delivery pipe.

(e) Cabin supercharger inlet pipe.

(f) Cabin supercharger clatch control.

(g) Catin supercharger silencer.

Reconnect at wing root, tighten and lock.

Ensure pipe does not foul flying control cables.

Refit to wing root.

(i) Fit to engine.

Position and tighten Jubilee clips. Reconnect at compressor, tighten and lock.

(i)Position.

(ii) Reconnect to air filter.

(iii) Reconnect to cabin supercharger inlet.

(iv)´ Tighten Jubilee clips.

(i) (ii) Reconnect at clutch lever.

Lubricate with grease, XG-275.

(i) Refit.

(ii) Reconnect at outlet and supercharger outlet.

Position and tighten Jubilee clips. (iii)

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(Continued)

REMOVAL AND INSTALLATION SCHEDULE A.P.4099E & G Vol.5 Pt.5 Sheet No.23 ENGINE CHANGE VAMPIRE F.B. MKS.5 & 9 AIRCRAFT Issued with:-A.L. No.2 ENGINE MAN 'A' 1st. Edition, December 1958 SECTION 1 CHAPTER 1 GOBLIN 2 ENGINE Item No. ITEM OPERATION (Contd.) 19. (Top Port.) Engine. (i) Refit top securing bolts. (h) Extension fire shield (ii) Ensure that the bracket does not foul the support bracket on wing root. flying control cables. Operate, as required by N.C.O. 20. Engine controls. Engine installation. Remove all tools, rags and other materials used during Engine Change from the aircraft. Aircraft generally. Assisted by Man 'B' refit. Rear cone fairing. 22. Fireguard extensions. Assisted by Man 'B', remove from vicinity 23. Ground equipment. of aircraft. SM.457 (4) (8362)55

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(8362)56

Sheet No. 24 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE

VAMPIRE F.B. MKS.5 & 9 AIRCRAFT ENGINE MAN 'A'

1st. Edition, December 1958 SECTION 1 CHAPTER 1

A.P.4099E & G Vol.5 Pt.5

Item No.

ITEM

OPERATION

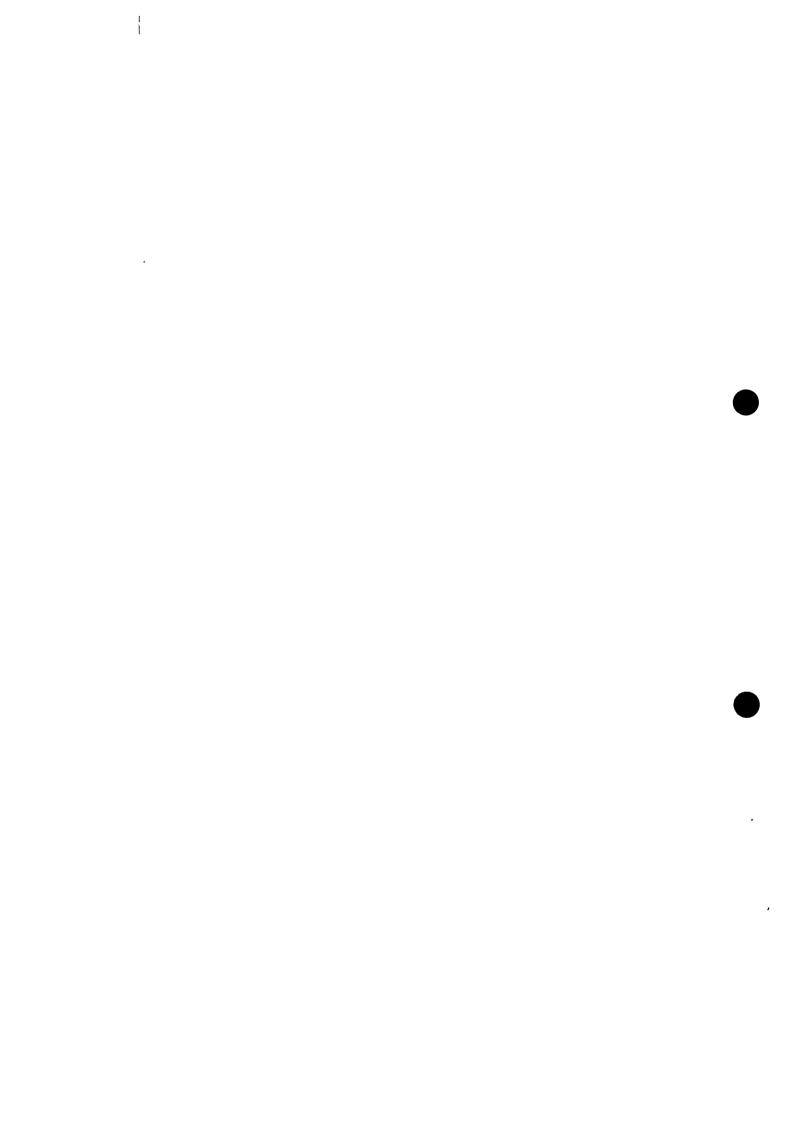
POST HANGAR SERVICING

Servicing Record Slips.

Sign for completing Engine Change Servicing.

Assist N.C.O. as detailed.

(8362) (57)



Sheet No. 24
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ENGINE MAN 'A' A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item

No. ITEM

OPERATION

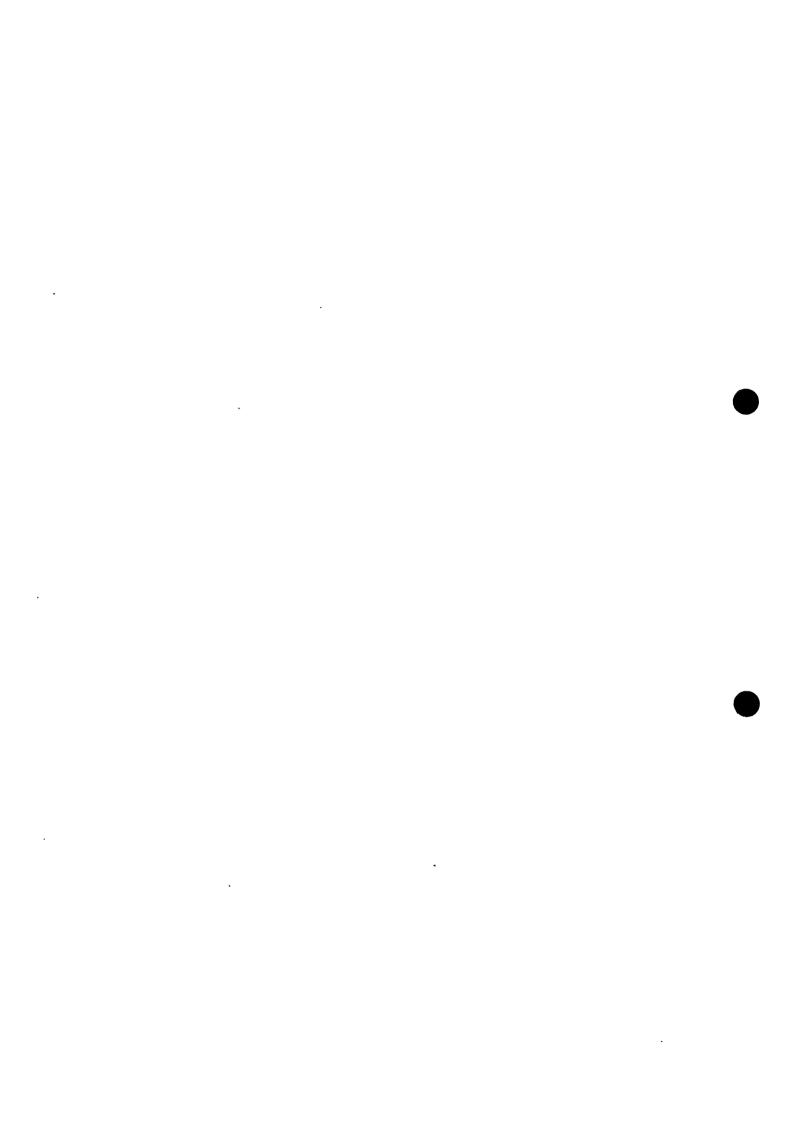
POST HANGAR SERVICING

1. Servicing Record Slips.

Sign for completing Engine Change Servicing.

2. Assist N.C.O. as detailed.

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Sheet No. 25 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDUIE ENGINE CHANGE SUPPLEMENTARY SERVICING ENGINE MAN 'B' A.P.4099E & G Vol.5 Pt.5

VAMPIRE F.B. MKS.5 & 9 AIRCRAFT

1st. Edition, December 1958

SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

(Continued overleaf)

OPERATION

ITEM

Item No. (8362) (69)

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Sheet No. 26
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE

ENGINE CHANGE ENGINE MAN 'B' A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

EQUIPMENT AND TOOLS

QTY.

Kits, tool, Engine Fitter (S), to scale A.3, A.P.830,
Vol.3, Pt. 'A'.

Cans, cil replenishing, 2 gallon.

Spanner, 'C', adjustable, medium.

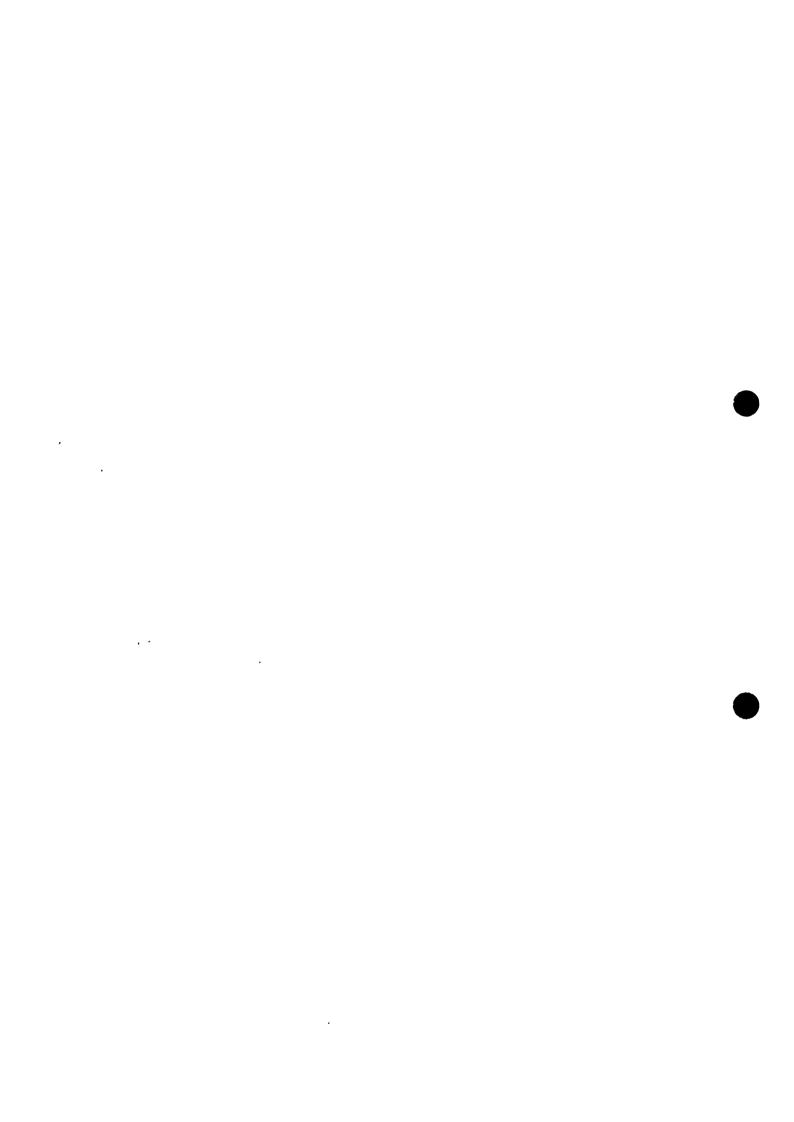
Pails, iron, galvanised.

Bullet, guide, engine mounting bolts.

Torches, electric, Type 'C' or 'U'.

Cobtain from N.C.O.

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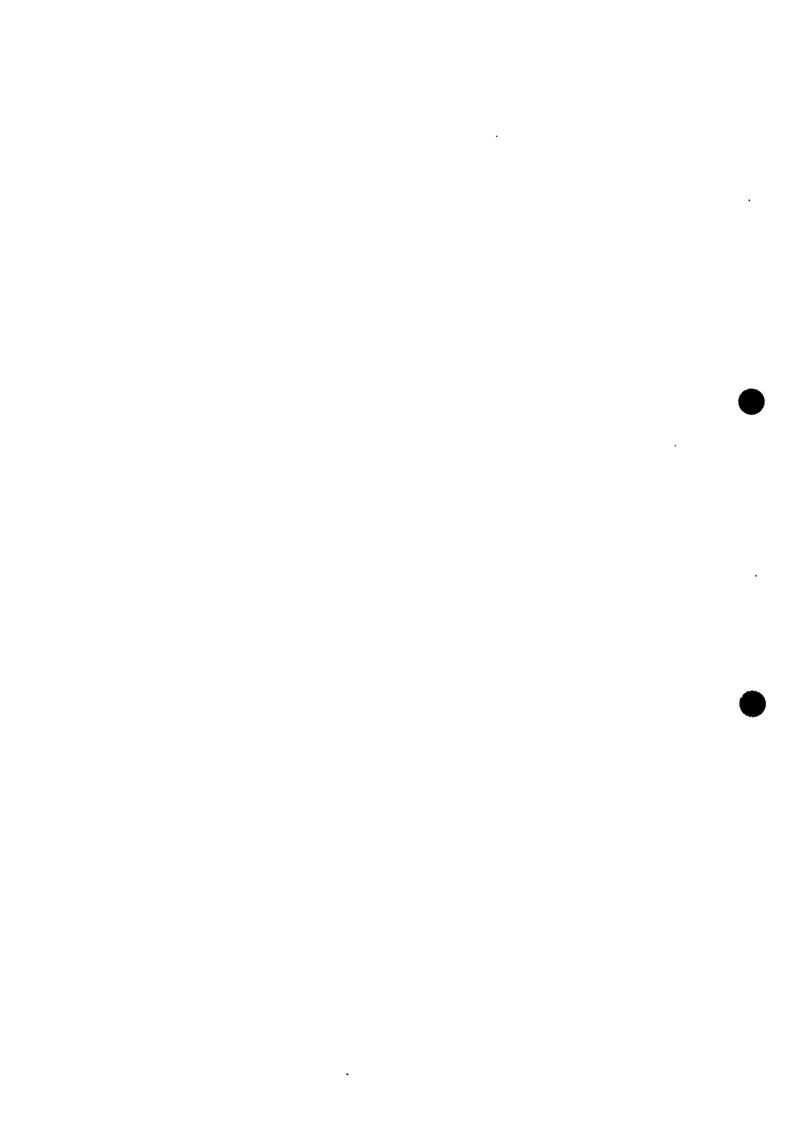
Sheet No. 27
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE
ENGINE CHANGE
ENGINE MAN 'B'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SAFETY PRECAUTIONS

- 1. The discharge from the high energy ignition equipment can be lethal. Therefore, before commencing any servicing on the high energy igniter plugs, or on the H.T. wiring, the low tension plug is to be disconnected by the Electrical Man and a period of one minute permitted to elapse. This allows the dissipation of stored capacitor energy and prevents inadvertent discharge. The ignition units are not to be operated with the H.T. leads disconnected. A.D.5589 is to be displayed.
- Prior to operation of the nose wheel micro switches ascertain from Armament Man that all stoppages have been cleared and all guns unloaded.
- Ground running of the engine is to be avoided, wherever possible, under conditions of dense fog and outside air temperatures in the region of 32 degrees Fahrenheit. These conditions can cause overheating of the engine and collapse of the intermediate air intake casings, due to icing up of the air intake guards.



Sheet No. 28 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'B' A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT. 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SERVICING NOTES

- 1. If any connections are broken, other than those detailed in the schedule, inform N.C.O. who will inspect when reconnection and locking has been completed.
- 2. The bonding of all components referred to in this schedule is to be examined for serviceability and good connection during the course of servicing.
- When tightening Bundy pipe union nuts the instructions given in A.P.4121B and C, Vol.2, Pt.3, Sect.3, Chap.1, Paras.5(a),(b),(c) and (d) are to be strictly adhered to.
- 4. DAMAGE 'Examine for damage' in this schedule means an examination to ascertain that the value or usefulness of the item has not been impaired by:-
 - (a) Insecurity of attachment.
 - (b) Cracks or fractures.
 - (c) Corrosion or contamination.
 - (d) Any form of distortion.
 - (e) Loose rivets.
 - (f) Chafing, fraying or scoring.
 - g) Broken locking.

- 5. REPLENISH - The word replenish' when applied to liquids in this schedule incorporates the following operations where necessary:-

 - (a) Remove cap(s) or cover(s) from filler orifices and/or drains.
 (b) Clear orifices.
 (c) Fill container as directed in the item operation.
 (d) Ensure drains are free from obstructions.
 (e) Ensure (gasket(s) and cap(s) or cover(s) are free from damage.
 (f) Refit cap(s) or cover(s).
 (g) Fit locking devices as necessary.

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Sheet No. 29
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ENGINE WAN'B'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item

No.

ITEM

OPERATION

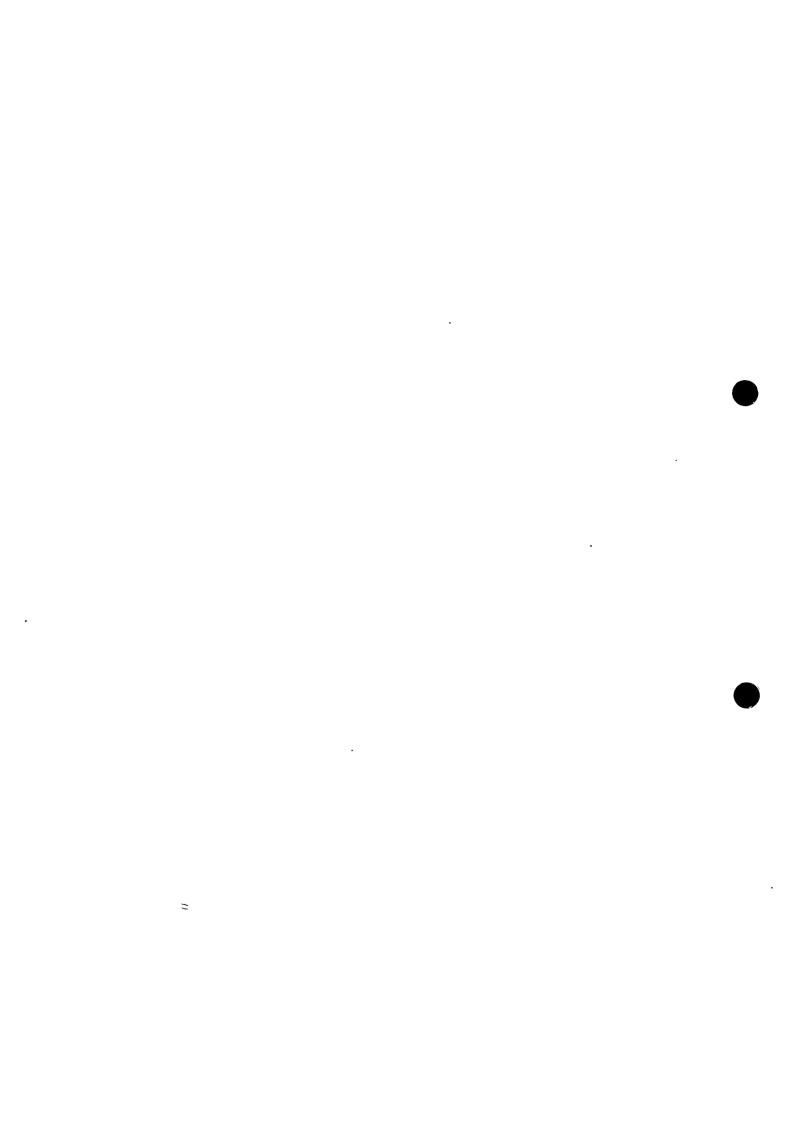
PRE HANGAR SERVICING

1. General

Read Safety Precautions and Servicing Notes

2. Assist N.C.O. as detailed.

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A.P.4099E & G Vol.5 Pt.5 REMOVAL AND INSTALLATION SCHEDULE Sheet No.30 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT ENGINE CHANGE. Issued with:-1st. Edition, December 1958 ENGINE MAN 'B' A.L. No.2 SECTION 1 CHAPTER 1 GOBLIN 2 ENGINE Item OPERATION ITEM No. HANGAR SERVICING Assist Man 'A' to position around the aircraft. Ground equipment. 1. 2. Upper rear cowling. Lower rear cowling. Assist Man 'A' to remove Upper front cowling. Lower front cowling. Assist Man 'A' to remove. Rear cone fairing. (i) Clean. Rear cone fairing. Examine for damage. (ii) Examine drain holes for freedom from obstruction.

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SM.457 (5)

(Continued overleaf)

5. Sub-items (a) and (b) of this Item are applicable only to Mk.5 aircraft. Engine. (Top Starboard.)

(a) Vacuum pump exhaust

b) Vacuum pump inlet pipe.

(c) Generator and air compressor cooling pipe

(d) Air duct to gun heater muff.

(e) Top cowling former.

(f) Canopy air seal pipe between diffuser casing to pressure reducing valve.

(g) Barostat total head air pipe.

(h) Air intake joint rubber.

(j) Extension fire shield support bracket on wing root.

Disconnect at vacuum pump.

(i) Disconnect at junction with gun heater pipe

(ii) Disconnect at generator.

(iii) Disconnect at air compressor cooling shroud.

(iv) Remove.

Disconnect at flexible joint adjacent to diffuser casing.

Disconnect at wing root.

Disconnect at each end and remove.

Disconnect at hose connection adjacent to generator.

Disconnect at engine.

Remove top securing bolts.

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Sheet No.31 Issued with:-A.L. No.2 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'B'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

Sub-item (1) of this Item is applicable only to Mk.9 aircraft. (Bottom Starboard.) Engine.

(a) Gun heater pipe between engine to bulkhead.

(b) Hydraulic pipes between hydraulic pump and bulkhead.

(c) Overspeed governor oil drain pipe.

(d) Overspeed governor fuel drain pipe.

(e) Combretion chamber pipe between drain valve and drain collector box.

Rear bearing drain pipe.

Hydraulic pump drain pipe.

Disconnect at connection adjacent to bottom cowling former.

Disconnect at Avery couplings.

Disconnect at drain collector box.

Disconnect at overspeed govervor unit.

Disconnect at drain valve.

Disconnect at engine.

Disconnect at hydraulic pump.

SM.457 (6)

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(Continued overleaf)

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6. (Contd.)

(h) Accumulator drain pipe.

(j) Drop fuel tank
pressurising pipe between
engine and pressure
reducing valves.

(k) Fuel transfer pipe support clip.

(1) Cabin air conditioning
'Y' pipe between engine
and control valves.

(m) Extension fire shield support bracket on wing root.

7. Bottom cowling former.

8. Engine.

Disconnect at accumulator.
Disconnect at diffuser casing.

Disconnect from bottom cowling former.

(i) Disconnect at each end.

(ii) Remove.

(i) Remove bottom securing bolts.

(iii) Remove.

Assist Man 'A' to remove.

Assist Man 'A' to remove from airframe and fit to stand.

(8362)72

Sheet No. 32
GOBLIN 2 ENGINE

FREMOVAL: AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'B'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER: 1

Item OPERATION ITEM No. Examine for damage. Bottom cowling (a) 9: Examine asbestos tape for damage. (ii) former. Examine support stirrups for damage. (iii) and correct locking. Examine for damage. (i)Drains collector box. Flush out with kerosine. (ii) Examine for deterioration, and damage to drains (c) Flexible drain pipes. collector box. Examine for damage. (i) Cowling fastener 10. (a) Examine lug ends for safety and correct tie rods. locking. Examine for stretching, and damage. Tie rods springs. Note: - If stretched, fit new springs.

(Continued overleaf)

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11. Engine Controls. (Cockpit.)

(a) Throttle control.

- H.P. cock control.
- L.P. cock control.
- Engine control box.
- 12. L.P.fuel filter.

- 12. (a) Engine cowlings.
 - (b) Cowling toggle fasteners.

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Operate, as required by Man 'A'

Examine for damage.

- Examine control levers for damage. (ii)
- Examine Teleflex conduits for damage. (iii)
- Examine damper for correct operation.
- Remove end cap.
- (i) (ii) Remove element.
- Examine for deposits and damage. (iii)
- Clean with kerosine, using a stiff brush. Note: - If element is dirty or choked, fit new element.
- Refit element. (v)
- (vi) Refit end cap, tighten and lock.
- Clean.
- (ii) Examine for damage.
- Examine for damage.
- Examine hooks for damage and spreading.
- Lubricate hinges with oil, OM-150.

Sheet No.33 Issued with:-A.L. No.2 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ENGINE MAN 'B'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item

ITEM No.

OPERATION

Replacement engine.

Assist Man 'A' to remove from stand and install in airframe.

- Intermediate air intake duct. (Starboard.)
- Remove all tools, rags and foreign (i) materials.
- Fit blanking board. (ii)

Bottom cowling former.

Assist Man 'A' to refit.

- Sub-items (a) and (b) of this Item are applicable only to Mk.5 aircraft. Engine. (Top Starboard.)
 - (a) Vacuum pump inlet pipe.
 - (b) Vacuum pump exhaust pipe.
 - (c) Air intake joint rubber.
 - (d) Barostat total head air pipe.

Reconnect to vacuum pump, tighten and lock.

- (i) Fit to engine.
- Position and tighten Jubilee clips. (ii)
- Reconnect at hose connection adjacent to generator.

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(Continued overleaf)

SM.457 (7)

- 17. (Contd.)
 - Canopy air seal pipe between diffuser casing and pressure reducing valve.
 - Top cowling former,
 - Air duct to gun heater muff.
 - (h) Generator and compressor cooling pipe.
 - (j) Extension fire shield support bracket on wing root.

- (ii)Position and tighten Jubilee clips.
- (i) Refit.
- (ii) Reconnect at each end, tighten and lock.

Reconnect at wing root.

- (i) Reconnect at flexible joint adjacent to diffuser casing.
- (ii) Position and tighten Jubilee clips.
- Refit.
- (i) (ii) Reconnect at air compressor cooling shroud.
- (iii) Reconnect at generator.
- (iv) Reconnect at junction with gun heater pipe.
- (v) (i) Position and tighten Jubilee clips.
- Refit.
- (ii) Refit top securing bolts.

(8362)76

Sheet No.34 Issued with:-A.L. No.2 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE. ENGINE MAN 'B'

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

Sub-item (a) of this Item is applicable only to Mk.9 aircraft. Engine. (Bottom Starboard.) (i) (a) Cabin air conditioning Refit. (ii) Reconnect at each end, tighten and lock.

'Y' pipe between engine and control valves. (b) Fuel transfer pipe

Reconnect to bottom cowling former.

support clip.

(c) Drop fuel tank pressurising pipe between engine and pressure reducing valves. Reconnect at diffuser casing, tighten and lock.

(d) Hydraulic pump drain pipe.

Reconnect at hydraulic pump, tighten and lock.

(e) Overspeed governor fuel drain pipe.

Reconnect at overspeed governor unit, tighten and lock.

(f) Overspeed governor oil drain pipe.

Reconnect at drain collector box, tighten and lock.

SM.457 (8) C.S.D.E. 11/59

(8362)77

(Continued overleaf)

18. (Contd.)

(g) Rear bearing drain pipe.

(h) Combustion chamber drain pipe between drain valve and drain collector box.

(j) Accumulator drain pipe.

(k) Hydraulic pipes between hydraulic pump and bulkhead.

(1) Gun heater pipe, engine to bulkhead.

(m) Extension fire shield support bracket on wing root.

19. Wheelcase sump.

Reconnect at engine, tighten and lock. Reconnect to drain valve, tighten and lock.

Reconnect to accumulator, tighten and lock. Reconnect at Avery couplings, tighten and lock.

(i) Reconnect at connection adjacement to bottom cowling former.

(ii) Position and tighten Jubilee clips.

(i) Refit bottom securing bolts.

(ii) Ensure that the bracket does not foul the flying control cables.

Replenish with enigne oil, specification as stated in Form 700G.

Note:- Care is to be taken not to overfill the sump.

Sheet No. 35
GOBLIN 2 ENGINE

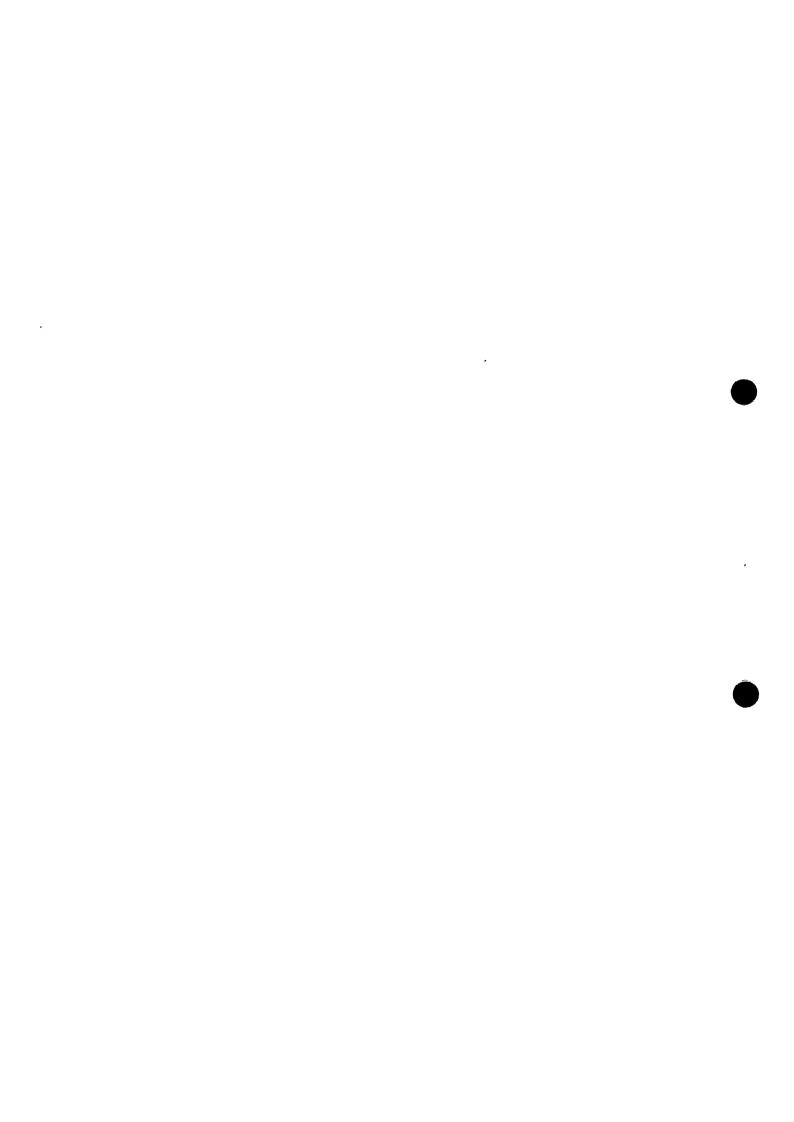
REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ENGINE MAN 'B' A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item OPERATION ITEM No. Remove all tools, rags and other materials used Engine installation. 20. during Engine Change from the aircraft. Aircraft generally.) Assist Man 'A' to refit. Rear cone fairing 21. (a) Fireguard extensions. Assist Man 'A' to remove from vicinity of 22. Ground equipment. aircraft.

(8362)(79)

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Sheet No. 36
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ENGINE MAN 'B' A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

TTEM

OPERATION

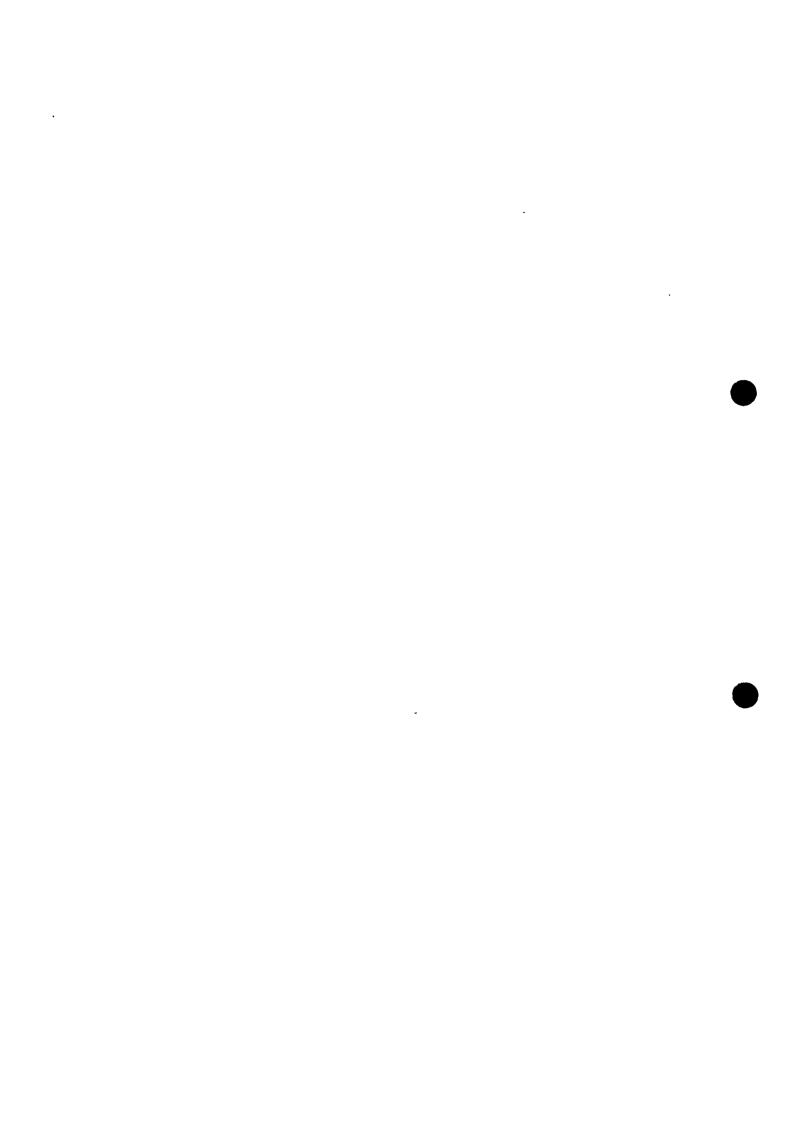
POST HANGAR SERVICING

1. Servicing Record Slips.

Sign for completing Engine Change, Servicing

2. Assist N.C.O. as detailed.

(8362)(81:)



Sheet No. 37
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE SUPPLEMENTARY SERVICING ELECTRICAL N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

(8362)(83)

(Continued overleaf)

OPERATION

ITEM

Item No.

Sheet No. 38 GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE

ELECTRICAL N.C.O.

A.P.4099E & G Vol.5 Pt.5 VALPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Required by:-

MAM

NCO

Total

2

REF. NO.

EQUIPMENT AND TOOLS

Kits, tool, Electrician, to scale A.26, A.P.830,

Vol.3, Pt. 'A'.

Trolley, battery, electric starting, Mk.5 4F/1718

50/1635 Ammeters, 50-0-50.

105/10610 Testmeters, Type 'D'.

MATERIALS ·

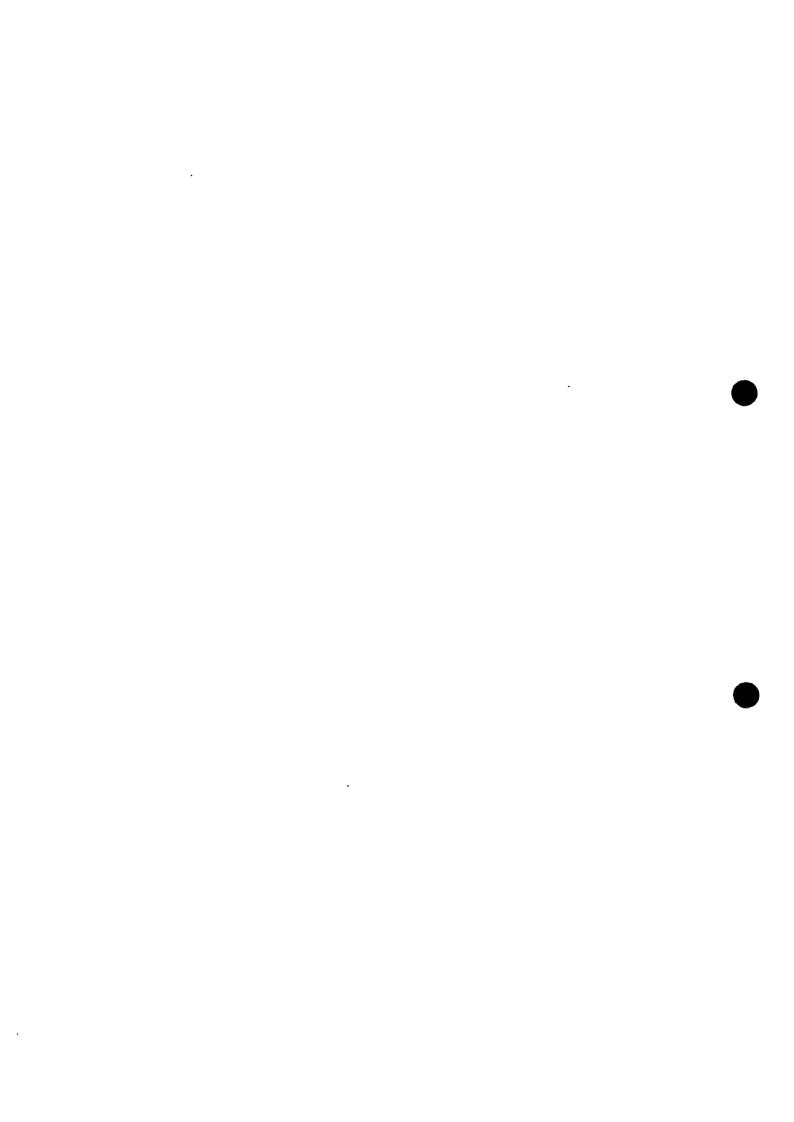
32B/242 Rags, cotton.

Compound, protective, insulating, No.2 33C/887

33C/1172 Compound, silicone, insulating.

34B/9100512 Grease, XG-275. G-350

(8362)(85)



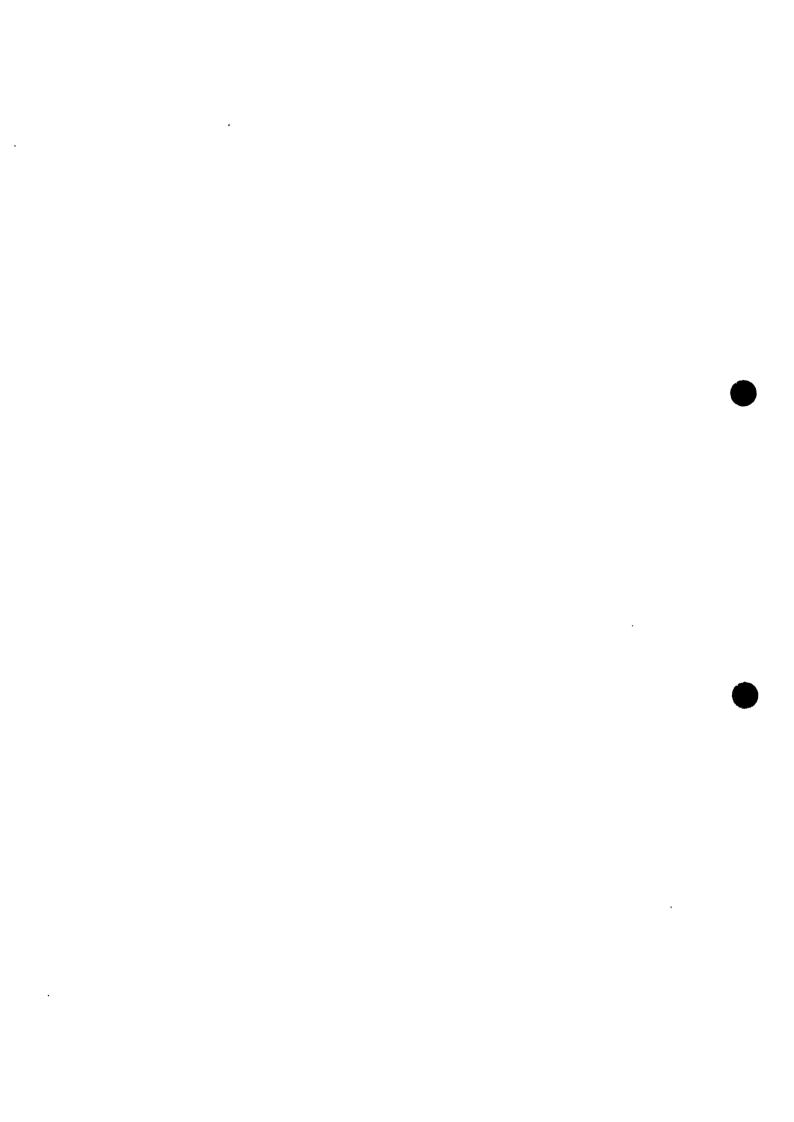
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Sheet No. 36
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL N.C.O. A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SAFETY PRECAUTIONS

- 1. Before commencing servicing on the high energy ignition units or on the H.T. wiring the low tension plug is to be disconnected and a period of one minute permitted to elapse, this allows the dissipation of stored capacitor energy and prevents inadvertent discharge. The high energy ignition units are not to be operated with the H.T. cable disconnected. Display Air Diagram 5589.
- . When using silicone compound care is to be taken to prevent compound making contact with the eyes.



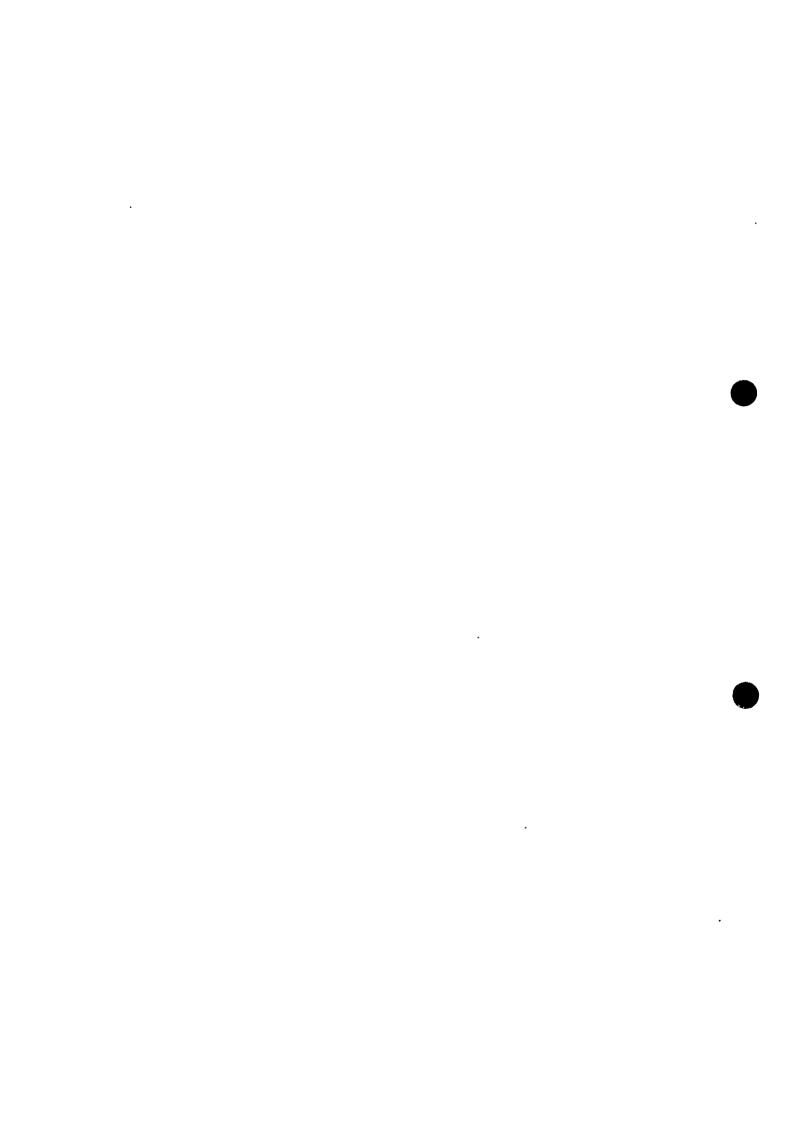
Sheet No. 40
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SERVICING NOTES

- 1. Inspect all repairs, replacements and modifications carried out.
- 2. Where any connections are broken either for routine servicing or repair, inspect reconnections for security of attachment and correct locking.
- 3. <u>DAMAGE</u> 'Examine for damage' in this schedule means an examination to ascertain that the value or usefulness of the item has not been impaired by:-
 - (a) Insecurity of attachment.
 - (b) Cracks or fractures.
 - (c) Corrosion or contamination.
 - (d) Any form of distortion.
 - (e) Loose rivets.
 - (f) Chafing, fraying or scoring.
 - (g) Broken locking.



Sheet No. 41 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION1 CHAPTER 1

Item No.

ITEM

OPERATION

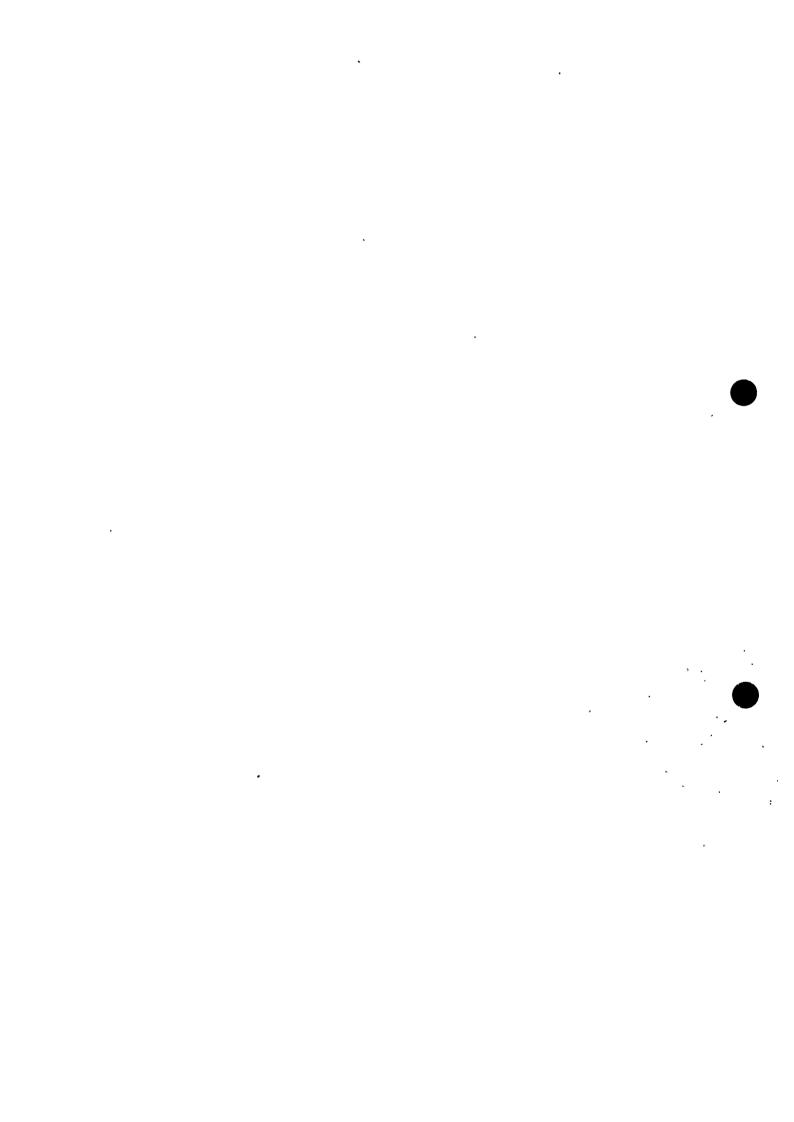
PRE HANGAR SERVICING

Carry out general supervision as necessary and the following Items as detailed:-

1. General.

(i) Read Safety Precautions and Servicing Notes.
(ii) In conjunction with N.C.O. i/c Servicing examine Form 700 for reports of defects and detail Men for rectification as necessary.

(8362)(99)



Sheet No. 42
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL N.C.O. A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATI ON

HANGAR SERVICING

Carry out general supervision as required and the following Items as detailed:-

1. This Item is applicable only if Type KX generator is fitted. Engine Driven Generator.

(a) Terminal lugs.

Generator.

i) Ensure correct lugs are fitted.

(ii) Examine for excess or protuding solder preventing lugs from locating correctly on insulating plate.

(iii) From a 4 inch length of P.U.C. tubing cut a segment, one third of its circumference and 5 inch long. Fit to field terminal.

(i) Fit the field terminal lug and tighten down.

(ii) Fit the insulation plate square on its mounting.

(8362)(93)

(b)

(Continued overleaf)

1. (Contd.)

2. Electric cable connections. (Engine compartment.)

(8362)(94)

(iii) Fit the positive and negative terminal lugs and tighten down.

Note: Ensure that the lugs bed down correctly on the insulation plate and the insulating sleeve is between the field and positive terminal lug.

When engine installation is completed and before cowlings are fitted, examine electric cable connections for security of attachment.

Sheet No. 43 GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

POST HANGAR SERVICING

Carry out general supervision as required and the following Items as detailed:-

• This Item is applicable only if replacement engine has Goblin Mod. 984 embodied. High energy ignition (i) Disconnect L.T. cable connections when units. requested by Engine N.C.O.

(ii) Connect L.T. cable connections when requested by Engine N.C.O.

2. This Item is applicable only when Mod.393 has been embodied and is to be carried out in conjunction with Engine N.C.O. immediately after a flight or Engine Ground Check of at least 20 minutes using instruments which are calibrated periodically against a known master indicator, e.g. a Type 'D' of 'F' testmeter used in accordance with A.P.3158, Vol.2, Leaflet J2, Appendix 'B'.

Generator control system.

(Type 'A' voltage regulator and cut-out unit.)

(8362) (95)

Assisted by Man, position battery trolley beside the aircraft and plug in to starter socket. Set the Ground/Flight switch to 'GROUND'.

(Continued overleaf)

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2. (Contd.)

(ii) Remove main fuse and connect voltmeter across 'G' Pos. and 'G' Neg. of regulator.

(iii) Remove the cable connected to 'L' Pos. and connect it to 'A' Pos. on the regulator.

(iv) Set Ground/Flight switch to 'FLIGHT'.

(v) When the engine has started set battery trolley switch to 'OFF', disconnect and remove trolley.

(vi) Request Engine N.C.O. to run engine at cruising R.P.M. and check that the generator output remains steady at 27.5 volts, adjust by means of voltage regulator trimmer as necessary.

(vii) Request Engine N.C.O. to run engine at maximum R.P.M. and check that voltage remains steady at 27.5 volts plus or minus 0.5 volts.

(viii)Place a dummy fuse and 50-0-50 ammeter in main fuse holder.

(ix) Ensure that battery cut-out functions. correctly as follows:-

Battery cut-out is to pull-in at 26 to 27 volts and cut-out at a discharge current of between 5 and 10 amps.

(Continued)

(8362) (96)

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GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL N.C.O. A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

2. (Contd.)
 Generator control system.
 (Type 'A' voltage regulator
 and cut-out unit.)

- (x) When engine has stopped, set the Ground/ Flight switch to 'GROUND'.
- (xi) Remove all ground test equipment.
- (xii) Refit the main fuse, and connect the cable from 'A' Pos. to 'L' Pos. on the voltage regulator (xiii) Refit all covers.
- This Item is applicable only to Pre Mod. 393 aircraft and is to be carried out in conjunction with Engine N.C.O. immediately after a flight or engine ground run of at least 20 minutes using instruments which are calibrated periodically against a known master indicator, e.g. a Type 'D' or 'F' testmeter used in accordance with A.P. 3158, Vol. 2, Leaflet J2, Appendix 'B'.

 Generator control system.

 (i) Assisted by Man position battery trolley

Generator control system. (Type F24 voltage regulator.)

Assisted by Man position battery trolley beside the aircraft and plug in to starter socket. Set the Ground/Flight switch to 'FLICHT'.

(8362)(97)

(Continued overleaf)

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3. (Contd.)

(ii) Remove main fuse and connect voltmeter across 'G' Pos. and 'G' Neg. of voltage regulator.

(iii) When the engine has started, set battery trolley switch to 'OFF', disconnect and remove

trolley.

(iv) Request Engine N.C.O. to run engine at cruising R.P.M. and check that the generator output remain steady at 27.5 volts, adjust by means of voltage regulator trimmer, as necessary.

(v) Request Engine N.C.O. to run engine at maximum R.P.M. and check that the voltage remain steady at 27.5 volts plus or minus

0.5 volts.

(vi) Place a dummy fuse and ammeter in main fuse holder and check that battery cut-out functions correctly as follows:
Battery cut-out is to pull-in at 26 to 27 volts and cut-out at a discharge current of between 5 and 10 amps.

(vii) When engine has stopped, set the Ground/ Flight switch to 'GROUND'.

(viii) Remove all ground test equipment.

(ix) Refit the main fuse.

(x) Refit all covers.

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Sheet No. 45
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE

ELECTRICAL N.C.O.

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHPATER 1

Item

No.

ITEM

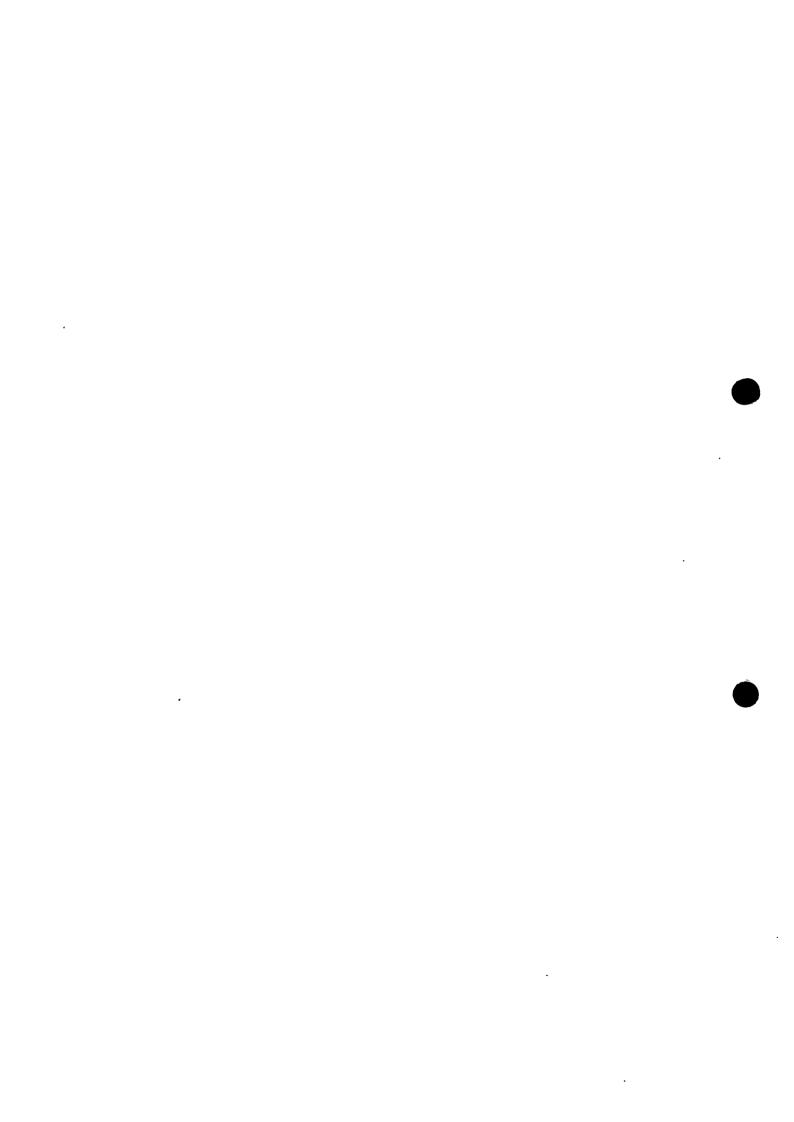
OPERATION

4. Aircraft generally.

Ensure that all tools, rags and other materials used during Electrical servicing have been removed from the aircraft.

5. (a) Servicing Record Slips.)
(b) Form 700G...

Sign for completing Engine Change Servicing.



Sheet No. 46
GOBLIN 2 ENGINE

REMOVAL AND INSTALIATION SCHEDULE
ENGINE CHANGE
SUPPLEMENTARY SERVICING
ELECTRICAL MAN

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B.MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATIONS

(8362) (101)

(Continued overleaf)

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TTEM

Item No.

Sheet No. 47
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL MAN

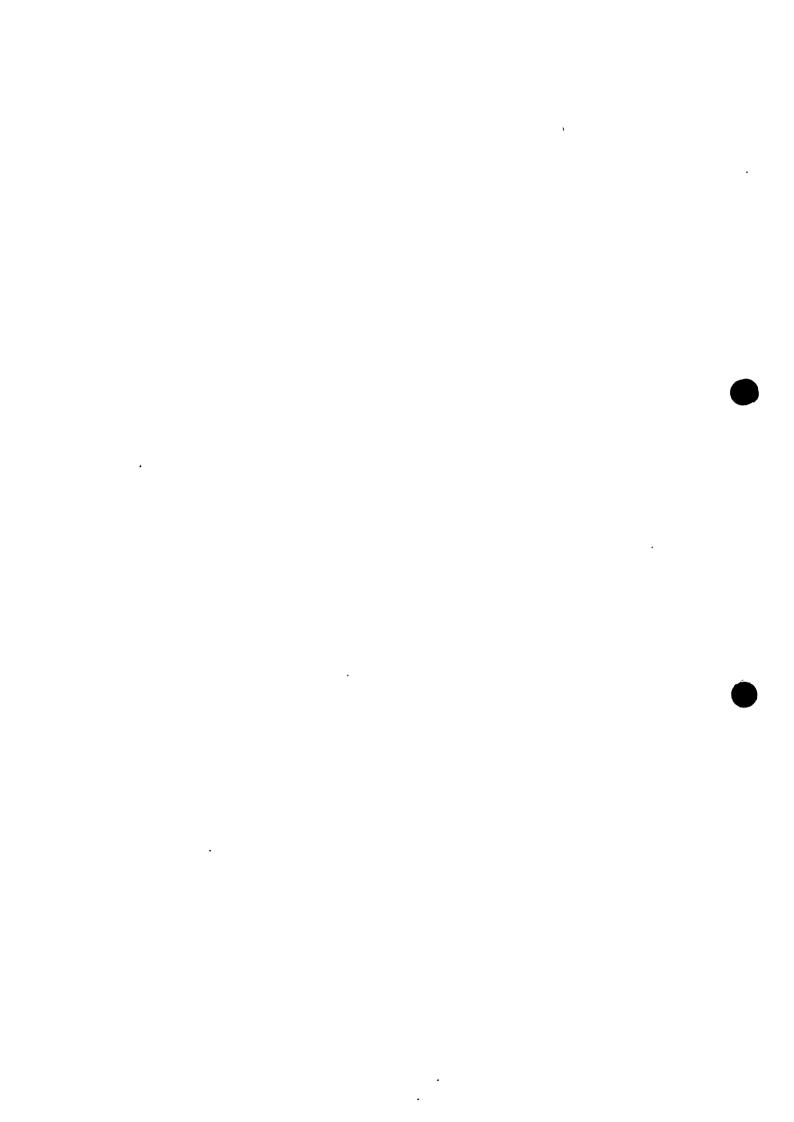
A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

EQUIPMENT AND TOOLS.

QTY.

1

Kits, tool, Electrician, to scale A.26, A.P.830, Vol.3, Py. 'A'.

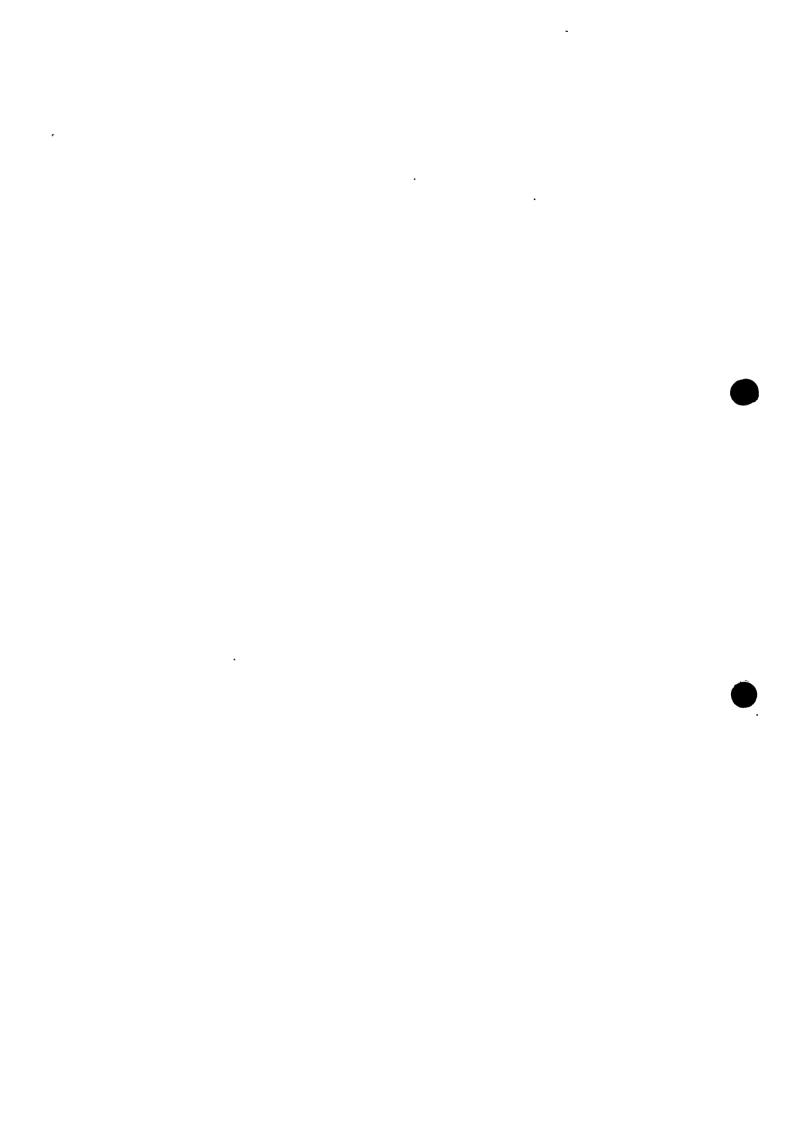


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GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL MAN A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SAFETY PRECAUTIONS

- 1. Before commencing servicing on the high energy ignition units or on the H.T. wiring the low tension plug is to be disconnected and a period of one munite permitted to elapse, this allows the dissipation of stores capacitor energy and prevents inadvertent discharge. The high energy ignition units are not to be operated with the H.T. cable disconnected. Display Air Diagram 5589.
- 2. When using silicone compound care is to be taken to prevent compound making contact with the eyes.



Sheet No. 49
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL MAN

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SERVICING NOTES

If any connections are broken, other than those detailed in the schedule, inform N.C.O. who will inspect when reconnection and locking has been completed.

2. The bonding of all components referred to in the schedule is to be examined for serviceability and good connection during the course of servicing.

3. Before carrying out functional tests, plug in external supply and set switch to 'ON'. Set switch to 'OFF' and disconnect plug on completion of tests.

4. The threads of plugs and sockets disconnected during servicing are to be cleaned and lightly lubricated with grease, XG-275. If corrosion is observed on plug pins they are to be cleaned, dried, and smeared with silicone compound. On no account is compound to be allowed to come into contact with rubber cable or cleating.

DAMAGE - 'Examine for damage' in this schedule means an examination to ascertain that the value or usefulness of the item has not been impaired by:-

(a) Insecurity of attachment.

(b) Cracks or fractures.

(c) Corrosion or contamination.

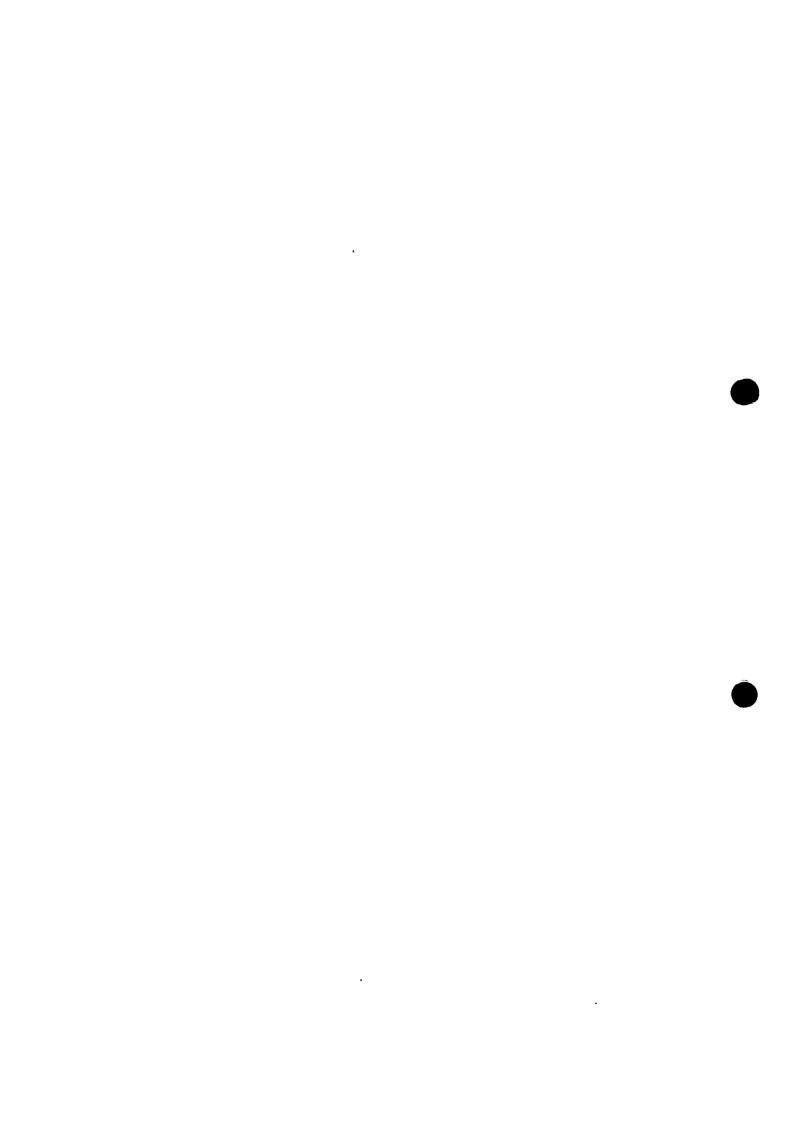
(d) Any form of distortion.

(e) Loose rivets.

(f) Chafing, fraying or scoring.

(g) Broken locking.

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Sheet No. 50 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL MAN

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item

No.

ITEM

OPERATION

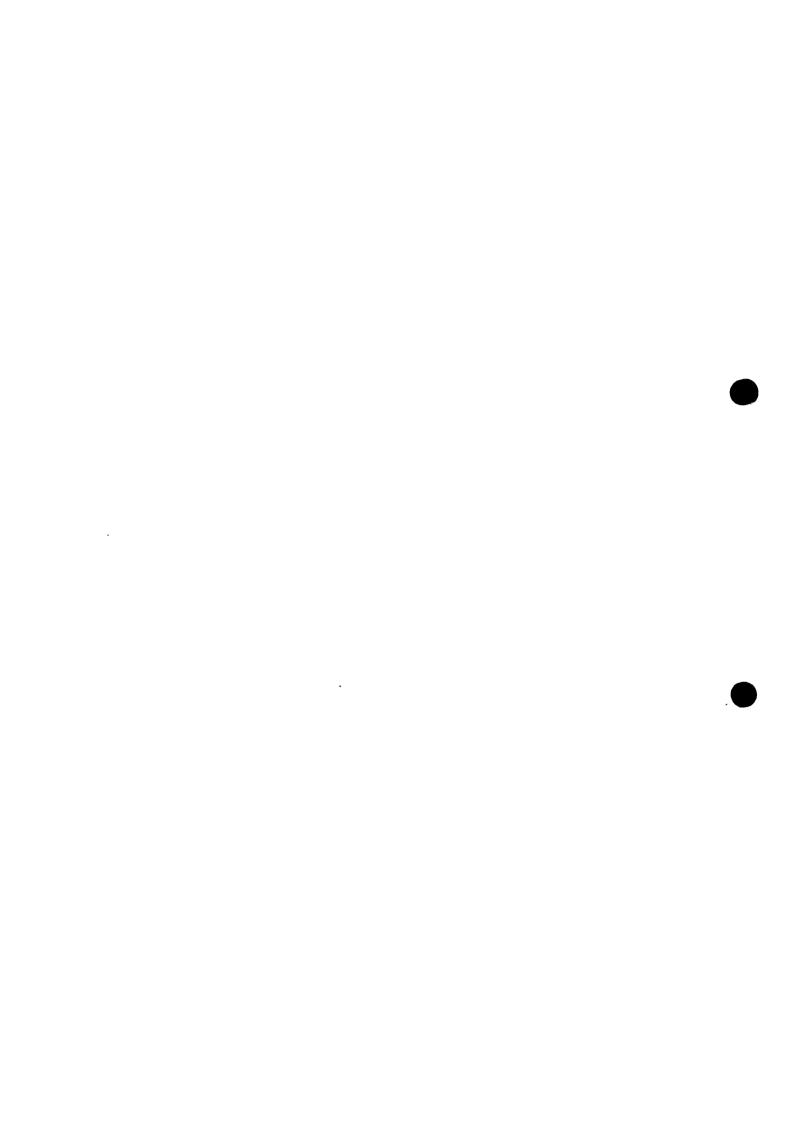
PRE HANGAR SERVICING

General

Read Safety Frecautions and Servicing Notes.

Assist N.C.O. as detailed.

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Sheet No. 51 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE

ENGINE CHANGE ELECTRICAL MAN

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

HANGAR SERVICING

Sub-item (b) of this Item is applicable only if Vampire Mod. 3238 is embodied. Engine Rear Cone Fairing.

(a) Downward identification)

Disconnect plug and socket connections.

- lamps. (b) Flame switches.
- This Item is applicable only if engine, has Goblin Mod. 984 embodied. High energy ignition Disconnect. units.
- Fuel pressure switch. * Disconnect. (Engine.)

(8362)(111)

(Continued overleaf)

Engine.

Engine driven generator.

(b) Starter motor.

Engine Rear Cone Fairing.

(a) Downward identification ·lamps.

Electric cables.

Fire Detector Switch. (27N/90, 27N/91 and 27N/107.)
(Engine rear cover.)

Disconnect.

Clean.

(i) (ii) Examine for damage.

Clean.

(i) (ii) Examine for contamination by fuel, grease or oil for deterioration.

(iii) Examine for correct cleating.

Remove two holding bolts from one switch. (i)

(ii) Remove cover plate and disconnect both cables.

(iii) Check between the terminals using a Type 'C' insulation resistance tester. permissible reading 2 megohms.

(iv) Check in turn, between each terminal and bo body of switch, using a Type 'C' insulation resistance tester. Minimum permissible reading 2 megohms.

Connect both cables to switch.

Repeat Operations (i) to (v) on all the remaining fire detector switches.

(Continued)

(8362)(112)

Sheet No. 52 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE
ENGINE CHANGE
ELECTRICAL MAN

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1ST. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

5A. (Contd.)

Fire Detector Switch.

(27N/90, 27N/91

and 27N/107.)

(Engine rear cover.)

- (vii) Bridge terminal of any one switch in any one bank, and ensure appropriate warning lamp illuminates.
- (viii) Remove bridge and ensure warning lamp is extinguished.
- (ix) Repeat Operations (vii) and (viii) on remaining banks.
- (x) Refit cover plate and two holding bolts of all switches.
- 6. This item is applicable only if Goblin Mod.984 is not embodied on replacement engine.

 Booster coils.

 (i) Disconnect and remove for Bay Servicing.

 (Engine compartment.)

 (ii) Fit and connect serviced booster coils.

(8**362)(113)**

(Continued overleaf)

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Engine Compartment. (a) Time delay switch.
(b) Type T2 relays.
(2 off.) (i) Clean. Examine for damage, (c) Resistors. . 8. Slow engagement relay. (i) (ii) Cléan. (Engine compartment.) Examine for damage. (iii) Remove cover. Examine points for pitting and signs of (iv) burning. (v) Refit cover and lock. Engine Compartment. Starter socket. (i) (ii) Clean. External supply Examine for damage. socket. (iii) Rotate cover against spring tension. that when cover is released it returns to its original position. 10. Ground/Flight switch. Clean. (Engine compartment.) Examine for damage. (ii)

(8362)(114)

Sheet No. 53
GOBLIN 2 ENGINE

REMOVAL AND: INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL MAN

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No. ITEM OPERATION Engine Compartment. Plugs and sockets. (i) (ii) Terminal blocks. Clean. Electric cable. Examine for damage. connections. Electric cables. (i) (ii) Clean. Examine for contamination by fuel, grease or oil, and for deterioration. (iii) Examine for correct cleating. 11A. Fire Detector switch. (i) (ii) Remove two holding bolts from one switch. (27N/90, 27N/91 Remove cover plate and disconnect both and 27N/107.) cables. (Engine Compartment.) Check between the terminals, using a Type (iii) 'C' insulation resistance tester. Minimum permissible reading 2 megohms.

(8362)(115)

(Continued overleaf)

11A. (Contd.)

12. Engine.

- (a) Engine driven generator.
- (b) Starter motor.)
- 13. Fuel pressure switch. (Engine.)

(8362) (116)

(iv) Check in turn, between each terminal and body of switch, using a Type 'C' insulation resistance tester. Minimum permissible reading 2 megohms.

(v) Connect both cables to switch.
(vi) Repeat Operations (i) to (v)

- (vi) Repeat Operations (i) to (v) on all the remaining fire detector switches.
- (vii) Bridge terminals of any one switch in any one bank, and ensure appropriate warning lamp illuminates.
- (viii) Remove bridge and ensure warning lamp is extinguished.
- (ix) Repeat Operations (vii) and (viii) on remaining banks.
- (x) Refit cover plate and two holding bolts of all switches.

Connect.

Connect.

Sheet No. 54 GOBLIN 2 ENGINE REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE ELECTRICAL MAN A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATIONS

14. This Item is applicable only if Goblin Mod. 984 is embodied on replacement engine.

High energy ignition Connect.

units.

15. Engine Rear Cone

Fairing.

(a) Downward identification) lamps.

(b) Flame switches.

Connect plug and socket connections.

16. Aircraft generally.

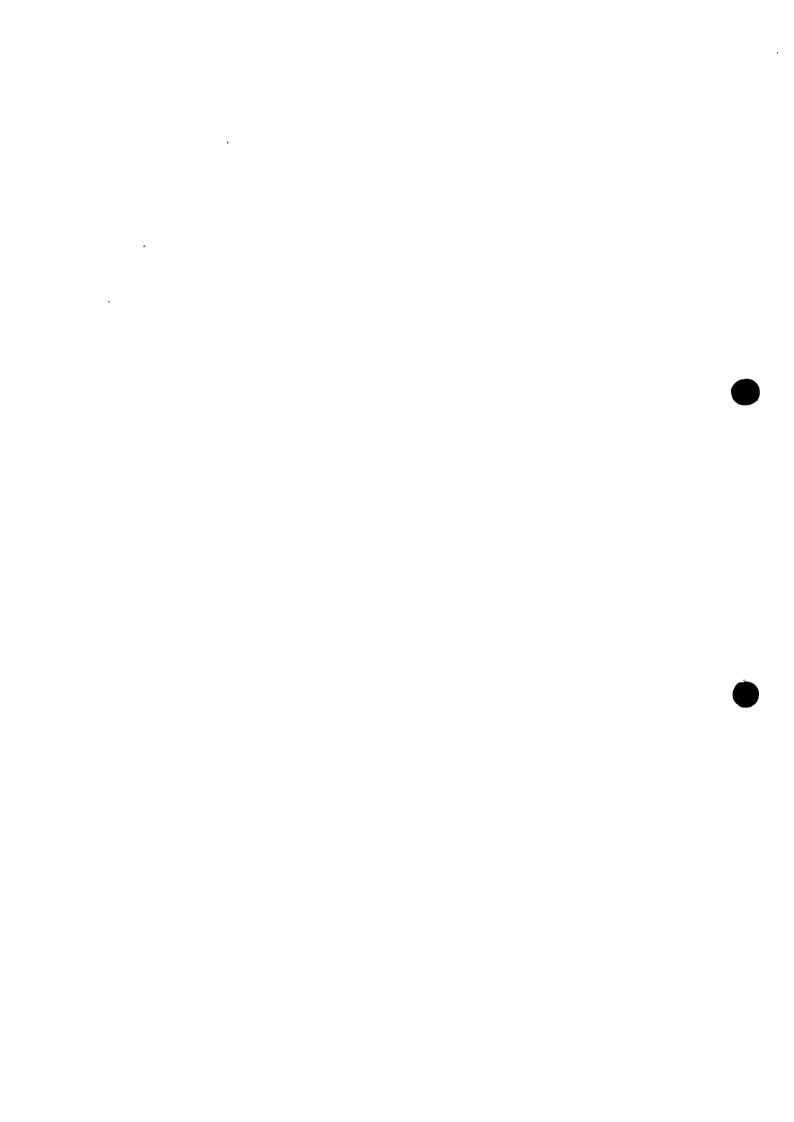
Remove all tools, rags and other materials used during Electrical servicing from the aircraft.

17. Servicing Record Slips.

Sign for completing Engine Change Servicing.

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Sheet No. 55
GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE SUPPLEMENTARY. SERVICING INSTRUMENT MAN A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM

OPERATION

(8362)(119)

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OPERATION

ITEM

Item No.

(8362)(120)

Sheet No. 56 GOBLIN 2 ENGINE

REMOVAL AND INSTALIATION SCHEDULE ENGINE CHANGE INSTRUMENT MAN

'A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

SERVICING NOTE

DAMAGE 'Examine for damage' in this schedule means an examination to ascertain that the value or usefulness of the item has not been impaired by:-

Insecurity of attachment.

Cracks or fractures.

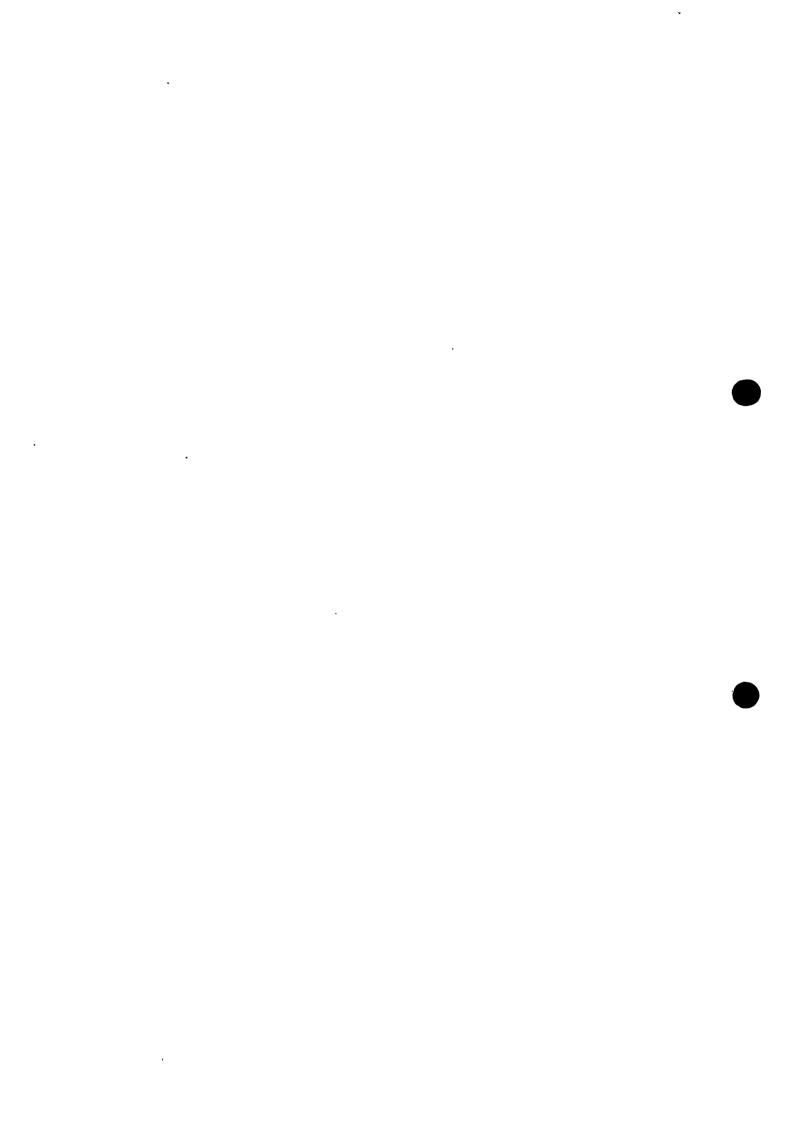
Corrosion or contamination.

Any form of distortion.

Loose rivets.

Chafing, fraying or scoring.

Broken locking.



Sheet No. 57 GOBLIN 2 ENGINE

REMOVAL AND INSTALLATION SCHEDULE ENGINE CHANGE INSTRUMENT MAN-

A.P.4099E & G Vol.5 Pt.5 VAMPIRE F.B. MKS.5 & 9 AIRCRAFT 1st. Edition, December 1958 SECTION 1 CHAPTER 1

Item No.

ITEM '

OPERATION

1. General

Engine
(a) Tachometer generator.

(b) Oil temperature bulb

(c) Exhaust gas
thermometer thermocouple leads.

(d) Rear bearing thermometer thermometer couple leads.

Read Servicing Note.

(i) Disconnect electric cables.

(ii) Examine insulation of electric cables for damage.

(i) Disconnect.

(ii) Examine for damage.

(iii) Stow in engine bay.

(i) Disconnect at terminal block on starboard side of engine bay.

(ii) Examine insulation for damage.

(8362) (123)

(Continued overleaf)

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3. Engine.

(a) Tachometer generator.

(b) Exhaust gas thermometer) thermo-couple leads.

(c) Rear bearing thermometer thermocouple leads.

(d) Oil temperature bulb plug.

4. Aircraft generally.

5. Servicing Record Slips.

Connect electric cables.

Connect at terminal block on starboard side of engine bay.

Connect to bulb.

Note: If pins are silver plated, plug is to be sealed in accordance with S.I./Inst./2C.

Remove all tools, rags and other materials used during Instrument Servicing from the aircraft.

Sign for completing Engine Change Servicing.

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