

CF-105 SERVICE DATA

Section 29

Engine Intake and

Ramp De-icing

~~CONFIDENTIAL~~

UNCLASS

AVCS

27-466

DR

AVSS

ANALYZED

CONFIDENTIAL

CF-105 SERVICE DATA

Classification cancelled / Changed to UNCLASS

By authority of AVRS

Date

27 Sept 96

ENGINE INTAKE AND RAMP DE-ICING SYSTEM

Signature

Unit / Rank / Appointment

AVRS S

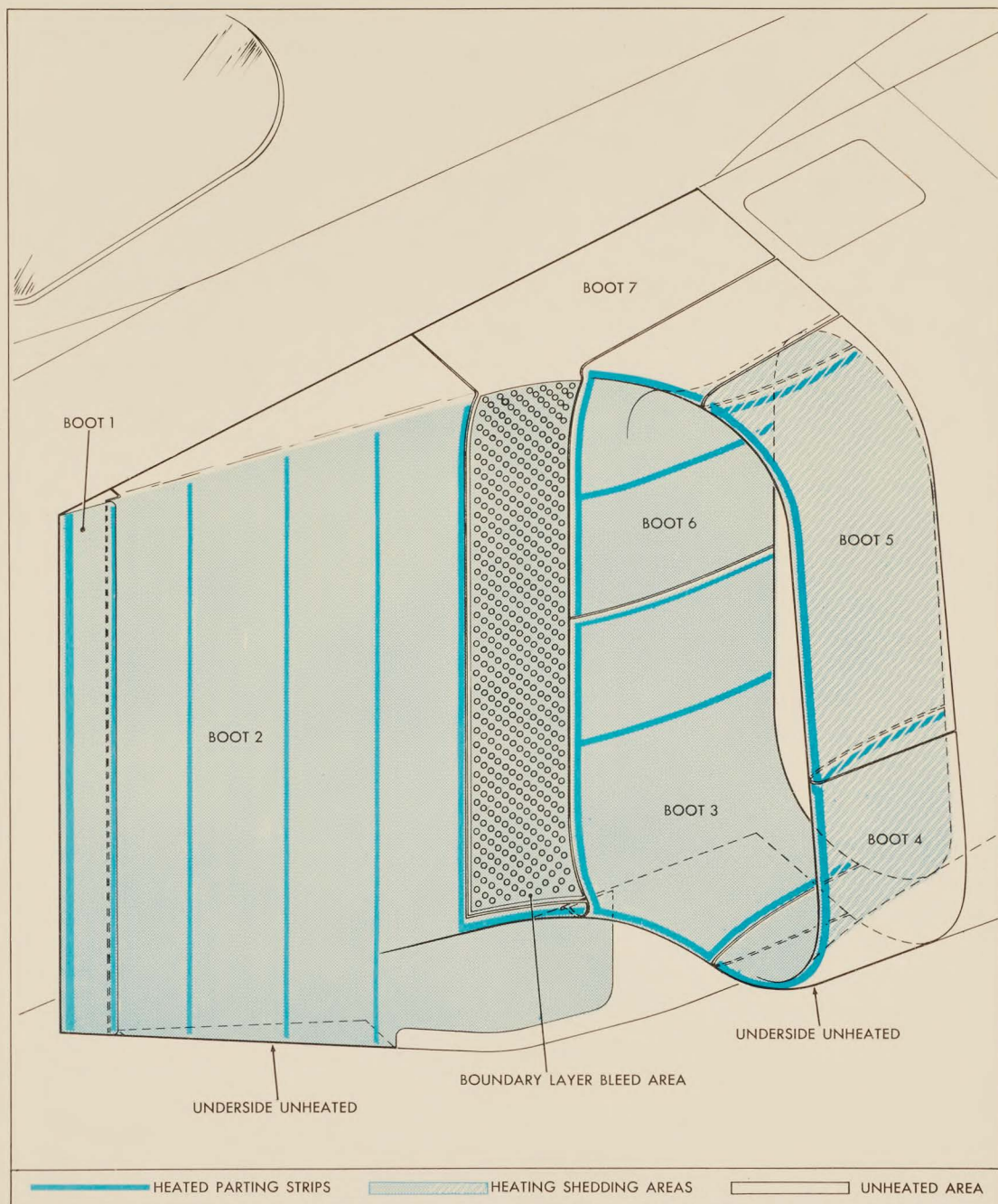
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7M1-3001-1

FIG. 1 ENGINE INTAKE AND RAMP DE-ICING - INSTALLATION

T41-3513-2-2

CF-105 SERVICE DATA

SYSTEM DATA SHEET

SYSTEM	SUB-SYSTEM	AIRCRAFT EFFTY	REF. NO.
DE-ICING	ENGINE INTAKE AND RAMP DE-ICING	25201	20-2
<p style="text-align: center;">DESCRIPTION</p> <p>General</p> <ol style="list-style-type: none"> 1. The engine air intake ducts and ramps are de-iced by an electro-thermal de-icing boot system. The area protected extends from the ramp leading edge to a point approximately 12 inches inside the air intake duct. 2. Seven neoprene rubber boots with moulded in elements for shedding areas and parting strips are fitted, three covering the ramp and four covering the intake duct. The boots are attached to the aircraft skin by an adhesive and can be replaced individually. The ramp leading edge and the boundary layer bleed area are covered by thin stainless steel sheet for protection, and to assist distribution of heat in the boundary layer bleed area. 3. Thermo-switches are fitted behind the boots in each shedding area and at critical points in the parting strips to prevent overheating of the elements. The wiring for the heating and parting strip elements and for the thermo-switches is led through the aircraft skin from a short grommet moulded to each boot. 4. Each engine supplies the electrical power to de-ice its own intake so that in case of an engine failure, the intake of the operating engine is maintained free of ice. 5. The electrical operation of the system is described under Electrical System - Engine Intake De-icing. 			
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CF-105 SERVICE DATA

COMPONENT DATA SHEET

SYSTEM DE-ICING		SUB-SYSTEM ENGINE INTAKE AND RAMP DE-ICING		COMPONENT Boot No. 1		REF. NO. 20-2-1	
AVRO PART NO. 7-2055-91 LH 7-2055-92 RH		MANUFACTURER B.F. Goodrich Co.		MAN'FR'S PART NO. G-11901-11 LH G-11901-12 RH		AIRCRAFT EFFECTIVITY 25201	
OVERHAUL LIFE: KNOWN- ESTIMATED- 500 hours							
FUNCTION Fitted to air intake ramp to remove ice.							
LOCATION Engine air intake ramp leading edge - left and right.							
ACCESS Accessible on leading edge of air intake ramp - left and right.						MEN X MINUTES	
REPLACEMENT PROCEDURE						MEN X MINUTES	

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INSPECTION						MEN X MINUTES			
<p>Check boots for signs of overheating, damage and lifting.</p>						MEN X MINUTES			
FUNCTIONAL CHECKS						MEN X MINUTES			
<p>GROUND HANDLING AND GROUND TEST EQUIPMENT</p> <p>35-40 volt D.C. power supply. Electrical ground power supply. B5 access stand. Cockpit access panel.</p>									
SPECIAL TOOLS TO REMOVE OR SERVICE									
REMARKS									
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TW1-3913-7-6

CF-105 SERVICE DATA

COMPONENT DATA SHEET

SYSTEM DE-ICING		SUB-SYSTEM ENGINE INTAKE AND RAMP DE-ICING		COMPONENT Boot No. 2	REF. NO. 20-2-2
AVRO PART NO. 7-2055-93 LH 7-2055-94 RH		MANUFACTURER B.F. Goodrich Co.	MAN'FR'S PART NO. G-11902-13 LH G-11902-14 RH		AIRCRAFT EFFECTIVITY 25201
OVERHAUL LIFE: KNOWN- ESTIMATED- 500 hours					
FUNCTION Fitted to air intake ramp to remove ice.					
LOCATION Engine air intake ramp - left and right.					
ACCESS Accessible on air intake ramp - left and right.					MEN X MINUTES
REPLACEMENT PROCEDURE					MEN X MINUTES

TM-3013-2-5

CONFIDENTIAL

INSPECTION		MEN X MINUTES	
<p>Check boots for signs of overheating, damage and lifting.</p>			
FUNCTIONAL CHECKS		MEN X MINUTES	
<p>GROUND HANDLING AND GROUND TEST EQUIPMENT</p> <p>35-40 volt D.C. power supply. Electrical ground power unit. B5 access stand, Cockpit access stand.</p>			
SPECIAL TOOLS TO REMOVE OR SERVICE			
REMARKS			
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TM-3613-2-6

CONFIDENTIAL

INSPECTION								MEN X MINUTES	
Check boots for signs of overheating, damage, and lifting.									
FUNCTIONAL CHECKS								MEN X MINUTES	
GROUND HANDLING AND GROUND TEST EQUIPMENT									
35-40 volt D.C. power supply. Electrical ground power unit. B5 access stand. Cockpit access stand.									
SPECIAL TOOLS TO REMOVE OR SERVICE									
REMARKS									
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CF-105 SERVICE DATA

COMPONENT DATA SHEET

SYSTEM DE-ICING	SUB-SYSTEM ENGINE INTAKE AND RAMP DE-ICING	COMPONENT Boot No. 4.	REF. NO. 20-2-4
AVRO PART NO. 7-2055-97 LH 7-2055-98 RH	MANUFACTURER B.F. Goodrich Co.	MAN'FR'S PART NO. G-11904-21 LH G-11904-22 RH	AIRCRAFT EFFECTIVITY 25201
OVERHAUL LIFE: KNOWN- ESTIMATED- 500 hours			
FUNCTION Fitted to air intake to remove ice.			
LOCATION Engine air intake - lower outboard section left and right.			
ACCESS Accessible on lower outboard edge of air intake - left and right.			MEN X MINUTES
REPLACEMENT PROCEDURE			MEN X MINUTES

TM-1-3433-2-5

CONFIDENTIAL

INSPECTION		MEN X MINUTES							
<p>Check boots for signs of overheating, damage and lifting.</p>									
FUNCTIONAL CHECKS		MEN X MINUTES							
GROUND HANDLING AND GROUND TEST EQUIPMENT									
<p>35-40 volt D.C. power supply. Electrical ground power unit. B5 access stand. Cockpit access stand.</p>									
SPECIAL TOOLS TO REMOVE OR SERVICE									
REMARKS									
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COMPONENT DATA SHEET

SYSTEM DE-ICING		SUB-SYSTEM ENGINE INTAKE AND RAMP DE-ICING		COMPONENT Boot No. 5		REF. NO. 20-2-5	
AVRO PART NO. 7-2055-101 LH 7-2055-102 RH		MANUFACTURER B.F. Goodrich Co.		MAN'FR'S PART NO. G-11905-23 LH G-11905-24 RH		AIRCRAFT EFFECTIVITY 25201	
OVERHAUL LIFE: KNOWN- ESTIMATED- 500 hours							
FUNCTION Fitted to air intake to remove ice.							
LOCATION Engine air intake - upper outboard section left and right.							
ACCESS Accessible on upper outboard edge of air intake - left and right.						MEN X MINUTES	
REPLACEMENT PROCEDURE						MEN X MINUTES	

701-1113-2-5

CONFIDENTIAL

INSPECTION		MEN X MINUTES	
Check boots for signs of overheating, damage and lifting.			
FUNCTIONAL CHECKS		MEN X MINUTES	
GROUND HANDLING AND GROUND TEST EQUIPMENT			
35-40 volt D.C. power supply. Electrical ground power supply. B5 access stand. Cockpit access stand.			
SPECIAL TOOLS TO REMOVE OR SERVICE			
REMARKS			
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CF-105 SERVICE DATA

COMPONENT DATA SHEET

SYSTEM DE-ICING		SUB-SYSTEM ENGINE INTAKE AND RAMP DE-ICING		COMPONENT Boot No. 6		REF. NO. 20-2-6	
AVRO PART NO. 7-2055-103 LH 7-2055-104 RH		MANUFACTURER B.F. Goodrich Co.		MAN'FR'S PART NO. G-11906-25 LH G-11906-26 RH		AIRCRAFT EFFECTIVITY 25201	
OVERHAUL LIFE: KNOWN- ESTIMATED- 500 hours							
FUNCTION Fitted to air intake to remove ice.							
LOCATION Engine air intake - upper section left and right.							
ACCESS Accessible on upper edge of air intake - left and right.						MEN X MINUTES	
REPLACEMENT PROCEDURE						MEN X MINUTES	

781-1013-2-5

CONFIDENTIAL

INSPECTION								MEN X MINUTES	
Check boots for signs of overheating, damage and lifting.									
FUNCTIONAL CHECKS								MEN X MINUTES	
GROUND HANDLING AND GROUND TEST EQUIPMENT									
35-40 volt D.C. power supply. Electrical ground power unit. B5 access stand. Cockpit access stand.									
SPECIAL TOOLS TO REMOVE OR SERVICE									
REMARKS									
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CF-105 SERVICE DATA

COMPONENT DATA SHEET

SYSTEM DE-ICING		SUB-SYSTEM ENGINE INTAKE AND RAMP DE-ICING		COMPONENT Boot No. 7		REF. NO. 20-2-7	
AVRO PART NO. 7-2055-117 LH 7-2055-118 RH		MANUFACTURER B.F. Goodrich Co.		MAN'FR'S PART NO.		AIRCRAFT EFFECTIVITY 25201 - 25205	
OVERHAUL LIFE:		KNOWN-		ESTIMATED-		500 hours	
FUNCTION Fitted to air intake ramp to remove ice.							
LOCATION Between ramp and engine intake - left and right.							
ACCESS Accessible on ramp and engine intake - left and right.						MEN X MINUTES	
REPLACEMENT PROCEDURE						MEN X MINUTES	

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INSPECTION							MEN X MINUTES		
<p>Check boots for signs of overheating, damage and lifting.</p>									
FUNCTIONAL CHECKS							MEN X MINUTES		
<p>GROUND HANDLING AND GROUND TEST EQUIPMENT</p> <p>35-40 volt A.C. or D.C. power supply. Cockpit access stand. Electrical ground power unit. B.5 access stand.</p>									
SPECIAL TOOLS TO REMOVE OR SERVICE									
REMARKS									
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