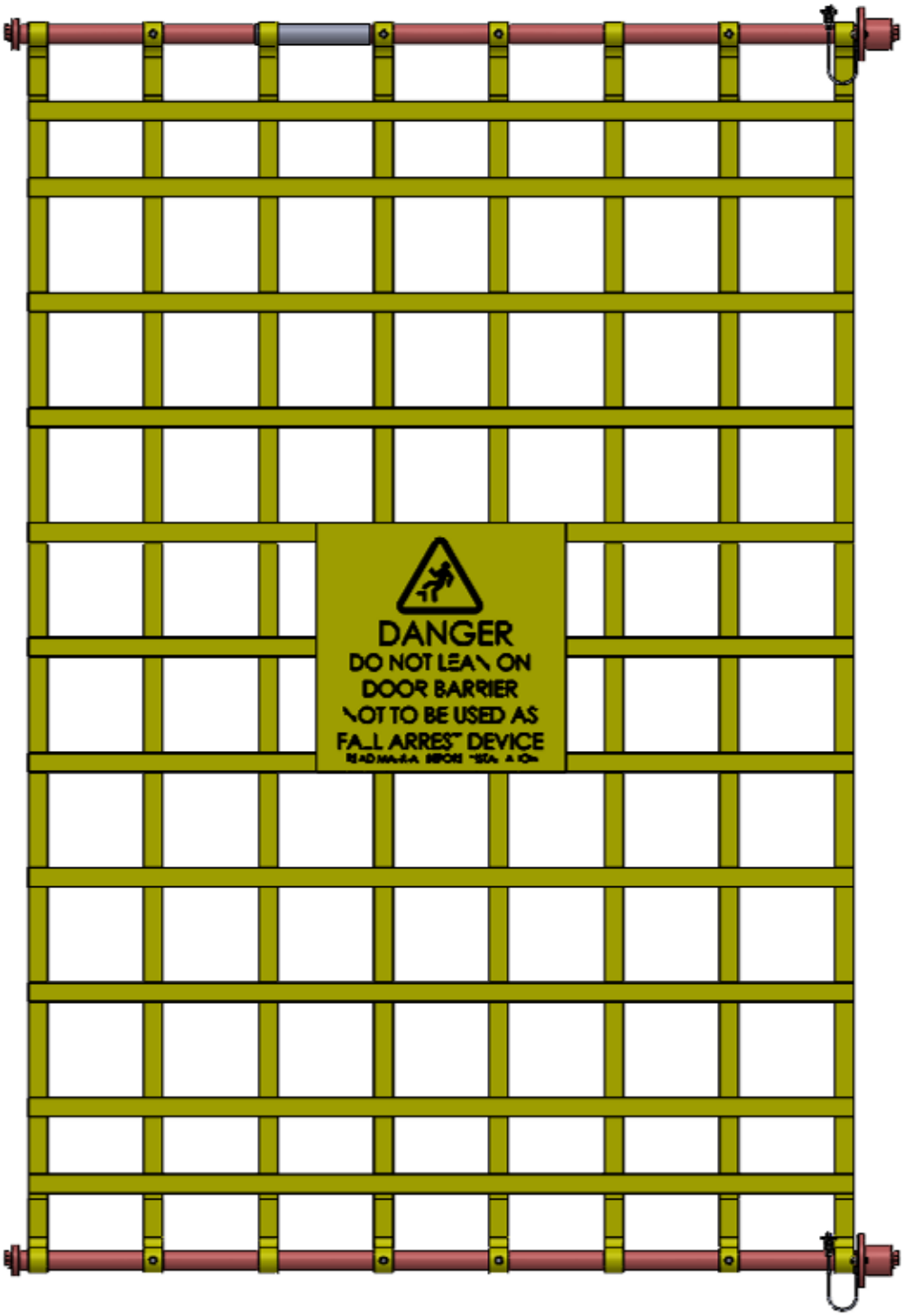

AIRCRAFT DOOR BARRIER NETS
AIRBUS A340
Part No's 514CA29 and 515CA29
COMPONENT MAINTENANCE MANUAL

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AIRCRAFT DOOR BARRIER NETS AIRBUS A340

COMPONENT MAINTENANCE MANUAL

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1. GENERAL

1.1 Introduction

This document details the Installation, Maintenance, Inspection and Storage for Aircraft Door Barrier Nets used specifically on the Airbus A340 Aircraft. The Door Barrier nets are fitted to the Aircraft whilst maintenance work is carried-out in Aircraft Hangers to provide a visual fall hazard warning sign to maintenance personnel.

1.2 Symbol Explanation

Remarks regarding the safety of persons and the Aircraft Door Barrier Nets are marked by special symbols. These remarks are to be absolutely observed to avoid accidents and material damage.

ATTENTION!

- points to a potentially dangerous situation, which can cause minor or slight injuries if it is not avoided.
- points to a potentially dangerous situation, which can cause property damage if it is not avoided.

REMARK!

- Important notice for installation or functioning.

Note: The Aircraft Door Barrier Net is not designed OR intended for use as a safety device or as part of a fall arrest system and does not provide protection or prevention for personnel from falling off or into unprotected edges or door openings.

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2. TECHNICAL DESCRIPTION.

2.1 Installation details.

2.1.1 The Aircraft Door Barrier Nets are suitable to be fitted to the Passenger and Crew exit doors.

2.1.2 There are two Aircraft Door Barrier Nets, Part no. 514CA29 fits to Door 1L and 1R. The other Part no. 515CA29 fits to Doors 2L, 3L, 4L, 2R, 3R, 4R. See Figure 1 for door identification and location.

2.1.3 The Aircraft Door Barrier Net is fitted to 4 off door brackets located around each aircraft door frame.

2.1.4 No tools are required to attach and remove the Aircraft Door Barrier Net.

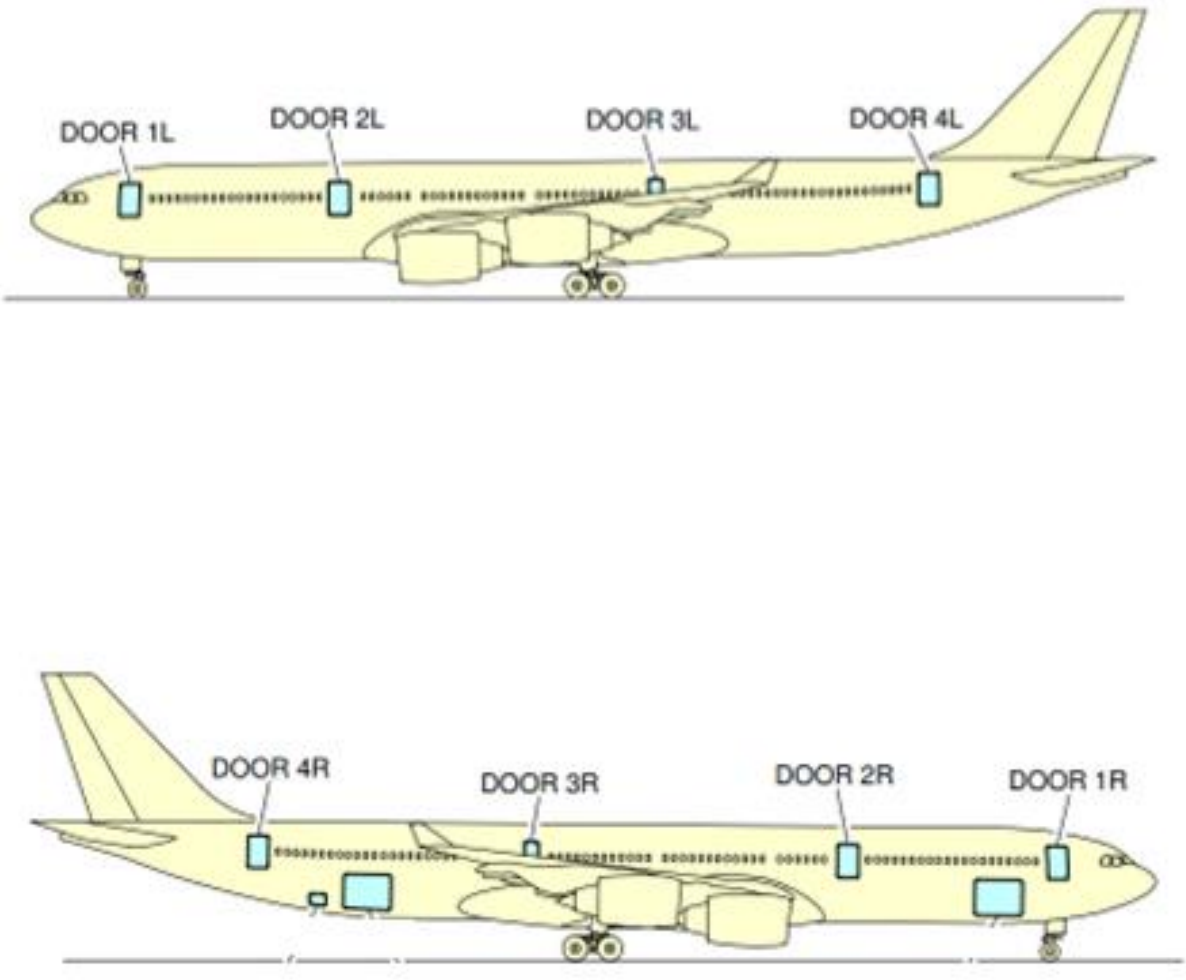

Figure 1 – Airbus A340 Door Identification and Location.

2.2 Construction

2.2.1 Figure 2 shows the construction of Part no. 514CA29 Aircraft Door Barrier Net.

2.2.2 Figure 3 shows the construction of Part no. 515CA29 Aircraft Door Barrier Net.

2.2.3 Both Aircraft Door Barrier Nets consist of two aluminum tubes top and bottom with one side having two spring-loaded locators and two fixed locators the other side.

2.2.4 There are two locking pins on one side, one for each spring-loaded locator.

2.2.5 Polyester webbing is fixed between the aluminum tubes.

2.2.6 A label is located on the top tube that identifies the Door Barrier Part number, description, aircraft type and door used on.

2.2.7 A warning sign and installation instruction are printed on the PVC sheet attached to the webbing.

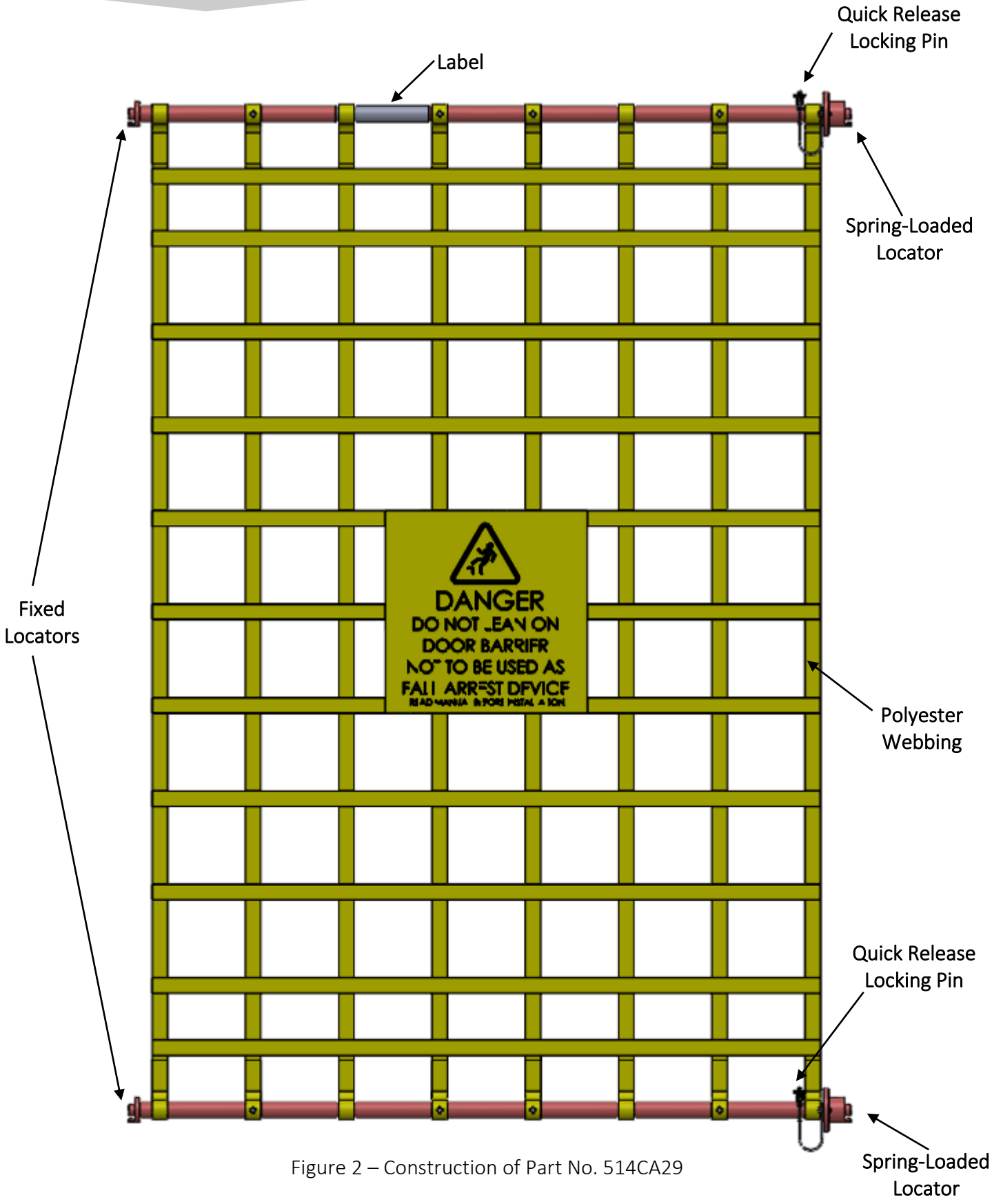

Figure 2 – Construction of Part No. 514CA29

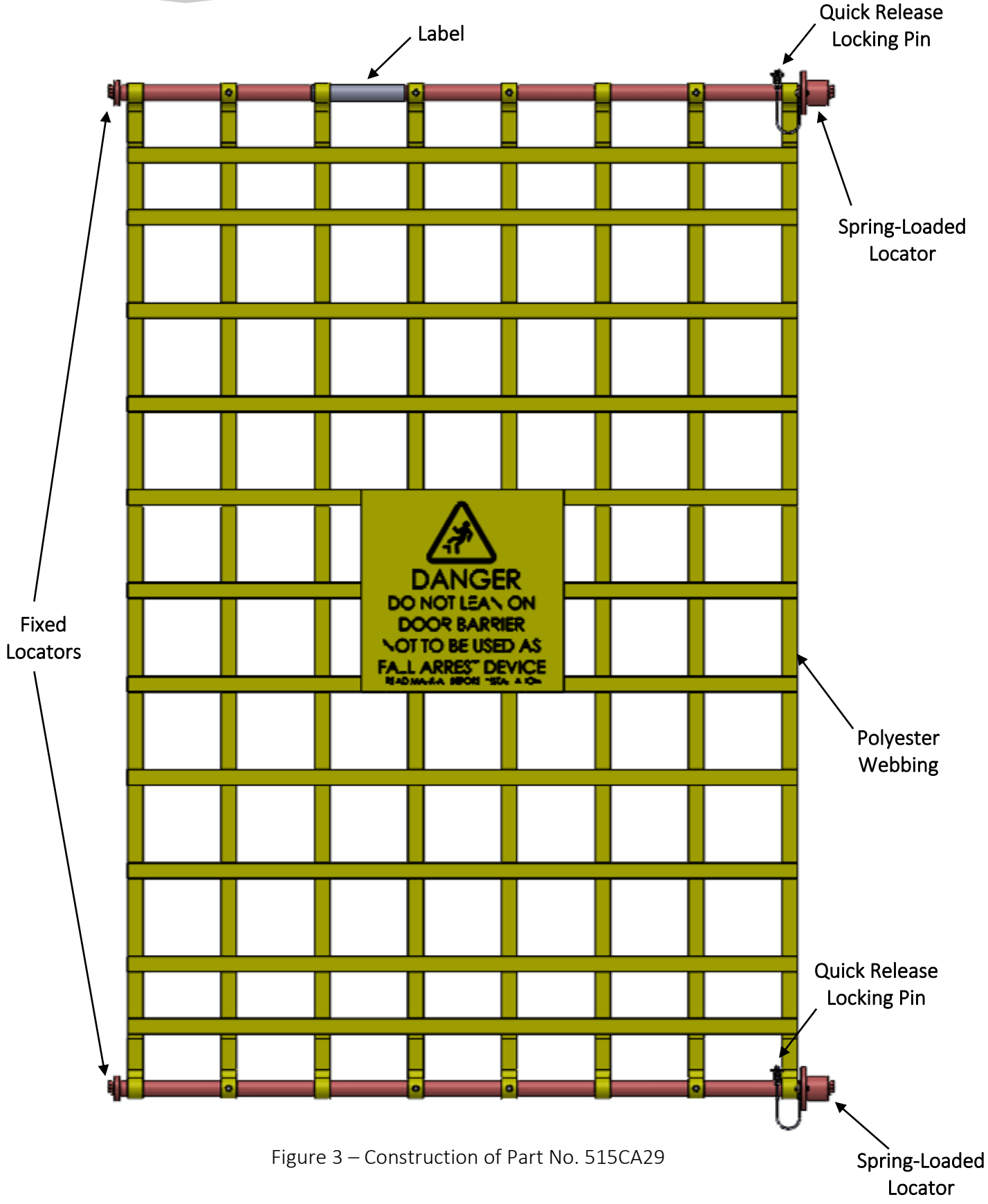

Figure 3 – Construction of Part No. 515CA29

2.3 Markings

2.3.1 Figure 4 below shows the installation details and warning sign on the Aircraft Door Barrier Net.

Figure 4 - Markings

2.4 Safety.

2.4.1 In an emergency, the Aircraft Door Barrier Net can be removed from the Aircraft door frame without the use of tools.

2.4.2 Do not lean on the Door Barrier. It must not be used as a fall arrest device.

Note: The Aircraft Door Barrier Net is not designed OR intended for use as a safety device or as part of a fall arrest system and does not provide protection or prevention for personnel from falling off or into unprotected edges or door openings.

3. INSPECTION.

3.1 Inspection before each use:

3.1.1 Inspect each Aircraft Door Barrier Net for visible defects such as cuts to webbing.

3.1.2 Check that each sprung loaded locator mechanism is in good working condition.

3.2 In-service inspections:

3.2.1 Inspect the Polyester webbing, aluminum tubing and sprung loaded fittings for defects and ensure that all labels and markings are in good condition.

3.2.2 If any doubts exist remove the product from service and seek further advice or replacement from the manufacturer.

3.2.3 Signs of defects or damage may include:- Local abrasion or cuts from a sharp edge or similar, Damage at seam or stitching, Chemical attack, Deformed or otherwise damaged fittings, aluminum tubing, sprung loaded fittings.

3.3 Periodic inspection:

3.3.1 Each Aircraft Door Barrier Net must be inspected by a competent person, once a year. If any doubts exist remove the product from service and seek further advice or replacement from the manufacturer. Refer to Figure 5 Inspection Diagram.

3.3.2 Note Figure 5 Inspection Diagram shows Part No. 514CA29 but is also relevant for Part No. 515CA29.

3.3.3 Check condition of the **Polyester webbing** and **stitching** for defects and damage i.e., scaring, abrasion, flaring and cuts.

3.3.4 Check condition of the **identification label and warning sign**.

3.3.5 Check condition of the **spring-loaded locators and quick release pins**. Check the mechanism and movement.

3.3.6 Check condition of the **retaining cable** for defects and damage. Ensure that the retaining cable is secure and attached to both quick release pins and spring-loaded locators.

3.3.7 Check condition of the **aluminum tubing** for defects and damage.

3.3.8 Check condition of the **slotted spring pins** for defects and damage.

3.3.9 For safe storage of the product refer to paragraph 6.

Note: Always follow safe manual handling techniques and practices to avoid risk to personnel during handling operations.

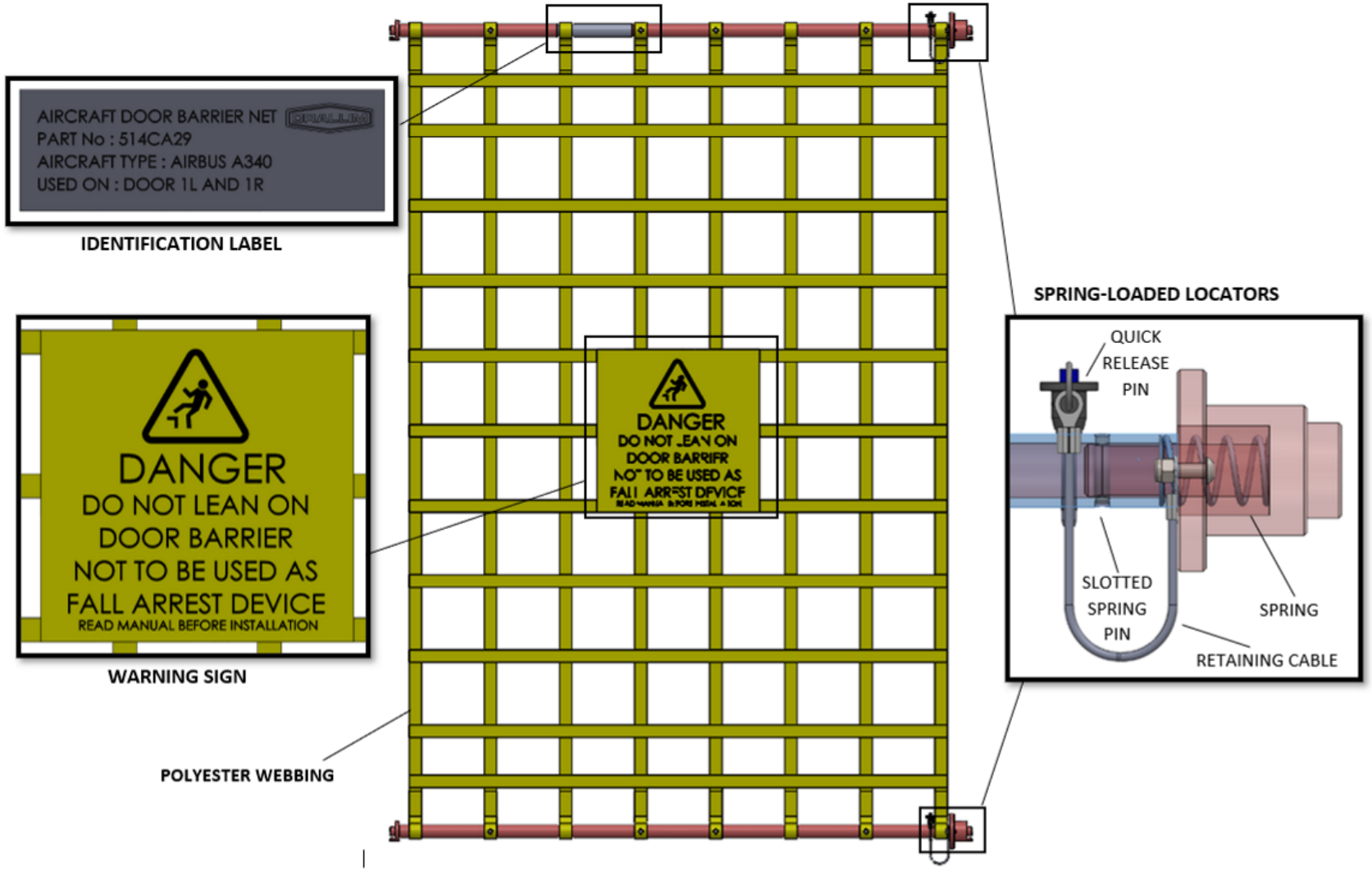

Figure 5 – Inspection Diagram (Part No. 514CA29)

4. INSTALLATION & REMOVAL.

4.1 Installation

Always carry out visual checks on the Aircraft Door Barrier Net for any defects before each use, as stated in paragraph Inspection Before Each Use 3.1.

4.1.1 The **Aircraft Door Barrier Net Part no. 514CA29** (Door 1L and 1R Barrier) is fitted to the 4 door brackets shown in figure 6. The Door Barrier locators are fitted to each bracket in the area shown in figures 7, 8, 9 and 10.

Figure 6 – Door 1L and 1R Bracket Positions

Figure 7 – Left Top Door Bracket

Figure 8 – Right Top Door Bracket

Figure 9 – Left Bottom Door Bracket

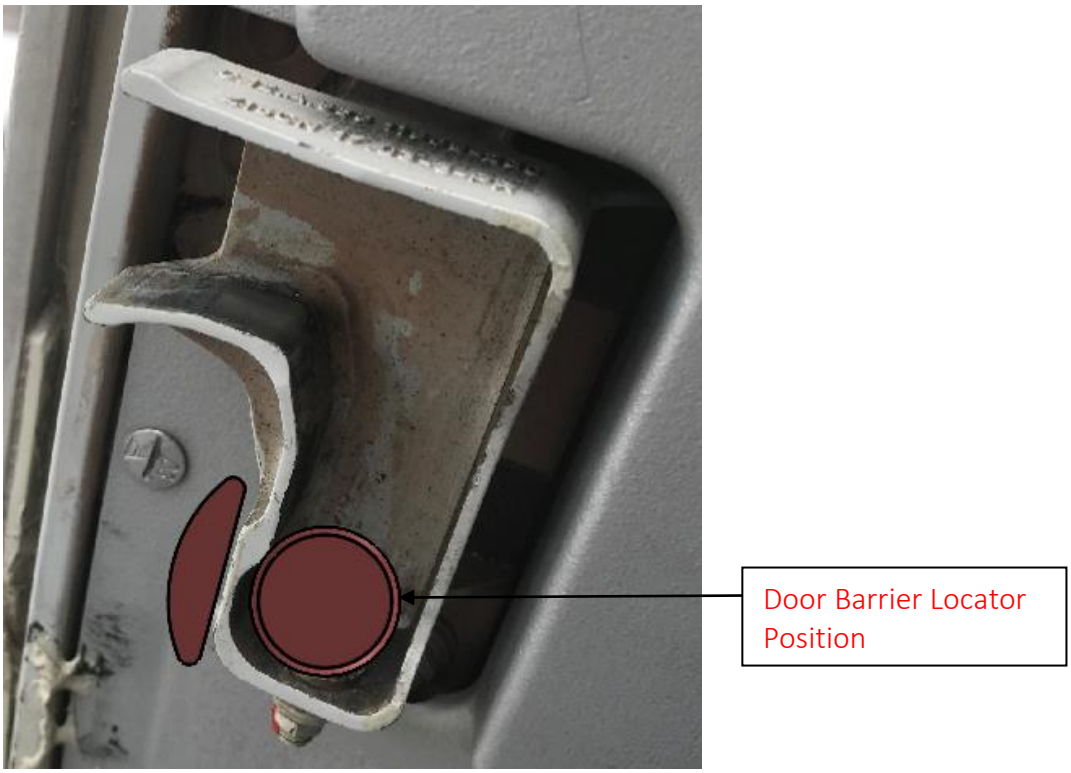

Figure 10 – Right Bottom Door Bracket

4.1.2 The end of each Door Barrier locator is fitted to the door brackets. The fixed and sprung loaded locators are shown in figure 11.

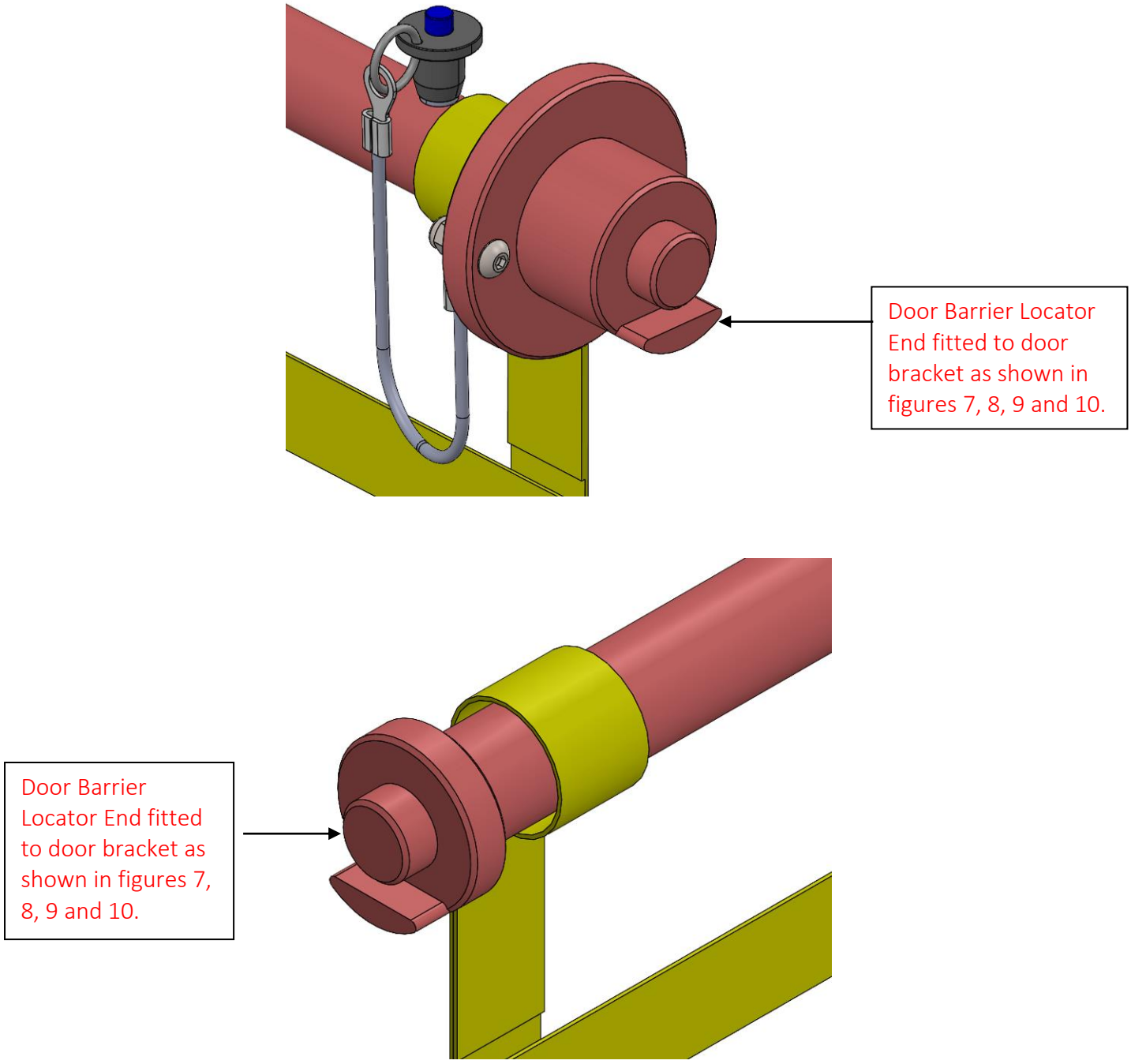

Figure 11 – Door Barrier Locators (Part no. 514CA29)

4.1.3 Make sure that the warning sign is upright, facing towards the inside of the aircraft and clearly visible to all personnel. As shown in figure 2.

4.1.4 Start by fitting the Door Barrier to the top door brackets.

4.1.5 Remove the Quick release pin from the Door Barrier top tube by pressing the button on the end of the pin.

4.1.6 Locate the top fixed locator into the left top door bracket area shown in figure 7.

4.1.7 Push the top sprung loaded locator inwards and locate it into the right top door bracket area shown in figure 8.

4.1.8 Fit the Quick Release pin to the Door Barrier top tube by pressing the button on the end of the pin. With the button released the pin should not be able to be removed.

4.1.9 Make sure that both top locators are fully engaged into the door brackets.

4.1.10 With the Quick release pin fitted it should not be possible for the top locators to be removed from the door brackets.

4.1.11 Now fit the Door Barrier to the Bottom door brackets.

4.1.12 Remove the Quick release pin from the Door Barrier bottom tube by pressing the button on the end of the pin.

4.1.13 Locate the Bottom fixed locator into the left bottom door bracket area shown in figure 9.

4.1.14 Push the bottom sprung loaded locator inwards and locate it into the right bottom door bracket area shown in figure 10.

4.1.15 Fit the Quick Release pin to the Door Barrier bottom tube by pressing the button on the end of the pin. With the button released the pin should not be able to be removed.

4.1.16 Make sure that both bottom locators are fully engaged into the door brackets.

4.1.17 With the Quick release pin fitted it should not be possible for the bottom locators to be removed from the door brackets.

4.1.18 See figure 12 showing the Door Barrier Part no. 514CA29 installed to Door 1R.

4.1.19 See figure 13 showing each Door Barrier locator installation into each door bracket for Door Barrier Part no. 514CA29.

Figure 12 – Installed Door 1R Barrier Part no. 514CA29

Figure 13 – Door Bracket Locator Installation of Door Barrier Part no. 514CA29

4.1.20 The Aircraft Door Barrier Net Part no. 515CA29 (Door 2L, 3L, 4L, 2R, 3R, 4R) is fitted to the 4 door brackets shown in figure 14. Note that figure 14 shows Door 2R. The Door Barrier locators are fitted to each bracket in the area shown in figures 15, 16, 17 and 18. Note that the Door brackets are the same for all doors.

Figure 14 – Door 2R Bracket Positions.
(Note: Brackets are the same for all Doors)

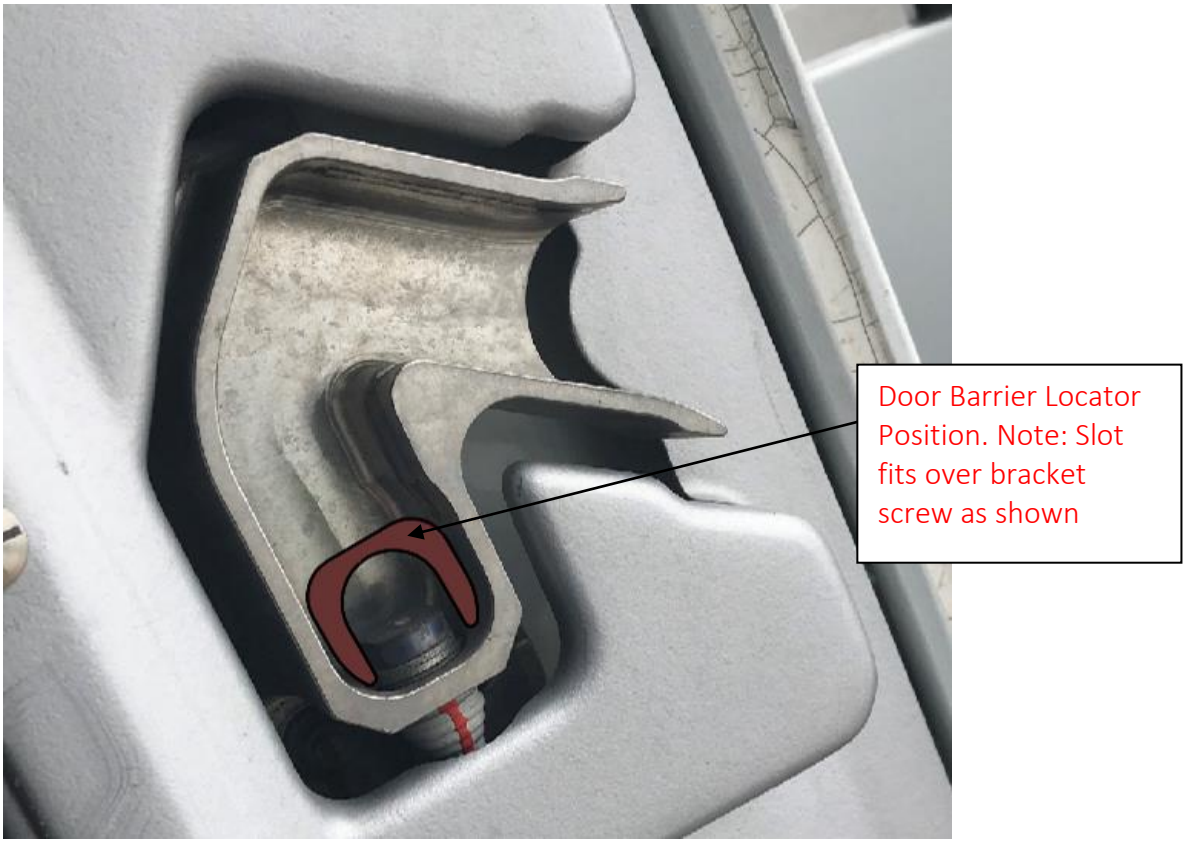

Figure 15 – Left Top Door Bracket

Figure 16 – Right Top Door Bracket

Figure 17 – Left Bottom Door Bracket

Figure 18 – Right Bottom Door Bracket

4.1.21 The end of each Door Barrier locator is fitted to the door brackets. The fixed and sprung loaded locators are shown in figure 19.

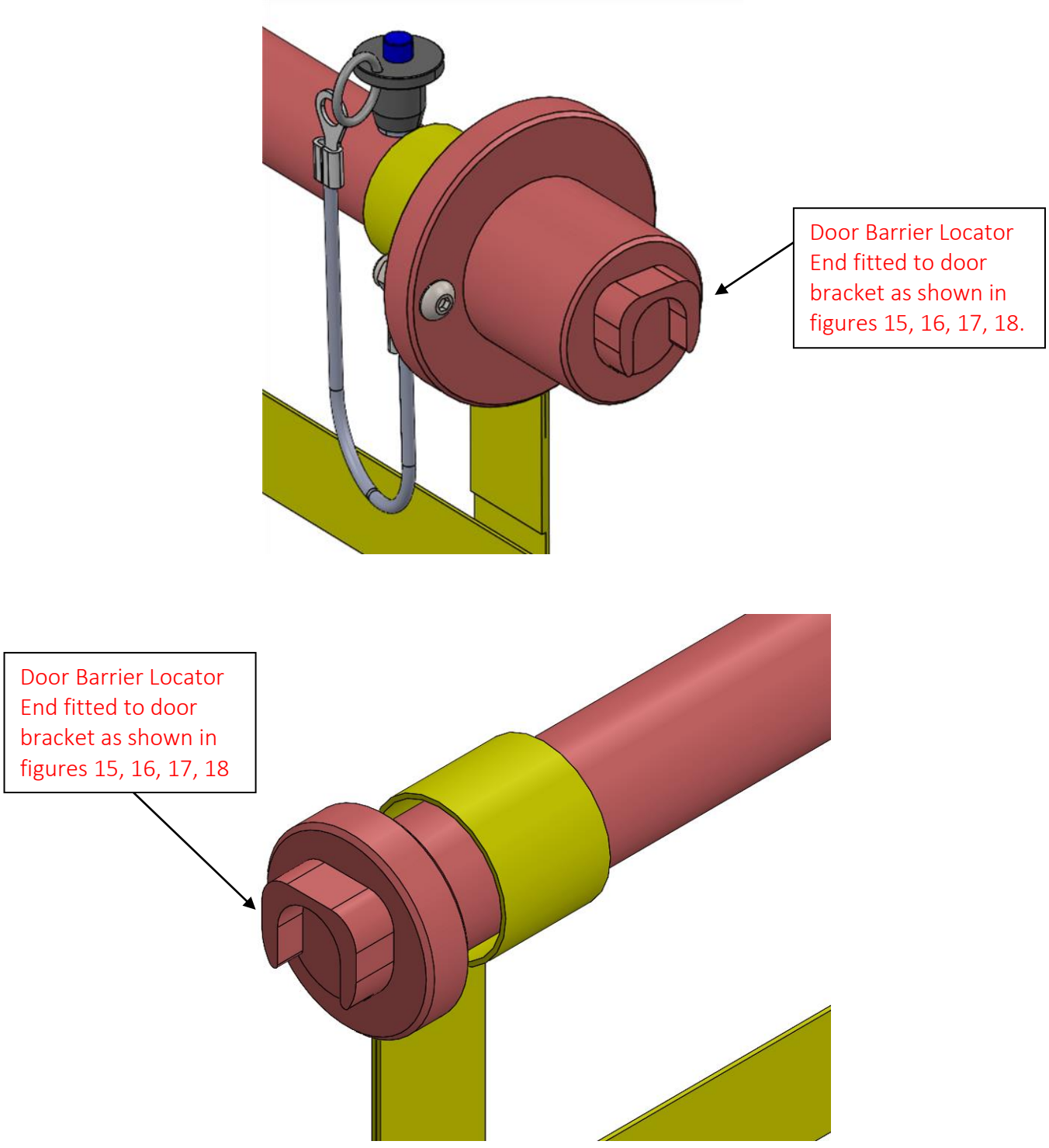

Figure 19 – Door Barrier Locators (Part no. 515CA29)

4.1.22 Make sure that the warning sign is upright, facing towards the inside of the aircraft and clearly visible to all personnel. As shown in figure 3.

4.1.23 Start by fitting the Door Barrier to the top door brackets.

4.1.24 Remove the Quick release pin from the Door Barrier top tube by pressing the button on the end of the pin.

4.1.25 Locate the top fixed locator into the left top door bracket, in the area shown in figure 15.

4.1.26 Push the top sprung loaded locator inwards and locate it into the right top door bracket in the area shown in figure 16.

4.1.27 Fit the Quick Release pin to the Door Barrier top tube hole by pressing the button on the end of the pin. With the button released the pin should not be able to be removed.

4.1.28 Make sure that both top locators are fully engaged into the door brackets.

4.1.29 With the Quick release pin fitted it should not be possible for the top locators to be removed from the door brackets.

4.1.30 Now fit the Door Barrier to the Bottom door brackets.

4.1.31 Remove the Quick release pin from the Door Barrier bottom tube by pressing the button on the end of the pin.

4.1.32 Locate the Bottom fixed locator into the left bottom door bracket in the area shown in figure 17.

4.1.33 Push the bottom sprung loaded locator inwards and locate it into the right bottom door bracket in the area shown in figure 18.

4.1.34 Fit the Quick Release pin to the Door Barrier bottom tube hole pressing the button on the end of the pin. With the button released the pin should not be able to be removed.

4.1.35 Make sure that both bottom locators are fully engaged into the door brackets.

4.1.36 With the Quick release pin fitted it should not be possible for the bottom locators to be removed from the door brackets.

4.1.37 Refer to figure 20 showing the Door Barrier Part no. 515CA29 installed to Door 2R and figure 21 showing the Door Barrier locators installed to each door bracket.

Figure 20 – Door Barrier Part no. 515CA29 installed to Door 2R

Figure 21 – Door Barrier Locators Part no. 515CA29 installed to Door 2R

4.2 Removal

4.2.1 Start by removing the Aircraft Door Barrier Net from the bottom door brackets.

4.2.2 Remove the bottom Quick Release pin.

4.2.3 Push the bottom sprung-loaded locator inwards and remove from the bottom door bracket.

4.2.4 Remove the bottom fixed locator from the bottom door bracket.

4.2.5 Refit the Quick Release pin into the bottom tube hole.

4.2.6 Remove the top Quick Release pin.

4.2.7 Push the top sprung-loaded locator inwards and remove from the top door bracket.

4.2.8 Remove the top fixed locator from the top door bracket.

4.2.9 Refit the Quick Release pin into the top tube hole.

5. MAINTENANCE

In addition to regular visual inspections, maintenance work must be carried out once a year. If any doubts exist on the condition of the product, the product must be removed from service and contact the manufacturer for advice or replacement.

5.1.1 The only maintenance that can be carried out is cleaning of the PVC Sheet, Webbing and Aluminum fittings.

5.1.2 Use clean water and cloth to wipe surfaces and remove dirt.

5.1.3 Ensure the warning sign is clearly visible.

6. STORAGE.

6.1.1 The storage area should be dry, clean, and free of any contaminants.

6.1.2 Avoid prolonged exposure to direct sunlight (UV radiation), this may have an adverse effect on the polyester webbing.

6.1.3 Do not expose to heat sources.

6.1.4 Avoid direct exposure to chemicals such as strong Alkalis and Acids.