Service Instruction



7. General			
(a) No.:	15 C / September 2019		
(b) Revision / Date			
(b) Title:	Basket Restraint Anchor Installation		
c) Description: Procedures for the retrofit of existing baskets with pilot/passenger restraint anchors.			

All Baskets (with solid and woven floor)

Note: Applicability= All types and variants to which the change can be applied.

Effectivity= Actual CN or group of CN's to which the bulletin has been/will be applied.

All applicable CN's

2. Accomplishment Instructions

This Service Instruction includes details for 5 restraint anchor designs:

- 1. U-bolt Anchor Applicable to baskets with solid plywood floors.
- 2. Webbing Strap Anchor Applicable to both baskets with solid plywood or woven floors.
- 3. D-ring Under-skid Anchor Applicable to baskets with woven floors.
- 4. Webbing Strap Under-skid Anchor Applicable to baskets with woven floors.
- 5. Nano Basket U-bolt Anchor Applicable to CBL Nano collapsible baskets.

The preferred retrofit option for solid floor baskets is the U-bolt Anchor (1). The preferred retrofit option for woven floor baskets is the Webbing Strap Anchor (2). For the Nano Collapsible basket, the installation of the Nano specific U-bolt assembly is the only acceptable configuration.

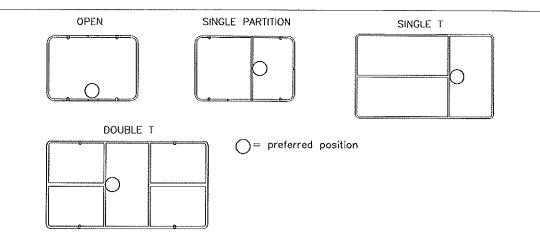
U-bolt Anchors

1. General

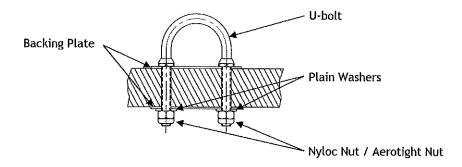
(d) Applicability:

(e) Effectivity:

- 6. The U-bolt should be cut to length to prevent excess thread length when installed into the basket floor. Enough thread length must be maintained to accommodate the backing plates, washers, nuts, and at least 2 threads visible beyond the end of the nut. A test assembly is recommended to confirm cut length specific to basket under retrofit.
- 7. Locate a suitable site for anchor installation in basket floor, near centre of the pilot compartment. Check that the underside of the floor is free from runners, wires or other obstacles. Depending on basket type, the below location guidance must be followed:



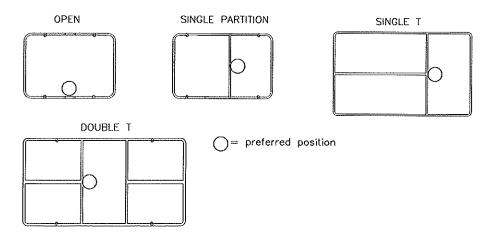
- 8. Mark centres and drill 2 off M6 clearance holes in anchor location identified in Step 2. WARNING: When drilling holes in the basket floor, great care should be taken not to damage the basket wires, their hide protection, or the floor lacing.
- 9. Install the U-bolt through the floor assemble using either Nyloc or Aerotight nuts. The finished arrangement should appear as the image below:



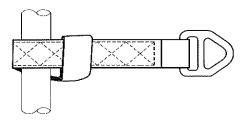
NOTE: The U-bolt must <u>not</u> be installed into spreader boards or pilot compartment floors in woven floor baskets.

Webbing Strap Anchors

10. Locate a suitable site for anchor installation in basket floor or sidewall, near centre of the pilot compartment. Depending on basket type, the below location guidance must be followed:

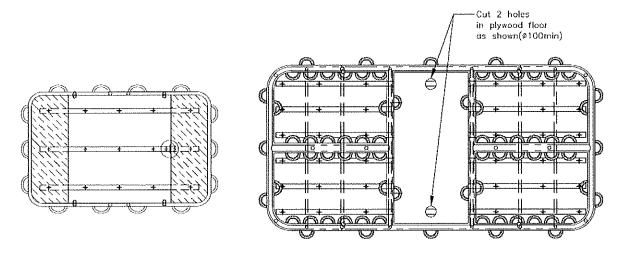


11. The webbing strap can be looped around the lower frame (solid floor baskets) or around vertical thick canes (20mm diameter or more), nylon rods or U-tubes in the basket sidewall weave (solid floor and woven floor baskets). The final loop position of the webbing strap to the wicker must be within 150mm of the basket floor. The finished arrangement should appear as the image below:



D-ring Under-skid Anchors

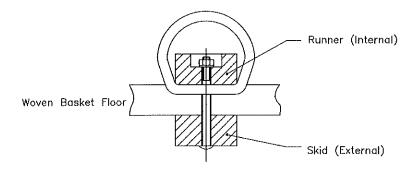
12. Locate a suitable site for anchor installation in basket floor. The D-ring must be positioned midway between 2 Runner/Skid coach bolts, not more than 80mm apart. If cylinder spreader boards are fitted, the anchor must be accessible when they are installed. In the case of pilot compartment flooring for partitioned baskets, openings must be cut to allow access to the basket internal Runners. Depending on basket type, the location guidance below must be followed:



13. Remove the chosen internal runner and slide the D-ring over the runner to position between coach bolts.

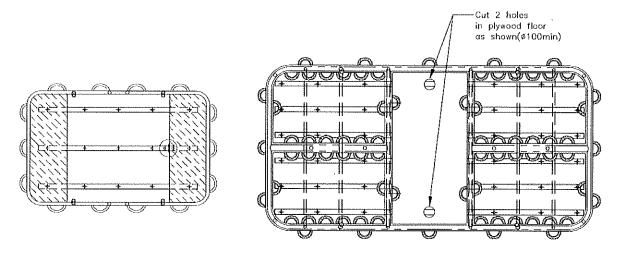
NOTE: Additional coach bolt holes may need to be drilled.

14. Reassemble the runner with the D-ring captive between appropriately spaced coach bolts. The finished arrangement should appear as the image below:



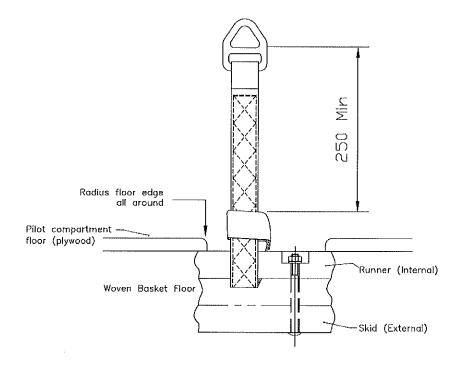
Webbing Strap Under-skid Anchors

15. Locate a suitable site for anchor installation in basket floor. The Webbing Strap must be positioned midway between 2 Runner/Skid coach bolts, not more than 80mm apart. If cylinder spreader boards are fitted, the anchor must be accessible when they are installed. In the case of pilot compartment flooring for partitioned baskets, 100mm diameter openings must be cut to allow access to the basket internal Runners. Depending on basket type, the location guidance below must be followed:



- 16. Loop the Webbing Strap around the chosen internal Runner. The Runner may have to be removed to allow sufficient clearance for the Webbing Strap installation.

 NOTE: Additional coach bolt holes may need to be drilled.
- 17. Reassemble the runner with the Webbing Strap captive between appropriately spaced coach bolts. The finished arrangement should appear as the image below:

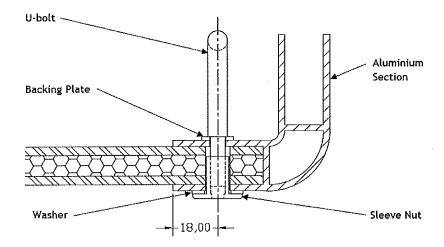


Nano Basket U-bolt Anchor

- 18. The U-bolt should be cut to length to prevent excess thread length when installed into the basket floor. At least 20mm of exposed thread must be available to take into account of the backing plate and floor thickness.
- 19. Locate a suitable site for anchor installation in basket floor, near centre of the pilot compartment. The anchor must be fitted in the aluminium edge section of the floor as shown. The location guidance is similar to that for solid floor baskets.



- 20. Mark centres and drill 2 off M6 clearance holes through the aluminium edge section in the anchor location identified in Step 2. Then drill 2 off 9mm blind holes from the underside of the basket through the lower aluminium plate and the floor panel, do not drill through the top aluminium plate.
- 21. Install the U-bolt through the floor assembly using sleeve nuts and Loctite Studlock 270. The finished arrangement should appear as the image below:



NOTE: The U-bolt must <u>not</u> be installed into the honey-comb floor outside of the aluminium edge section.

3. Materials

U-bolt Anchors

The following components are required:

- CG-1000-1024 U-bolt, 6mm Stainless Steel
- CG-1000-1025 Backing Plate (2 off required per U-bolt)
- CY-0006-1002 Nut, Nyloc, M6 (2 off required per U-bolt, unless CY-0006-1004 used as alternative)
- CY-0006-1004 Nut, Aerotight, M6 (2 off required per U-bolt, unless CY-0006-1002 used as alternative)
- CY-0006-2008 Plain Washer, M6 (2 off required per U-bolt)

Webbing Strap Anchors

The following component is required:

- CB-3280-0000 - Restraint Anchor (webbing) or CB-3347-0000 - Basket tie Down Strap

D-ring Under-skid Anchors

The following components is required:

- CB-3281-0001 D-ring, 50mm
- CU-1008-1110 Coach Bolt
- CY-1008-1002 Nut, Nyloc, M8
- CY-0008-2008 Plain Washer, M8

Webbing Strap Under-skid Anchors

The following components is required:

- CB-3280-0000 Restraint Anchor (webbing) or CB-3347-0000 Basket tie Down Strap
- CU-1008-1110 Coach Bolt
- CY-1008-1002 Nut, Nyloc, M8
- CY-0008-2008 Plain Washer, M8

Nano Basket U-bolt Anchor

The following components are required:

- CG-1000-1024 U-bolt, 6mm Stainless Steel
- CG-1000-1025 Backing Plate (1 off required per U-bolt)
- CY-0010-2008 Plain Washer, M10 (2 off required per U-bolt)
- CB-3712-0000 Sleeve Nut, M6, 15mm length (2 off required per U-bolt)

4. Other Publications Affected - Maintenance Manual Supplement 7.36

		V5.050	
5. Remarks -	2	2	
Compiled by:	The state of the s	Notes:	
Date: 11-09-2019	Name: David Cameron		

6. Design Organisation Approval

Approval Statement

I hereby confirm that these instructions are in compliance with all the applicable airworthiness requirements. The technical content of this document is approved under the authority of DOA nr EASA.21J.140

Signed, for and on behalf of Cameron Balloons Ltd.

PP Head of Design

Date:11-09-2019

Name: D Boxall

