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ENGINE STARTING, TESTING AND STOPPING Applicable only to Mk6, 6A and 9 A/C.

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

TRADE	M/HRS	TRADE	M/HRS	ASSOCIATED PROCEDURE CARDS
Prop.				SP 526, SP CSDE/Hunter/Vib./1

Special Tools and Equipment:

Air Intake Safety Guards 26FX/95413 (Port), 26FX/95414 (Stbd).
Accelerometer and Bracket.
Test Resistor 5CZ/4337552.

NB: During this Procedure ground running of engine is to be kept to a minimum and the checks detailed are only to be carried out when required.

BLOCK 1

1. Preparation

1.1	Engine oil sump.	Replenish as necessary. (Oil OX-38).
1.2	Accessory gearbox oil sump.	
1.3	Turret drive oil sump.	
1.4	Aircraft fuel system.	Replenish as necessary. (5A2, Sect 2).
1.5	IPN tank.	Replenish as necessary.
1.6	Brake system pressure.	Ensure 1500 lbf/in2 minimum.

Sub-item 1.7 is applicable only if ECU has been newly installed, inhibited, or if air is in the fuel system.

1.7	Engine fuel system.	Bleed.

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TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

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ENGINE STARTING, TESTING AND STOPPING

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

	TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
	MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1 — PROPULSION					
2. Preparation					
2.1 Aircraft. — Position and secure for ground running.					
2.2 Control locks. / 2.3 Air intake blanks. — Remove.					
2.4 Air intakes. — Ensure clear.					
2.5 Air intake safety guards. — Fit.					
2.6 Accelerometer and bracket. — Assemble. (SP CSDE/Hunter/Vib/1.)					
BLOCK 2 — PROPULSION NCO					
3. Pre-Start Checks					
3.1 Undercarriage selector. — Ensure set to 'DOWN' and locked.					
3.2 Brake lever. — Ensure locked 'ON'.					
3.3 Flap selector. — Ensure set to 'UP'.					
3.4 Top temperature control switch. — Ensure set to 'ON'.					
3.5 Cabin pressurization. — Ensure set to 'OFF'.					
3.6 Cabin temperature. / 3.7 Flood flow. — Ensure set to 'AUTO'.					
3.8 Power controls. — Ensure set to 'OFF'.					

PROPULSION SP 211A (3)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION NCO					
3.	Pre-Start Checks						
3.9 3.10	Battery master switch. Engine master switch.	Set to 'ON'.					
3.11	Fire warning test button.	(i) Press. (ii) Ensure fire warning illuminates.					
3.12	Relight system.	(i) Operate. (ii) Ensure intermittent and audible.					
3.13	Anti-icing system switch.	Ensure closed and indicator showing 'SHUT'					
BLOCK 2		PROPULSION NCO					
NB:	If engine fails to start, close throttle and after one minute has elapsed a further attempt may be made. After three attempts to start, starter is to be allowed to cool before any further attempt is made.						
4.	Starting						
4.1 4.2 4.3	Ignition switch. LP fuel cock. Tank pump switches.	Set to 'ON'.					
4.4	Throttle/HP cock.	Set to 1 inch open.					
NB:	During sub-item 4.5 ensure engine lights up within 4 to 8 seconds and that the JPT does not exceed 560°C.						
4.5	Starter button.	Press for 2 seconds and release.					

ENGINE STARTING, TESTING AND STOPPING

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		TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
		MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1	PROPULSION NCO					
4.	Starting cont.					
4.6	Idling rev/min. — Ensure 2500 PLUS 200 MINUS NIL.					
4.7	Oil pressure. (At 3600 rpm). — Ensure indicated. (minimum 20 lbf/in2).					
4.8 / 4.9	Hydraulic pressure warning light. / Generator warning light. — Ensure extinguished.					
BLOCK 2	PROPULSION NCO					
5.	Hydraulics					
5.1	Throttle. — Set to obtain 4500 rev/min.					
5.2	Engine. — Ensure smooth running.					
5.3	Hydraulic pressure gauge. — Ensure indicates 2850 PLUS 150 MINUS 50 lbf/in2.					
5.4	Hood control clutch. — Set to 'IN'.					
5.5	Hood selector switch. — Set to close.					
5.6	Hood seal. — Ensure inflated.					
5.7	Hood selector switch. — Set to open.					
5.8	Throttle. — Set to 'IDLING'.					
5.9	Hood control clutch. — Set to 'NEUTRAL'.					

ENGINE STARTING, TESTING AND STOPPING

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TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

BLOCK 1 — PROPULSION NCO

6. Air Bleed Valve Check

NB: Variation in ambient air temperature will affect air bleed valve and IGV ram settings.

6.1 Outside air temperature. Obtain outside air temperature and record in degrees centigrade.

6.2 Anti-icing system switch. Ensure set to shut.

6.3 Engine.

(i) Accelerate smoothly from idling RPM to ensure PV ram and bleed valve are functioning.

(ii) Set engine at 7600 RPM and allow to soak for 3 minutes.

(iii) Exercise engine throughout PV ram range twice then set engine to 7000 RPM.

(iv) Using a throttle rate of approx. 25 RPM per second. smoothly decelerate until bleed valve opens. Record RPM for reference.

(v) Reduce engine speed to 6000 RPM then smoothly accelerate at 25 RPM per second until bleed valve closes. Record RPM for reference.
NB: The bleed valve should operate on acceleration at 6700 + 50 RPM at 15°C. (Refer to Figure 1 for temperature correction).

ENGINE STARTING, TESTING AND STOPPING

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION NCO					
6.	Air Bleed Valve Check cont.						
6.3	Engine.	(vi) Ensure bleed valve operating rev/min are within the limits of Fig 1, and that the engine is free from surge, bleed valve 'THUMP' or burbling during a rapid deceleration from governed speed. Record RPM at which bleed valve opens on rapid deceleration.					
		(vii) Record BV setting RPM and OAT on Form 707B or as appropriate and on STC Form 1222 (STC UNITS ONLY).					
BLOCK 2		PROPULSION NCO					
7.	Intake Guide Vane Ram Check						
7.1	Outside air temperature.	Obtain outside air temperature and record in degrees centigrade.					
7.2	Anti-icing system switch.	Ensure set to 'SHUT'.					
7.3	Engine.	(i) Accelerate smoothly from idling RPM to ensure PV ram and bleed valve are functioning.					
		(ii) Set engine at 7600 RPM and allow to soak for 3 minutes.					

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SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

	TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
	MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1 — PROPULSION NCO					
7. Intake Guide Vane Ram Check cont.					
7.3 Engine. cont. (iii) Exercise engine throughout the PV ram range twice.					
(iv) Slowly reduce RPM and ensure IGV ram leaves the -0° position within limits (Fig 1).					
(v) Reduce engine speed to 6000 RPM then slowly increase RPM and ensure the IGV ram leaves +25° position within limits (Fig 1).					
NB: Engine operarion will normally be more satisfactory if PV ram is set near top of 25° limit; this will also reduce the requirement to re-adjust when checking bleed valve operation (Item 6).					
(vi) After change or adjustment of IGV ram it is essential to repeat the air bleed valve check detailed in Item 6.					
BLOCK 2 — PROPULSION NCO					
8. Anti-icing Check					
8.1 Throttle. Set to obtain 7600 rev/min.					
8.2 Anti-icing system switch. Set to 'OPEN'.					
8.3 Rev/min. Note a change.					

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION NCO					
8.	Anti-icing Check cont.						
8.4	JPT.	Note increase. (approximately 20 degrees).					
8.5	Anti-icing system switch.	Set to 'SHUT'.					
8.6 8.7	Rev/min. JPT.	Ensure return to approximately original readings.					
8.8	Throttle.	Set to 'IDLING' position.					
BLOCK 2		PROPULSION NCO					
NB:	During Item 9 maximum governed rev/min and JPT are NOT to be exceeded.						
9.	Governed Rev/Min Check						
9.1	Top temperature control switch.	Set to 'OFF'.					
9.2	Throttle.	Set to fully open.					
9.3	Governed rev/min.	Ensure 8000 PLUS OR MINUS 50 maximum.					
9.4	JPT.	Ensure between 560 and 685 degrees C.					
9.5	Throttle.	Close to 'IDLING' position.					
9.6	Top temperature control switch.	Set to 'ON'.					

PROPULSION SP 211A (9)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION NCO					
10.	Acceleration Check						
NB:	Correct acceleration time by adding 1 second for every 10°C temperature increase above +15°C and subtract 1 second for every 10°C temperature below +15°C.						
10.1	Outside air temperature.	Note.					
10.2	Top temperature control switch.	Ensure set to 'ON'.					
10.3	Anti-icing system switch.	Ensure set to 'OFF'.					
10.4	Throttle.	Open rapidly to fully open position.					
10.5	Engine rev/min.	Check time taken to accelerate from idling to within 50 rev/min of governed rev/min. (Ensure within 9 to 14 seconds.					
10.6	Throttle.	(i) Set to obtain 4500 rev/min. (ii) Open rapidly to fully open position.					
10.7	Engine.	Check time to accelerate to within 50 rev/min of governed rev/min. (Ensure within 3 to 5 seconds).					
10.8	Throttle.	Close to 'IDLING' position.					

ENGINE STARTING, TESTING AND STOPPING

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION NCO					
11.	Top Temperature Control Check						
11.1	Temperature resistance (Normal).	Remove.					
11.2	Temperature resistance (600 degrees C).	Fit.					
11.3	Top temperature control micro switch (Nosewheel compartment)	Operate and hold.					
11.4	Top temperature control switch.	Ensure set to 'ON'.					
11.5	Throttle.	Move to open position until 600 degrees C JPT is reached. No increase in JPT should be recorded on further opening of throttle.					
11.6	Throttle.	Close to 'IDLING' position.					
11.7	Top temperature control switch.	Set to 'OFF'.					
11.8	Throttle.	Move to fully open position.					
11.9 11.10	Rev/min. JPT.	Ensure normal readings.					
11.11	Top temperature control switch.	Set to 'ON'.					

ENGINE STARTING, TESTING AND STOPPING

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		TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
		MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1	PROPULSION NCO					
11.	Top Temperature Control Check cont.					
11.12	Throttle. — Close to 'IDLING' position.					
11.13	Temperature resistance (600 degrees C). — Remove.					
11.14	Temperature resistance (Normal). — Refit.					
11.15	Top temperature control micro switch. — Release.					
BLOCK 2	PROPULSION NCO					
12.	Checks Before Engine Shut Down					
12.1	Vibration survey. — Carry out using technique CSDE/Hunter/VIB/1 on following occasions: a. On engine installation after repair, recondition, or in-service repair. b. On defect (installed). c. On test bed.					
NB:	A physical record is to be kept with engine documents.					
12.2 12.3 12.4	Flaps. Air brakes. Fuel transfer. — Ensure correct operation.					
12.5	Power controls. — Ensure engagement.					

PROPULSION
SP 211A (12)

SERVICING PROCEDURES
FUNCTIONAL CHECKS AND TESTS
HUNTER ALL MARKS

AP101B-1300-5A3B
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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION NCO					
13.	Stopping						
13.1	Idling rev/min.	Note.					
13.2	Throttle/HP cock control.	Set to 'HP COCK OFF'.					
13.3	Engine master switch.	Set to 'OFF'.					
13.4	Engine.	Ensure runs down freely (Minimum time 75 seconds).					
13.5	Tank pump switches.	Set to 'OFF'.					
13.6	Generator warning light.	Ensure illuminates at 1500 to 1700 RPM.					
13.7	Manifold drain.	Ensure fuel discharges on engine run down.					
13.8 13.9	LP fuel cock. Battery master switch.	Set to 'OFF'.					
BLOCK 2		PROPULSION					
14.	Completion						
14.1	Air intake safety guards.	Remove.					
14.2	Accelerometer and bracket.	Remove.					
14.3	Air intake blanks.	Refit.					
14.4	Top temperature control switch.	(i) Ensure set to 'ON'. (ii) Fit tell-tale wire.					

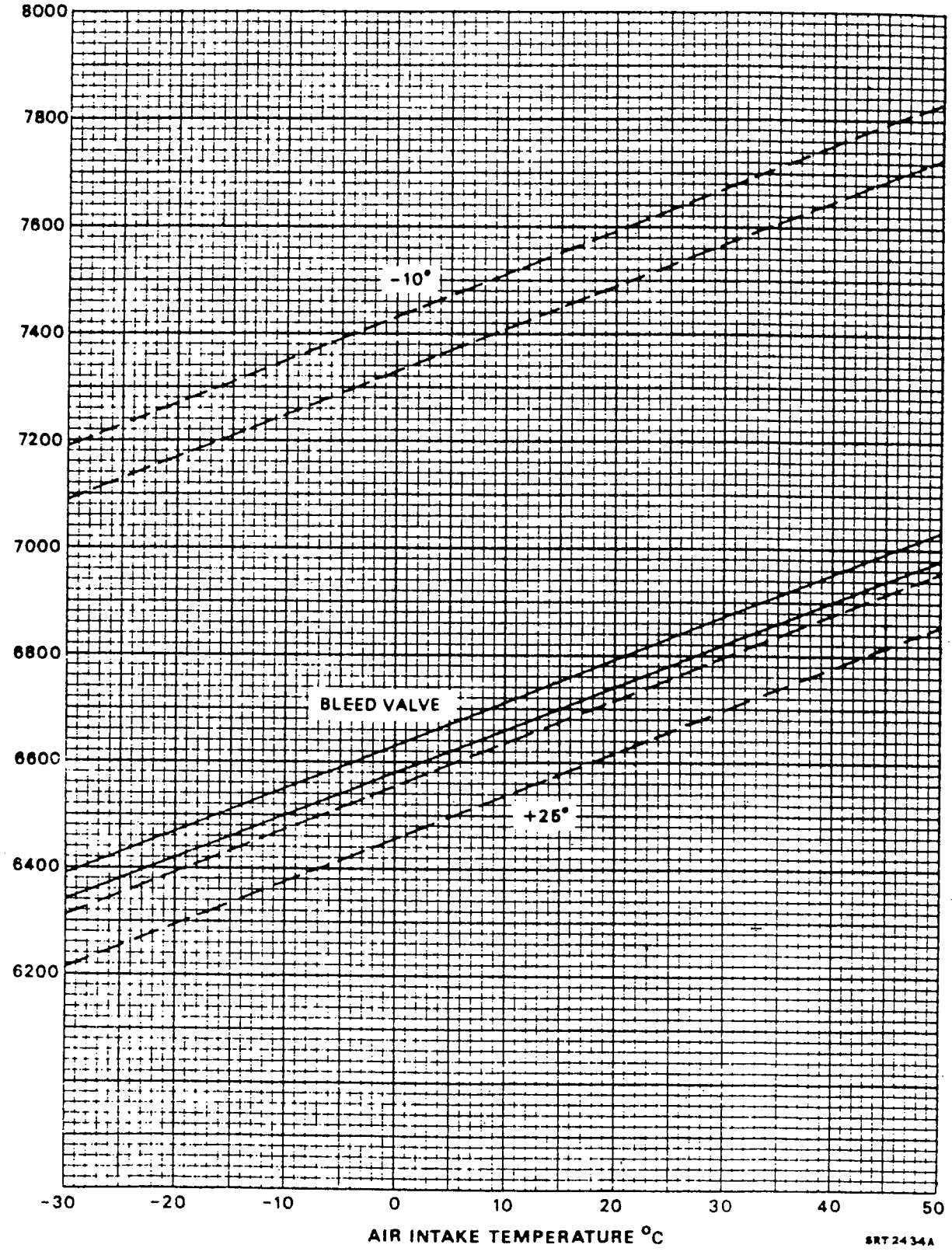

Fig.1 I.G.V. ram and air bleed valve setting curve

PROPULSION SP 215 (1) (1 to 5)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - COMBINED FUEL PRIMING AND DRAINAGE CHECK

Applicable only to Mk6, 6A and 9 aircraft.

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

TRADE Prop. Elect	M/HRS	TRADE	M/HRS	ASSOCIATED PROCEDURE CARDS

Special Tools and Equipment:

Calibrated Container.

NB 1 At least one hour is to elapse after a 'live' start before this check is carried out.

NB 2 This procedure is applicable whenever the starter fuel system is disturbed or on initial installation of starting system and is to be carried out BEFORE ANY ATTEMPT IS MADE TO START THE ENGINE.

NB 3 The quantity of fuel from all drainage checks is to be recorded in the F700 with other IPN starter installation details.

NB 4 Where fuel drainage does not follow the correct pattern, in that drainage stops early, or continues to drip steadily or is less than specified minimum, a blocked nozzle plate drain hole is indicated. This is a SERIOUS HAZARD and a start is not to be attempted until drain hole has been cleared.

NB 5 If the fuel pump/air blower motor unit continues to run on after the air cycle is complete, an excessive amount of fuel will be discharged into, or through, the combustion chamber and may cause combustion products to be dislodged and block the nozzle plate holes. Should this situation arise, the nozzle plate must be examined and cleared as detailed in Item 6.

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TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

PROPULSION
SP 215 (2)

SERVICING PROCEDURES
FUNCTIONAL CHECKS AND TESTS
HUNTER ALL MARKS

AP101B-1300-5A3B
Sect 2
Chap 4

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ENGINE STARTER SYSTEM - COMBINED FUEL PRIMING AND DRAINAGE CHECK

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1	**PROPULSION**						
1.	**Preparation**						
1.1 1.2	Engine master switch. Ignition switch.	Ensure set to 'OFF'.					
1.3	IPN fuel tank.	Replenish.					
1.4	Calibrated container.	Position under starter exhaust outlet.					
BLOCK 2	**ELECTRICAL**						
2.	**Preparation**						
2.1	HF ignition unit LT lead.	(i) Disconnect. (ii) Connect a suitable test lamp to the plug to provide an indication of fuel pressure in the atomiser fuel line.					
2.2	Aircraft batteries.	Ensure fully charged.					
2.3	External d.c. power supply.	(i) Connect. (ii) Switch on. (iii) Adjust input to between 23 and 26 volt d.c. on load. NB: Ensure voltage is maintained within limits during the fuel priming. High or low voltages will give incorrect fuel drainage.					

PROPULSION SP 215 (3)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - COMBINED FUEL PRIMING AND DRAINAGE CHECK

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION					
3.	Fuel Priming						
3.1	Engine master switch.	Set to 'ON'.					
3.2	Starter button.	Press and release.					
3.3	Starter exhaust.	(i) Ensure air flows for 2 to 3 secs. (ii) Look for fuel drainage. (iii) Ensure that any fuel drainage is accompanied by a brief flash of the test lamp.					
3.4	Starter control box motor.	Ensure stops approximately 18 seconds after operation of starter button.					
3.5	System.	Repeat operations detailed in Sub-items 3.2 and 3.4 at one minute intervals until fuel flows from starter exhaust. NB: If more than four runs are required, the nozzle plate drain hole is to be examined for obstruction.					
BLOCK 2		PROPULSION					
	Item 4 is to be carried out during Fuel Drainage Check.						
4.	Leak Check						
4.1	System.	Look for leaks.					

PROPULSION SP 215 (4)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - COMBINED FUEL PRIMING AND DRAINAGE CHECK

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SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

			TRADESMAN			SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	Brief Details of Suspected Defect and SNOW When Applicable 3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION					
5.	Fuel Drainage Check						
5.1	Starter button.	Press and release.					
5.2	Starter exhaust.	Measure and record quantity of fuel drainage (80 to 110 cc). NB: Approximately three quarters of fuel drainage should occur in first minute, remainder during next minute.					
5.3	Engine master switch.	Set to 'OFF'.					
BLOCK 2		PROPULSION					
	Item 6 is applicable only if more than four runs are required in Item 3 or if fuel drainage pattern is incorrect.						
6.	Combustion Chamber Check						
6.1	Safety disc holder.	Remove.					
6.2	Combustion chamber.	Ensure free from accumulated fuel.					
6.3	Nozzle plate drain hole.	Ensure unobstructed.					
6.4	Safety disc holder.	(i) Ensure disc intact. (ii) Refit. (Torque 384 lbf in.). (iii) Lock.					

PROPULSION SP 215 (5)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - COMBINED FUEL PRIMING AND DRAINAGE CHECK

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Date:

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			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1	ELECTRICAL						
7.	Completion						
7.1	External d.c. power supply.	(i) Switch off. (ii) Disconnect.					
7.2	HF ignition unit LT lead.	(i) Remove test lamp. (ii) Reconnect.					
BLOCK 2	PROPULSION						
8.	Completion						
8.1	Starter exhaust.	Remove all traces of fuel.					
8.2	Calibrated container.	Recover.					
8.3	IPN fuel tank.	Replenish.					

PROPULSION SP 216 (1) (1 to 5)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - FUEL DRAINAGE CHECK Applicable only to Mk6, 6A and 9 aircraft.

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

TRADE Prop. Elect	M/HRS	TRADE	M/HRS	ASSOCIATED PROCEDURE CARDS

Special Tools and Equipment:

Calibrated Container.

NB 1 At least one hour is to elapse after a 'live' start before this check is carried out.

NB 2 This Procedure is applicable whenever any part of the starter electrical system has been disturbed and is to be carried out BEFORE ANY ATTEMPT IS MADE TO START THE ENGINE.

NB 3 The quantity of fuel from all the drainage checks is to be recorded in F700 with other IPN starter installation details.

NB 4 Where fuel drainage does not follow the correct pattern, in that drainage stops early, or continues to drip steadily, or it is less than specified minimum, a blocked nozzle plate drain hole is indicated. THIS IS A SERIOUS HAZARD and a start is not to be attempted until drain hole has been cleared.

NB 5 If the fuel pump/air blower motor unit continues to run on after the air cycle is complete; an excessive amount of fuel will be discharged into the combustion chamber and may cause combustion products to be dislodged and block the nozzle plate holes. Should this situation arise, the nozzle plate must be examined and cleared as detailed in Item 5.

NB 6 Following a successful combustion cycle where more than two fuel drainage checks are required during servicing, the combustion chamber must be examined for fuel content, as detailed in Item 5, as the last operation just prior to an attempt to start.

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MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

ENGINE STARTER SYSTEM - FUEL DRAINAGE CHECK

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Aircraft Ser No:
Date:

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TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

NB 6 Cont.
This limit permits three subsequent attempts to start by the pilot.

NB 7 Not more than five starter operations, comprising fuel drainage checks and unsuccessful attempts to start (where combustion does not occur) may be made between successful combustion cycles (or starts). Where more than 5 Starter operations are required during servicing, the combustion chamber must be examined for any blockage of drain hole and nozzles and cleared as detailed in Item 5.

NB 8 An unsuccessful attempt to start, where combustion does not occur, has the same effect on the IPN system, and passes the same amount of fuel, as a simulated start, ie a priming run or a fuel drainage check.

BLOCK 1 PROPULSION

1. Preparation

1.1	Engine master switch.	Ensure set to 'OFF'.
1.2	Ignition switch.	
1.3	IPN fuel tank.	Replenish.
1.4	Calibrated container.	Position under starter exhaust outlet.

PROPULSION SP 216 (3)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - FUEL DRAINAGE CHECK

SERVICING RECORD — RAF Form 29888

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		ELECTRICAL					
2.	Preparation						
2.1	HF ignition unit LT lead.	(i) Disconnect. (ii) Connect a suitable test lamp to the plug to provide an indication of fuel pressure in the atomiser fuel line.					
2.2	Aircraft batteries.	Ensure fully charged.					
2.3	External d.c. power supply.	(i) Connect. (ii) Switch on. (iii) Adjust input to between 23 and 26 volts d.c. on load. NB: Ensure voltage is maintained within limits during the fuel drainage. High or low voltage will give incorrect fuel drainage.					
BLOCK 2		PROPULSION					
3.	Fuel Drainage Check						
3.1	Engine master switch.	Set to 'ON'.					
3.2	Starter button.	Press and release.					

PROPULSION SP 216 (4)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - FUEL DRAINAGE CHECK

SERVICING RECORD — RAF Form 29888

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION					
3.	Fuel Drainage Check cont.						
3.3	Starter exhaust.	(i) Ensure air flows for 2 to 3 secs. (ii) Ensure that any fuel drainage is accompanied by a brief flash of the test lamp. (iii) Measure and record the quantity of fuel drainage which should be 80 to 110 cc. NB: Approximately three quarters of the fuel drainage should occur in the first half minute with the remainder other than a few drops, during the next minute.					
3.4	Starter control box motor.	Ensure stops approximately 18 seconds after operation of starter button.					
3.5	Engine master switch.	Set to 'OFF'.					
BLOCK 2		PROPULSION					
	Item 4 is to be carried out during Fuel Drainage Check.						
4.	Leak Check						
4.1	System.	Look for leaks.					

PROPULSION SP 216 (5)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

ENGINE STARTER SYSTEM - FUEL DRAINAGE CHECK

SERVICING RECORD — RAF Form 29888

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

	TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
	MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1 — PROPULSION					
Item 5 is applicable only if drainage pattern is incorrect.					
5. Combustion Chamber Check					
5.1 Safety disc holder. — Remove.					
5.2 Combustion chamber. — Ensure free from accumulated fuel.					
5.3 Nozzle plate drain. — Ensure unobstructed.					
5.4 Safety disc holder. — (i) Ensure disc intact. (ii) Refit. (Torque 384 lbf in.). (iii) Lock.					
BLOCK 2 — ELECTRICAL					
6. Completion					
6.1 External d.c. power supply. — (i) Switch off. (ii) Disconnect.					
6.2 HF ignition unit LT lead. — (i) Remove test lamp. (ii) Reconnect.					
BLOCK 3 — PROPULSION					
7. Completion					
7.1 Starter exhuast. — Remove all traces of fuel.					
7.2 Calibrated container. — Recover.					
7.3 IPN fuel tank. — Replenish.					

PROPULSION SP217 (1) (1 to 2)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

SERVICING RECORD — RAF Form 29888

Aircraft Ser No:
Date:

STARTER FUEL TANK FILLER DRAIN PIPE LEAK CHECK. Mk 6, 6A and 9 A/C only.

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

TRADE	M/HRS	TRADE	M/HRS	ASSOCIATED PROCEDURE CARDS
Prop.				

Special Tools and Equipment:

Calibrated container - 14B/3498 (2 off).

BLOCK 1		ENGINES	TRADESMAN MAN HRS 1	TRADESMAN INITS & TDM 2	Brief Details of Suspected Defect and SNOW When Applicable 3	SUPERVISOR MAN HRS 4	SUPERVISOR INITS & TDM 5
1.	Preparation						
1.1	Starter fuel tank filler access panel.	Remove.					
1.2	Filler drain pipe.	Ensure unobstructed.					

BLOCK 2		ENGINES					
2.	Check						
2.1	Filler drain pipe.	(i) Using calibrated container, pour 300 Cm3 of warm water into drain inlet. (ii) Using second calibrated contain-er, collect and note quantity of water issuing from drain outlet. NB During third check in operation (iii), if input exceeds output by more than 10 Cm3, leak is to be located and rectified.					

Continued

PROPULSION SP217 (2)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

STARTER FUEL TANK FILLER DRAIN PIPE LEAK CHECK.

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

SERVICING RECORD — RAF Form 2988B

Aircraft Ser No:
Date:

BLOCK 1	ENGINES		
2.	Check cont.		
2.1		(iii) Repeat operations (i) and (ii) twice.	

BLOCK 2	ENGINES		
3.	Completion		
3.1	Starter fuel tank filler recess.	Dry.	
3.2	Starter fuel tank filler access panel.	Refit.	

TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

PROPULSION SP 218 (1) (1 to 5) FUEL FLOW TEST	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS Amended to include Mk 9 content.	AP101B-1300-5A3B Sect 2 Chap 4

SERVICING RECORD RAF Form 2988B

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

TRADE	M/HRS	TRADE	M/HRS	ASSOCIATED PROCEDURE CARDS
Prop.				

TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

Special Tools and Equipment:
Locally Manufactured Hose Assembly.
Locally Manufactured Calibrated Fuel Container (Minimum Capacity 10 Gallons).

BLOCK 1 PROPULSION

1. Preparation

1.1	Front fuselage fuel tanks.	Ensure a minimum of 650 lbs of fuel in each.
1.2	Battery master switch.	Set to 'OFF'.
1.3	LP fuel cock.	Set to 'OFF'.
1.4	Engine master switch.	Set to 'OFF'.

BLOCK 2 PROPULSION

This Block is applicable only to Mk6, 6A and 9 aircraft.

2. Preparation

2.1	Fuel delivery pipe. (Pt No C201525/29).	(i) Diconnect at flexible couplings. (ii) Remove. (iii) Fit locally manufactured pipe assembly to fuel pipe assembly (Pt No C201525/28) at frame 32. (iv) Position calibrated container.

FUEL FLOW TEST

SERVICING RECORD RAF Form 29888

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

BLOCK 1 PROPULSION

This Block is applicable only to Mk7, 7A and 8B aircraft.

3. Preparation

3.1	Fuel delivery pipe. (Pt No C18805/10).	(i)	Disconnect at flexible coupling.
		(ii)	Remove.
		(iii)	Fit locally manufactured pipe assembly to fuel pipe assembly (Pt No A212114).
		(iv)	Position locally manufactured calibrated container.

BLOCK 2 PROPULSION

This Block is applicable only to Mk6, 6A and 9 aircraft.

4. Test

4.1	Battery master switch.	Set to 'ON'.	
4.2	Engine master switch.	Set to 'ON'.	
4.3	Port fuel pump.	Set to 'ON'.	
	Note: Ensure locally manufactured hose assembly and calibrated container are in position.		
4.4	LP cock.	(i)	Open for 5 seconds.
		(ii)	Close.
		(iii)	Check that the minimum quantity of fuel discharged into the calibrated container is 4.0625 gal.

PROPULSION SP 218 (3)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

FUEL FLOW TEST

SERVICING RECORD — RAF Form 2988B

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

			TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
			MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1		PROPULSION					
4.	Test cont.						
4.5	Port fuel pump.	Set to 'OFF'.					
4.6	Starboard fuel pump.	Set to 'ON'.					
4.7	LP cock.	(i) Open for 5 seconds. (ii) Close. (iii) Check that the minimum quantity of fuel discharged into calibrated container is 4.0625 gallons.					
4.8	Starboard fuel pump.	Set to 'OFF'.					
4.9	Engine master switch.	Set to 'OFF'.					
4.10	Battery master switch.	Set to 'OFF'.					
BLOCK 2		PROPULSION					
	This Block is applicable only to Mk7, 7A and 8B aircraft.						
5.	Test						
5.1	Battery master switch.	Set to 'ON'.					
5.2	Engine master switch.	Set to 'ON'.					
5.3	Port fuel pump.	Set to 'ON'.					
	NOTE: Ensure that the locally manufactured hose assembly and calibrated container is in position.						

FUEL FLOW TEST

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

BLOCK 1 PROPULSION

5. Test cont.

5.4	LP cock.	(i) (ii) (iii)	Open for 5 seconds. Close. Check that the minimum quantity of fuel discharged into the calibrated container is 3.125 gallons.
5.5	Port fuel pump.	Set to 'OFF'.	
5.6	Starboard fuel pump.	Set to 'ON'.	
5.7	LP cock.	(i) (ii) (iii)	Open for 5 seconds. Close. Check that the minimum quantity of fuel discharged into the calibrated container is 3.125 gallons.
5.8	Starboard fuel pump.	Set to 'OFF'.	
5.9	Engine master switch.	Set to 'OFF'.	
5.10	Battery master switch.	Set to 'OFF'.	

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Aircraft Ser No:
Date:

TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5

PROPULSION SP 218 (5)	SERVICING PROCEDURES FUNCTIONAL CHECKS AND TESTS HUNTER ALL MARKS	AP101B-1300-5A3B Sect 2 Chap 4

FUEL FLOW TEST

SERVICING RECORD — RAF Form 2988B

Aircraft Ser No:
Date:

SAFETY AND SERVICING NOTES ARE TO BE COMPLIED WITH THROUGHOUT THE WORK DETAILED ON THIS CARD

		TRADESMAN		Brief Details of Suspected Defect and SNOW When Applicable	SUPERVISOR	
		MAN HRS 1	INITS & TDM 2	3	MAN HRS 4	INITS & TDM 5
BLOCK 1	PROPULSION					
	This Block is applicable only to Mk6, 6A and 9 aircraft.					
6.	Completion					
6.1	Locally manufactured hose assembly. — Remove.					
6.2	Fuel delivery pipe. (Pt No 201525/29). — Refit.					
BLOCK 2	PROPULSION					
	This Block is applicable only to Mk7, 7A and 8B aircraft.					
7.	Completion					
7.1	Locally manufactured hose assembly. — Remove.					
7.2	Fuel delivery pipe. (Pt No 18805/10). — Refit.					
BLOCK 3	PROPULSION					
8.	Completion					
8.1	ECU fuel system. — Bleed.