Classification cancelled / Changed to UNCLASS

CONFIDENTIAL

By authority of AVRS

Date Z7

Unit / Rank / Appointment AV45 5

ANALYZED

FILE IN VAULT

ARROW 1 SERVICE DATA

SECTION 39

ELECTRICAL SYSTEM INTERNAL AND EXTERNAL LIGHTING

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MAY 24 1995

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(This data supersedes previous issue dated 12 Mar 1957)

LIST OF REVISIONS

DATE PAGE NO.

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ELECTRICAL SYSTEM

INTERNAL AND EXTERNAL LIGHTING

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DESCRIPTION

GENERAL

I The internal lighting system consists of lighting circuits for the illumination of the front and the rear cockpit instruments, switches and controls. The external lighting system consists of a navigation light circuit and a landing and taxying lights circuit.

FRONT COCKPIT LIGHTING

- The following five circuits comprise the front cockpit lighting:
- (a) A circuit for the instrument lights and the edge lights of the main instrument panel and undercarriage actuation panel. The instrument lights and the edge lights are red coloured.
- (b) A circuit for console panel edge lights which are red lights.
- (c) A circuit for the console flood lights which are red lights.
- (d) A circuit for the console high altitude flood lights which are amber lights.
- (e) A circuit for the map and emergency flood light which is a red or clear light, as selected.
- The instrument lights, edge lights, and console flood lights circuits each incorporate a dimming control. The controls are marked MAIN PANE L, CONSOLE PANELS and CONSOLE FLOOD. The dimming is controlled by switching the tapping points of three variable transformers fitted one in each circuit. The transformers and their controls are located on panel E17 in the RH console and they derive a power supply from 'A' phase of the main AC bus-bars via circuit breakers on the main circuit breaker panel E1.
- 4 A dimming control is not provided for the console high altitude flood lights. The control switch for the lights is marked HIGH ALT LIGHTING and is located on panel E17. The circuit derives a power supply from the main DC bus via a circuit breaker located on the main circuit breaker panel E1.

- 5 The map and emergency flood light, located above the RH console, is provided with a rheostat dimming control incorporated with the on and off switch housing which is an integral part of the case. The circuit is supplied from the emergency DC bus via a circuit breaker on the main circuit breaker panel E1.
- 6 A table listing the circuit breaker, fuse (if fitted), operating controls and associated lights, is provided for each of the five lighting circuits in the front cockpit. These tables, figs 3 to 7, will facilitate operating and servicing the circuits.

REAR COCKPIT LIGHTING

- 7 The following four circuits comprise the rear cockpit lighting:
- (a) A circuit for the instrument lights and the console panel edge lights. The instrument lights and the edge lights are red coloured.
- (b) A circuit for the console flood lights which are red lights.
- (c) A circuit for the console high altitude flood lights which are amber lights. (Not fitted at present).
- (d) A circuit for the map and emergency flood light which is a red or clear light, as selected.
- 8 Dimming controls are provided for the instrument lights, edge lights and console lights circuits. A common dimming control is provided for the instrument lights and the instrument edge lights. A separate dimming control is provided for the console flood lights. The controls are marked PANEL LIGHTS and CONSOLE FLOOD and they control the dimming by switching the tapping points of two variable transformers. The transformers and their controls are located on panel E26 in the RH console and they derive a supply from 'A' phase of the main AC bus-bars via circuit breakers mounted on panel E1 located in the nose-wheel well.
- 9 A dimming control is not provided for the console high altitude flood lights. The

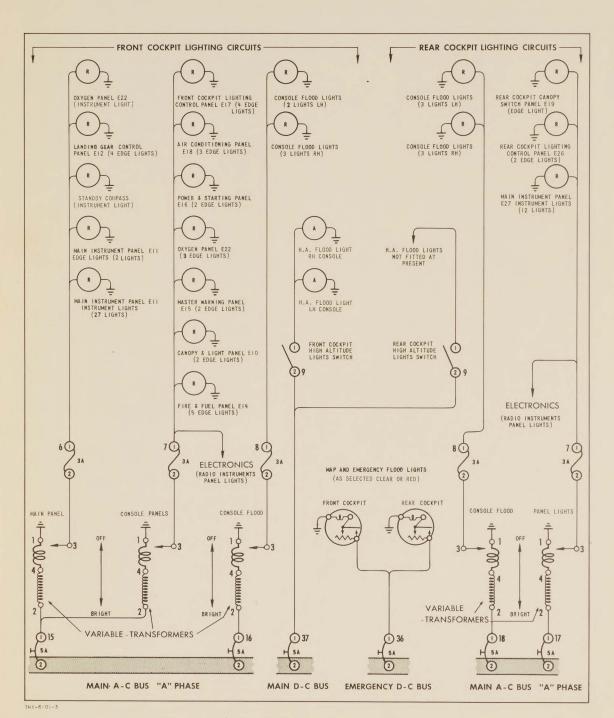


FIG. 1 INTERNAL LIGHTING CIRCUITS SCHEMATIC



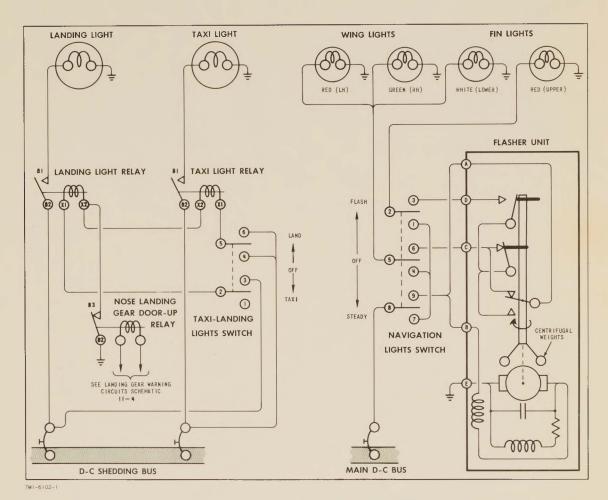


FIG. 2 EXTERNAL LIGHTING CIRCUITS SCHEMATIC

control switch for the lights is marked HIGH ALT LIGHTING and is located on panel E26. The circuit derives a power supply from the main DC bus via a circuit breaker on the main circuit breaker panel E1.

10 The map and emergency flood light, located above the RH console, is provided with a rheostat dimming control incorporated with the on and off switch housing which is an integral part of the case. The circuit is supplied from the emergency DC bus via a circuit breaker on the main circuit breaker panel E1.

11 Tables similar to those provided for the

front cockpit lighting circuits are provided for the rear cockpit lighting circuits. See figs 8 to 11.

NAVIGATION LIGHTS

The navigation lights circuit comprises a red (LH) and a green (RH) wing tip light, a red (upper) and a white (lower) fin tip light, a flasher unit and a selector switch marked NAV LIGHTS, FLASH-OFF-STEADY. When the selector switch is set to the STEADY position, a power supply circuit derived from the main DC bus is completed through the selector switch contacts to the four navigation lights.



When the switch is selected to FLASH, the flasher unit located on the RH side of the nose-wheel well adjacent to panel E3 is operative. The flasher unit will illuminate the wing tip lights and fin tip white light alternately with the fin tip red light. If the flasher unit fails, it will automatically revert the lights to a steady indication with the exception that, dependent upon the position in which the flasher halts, the fin tip red light may not illuminate.

13 Fig 12, which is similar to those tables for the front cockpit and the rear cockpit lighting circuits, is provided for the navigation lights circuit.

LANDING AND TAXYING LIGHTS

- 14 Two lights are fitted on the nose landing gear leg; one on the steering portion of the leg for taxying, and the other on the fixed portion of the leg for landing. The selection and operation of the lights is controlled by a double pole double throw switch marked TAXI-OFF-LAND located on the LH console in the front cockpit.
- 15 Two single pole single throw relays control the supply circuit to the landing light and taxi light respectively. Selecting the control switch to the LAND position will energize both relays. Selecting the switch to the TAXI position will energize only the taxi light control relay. The circuits derive their power supply from the DC shedding bus.
- 16 Fig 13 is provided for the landing lights and taxi lights circuit and is similar to those of the front cockpit, rear cockpit and navigation lights circuits.

FUNCTION TESTING

FRONT COCKPIT LIGHTING CIRCUITS TEST

- 17 To check the operation of the front cockpit lighting circuits proceed as follows:
- (a) Ensure that the following circuit breakers on panel El are switched on:
- (1) INST & EDGE FRONT C/P LTS.
- (2) FLOOD FRONT C/P LTS.

- (3) HIGH ALT. C/P LTS.
- (4) EMERG C/P LTS.
- (b) Check that the three fuses in the lighting control panel E17 are serviceable.
- (c) On panel E17, set the MAIN PANEL control to BRIGHT and check that the lights listed in fig 3 are lit.
- (d) Rotate the MAIN PANEL control toward OFF and note that the brilliance of the lights is progressively reduced.
- (e) On panel E17, set the CONSOLE PANELS control to BRIGHT and check that the lights listed in fig 4 are lit.
- (f) Rotate the CONSOLE PANELS control toward OFE and note that the brilliance of the lights is progressively reduced.
- (g) On panel E17, set the CONSOLE FLOOD control to BRIGHT and check that the lights listed in fig 5 are lit.
- (h) Rotate the CONSOLE FLOOD control to OFF and check that the brilliance of the lights is progressively reduced.
- (j) On panel E17, select the HIGH ALT LIGHTING switch to ON. Check that the high altitude light on the RH console and the high altitude light on the LH console are lit.
- (k) Select the HIGH ALT LIGHTING switch to OFF.
- (m) Release the map and emergency flood light from its stowage clip on the RH console. Operate the integrally mounted rheostat control and note that the brilliance of the light increases as the control is rotated. Rotate the bezel ring and check that the light is red or clear, as selected.
- (n) Select the control to the off position and note that the switch action is positive.

REAR COCKPIT LIGHTING CIRCUITS TEST

18 To check the operation of the rear cockpit lighting circuits proceed as follows:

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- (a) Ensure that the following circuit breakers on panel El are switched on:
- (1) INST & EDGE REAR C/P LTS.
- (2) FLOOD REAR C/P LTS.
- (3) EMERG C/P LTS.
- (4) HIGH ALT C/P LTS.
- (b) Check that the two fuses in the lighting control panel E26 are serviceable.
- (c) On panel E26, set the PANEL LIGHTS control to BRIGHT and check that the lights listed in Fig 8 are lit.
- (d) Rotate the PANEL LIGHTS control to OFF and note that the brilliance of the lights is progressively reduced.
- (e) On panel E26, set the CONSOLE FLOOD control to BRIGHT and check that the lights listed in fig 9 are lit.
- (f) Rotate the CONSOLE FLOOD control to OFF and note that the brilliance of the lights is progressively reduced.
- (g) On panel E26, select the HIGH ALT LIGHTING switch to ON. Check that the high altitude light on the LH console and the high altitude light on the RH console are lit.
- (h) Release the map and emergency flood light from its stowage clip on the RH console. Operate the integrally mounted rheostat control and note that the brilliance of the light increases as the control is rotated. Rotate the bezel ring and check that the light is red or clear as selected.
- (j) Select the control to the off position and note that the switch action is positive.

NAVIGATION LIGHTS CIRCUIT TEST

- 19 To check the operation of the navigation lights proceed as follows:
- (a) Ensure that the NAV-EXT. LTS circuit breaker on paneI El is switched on.
- (b) On panel E22, select the NAV LIGHTS switch to the STEADY position and check that the LH wing tip light and the RH wing tip light and both lights in the fin tip are lit.
- (c) Select the NAV LIGHTS switch to the FLASH position and check that both wing tip lights and the white light in the fin tip flash alternately with the red light in the fin tip.
- (d) Select the NAV LIGHTS switch to OFF.

LANDING AND TAXYING LIGHTS CIRCUIT TEST

- 20 To check the operation of the landing and taxying lights proceed as follows:
- (a) Examine the lens of both lights for chips or cracks. Clean the lenses, if necessary. Check the bulbs visually and replace if they appear to be 'black'.
- (b) Ensure that the LAND-EXT LTS circuit breaker and the TAXI-EXT LTS circuit breaker both located on panel E1 are switched on.
- (c) On panel El0, select the LIGHTS switch to the LAND position and check that the landing light and the taxi light are lit.
- (d) Select the LIGHTS switch to the TAXI position and check that the TAXI light only is lit.
- (e) Select the LIGHTS switch to OFF.

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CIRCUIT COMPONENT	LOCATION
Circuit Breaker; INST. & EDGE - FRONT C/P LTS. Fuse; forward one of three Control; MAIN PANEL Oxygen Panel, Instrument Light Main Instrument Panel, Edge Light Main Instrument Panel, Edge Light Standby Compass, Instrument Light Main Instrument Panel, Instrument Lights Main Instrument Panel, Instrument Lights (27) Undercarriage Actuation Panel, Edge Light Undercarriage Actuation Panel, Edge Light Undercarriage Actuating Lever, Edge Lights (two)	Panel E1-15 Panel E17-6 Panel E17-3 Panel E22-8 Panel E11-21 Panel E11-22 Panel E11-31 Panel E11-35 to 61 (incl) Panel E12-7 Panel E12-8 Panel E12-3

FIG. 3 FRONT COCKPIT INSTRUMENT AND EDGE LIGHTS CIRCUIT COMPONENTS



CIRCUIT COMPONENT	LOCATION
Circuit Breaker; lNST & EDGE - FRONT C/P LTS.	Panel E1-15
Fuse; centre one of three	Panel E17-7
Control; CONSOLE PANELS	Panel E17-4
Lighting Control Panel, Edge Light	Panel E17-10
Lighting Control Panel, Edge Light	Panel E17-11
Lighting Control Panel, Edge Light	Panel E17-16
Lighting Control Panel, Edge Light	Panel E17-17
Air Conditioning Panel, Edge Light	Panel E18-6
Air Conditioning Panel, Edge Light	Panel E18-7
Air Conditioning Panel, Edge Light	Panel E18-11
Power and Starting Panel, Edge Light	Panel E16-5
Power and Starting Panel, Edge Light	Panel E16-8
Oxygen Panel, Edge Light	Panel E22-10
Oxygen Panel, Edge Light	Panel E22-11
Oxygen Panel, Edge Light	Panel E22-18
Warning Lights Panel, Edge Light	Panel E15-25
Warning Lights Panel, Edge Light	Panel E15-26
Canopy and Lights Panel, Edge Light	Panel E10-4
Canopy and Lights Panel, Edge Light	Panel El0-5
Fire and Fuel Panel, Edge Light	Panel E14-14
Fire and Fuel Panel, Edge Light	Panel E14-15
Fire and Fuel Panel, Edge Light	Panel El4-16
Fire and Fuel Panel, Edge Light	Panel E14-17
Fire and Fuel Panel, Edge Light	Panel E14-21
TELECOMMUNICATIONS SYSTEM PANELS	
Pilot's Switch Panel R4; Edge Lights (two)	Panel R4 -6 and -7
Pilot's Radio Compass Control Panel C-1513A;	
Edge Lights (two)	Panel R111
lFF Control Panel C-1158/APX; Edge Lights (two)	Panel R116
UHF Control Panel C-1057/ARC-34; Edge Lights (two)	Panel R136
J4 Compass Control Panel; Edge Lights (two)	Panel R143
Pilot's Interphone Control Panel C-824/AlC-10;	
Edge Lights (two)	Panel R148
Damper Circuit Breaker Panel R8; Edge Lights (two)	Panel R8 -21 and 22
Damper Function Selector; Edge Light (one)	Panel R211

FIG. 4 FRONT COCKPIT CONSOLE PANEL EDGE LIGHTS CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; FLOOD - FRONT C/P LTS.	Panel E1-16
Fuse; aft one of three	Panel E17-8
Control; CONSOLE FLOOD	Panel E17-5
Console Flood Light, Forward	RH Console, E1004-2 (cable)
Console Flood Light, Centre	RH Console, E1004-3 (cable)
Console Flood Light, Rear	RH Console, E1004-5 (cable)
Console Flood Light, Forward	LH Console, E1003-2 (cable)
Console Flood Light, Centre	LH Console, E1003-3 (cable)
Console Flood Light, Rear	LH Console, E1003-5 (cable)

FIG. 5 FRONT COCKPIT CONSOLE FLOOD LIGHTS CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; HIGH ALT C/P LIGHTS Switch; HIGH ALT LIGHTING High Altitude Flood Light High Altitude Flood Light	Panel E1-37 Panel E17-9 RH Console, E1004-4 (cable) LH Console, E1003-4 (cable)

FIG. 6 FRONT COCKPIT HIGH ALTITUDE FLOOD LIGHTS CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; EMERG - C/P LIGHTS Map and Emergency Flood Light (Switch and dimmer combined)	Panel El-36 RH Console, El503-1 (cable)

FIG. 7 FRONT COCKPIT MAP AND EMERGENCY FLOOD LIGHT CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; INST. & EDGE - REAR C/P LTS.	Panel E1-17
Fuse; aft one of two	Panel E26-7
Control; PANEL LIGHTS	Panel E26-5
Canopy and Light Panel, Edge Light	Panel E19-4
Lighting Control Panel, Edge Light	Panel E26-10
Lighting Control Panel, Edge Light	Panel E26-11
TELECOMMUNICATIONS SYSTEM PANELS	
R.O. Switch Panel R5; Edge Lights (two)	Panel R5-7 and -8
R.O. Radio Compass Control Panel C-1513A;	
Edge Lights (two)	Panel R112
R.O. Interphone Control Panel C-824/AIC-10;	
Edge Lights (two)	Panel R149
Rear Cockpit Instrument Panel - 12 instrument lights	Panel E27 -5 to 16
	inclusive

FIG. 8 REAR COCKPIT INSTRUMENT AND CONSOLE PANEL EDGE LIGHTS CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circle Parker BY00D BRAD G/R 180	D. 1 D. 10
Circuit Breaker; FLOOD - REAR C/P LTS	Panel E1-18
Fuse - forward one of two	Panel E26-8
Control; CONSOLE FLOOD	Panel E26-4
Console Flood Light, Forward	RH Console, E1010-2 (cable)
Console Flood Light, Centre	RH Console, E1010-3 (cable)
Console Flood Light, Rear	RH Console, E1010-4 (cable)
Console Flood Light, Forward	LH Console, E1013-3 (cable)
Console Flood Light, Centre	LH Console, E1013-5 (cable)
Console Flood Light, Rear	LH Console, E1013-6 (cable)

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; HIGH ALT C/P LTS Switch; HIGH ALT LIGHTING High Altitude Flood Light) Not fitted. High Altitude Flood Light)	Panel E1-37 Panel E26-9 RH Console, E1010-5 (cable) LH Console, E1013-4 (cable)

FIG. 10 REAR COCKPIT HIGH ALTITUDE FLOOD LIGHTS CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; EMERG - C/P LTS Map and Emergency Flood Light (Switch and dimmer combined)	Panel E1-36 RH Console, E1504-1 (cable)

FIG. 11 REAR COCKPIT MAP AND EMERGENCY FLOOD LIGHT CIRCUIT COMPONENTS

CIRCUIT COMPONENT	LOCATION
Circuit Breaker; NAV - EXT. LTS Switch; NAV LIGHTS, STEADY-OFF-FLASH Navigation Lights Flasher Wing Light - Red Wing Light - Green Fin Light - White Fin Light - Red	Panel E1-38 Panel E22-5 Nose Wheel Well, E102 (EQ No.) Left Wing Tip, E1155-2 (cable) Right Wing Tip, E1156-2 (cable) Fin Tip, Lower, E158-2 (cable) Fin Tip, Upper, E1046-2 (cable)

FIG. 12 NAVIGATION LIGHTS CIRCUIT COMPONENTS

CIRCUIT COMPONENTS	LOCATION
Circuit Breaker; LAND - EXT. LTS Circuit Breaker; TAXI - EXT. LTS Switch; LIGHTS, LAND-OFF-TAXI Landing Light Relay Taxi and Landing Lights Relay Landing Light Taxi Light	Panel E1-39 Panel E1-40 Panel E10-3 Panel E6-13 Panel E6-10 Nose Undercarriage; E201 (EQ No.) Nose Undercarriage; E202 (EQ No.)

FIG. 13 LANDING AND TAXI LIGHTS CIRCUIT COMPONENTS

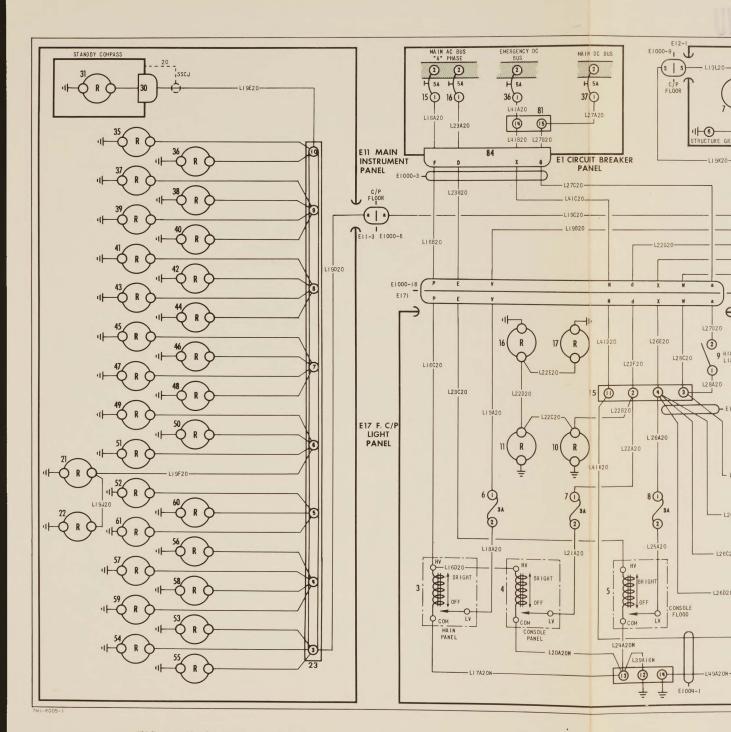


FIG. 14 FRONT COCKPIT INTERNAL LIGHTING CIRCUITS

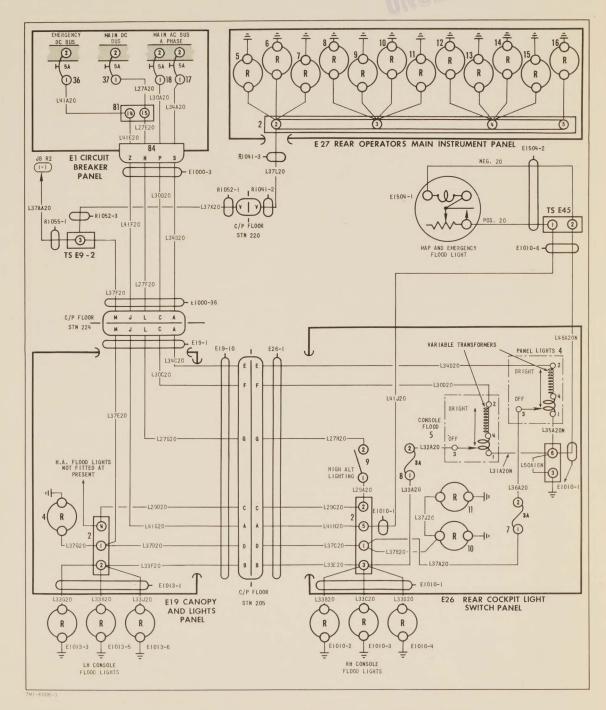


FIG. 15 REAR COCKPIT INTERNAL LIGHTING CIRCUITS

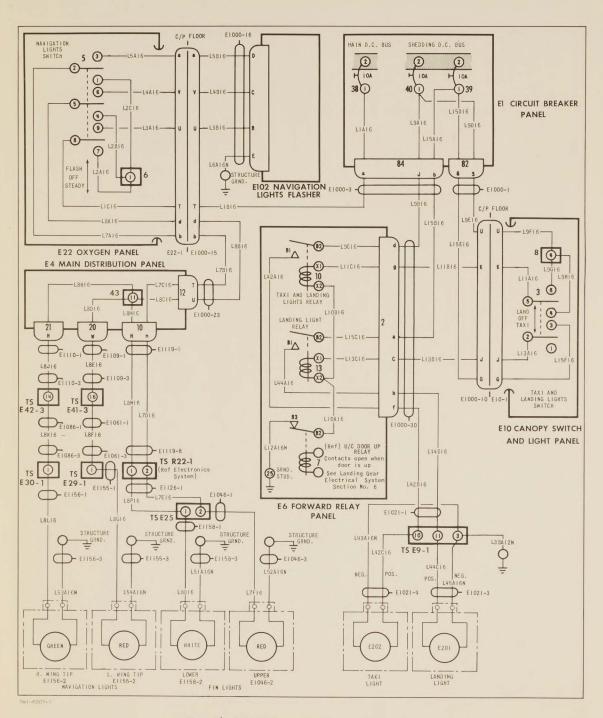


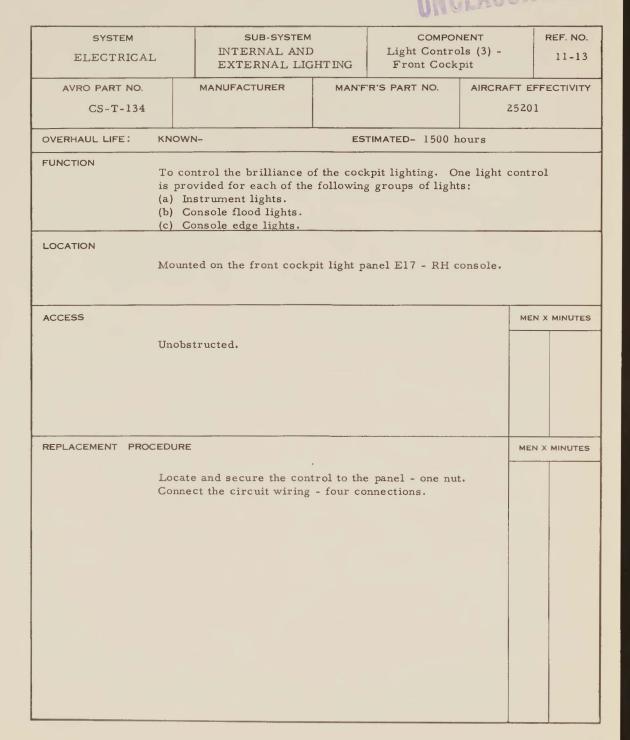
FIG. 16 EXTERNAL LIGHTS CIRCUITS

ARROW 1 SERVICE DATA COMPONENT DATA SHEET

	- 1					
SYSTEM	1	SUB-SYSTEM		COMPON		REF. NO.
ELECTRICAL		INTERNAL AN EXTERNAL LIG		Front Cockpi Panel - I		11-13
			TING	Paner - I		
AVRO PART NO.		MANUFACTURER	MAN'F	'R'S PART NO.	AIRCRAFT	EFFECTIVITY
17-1252-77	Av	vro Aircraft Ltd.			25	5201
OVERHAUL LIFE:	KNOWN	-	ES	TIMATED- 1500 h	nours	
		se three variable tr used for the front c				ol.
LOCATION						
1	Front c	ockpit, RH console				
ACCESS						MEN X MINUTES
Ţ	Unobst	ructed.				
REPLACEMENT PROCI	EDURE					MEN X MINUTES
	of the p	the panel in the con			5	

INSPECTION		MEN X MINUTES
	Check that the panel is securely fitted. Operate the dimming controls and switches;	
	check that the action is not rough or sluggish.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND GROU	UND TEST EQUIPMENT	
		V 90
SPECIAL TOOLS TO REMOVE OF	R SERVICE	
REMARKS		
THE STATE OF		
		Land of the

COMPONENT DATA SHEET



THE COLUMN THE PARTY OF THE PAR			
INSPECTION		MEN X	MINUTES
pr Ch an Op	eck that the control is securely and operly fitted. leck that the circuit wiring is securely deproperly connected. lecate the control and check that the tion is not rough or sluggish.		
FUNCTIONAL CHECKS		MEN X	MINUTES
GROUND HANDLING AND GROUND	TEST EQUIPMENT		
SPECIAL TOOLS TO REMOVE OR SE	CRVICE		
REMARKS			
	ı		

COMPONENT DATA SHEET

		COMPONEN	DATAS	IINCI	ASSI	EIFD
SYSTEM ELECTRICAL		SUB-SYSTEM COMPONE INTERNAL AND Switch - Front (EXTERNAL LIGHTING High Altitude Lig		NENT at Cockpit	REF. NO.	
AVRO PART NO.		MANUFACTURER	MAN'F	"R'S PART NO.	AIRCRAFT	EFFECTIVIT
		Cutler-Hammer		8801K16	25	201
OVERHAUL LIFE:	KNOW	N-	ES	TIMATED- 1500	hours	
LOCATION		ovide on-off switchin lights.	ng for the	front cockpit hi	gh altitude	
	Moun	ted on the front cock	oit light p	anel E17 - RH c	console.	
ACCESS	Unobs	tructed.				MEN X MINUTE
REPLACEMENT PRO	CEDURE				1	MEN X MINUTE
		e and secure the switect the circuit wiring				

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INSPECTION		MEN X MINUTE
	Check that the switch is securely and properly fitted. Check that the circuit wiring is securely and properly connected. Operate the switch and check that the action is not rough or sluggish.	
FUNCTIONAL CHECKS		MEN X MINUTE
GROUND HANDLING AND GE	ROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REMOVE	OR SERVICE	
REMARKS		

ARROW 1 SERVICE DATA COMPONENT DATA SHEET

				(61)		
SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL AND		COMPON Map and Emer	gency Flood	REF. NO.
		EXTERNAL LIC	HTING	Light Asse	mbly	
AVRO PART NO.		MANUFACTURER	MAN'F	'R'S PART NO.	AIRCRAFT E	FFECTIVITY
		Grimes		D-7825	252	01
OVERHAUL LIFE:	KNOWI	N-	ES	TIMATED- 1500	hours	
FUNCTION		ovide a source of illu a radius of approxim			oved	
LOCATION						
	Front	cockpit, RH side.				
ACCESS					ME	N X MINUTE
	Unobs	tructed.				
REPLACEMENT PROC	CEDURE				ME	N X MINUTES
	to the Conne two el	e and secure the assistructure- two mour ct the light assembly ectrical connections e light assembly in the	nting bolts circuit	s. wiring -		

MEN X MINUTES INSPECTION Check that the filament is not blackened and examine the lens and the casing for signs of crazing or cracks. Check that the stowage clip is securely and properly fitted and that the light assembly circuit connections are securely connected. Operate the switch and check that the action is not rough or sluggish. MEN X MINUTES FUNCTIONAL CHECKS GROUND HANDLING AND GROUND TEST EQUIPMENT SPECIAL TOOLS TO REMOVE OR SERVICE REMARKS

ARROW 1 SERVICE DATA COMPONENT DATA SHEET

						NFIDENTIA
		ARROW 1 SE		DATA HEET	LASSIF	IED
SYSTEM		SUB-SYSTEM		СОМРО		REF. NO.
ELECTRICAL	CLECTRICAL INTERNAL AND Rear Cockpit Light EXTERNAL LIGHTING Panel - E26			11-13		
AVRO PART NO.		MANUFACTURER MAN'F'R'S PART NO. AIRC		AIRCRAFT I	EFFECTIVITY	
7-1252-123	A	vro Aircraft Ltd.			252	01
OVERHAUL LIFE:	KNOWN	I-	ES	TIMATED- 1500	hours	
		se two variable tran				
LOCATION	Rear o	ockpit, RH console.				
ACCESS					М	EN X MINUTE
	Unobst	ructed.				
REPLACEMENT PROC	EDURE				мі	EN X MINUTES
	four que Connect the part	the panel in the connick-fasteners. ct and secure the cirulel to the terminal secure the pilot's seat bulk	cuit wiri	ng supplied with	X	



INSPECTION		MEN X MINUTES
	Check that the panel is securely fitted.	
	Operate the dimming controls and switches,	
	check that the action is not rough or sluggish.	
	Check that the circuit wiring to the terminal	
	strip is securely and properly fitted.	
	strip is securely and property ritted.	
FUNCTIONAL CHECKS		MEN X MINUTES
TOTOTIONAL OTLORS		MEN X MINOTES
GROUND HANDLING AND GRO	UND TEST EQUIPMENT	
SPECIAL TOOLS TO REMOVE OF	R SERVICE	
	_	
REMARKS		
1, 713.4		

COMPONENT DATA SHEET

			7.1	and P		
SYSTEM		SUB-SYSTEM		COMPONENT		REF. NO
ELECTRICAL		INTERNAL AN		Light Contr		11-1
ELECTRICAL		EXTERNAL LIG	HTING	Rear Co	ckpit	11-1
AVRO PART NO.		MANUFACTURER	MAN'F	'R'S PART NO.	AIRCRAFT E	EFFECTIVIT
CS-T-134					2520) 1
OD 1 101					2520	, <u> </u>
OVERHAUL LIFE:	KNOWN	4-	ES*	TIMATED- 1500 h	ours	
FUNCTION						
		trol the brilliance of				rol
		ided for the console			rol for the	
	console	e edge lights and ins	trument p	panel lights.		
						-
LOCATION						
3	Mounte	d on the rear cockp	it light pa	nel E26 - RH co	nsole.	
ACCESS					М	EN X MINUTE
	Unobst	ructed.				
REPLACEMENT PROC	EDURE				ME	EN X MINUTE
		and secure the cont				
	Connec	t the circuit wiring	- three co	onnections.		

INSPECTION		MEN X MINUTES
	Check that the circuit wiring is securely and properly connected. Check that the control is securely and properly fitted. Operate the control and check that the action is not rough or sluggish.	
FUNCTIONAL CHECKS	3	MEN X MINUTES
GROUND HANDLING	AND GROUND TEST EQUIPMENT	
SPECIAL TOOLS TO R	EMOVE OR SERVICE	17
REMARKS		
REMARKS		

COMPONENT DATA SHEET

				1477		
SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL AND EXTERNAL LIGHTING		COMPONENT Switch - Rear Cock High Altitude Lightin		REF. No
AVRO PART NO.		MANUFACTURER	MAN'F	R'S PART NO.	AIRCRAFT	EFFECTIVI
8801-K16		Cutler-Hammer	3	8801-K16	25201	
OVERHAUL LIFE:	KNOWI	V-	ES.	TIMATED- 1500 h	ours	
FUNCTION	To pro	ovide on-off switching le flood lights.	ng for the	rear cockpit hig	yh	
LOCATION						
	Mount	ed on the rear cockp	oit light pa	anel E26 - RH co	onsole.	
ACCESS						MEN X MINUT
	Unobs	tructed.				
REPLACEMENT PROC	CEDURE					MEN X MINUT
		e and secure the swi ct the circuit wiring				

INSPECTION		MEN X MINUTES
	Check that the circuit wiring is securely and properly connected. Check that the switch is securely and properly fitted. Operate the switch and check that the action is not rough or sluggish.	
FUNCTIONAL CHECKS		MEN X MINUTES
	*	
GROUND HANDLING AND	GROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REM	OVE OR SERVICE	
REMARKS		

ARROW 1 SERVICE DATA COMPONENT DATA SHEET

SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL AND EXTERNAL LIGHTING		COMPONENT Map and Emergency F Light Assembly		REF. NO. 11-13	
AVRO PART NO.		MANUFACTURER Grimes	MAN'F	'R'S PART NO. D-7825	AIRCRAFT EFFECTIVIT		
OVERHAUL LIFE:	KNOWN- ESTIMATED- 1500 hours						
FUNCTION		ovide a source of illu a a radius of approxim			oved		
LOCATION	Rear	cockpit, RH side.					
ACCESS	Unobs	tructed.				MEN X	MINUTE
REPLACEMENT PROC	Locate the st: Conne	e and secure the asseructure - two mountines the light assembly ectrical connections. e light assembly in the	ng bolts.	viring -		MEN X	MINUTE:

INSPECTION		MEN X MINUTES
	Check that the filament is not blackened and examine the lens and the casing for signs of crazing or cracks. Check that the stowage clip is securely and properly fitted and that the light assembly circuit connections are securely connected. Operate the switch and check that the action is not rough or sluggish.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND G	GROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REMOVE	E OR SERVICE	
REMARKS		

ARROW 1 SERVICE DATA COMPONENT DATA SHEET

	SUB-SYSTEM INTERNAL AND EXTERNAL LIGHTING			Lights		
	MANUFACTURER Cutler-Hammer			AIRCRAFT EFFECTIVIT 25201		
KNOWI	N-	EST	TIMATED- 1500 h	ours		
				acilitate		
Front	cockpit, RH console	panel E2	2.			
				м	EN X MINUTES	
Unobs	tructed.					
CEDURE				м	EN X MINUTES	
lockwa Conne Locate	asher and nut provide ect and secure the cir e the panel in the con	ed. cuit wiringsole and	ng to the switch. secure - six sci			
	To pr select Front Unobs EEDURE Fit an lockw Conne	EXTERNAL LIGHT MANUFACTURER Cutler-Hammer KNOWN- To provide off control of the selection of steady or flash Front cockpit, RH console Unobstructed. CEDURE Fit and secure the switch to lockwasher and nut provide Connect and secure the circulate the panel in the consoler.	EXTERNAL LIGHTING MANUFACTURER Cutler-Hammer KNOWN- To provide off control of the navigar selection of steady or flashing illum Front cockpit, RH console panel E2 Unobstructed. CEDURE Fit and secure the switch to the panel cockwasher and nut provided. Connect and secure the circuit wiring Locate the panel in the console and	EXTERNAL LIGHTING Control S MANUFACTURER MAN'FR'S PART NO. Cutler-Hammer 7662K5 KNOWN- ESTIMATED- 1500 h To provide off control of the navigation lights and fiselection of steady or flashing illumination. Front cockpit, RH console panel E22. Unobstructed. EDURE Fit and secure the switch to the panel using the lockwasher and nut provided. Connect and secure the circuit wiring to the switch.	EXTERNAL LIGHTING Control Switch MANUFACTURER Cutler-Hammer 7662K5 25 KNOWN- ESTIMATED- 1500 hours To provide off control of the navigation lights and facilitate selection of steady or flashing illumination. Front cockpit, RH console panel E22. Unobstructed. M Unobstructed. M ESTIMATED- 1500 hours	

NSPECTION		MEN X MINUTE
	Check that the panel is securely fitted. Operate the switch and check that the action is not rough or sluggish. Check that the oxygen pipeline is correctly and securely fitted.	
FUNCTIONAL CHECKS		MEN X MINUTE
GROUND HANDLING ANI	D GROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REM	OVE OR SERVICE	
REMARKS		

COMPONENT DATA SHEET



SYSTEM ELECTRICAL	SUB-SYSTEM INTERNAL AN EXTERNAL LIG	ND	COMPON Flasher Uni Navigation Li	it -	REF. NO.	
AVRO PART NO.	MANUFACTURER	MAN'F'R	'S PART NO.	AIRCRAFT EFFECTIVIT		
CS-F-106	Lucas-Rotax	6	1370	25	201	
OVERHAUL LIFE: KI	NOWN-	ESTI	MATED- 1500 h	ours		
TO al	o illuminate the wing tip ternately with the fin tip	lights and t	the fin tip white	e light		
LOCATION	ose wheel well, RH side	at station l	20.00.			
ACCESS				ME	N X MINUTE	
Ur	obstructed.					
REPLACEMENT PROCEE	DURE			МЕ	N X MINUTE	
	t and secure the unit to tonnect and secure one ele					

INSPECTION		MEN X	MINUTES
	Check that the unit is securely fitted. Check that the electrical connector is securely and properly fitted.		
FUNCTIONAL CHECKS		MENX	MINUTES
GROUND HANDLING AND GRO	DUND TEST EQUIPMENT		
SPECIAL TOOLS TO REMOVE C	DR SERVICE		
REMARKS			
REMARKS			

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SYSTEM ELECTRICAL	SUB-SYSTEM INTERNAL AN EXTERNAL LIGH	D	COMPON Navigation Lig Wing Tip (G	ght, RH	REF. NO.
AVRO PART NO. 2-CS-L-129-1	MANUFACTURER Aviation Electric (Grimes)	VS W	R'S PART NO.	AIRCRAFT EFFECTIVIT	
OVERHAUL LIFE: KNC	DWN-	ES.	TIMATED- 1500 ho	ours	
	indicate the position an	d the dire	ection of motion	of the	
LOCATION	wing tip.				
ACCESS				МЕ	EN X MINUTES
Unc	bstructed.				
REPLACEMENT PROCEDU	RE			МЕ	N X MINUTES
	nect and secure one ele and secure the light to			ws.	

INSPECTION	MEN X	MINUTES
Check that the light is securely and properly fitted. Check that the bulb is not blackened. Check the lens for crazing or cracks.		
FUNCTIONAL CHECKS	MEN X	MINUTES
GROUND HANDLING AND GROUND TEST EQUIPMENT		
		1
SPECIAL TOOLS TO REMOVE OR SERVICE		
REMARKS		
REMARKS		

COMPONENT DATA SHEET

SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL A EXTERNAL LIG	ND	COMPON Navigation L Wing Tip (R	ight, LH	REF. NO
AVRO PART NO.		MANUFACTURER	MAN'F	R'S PART NO.	AIRCRAFT E	FFECTIVIT
1-CS-L-129-1	A	viation Electric (Grimes)	В	8020R	2520)1
OVERHAUL LIFE:	KNOWN	V —	ES.	TIMATED- 1500	hours	
FUNCTION		licate the position ar	nd the dire	ection of motion	of	
LOCATION						
	LH wi	ng tip.				
ACCESS					ME	N X MINUTE
	Unobs	tructed.				
REPLACEMENT PROC	EDURE				МЕ	N X MINUTE
		ct and secure one el d secure the light to			ws.	

INSPECTION		MEN X MINUTES
	Check that the light is securely and	
	properly fitted.	
	Check that the bulb is not blackened.	
	Check the lens for crazing or cracks.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND G	ROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REMOVE	OR SERVICE	
REMARKS		

ARROW 1 SERVICE DATA COMPONENT DATA SHEET



					N. W	
SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL A EXTERNAL LIGH	ND	COMPON Navigation Fin Tip (I	Light,	REF. NO.
AVRO PART NO.		MANUFACTURER	MAN'F	R'S PART NO.	AIRCRAFT	EFFECTIVITY
7-1183-11		Soderberg			252	201
OVERHAUL LIFE:	KNOWN	V	ES.	TIMATED- 1500 1	nours	
		licate the position an	d the dire	ection of motion	of	
LOCATION	Traili	ng edge of fin tip.				
ACCESS					м	EN X MINUTES
	Onobsi	tructed.				
REPLACEMENT PROCE	EDURE				мі	EN X MINUTES
	Locate Fit and	d secure one connect the light in the fair d clamp the lens. d secure the light to	ing.	ture - two screv	vs.	

Chin -		
INSPECTION		MEN X MINUTES
	Check that the light is securely and	
	properly fitted.	
	Check that the bulb is not blackened.	
	Check the lens for crazing and cracks.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND GROU	JND TEST EQUIPMENT	
SPECIAL TOOLS TO REMOVE OR	SERVICE	
REMARKS		
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SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL AN EXTERNAL LIGH		COMPON Navigation Fin Tip (Light,	REF. NO.
AVRO PART NO.		MANUFACTURER	MAN'F	R'S PART NO.	AIRCRAFT	EFFECTIVITY
7-1183-11		Soderberg			25.	201
OVERHAUL LIFE:	KNOWI	٧-	ES"	TIMATED- 1500	hours	
FUNCTION		licate the position and	d the dire	ection of motion	of	
LOCATION	Traili	ng edge of fin tip.				
ACCESS	Unobs	tructed.			N	IEN X MINUTES
REPLACEMENT PROC	EDURE				М	EN X MINUTES
	Locate Fit and	d secure one connector the light in the fairing declamp the lens. It secure the light to the rews.	ng.	ructure -		

INSPECTION		MEN X	MINUTES
t	Check that the light is securely and properly fitted. Check that the bulb is not blackened. Check the lens for crazing and cracks.		
FUNCTIONAL CHECKS		MEN X	MINUTES
GROUND HANDLING AND GROU	UND TEST EQUIPMENT		
SPECIAL TOOLS TO REMOVE OF	R SERVICE		
REMARKS			

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SYSTEM		SUB-SYSTEM		СОМРО	ENT	REF. NO
ELECTRICAL		INTERNAL AN		Landing and		
and the same		EXTERNAL LIGH		Lights Contro		
AVRO PART NO.		MANUFACTURER	MAN'F	R'S PART NO.	AIRCRAFT	EFFECTIVIT
		Cutler-Hammer	8	820K10	25201	
OVERHAUL LIFE:	KNOWI	N-	ES.	TIMATED- 1500 h	ours	
FUNCTION		rmit the selection of ght or the taxi light of		ng light and the	*	
LOCATION				•		
	Front	cockpit, LH console	panel El	0.		
ACCESS					м	EN X MINUTE
	Unobs	tructed.				
REPLACEMENT PROC	CEDURE				м	EN X MINUTE
	lockwa	d secure the switch t asher and locknut sup ct and secure the cir lectrical connections	oplied. cuit wiri		-	

INSPECTION		MEN X MINUTES
	Check that the switch is securely fitted and that the circuit wiring is correctly and securely connected. Operate the switch and check that the action is not rough or sluggish.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND	GROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REMO	VE OR SERVICE	
REMARKS		

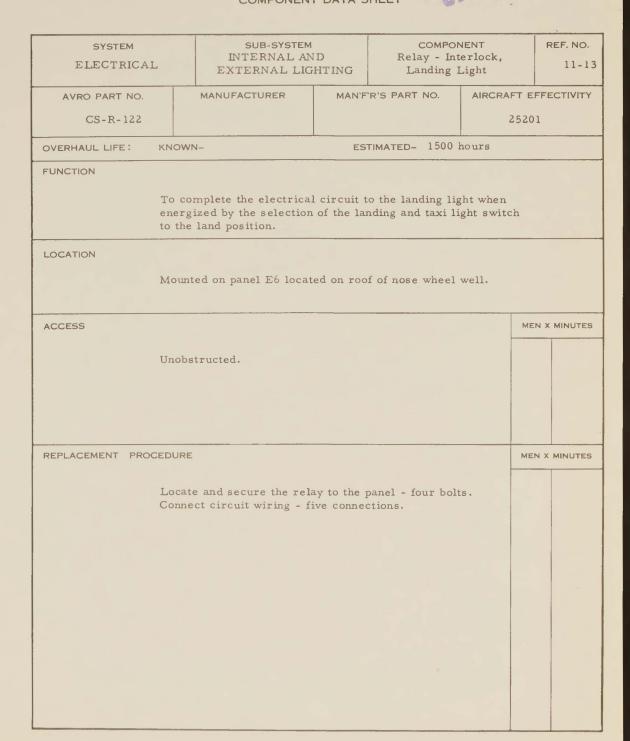
COMPONENT DATA SHEET

SYSTEM ELECTRICAL	z.	SUB-SYSTEM INTERNAL AN EXTERNAL LIGH	D	COMPON Relay - Interlo and Taxi Lig	ck, Landing	11-13
AVRO PART NO. CS-R-122		MANUFACTURER	MAN'F	'R'S PART NO.	AIRCRAFT E	
OVERHAUL LIFE:	KNOWN	V-	ES	TIMATED-1500 ho	urs	
FUNCTION	energi	nplete the electrical zed by the selection to the taxi or land p	of the lar			
LOCATION	Mounte	ed on panel E6 locate	ed on roos	f of nose wheel v	vell.	
ACCESS					ME	EN X MINUTE
	Unobst	ructed.				
REPLACEMENT PROC	CEDURE				ME	N X MINUTE
	one mo	e and secure the relacementing nut. Set the circuit wiring				

WIGLASSIFIE ARROW 1 SERVICE DATA

INSPECTION		MEN X MINUTES
	Check that the relay is securely fitted to the panel. Check that the circuit wiring is securely and properly fitted.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND	GROUND TEST EQUIPMENT	
SPECIAL TOOLS TO REMO	OVE OR SERVICE	
REMARKS		

ARROW 1 SERVICE DATA COMPONENT DATA SHEET



Milko.			
INSPECTION		MEN X	MINUTES
	Check that the relay is securely fitted to the panel. Check that the circuit wiring is securely and properly connected.		
FUNCTIONAL CHECKS		MEN X	MINUTES
GROUND HANDLING AND GI	ROUND TEST EQUIPMENT		
SPECIAL TOOLS TO REMOVE	OR SERVICE		
REMARKS			

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SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL AN EXTERNAL LIGH	D	COMPON Landing		REF. NO.
AVRO PART NO. AN-3129-4523	J	MANUFACTURER arry Hydraulics	MAN'F'	R'S PART NO.		EFFECTIVITY
OVERHAUL LIFE:	KNOW		EST	TIMATED- 1500]	hours	
LOCATION	10 111	luminate the foregrou	wat WillE	maning the airc	Lait.	
	Botto	m of the nose leg.				
ACCESS	Unobs	structed.				MEN X MINUTES
REPLACEMENT PROC	UNIT Conne Locat positi Secur Posit Secur LAMI Fit th Conne Locat	REPLACEMENT ect the circuit wiring e and secure the cab	le-retaini - seven s - one pos ect position g and rubb to the lan le-retaining	ng ferrule nut is screws. sitioning bolt. on - one bolt an er gasket. on - two connecting ferrule nut.	d nut.	MEN X MINUTES

	A Company of the Comp	
INSPECTION		MEN X MINUTES
	Check that the unit is securely fitted to the nose leg assembly. Check the unit for corrosion and damage. Check that the lens is not cracked or chipped. Check that the cable-retaining ferrule nut is secured firmly.	
FUNCTIONAL CHECKS		MEN X MINUTES
GROUND HANDLING AND GROU	ND TEST EQUIPMENT	1
SPECIAL TOOLS TO REMOVE OR	SERVICE	
REMARKS		
4		
7 1		

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SYSTEM ELECTRICAL		SUB-SYSTEM INTERNAL AI EXTERNAL LIGH		COMPON Taxi L		REF. NO.
AVRO PART NO. G.E. 4523	MANUFACTURER Jarry Hydraulics		MAN'F'R'S PART NO.		AIRCRAFT E	EFFECTIVITY
OVERHAUL LIFE:	KNOW	1 -	ES	TIMATED- 1500	hours	
FUNCTION	To illu aircra	uminate the foregrouft.	nd when l	anding or taxyir	ng the	
LOCATION	Botton	n of the nose leg.				
ACCESS	Unobst	tructed.			MI	EN X MINUTES
REPLACEMENT PROC	UNIT Connect Located Secure Position Secure LAMP Fit the Connect Located Located Connect Locat	REPLACEMENT of the circuit wiring and secure the cable lens in position - s on the unit correctly unit in the correct REPLACEMENT lamp retaining ring of the circuit wiring and secure the cable the lens in position	le-retaini ix screws - one pos position - g and rubb to the lan le-retaini	ng ferrule nut. sitioning bolt. one bolt and nu er gasket. np - two connec	tions.	EN X MINUTE:

INSPECTION		MEN X	MINUTES
	Check that the unit is securely fitted to the nose leg assembly. Check the unit for corrosion and damage. Check that the lens is not cracked or chipped. Check the electrical connections for security. Check that the cable-retaining ferrule nut is secured firmly.		
FUNCTIONAL CHECKS		MEN X I	MINUTES
GROUND HANDLING AND G	ROUND TEST EQUIPMENT		
		- 14-1	
SPECIAL TOOLS TO REMOVE	OR SERVICE		
REMARKS			
, Linux			