

Raytheon

AIRCRAFT COMPANY

INTERCHANGEABILITY

COMPONENT NUMBER

25-8WF13-66A

COMPONENT NAME

Outer Flap Vanes - Stbd

PURPOSE:

**To assure full interchangeability between
Outer Flap Vane and Flap in accordance to
Chapter 20 Model 800 Aircraft Specification**

"RAC Proprietary Data"

"This document contains proprietary technical data pertaining to items, or components, or processes, or other matter developed or acquired at the private expense of Raytheon Aircraft Company and is restricted to use by only RAC employees or other persons authorised by RAC in writing to use it. Neither said document nor said technical data shall be furnished or disclosed to or copied or used by persons outside RAC without the express written approval of RAC."

Raytheon

AIRCRAFT COMPANY

COMPONENT NUMBER

25-8WF13-66A

COMPONENT NAME

Outer Flap Vane - Stbd

RAC

Supplier

Originator

ICY Engineering

Quality Assurance

Quality Assurance

Program Manager

Raytheon

AIRCRAFT COMPANY

CONFIGURATION

PART		COUNTERPART
<p>Outer Vane Assembly Jig 051S11158D</p> <p>Go – Not Go Gauge 166SCD7736D</p>		<p>Flap Assembly Jigs 051S11154D</p>
	<p>Drawings Loft Drawings 25-Q 33 Laser Tracker</p>	<p>Flap Riveting & ICY Jig 520SCD3885D</p>
	<p>***** Note:- ICY and Drawing data Qualified through MOD Audit trail— 252500 600 to 700 series 252900 700 to 800 series *****</p>	

Raytheon

AIRCRAFT COMPANY

BROCHURE ISSUE SHEET:

COMPONENT NAME: Outer Flap Vane - Stbd

Issue;01

Amend:1

Effective: SEPT 2005

Amendment Number	Section/ Pages Affected	Reason for Amendment or Reference	Date	Authorised
1	ALL	Prestwick/Poland Transfer	Sept 2005	Mike Cavey

Raytheon

AIRCRAFT COMPANY

SECTION ISSUE SHEET

SECTION	SHEET	ISSUE	DATE	NAME
1	1	B	Sept 2005	Mike Cavey
2	1	A	“	“
3	1	B	“	“
3	2	A	“	“
3	3	A	“	“
4	1	B	“	“
5	1	B	“	“
5	2	A	“	“
5	3	A	“	“
6	1	B	“	“
7	1	A	“	“

Raytheon

AIRCRAFT COMPANY

PART

Outer Flap Vane - Stbd

Part Number:- 25-8WF13-66A

Tooling Data

Tool No.	Issue	Description
051S11158D		Outer Vane Assembly Jig
166SCD7736D		Go – Not Go Gauge

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

PART :Outer Flap Vane - Stbd General

051S11158D Outer Vane Assembly Jig

The Outer Vane Assembly Jig was manufactured to control the following ICY Features:-

1. Vane attachment holes (4-off ¼”Dia) at Outboard Flap Hinge Position and station.
2. Flap Vane Carrier Attachment holes(8-off ¼”Dia) at stations 28.90, 57.90, 81.10 and Outboard Rib.
3. Flap Carrier Attachment flanges station
4. Outboard and Inboard Skin Edges
5. Trailing Edge.

166SCD7736D Go – Not Go Gauge

The Go –Not Go Gauge was manufactured to check the following ICY Features: -

1. The Outer Vane Outside Skin Contour.

Note! All Pins and Gauges used to check ICY features must be subject to an annual Calibration Check.

Pins used on ICY Features must be included as part of the Jig cycle Check Ref Section 6.

Indicate tool Copy No. used.....

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

PART :Outer Flap Vane - Stbd ***ICY CHECKS***

General

To assure interchangeability between the Outer Flap Vane and Flap Stbd with all aircraft, in accordance to Chapter 20 Model 800 Aircraft Specification.

051S011158D OUTER VANE ASSEMBLY JIG.
166SCD77736D GO – NOT GO GAUGE

After completing the Outer Vane and before removing from the Assembly Jig carry out the following ICY Checks.

1. With vane clamped in place and properly secured in jig
2. Remove and replace 2-Off pins (Detail 65) at Flap to Vane Pick-up No 3 on station 81.10 and check for free rotation and undue deflection.
3. Remove and replace 2-Off pins (Detail 65) at Flap to Vane Pick-up No 4 on station 57.90 and check for free rotation and undue deflection.
4. Remove and replace 2-Off pins (Detail 65) at Flap to Vane Pick-up No 5 on station 28.90 and check for free rotation and undue deflection.
5. Remove and replace 2-Off pins (Detail 106) at Flap to Vane Pick-up No 6 on the Outboard Rib and check for free rotation and undue deflection.
6. Remove and replace 4-off jig pins (Detail 76 & 82) from the outboard flap hinge to vane attachment bracket and check for free rotation and undue deflection.

Cont:-

Yes	Date

Indicate tool Copy No. used.....

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

PART :Outer Flap Vane - Stbd ***ICY CHECKS***

General

To assure interchangeability between the Outer Flap Vane and Flap Stbd with all aircraft, in accordance to Chapter 20 Model 800 Aircraft Specification.

051S11158D OUTER VANE ASSEMBLY JIG. (Cont'd)
166SCD7736D GO – NOT GO GAUGE

7. Check Inboard Rib face tight to the jig location with a 0.010" feeler.
8. Release the Inboard Rib location and remove clear from vane and check Inboard Skin Edge is flush with Inboard Rib Face to ± 0.010 " with a feeler.
9. Check Outboard Rib face tight to the jig location with a 0.010" feeler.
10. Load profile boards and check 0.200" gap ± 0.030 " using Go – Not Go Gauge Tool No 166SCD7736D (6-Off Places each Board)
11. Remove from jig and check Outboard Skin Edge is flush with Outboard Rib Face to ± 0.010 " with a feeler.
12. Check Vane Trailing Edge waviness within 0.200".

Yes	Date

Remarks : -

Indicate tool Copy No. used.....

Raytheon

AIRCRAFT COMPANY

COUNTERPART NUMBER

25-8WF251-2A

COUNTERPART NAME

Flap Assembly Stbd

RAC

Supplier

Originator

ICY Engineering

Quality Assurance

Quality Assurance

Program Manager

Raytheon

AIRCRAFT COMPANY

COUNTERPART

Flap Assembly Stbd

Part Number:- 25-8WF251-2A

Tooling Data

Tool No.	Issue	Description
051S11154D		Flap Assembly Jig
520SCD3885D		Flap Riveting / ICY Fixture

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

COUNTERPART : Flap Assy Stbd General

051S11154D Flap Assembly Jig

The Flap Assembly Jig was manufactured to control the following ICY features: -

1. The 2-Off Attachment holes for the Vane Carriers at Stations 28.90, 57.90, 81.10 and Outboard Rib.
2. The 4-Off Vane attachment holes at the Outboard Flap Hinge.

520SCD3885D Flap Riveting and ICY Fixture

The Flap Riveting and ICY Fixture has been manufactured to check the following ICY Features: -

1. The 2-Off Attachment holes for the Vane Carriers at stations 28.90, 57.90, 81.10 and Outboard Rib.
2. The Outboard Flap Hinge Bracket.

Note! All Pins and Gauges used to check ICY features must be subject to an annual Calibration Check.

Pins used on ICY Features must be included as part of the Jig cycle Check Ref Section 6.

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

COUNTERPART : Flap Assy Stbd ***ICY CHECKS***

General

To assure interchangeability between Inner Vane and Wing Assy Stbd, by checking Profile, Hole Pattern and Twist, in accordance to Chapter 20 Model 800 Aircraft Specification.

STAGE 1

051S11154D Flap Assembly Jig

After completing the Flap and before removing from the Assembly Jig carry out the following ICY Checks: -

1. Remove and replace Location Pins (Details 97 & 98) from the 4-Off Outer Vane attachment holes on the surface of the Outboard Hinge and check for free rotation and undue deflection.
2. Remove and replace Location Pins (Detail 94) at 2-Off Outer Vane Carrier Attachment holes at station 28.90 and check for free rotation and undue deflection.
3. Remove and replace Location Pins (Detail 94) at 2-Off Outer Vane Carrier Attachment holes at station 57.90 and check for free rotation and undue deflection.
4. Remove and replace Location Pins (Detail 94) at 2-Off Outer Vane Carrier Attachment holes at station 81.10 and check for free rotation and undue deflection.
5. Remove and replace Location Pins (Detail 94) at 2-Off Outer Vane Carrier Attachment holes at Outboard Rib and check for free rotation and undue deflection.

Cont'd

Yes	Date

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

COUNTERPART : Wing Flap ICY CHECKS

General

To assure interchangeability between Outer Vanes, Inner Vanes, Wing Flaps and Wing, by checking Profile, Hole Pattern and Twist, in accordance to Chapter 20 Model 800 Aircraft Specification.

STAGE 2

520SCD3885D Flap Riveting and ICY Fixture

Load the Flap into the ICY Fixture locating on both hinges and 6-Off Vane Carrier Positions. Clamp Trailing Edge in place to jig details and carry out the following ICY Checks: -

1. Remove and replace Location Pins (Detail 45) at 2-Off Outer Vane Carrier Attachment holes at station 28.90 and check for free rotation and undue deflection.
2. Remove and replace Location Pins (Detail 45) at 2-Off Outer Vane Carrier Attachment holes at station 57.90 and check for free rotation and undue deflection.
3. Remove and replace Location Pins (Detail 45) at 2-Off Outer Vane Carrier Attachment holes at station 81.10 and check for free rotation and undue deflection.
4. Remove and replace Location Pins (Detail 45) at 2-Off Outer Vane Carrier Attachment holes at Outboard Rib and check for free rotation and undue deflection.

Yes	Date

Remarks: -

Raytheon

AIRCRAFT COMPANY

PERIODIC RECERTIFICATION PLAN

GENERAL

This recertification plan is to ensure interchangeability of the Outer Vane Assembly Stbd

PART

A periodic recertification in accordance with QAIS No. Q5B-003A shall be carried out on Outer Vane Assembly Jig 051S11158D no greater than 24 months or 60 units using ECDS Master file data pack.

COUNTERPART

A periodic recertification in accordance with QAIS No. Q5B-003A shall be carried out no greater than 24 months or 60 units on the following jigs :-

1. Flap Assembly Jig 051S11154D
2. Flap Riveting / ICY Fixture 520SCD3885D.

Raytheon

AIRCRAFT COMPANY

OUTER VANE STARBOARD INSTALLATION CHECKS -

General :

The following ICY checks are to assure the consistent interchangeability at Installation of the Flap Outer Vanes Starboard to the Flap Assembly in accordance to Chapter 20 of the "Corporate 800 Aircraft Specification Manual."

OUTER VANE STBD SERIAL NO:		FLAP ASSY STBD SERIAL NO :		OUTER VANE TO FLAP ASSEMBLY (Stbd):	
SERIAL NO	DATE/STAMP	SERIAL NO	DATE/STAMP	OUTER VANE STBD SERIAL NO	DATE/STAMP
				FLAP STBD SERIAL NO	DATE/STAMP

Remarks :