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Aircraft	A330 MRTT																																																								
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REVISIONS RECORD

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1 INTRODUCTION

1.1 Object

This document establishes the process to adjust the hatch located at the rear entrance area, between frames C66 and C67 as shown in figure 1, in the A330-200 MRTT aircraft for the Royal Australian Air Force.

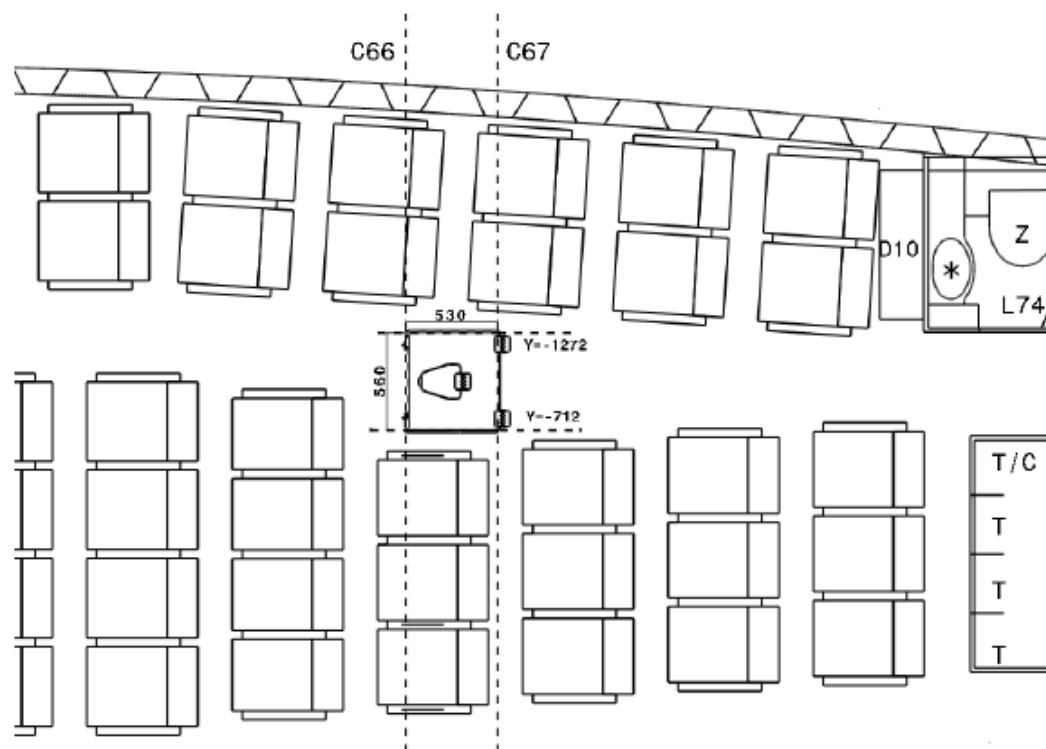


Figure 1. Hatch Location of the new access hatch in passenger compartment.

1.2 List of acronyms and abbreviations

MRTT	Multi-Role Tanker Transport
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2 APPLICABLE DOCUMENTATION

NT-FA-AEO-06-267-issue A	A330-200 MRTT Hatch Adjustment
F536A7001	HATCH INSTALLATION
F536A7010	ACCESS DOOR EQUIPPED
F536A7140-01	LATCH HOUSING ASSY
F255A4000	HATCH INSTALLATION
F255A4004	CARPETS MODIFICATION
F53477000	FLOOR STRUCTURE S17

3 REQUIRED EQUIPMENT

- Ruler and gauge
- Lamp/torch
- Screwdriver
- Anaerobic Adhesive Z15.504
- PROO-01-2500-001-00-01-A

4 DEFINITIONS

N/A

5 PRELIMINARY INSTRUCTIONS

5.1 Aircraft Configuration.

- Bulk cargo compartment shall be empty (no load or element necessary for this procedure is allowed).
- Light in cabin and bulk cargo compartment shall be on.
- Aft cargo compartment door and bulk cargo compartment door must be closed.
- Following ceiling panels of bulk cargo compartment must be removed for access to latch-housing:
 - F25576517004
 - F25576522004



Figure 2. Ceiling panels of BCC to be removed.

5.2 Interchangeability requirements

Due to the hatch is interchangeable the installation of the hatch and its adjustment must be done at the same time.

Main interchangeable dimensions appears in following drawings:

- F536A7001
- F536A7010

6 TEST EXECUTION

6.1 HATCH INSTALLATION

6.1.1 Positioning in main cabin

1. Remove the silicone tape of the hatch, rest the hatch on its structure and attach it to the floor panels. The gap between trim-carpets in vertical direction shall be **0,5 ± 1 mm**.

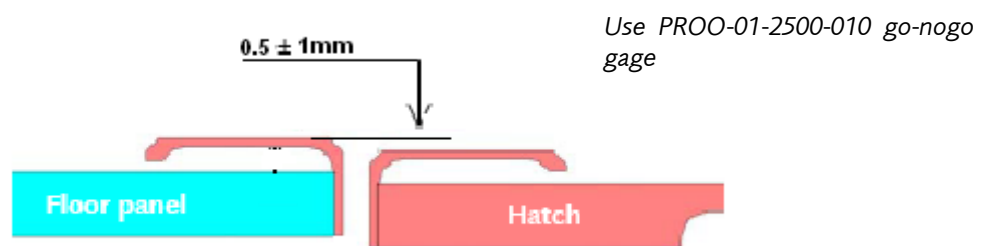


Figure 1. Vertical gap between hatch and floor panels (carpet not represented).

Install gauges around the hatch in order to achieve the correct gap indicated in Figure 2. The gap shall be **4±1 mm** around the hatch boundary (including the trim-carpets).

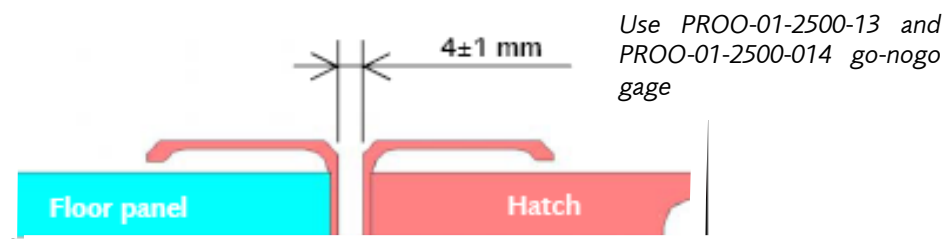


Figure 2. Gap between hatch and floor panels (carpet not represented).

2. Check these gaps in all the following points and record them in table 7.1.

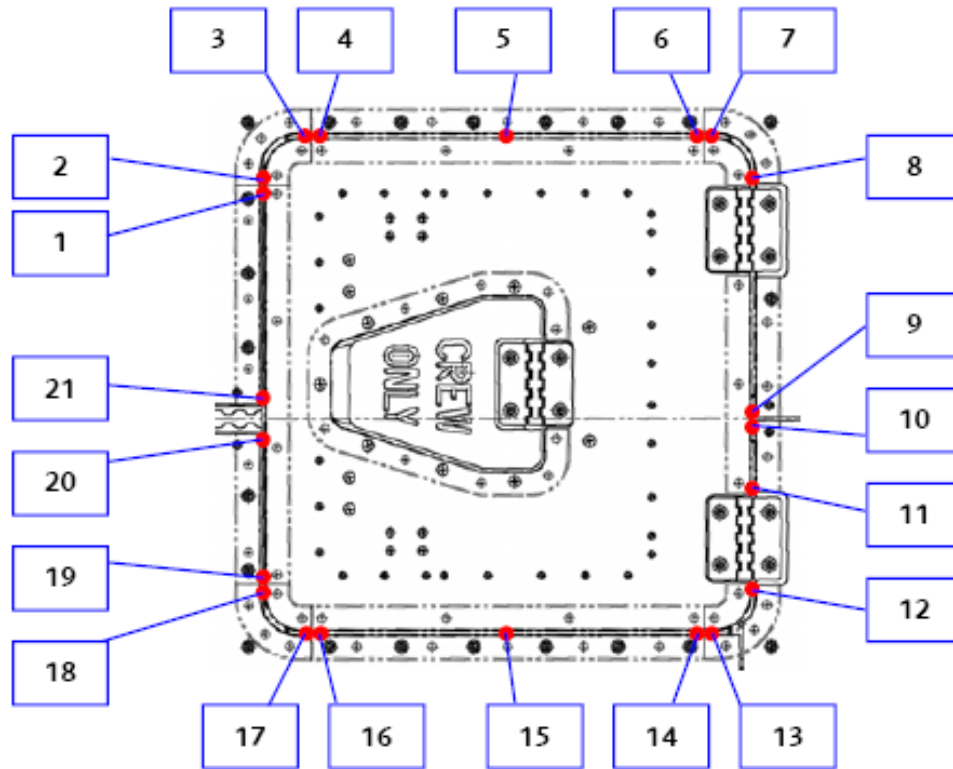


Figure 3. Checking points in hatch contour.

6.1.2 Alignment of latches and trims

Once positioned the hatch, it is necessary to align the hole of the trim F255A4032202 with the latch, to avoid any damage on the trim when the latch moves.

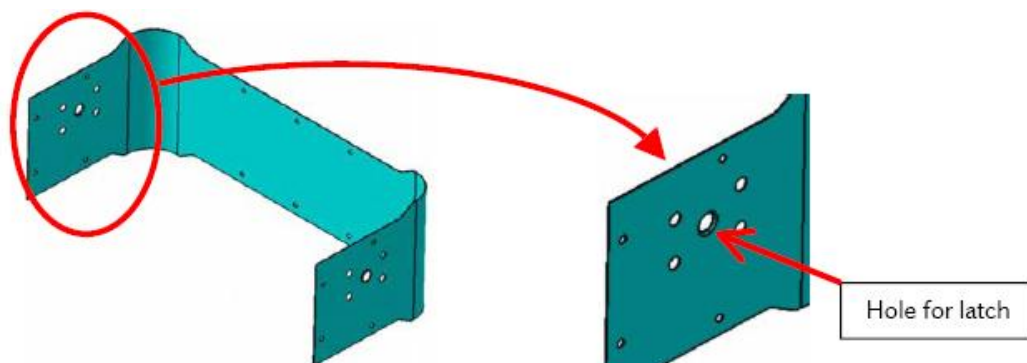


Figure 4. F255A4032202 Trim.

Introduce the hatch into the hole of the trim. Move the trim upwards and downwards until the latch complies with the appropriated dimensions. The gap between the latch and the hole is $2 \pm 0.5 \text{ mm}$ (dimension A). Measure and record it in table 7.2.

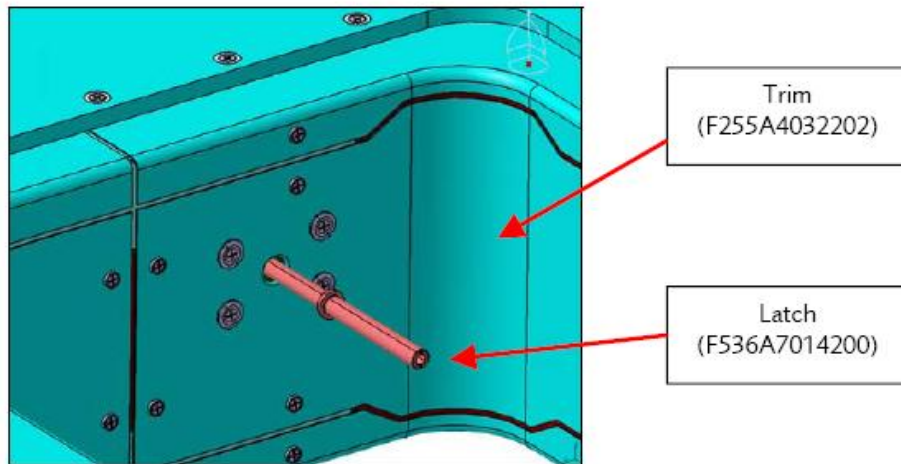


Figure 5. The latches and the holes in the trims must be aligned.

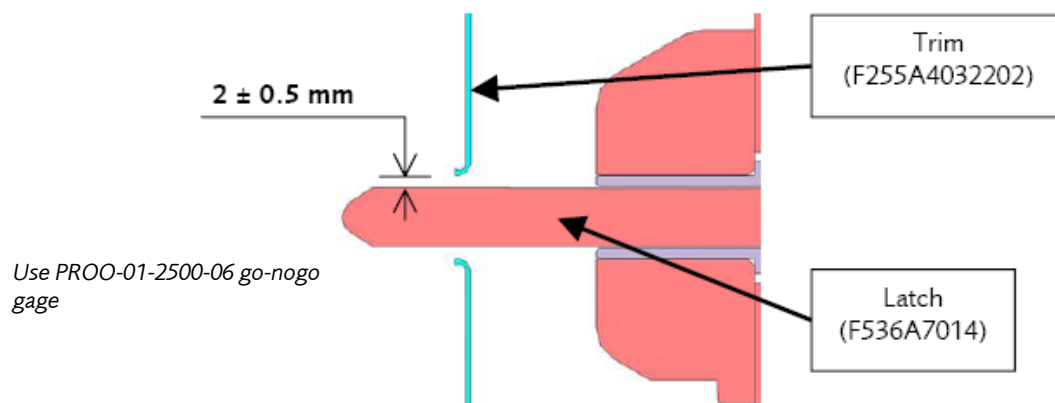


Figure 6. Gap between the latch and the hole.

6.1.3 Adjustment of the latch housings

The latch housing adjustment implies the following parts:

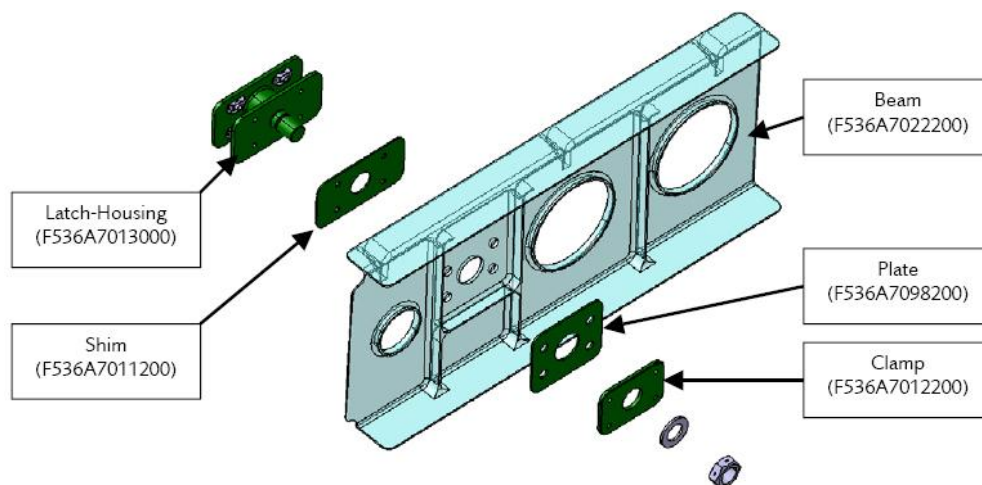


Figure 7. Explode view of the latch-housing.

In order to achieve the correct position in Y-direction, there is a peel able shim (F536A7011200) between the latch-housing and the beam. Make two marks on the latch with a pencil with the dimensions shown in figure 8. Using the corresponding peel, achieve the correct dimensions, checking it thanks to the previous marks already done. Its possible that more than one peel by side is necessary. Record the result in table 7.2 "latch housing Ydirection"

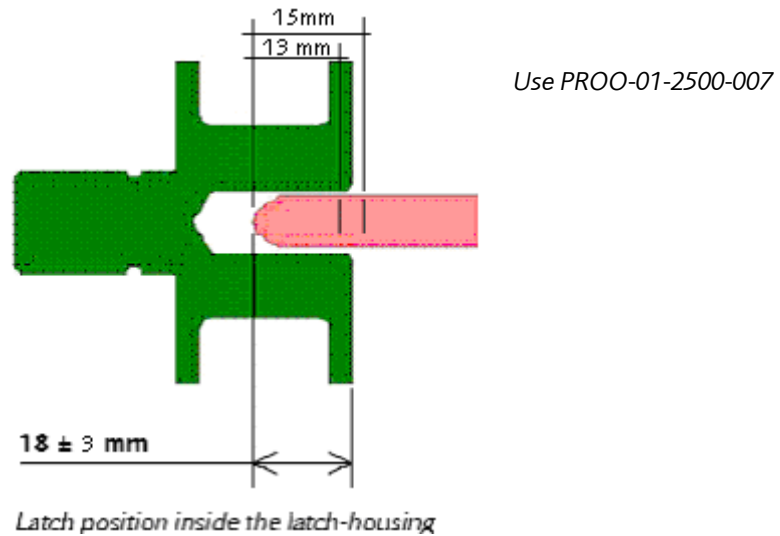


Figure 8. Latch position inside the latch-housing.

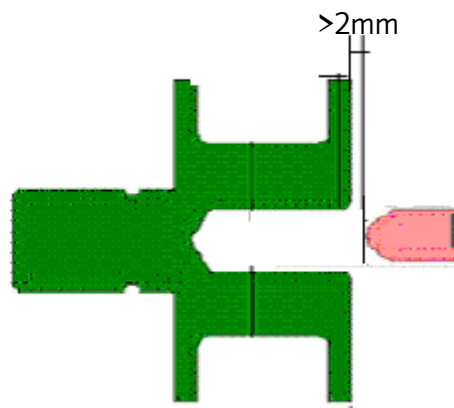


Figure 9. Retracted latch gap with latch housing

1. Install all parts showed in the figure 7, using only the big nut to keep them fixed. It is not necessary to tighten it too much.
2. Install a gauge of 0.5mm around the latch, and move the latch housing in Z and X directions. Record the result in table 7.2 "latch housing Z direction"

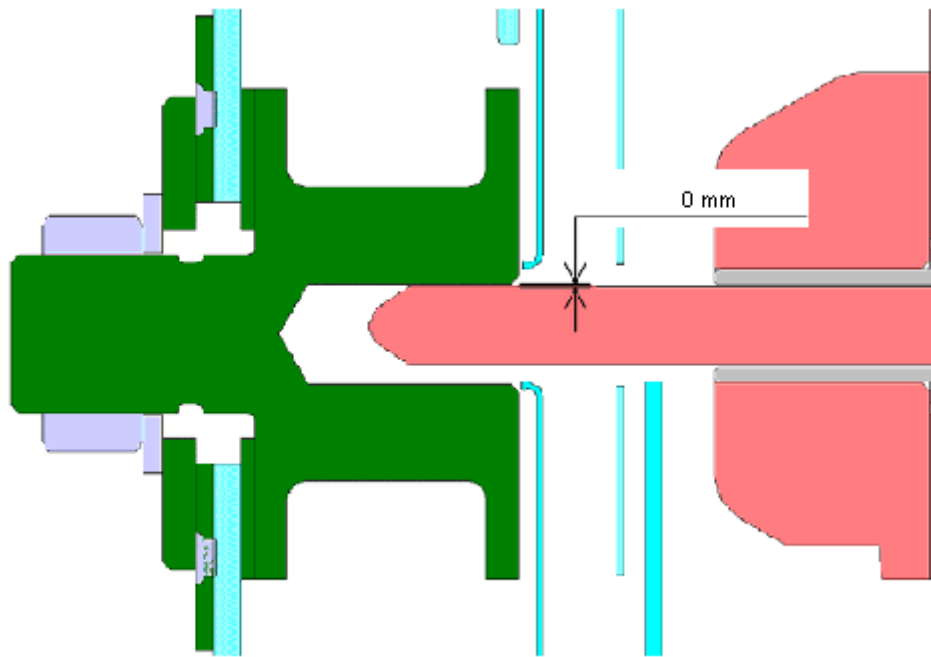


Figure 9. Gap between the latch and the latch-housing.

3. Once achieved the previous gap, tighten the nut in order to prevent any accidental movement of the latch-housing.
4. Install the four bolts according to the F536A7140-01 drawing (do not install yet the lock wire MS20995C41)

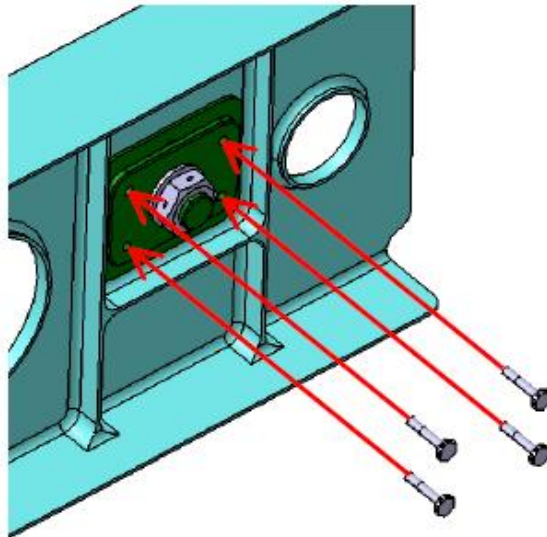


Figure 10. Bolts installation.

5. Turn the mechanism to open and close positions several times. Repeat the process using both handles. During these processes check that the mechanism moves smoothly.

6. Reinstall the silicone tape of the hatch, close de hatch and check the gap between trim-

carpets in vertical direction shall be $0 \pm \frac{2}{1}$ mm.

Use PROO-01-2500-012 gage

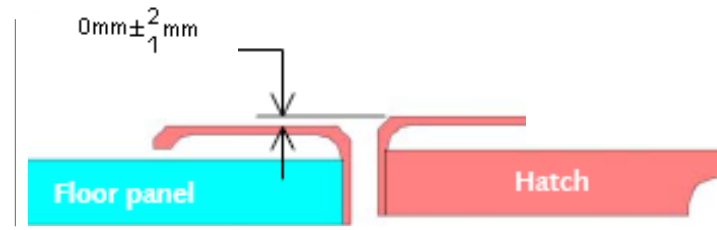


Figure 11. Vertical gap between hatch and floor panels (carpet not represented).

6.2 BLOCKING

After the adjustment of all parts, they shall be locked.

6.2.1 Latch housings

Install the lock-wire MS20995 as shown in drawing F536A7140-01.

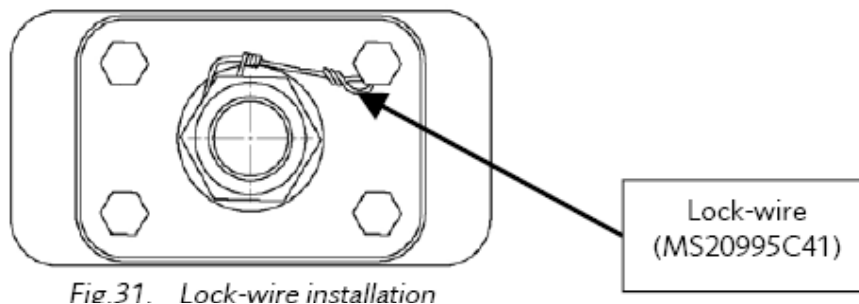


Fig.31. Lock-wire installation

Figure 32. Lock-wire installation.

7 TEST RESULTS

Test readings have to be logged on Table 1 and any additional observations have to be recorded.

		Points										
	Ref.	1	2	3	4	5	6	7	8	9	10	11
vertical	± 1 mm											
horizontal	4 ± 1 mm											
	Ref.	12	13	14	15	16	17	18	19	20	21	
vertical	± 1 mm											
horizontal	4 ± 1 mm											

Table 7.1. List of measurements Hatch Installation (trim-carpets)

Measurement	Required value	Measured value	Date
Dimension G	2 ± 0.5 mm		
latch housing Ydirection	N/A	OK/FAIL	
latch housing Z direction	N/A	OK/FAIL	
Latch-latch housing distance in retracted position	N/A	OK/FAIL	

Table 7.2. List of measurements Hatch Installation

The test equipment used has to be logged on the next table.

Equipment	Manufacturer	Model	Tool identification	Calibration date	Next calibration date
Ruler and gauge					

Table 7.4. List of test equipment used

IMPORTANT NOTE: Any comments or remarks arisen during test execution shall be written down here and send to Engineering Department. Non-conformities shall be processed according to MP22501

NOTE: In Case of NCS, write down its number on Table 7.1

N.C.S Number	Date

Table 7.3

NOTE: After this functional test execution, stamp the correspondent operation on the Production Order.

NOTE: Every result sheet must be stamped and attached to Production Order.

STAMP:	
DATE:	