

**SERVICE BULLETIN: # SB-67**

**DATE:** 23 November 2018

**TO:** ALL CH77 RANABOT

**AFFECTED PRODUCTS:** CH77 Ranabot

**PRODUCTS / SERIALS:** SB 67

**SUBJECT:** DUAL LOOK DOORS

**INSPECTION:** NEXT PRE FLIGHT CHECK

**REPLACEMENT:**

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## **COMPLIANCE PROCEDURE:**

SB67

Planning/Information

1.1 Reason: Field experience has shown the need to install a dual lock on the CH77 doors. The dual lock has two functions: safety and performance. It increases the door's points of hooking and counteracts the aerodynamic force borne by the door at high speeds, improving CX.

1.2 Subject: Dual Lock Doors

1.3 Compliance

Application required in the next pre-flight inspection. The application of SB67 must be compliant with the installation instructions that follow in section 3.

**WARNING!** Not complying with the installation instructions given in section 3 can result in damages to the aircraft, personal injuries or death.

2) Material-cost and availability

Prices and availability will be provided by CH7 Helisport HELICOPTER, Authorized Sellers or CH7 SERVICE CENTER

2.1 The Company

Shipping costs, downtime, loss of income, telephone costs etc., labor and/or additional work, are not covered or refunded by CH7 Helisport HELICOPTER.

## 2.2 Material

required parts:

Dual Lock Door Kit

qty. 1 Left main washer support with stop

qty. 1 Right main washer support with stop

qty. 4 pop out 2.5 mm conic head

qty. 2 Red lock arm

qty. 2 lower main washer

qty. 2 AN 3-10A

qty. 2 washer 0.5x4.8x20 steel

qty. 2 washer 1.6x4.8x19 alloy black

qty. 2 plx092

Retrofit Lock Door Kit

qty. 1 Left main washer support with stop

qty. 1 Right main washer support with stop

qty. 4 pop out 2.5 mm conic head

qty. 2 lower main washer

2.4 Special equipment / Grease / Glue / Sealing compound.

Dremel and accessories, Klemmer pliers, 3/32 Cleco pliers, 2.5mm drill, 4.8mm drill, Beta pop-out pliers.

Rework of parts

NO

## 3) Instructions

Before maintenance, thoroughly review the entire documentation in order to clearly understand the procedures and requirements and avoid errors. All measures must be taken and confirmed by the following persons/facilities:

CH7 Helisport HELICOPTER

CH7 SERVICE CENTER

Technicians approved by CH7 Helisport HELICOPTER

### 3.1 HOW TO install the door's Dual Locks

See enclosed pictures

1) Remove the door from the helicopter and place it on a clean surface protected by bubble wrap.

2) Remove AN 3-10A and check the 51cm size of the front pivot as well as the positioning of the rivets perpendicular to the strut. If parallel, proceed to remove PLX092, make new holes and carry out the installation from point 5

3) If on the helicopter strut there is no stop pivot, remove the rivets and proceed from point 6. In this case, order the Retrofit Lock Door Kit.

4) Measure 40.5cm from the lower hole; trace and make a hole with a 2.5mm drill exactly in the center of the door strut. Review with the 4.8mm drill.

5) Position the PLX092 so as to centering tool the 2,5mm holes, assemble with 3/32 Cleco.

6) With a 7.5mm drill, MANUALLY create two conical seats, so as for the Main Washer to well adhere to the flat surface.

CAUTION! Carbon fiber is very thin: do not use drilling machines with conical tips.

7) Use Dremel to make a hole and a cut.

8) Use the Keller pliers to insert the Washer Lower internally and fasten the Main Washer with 3/32 Cleco.

CAUTION! Ensure to use the Left or Right Main Washer as appropriate.

9) With a Keller plier, insert the PLX092 in the hole and prop the 2.5mm hole to the Cleco pivot; action the Cleco pliers and lock the PLX092 with two Cleco.

10) Remove one Cleco only and insert the 2.5 conic pop out, pull with the pop out pliers and repeat

the operation.

11) Ensure that the rivets are aligned with the flat surface level; if necessary, file them.

12) Assemble the Red Lock Arm with AN3-10A bolt and 1.6x8.19 alloy black washer; close with a torque in order to give an adequate friction to the Arm.

13) Install the door on the helicopter and check the lock. If necessary, apply Washer 0.5x4x8.20 in the amount required to allow locking; if not enough, replace bolt with AN3-11A.

#### WARNING

The locking is correct only if by applying pressure on the door from the outside the Red Lock Arm does not distance itself from its support on the door strut.

### 3.3 Summary

All above instructions (section3) must be carried out in accordance with section 1.3 on Compliance.

The application of this bulletin is to be transcribed on the aircraft maintenance log.

Approval translation in any case the original text in Italian and metric unit (SI-system) are authoritative.

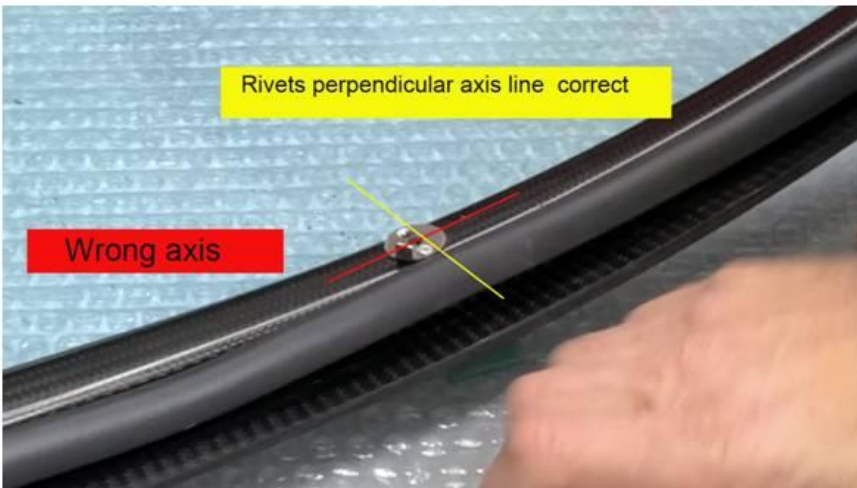
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## Tools





**Step 1-2-Verify  
51mm from the  
front axis pin**



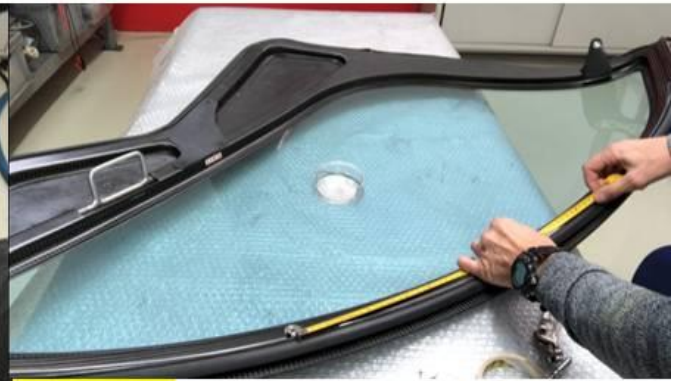
**Step 2-**

## Step 3





**Step 4. Make a mark 40.5mm**



**Step 4. Drill 2.5 mm and then 4.8mm**



**Step 5. With plx 29 use this as a hole centering tool**



**Step 5-With plx 29 use this as a hole centering tool**



**Step 5-Drill 2.5 mm**



**Step6**



## Step 6





**Step 7**



**Step 7**



**Step 8**



**Step 9**



**Step 10**

**Step 11**

## Step 12-13

