

Raytheon

AIRCRAFT COMPANY

INTERCHANGEABILITY

COMPONENT

NUMBER

25-FC7905-A-C

COMPONENT NAME

Main Entry Door

PURPOSE:

To ensure interchangeability in accordance with design specifications, 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-FC7905-A-C

COMPONENT NAME
Main Entry Door

RAC

Supplier

Originator

ICY Engineering

Quality Assurance

Quality Assurance

Program Manager

Raytheon

AIRCRAFT COMPANY

CONFIGURATION

<u>PART</u>		<u>COUNTERPART</u>
Main Entry Door Assy Jig Stage 1 038S557663D Main Entry Door Assy Jig Stage 2 038S557663D	Outward Opening Door Reference Plate S53751D	Door Aperture Assembly Jig 038S53787D
↓ Main Entry Door ICY Jig 101SCD7359D	↑ Loft Drawings 25-Q 77 Geometry Laser Tracker	↓ Setting Jig S056135
↓ Holding Fixture 520SCD2226D		↓ Additional Holding Bars For out of Jig Work 520S55890 520SS55571

Raytheon

AIRCRAFT COMPANY

SECTION ISSUE SHEET

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

Raytheon

AIRCRAFT COMPANY

PART

Main Entry Door

Part Number:- 25FC7905A-C

Tooling Data

Tool No.	Issue	Description
S53751D		Outward Opening Door Reference Plate
038S53633D		Main Door Assembly Jig Stages 1 & 2
101SCD7359D		Main Entry Door ICY Jig
520SCD2226D		Holding Fixture



AIRCRAFT COMPANY

Manufacturers Serial Number:

PART: Entry Door General

General

This is in accordance to Chapter 20 Model 800 Aircraft Design Specification.

S53751D Outward Opening Door Reference Plate

The Outward Opening Door Reference Plate has been manufactured to represent the following ICY features:-

- 1.The 4-Off Spigot Locations.
- 2.The 10-Off latch positions.
- 3.0.0250" Offset to Inside Skin.
- 4.Door Hinge C/line

038S53633D Main Door Assembly Jig stage 1

The Main Door Assembly Jig was manufactured to control the following ICY Features:-

- 1.The Door Skin Outside Profile and Contour.

The Jig has been correlated to the Outward Opening Door Reference Plate Tool No S53751D.

038S53633D Main Door Assembly Jig Stage 2

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

- 1.The Door Skin Outside Profile and Contour.
- 2.The Hinge Line Station and position.
- 3.4-Off Spigots
- 4.10-Off Latches

The Jig has been correlated to the Outward Opening Door Reference Plate Tool No S53751D.

101SCD7359 Main Entry Door ICY Jig

The Main Entry door ICY Jig was manufactured to check the following ICY Features:-

- 1.The door outside skin profile and contour.

The Jig has been correlated to the Outward Opening Door Reference Plate Tool No S53751D.

520S2226D Holding Fixture

The Holding Fixture was manufactured to check the following features: -

- 1.The Door Seal
- 2.Door motor activation capacity.

Indicate Tool Copy No used.....

Q7B489G - ISS 1

Ref: icy009/ppt/f

**Section 3 Iss B
Sheet 1 of 3**

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

PART : MAIN ENTRY DOOR ICY CHECKS

Yes	Date

General

This is in accordance to Chapter 20 Model 800 Aircraft Specification.

Stage 1

038S53633D Main Entry Door Stage 1

Complete the door to as high a standard as possible and before removing from the jig. Carry out the following ICY Checks:-

1. Check door trim at fixed stops to max 0.020" gap.

Stage 2

038S53633D Main Entry Door Stage 2

After completing the door and before removing from the jig, carry out the following ICY Checks:-

1. Check skin to fixed stops
2. Remove 0.100" packers at the aft hinge.
3. Check forward hinge pins rotates freely.
4. Remove and replace Aft Hinge pin to check for free rotation and undue deflection.
5. Check 2-Off 0.100" ± 0.025 gaps between aft hinge arm and jig detail.
6. Check 4-Off Spigots with 0.500" ± 0.010 " nominal gap between setting jig and spigot with Tool No MISC 5417/1
7. Insert 0.375" slip Tool no MISC 5417/2 between setting jig and latch plates.
8. Check gaps from jig datum plates to (10-Off) Latches to ± 0.025 " using details 281 & 282.

Remarks :-

Indicate Tool Copy No used.....

Raytheon

AIRCRAFT COMPANY

COUNTERPART NUMBER

25-8FA1-1A

COUNTERPART NAME

Fuselage Assy

RAC

Supplier

Originator

ICY Engineering

Quality Assurance

Quality Assurance

Program Manager

Raytheon

AIRCRAFT COMPANY

COUNTERPART

Fuselage

Part Number:- 25-8FA1-1A

Tooling Data

Tool No.	Issue	Description
S53751D		Outward Opening Door Reference Plate
038S53787D		Door Aperture Assembly Jig.
S056135		Setting Jig

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

COUNTERPART : Fuselage General

General

This is in accordance to Chapter 20 Model 800 Aircraft Design Specifications.

S53751D Outward Opening Door Reference Plate

The outward opening door reference plate has been manufactured to represent the following ICY Features: -

- 1.The 4-Off Spigot Locations
- 2.The 10-Off Latch Positions.
- 3.0.250" Offset to Inside Skin.
- 4.Door Hinge C/Line.

038S53787D Door Aperture Assembly Jig.

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

- 1.The Outer Skin Contour
- 2.The Outer Skin Profile.

The Jig has been correlated to the Outward Opening Door Reference Plate Tool No S53751D.

S56135 Setting Jig

The Setting Jig was manufactured to control the following ICY Features: -

- 1.The Hinge Line position and station.
- 2.The 2-Off Upper Guides
- 3.The 2-Off Lower Guides
- 4.The 10-Off Latch positions
- 5.The Aperture Opening.

The Jig has been correlated to the Outward Opening Door Reference Plate Tool No S53751D.

Raytheon

AIRCRAFT COMPANY

Manufacturers Serial Number:

COUNTERPART : FUSELAGE ICY CHECKS

General

This is in accordance to Chapter 20 Model 800 Aircraft Design Specifications.

038S53787D Door Aperture Assembly Jig.

After completing the surround and before removing from the jig. Carry out the following ICY Checks:-

1. Check Outer skin contour to assembly jig

S56135 Setting Jig

Locate the setting jig in Door Aperture and carry out the following ICY Checks:-

1. Check Lower Hinges station and concentricity.
2. Check Lower Guides 2-Places.
3. Check Upper Guides 2-Places
4. Check Latches 10-Places to Setting Jig.
5. Check aperture opening with Tooling Bar. Ref 27.00 ± 0.05 "

Remarks : -

Yes	Date

Raytheon

AIRCRAFT COMPANY

PERIODIC RECERTIFICATION PLAN:

GENERAL

This recertification plan is to ensure interchangeability of the Main Entry Door Assembly

PART

A periodic recertification in accordance with QAIS No. Q5B-003A shall be carried out on Main Entry Door Stage 1 and Stage 2 Assembly Jig 038S053633D and Main Entry Door ICY Jig 101SCD7359D using reference plate S053751D.

COUNTERPART

A periodic recertification in accordance with QAIS No. Q5B-003A shall be carried out on Fuselage Aperture Door Surround Assembly Jig 038S053787D and Setting Jig S056135.

Raytheon

AIRCRAFT COMPANY

DOOR APERTURE ASSY COUNTERPART INSTALLATION CHECKS -

General :

The following ICY checks are to assure the consistent interchangeability at Installation of all Counterparts of the Main Entry Door in accordance to Chapter 20 of the "Corporate 800 Aircraft Specification Manual."

MAIN ENTRY DOOR SERIAL NO :		AIRCRAFT SERIAL NO:		MAIN ENTRY DOOR TO FUSELAGE DOOR APERTURE	
SERIAL NO.	DATE/STAMP	SERIAL NO.	DATE/STAMP	DOOR SERIAL NO.	DATE/STAMP
				FUSELAGE SER' NO.	DATE/STAMP

Remarks :