



SERVICE BULLETIN
SB0222 March 6th, 2023 Revision 01

BATTERY 443CH1 P/N 416470
One-way valve inspection

1. Vendor service bulletin summary

This Service Bulletin (SB) 0222 is a notification from Saft concerning design improvement of the battery 443CH1 Saft P/N 416470 one-way valve Saft P/N 415690.

2. Planning information

A. Effectivity

Holders of Saft battery type 443CH1, P/N 416470 with a serial number preceding S/N 202206203 are affected by this SB0222.

NOTE: Saft serial number codification

Starting from January 1st, 2016, Saft batteries serial number format is “YYYYXXXXX” with:

- YYYY is the year of manufacturing of the battery,
- XXXXX is the manufacturing number of the battery (starting at 00001).

443CH1 batteries affected, Saft P/N 416470 with the following serial numbers:

443CH1 Battery P/N 416470 Serial numbers	One-way valve definition and actions
Before 202206203	Battery design with one-way valve P/N 415690 Action: during the maintenance check, replace the 415690 by the 416710. Replacement instructions, refer to section 4
After 202206203 (included)	Battery design with one-way valve P/N 416710 No action / not affected by SB0222.

B. Reason

During battery maintenance tasks, inspect and eventually replace the defective one-way valve Saft P/N 415690 by a new one, Saft P/N 416710.

C. Description

This service bulletin provides the instructions to inspect the one-way valve during the maintenance tasks and to replace the vent valve if detected defective (with cracks).

D. Compliance

Desirable - Service Bulletin to introduce improvements.

SB0222 shall be accomplished by a qualified battery maintenance technician as a one-time component change during maintenance activity of the battery as described in the section A chart here above.



SERVICE BULLETIN
SB0222 March 6th, 2023 Revision 01

E. Approval

The modification procedures described in SB0222 are reviewed and technically accepted by Embraer Design Office to apply to the Embraer battery fleet affected.

SB0222 does not contain any change information that revises the equipment definition covered by Embraer approved modifications.

F. Manpower

Estimated man-hours: less than 15 minutes.

G. Weight and balance

No change.

H. Electrical load data

Not changed.

I. Software accomplishment summary

Not applicable

J. References

CMM 443CH1 24-36-06 latest revision

K. Publication Affected

CMM 443CH1 24-36-06

L. Interchangeability of Parts

Not affected.

3. Material Information

A. Material price and availability

Please contact:

Soft Aviation Product Support at aircraft@saft.com

B. Industry support

If technical assistance is needed, contact Soft Aviation Product Support at aircraft@saft.com.

C. Material necessary for each aircraft

Not applicable



SERVICE BULLETIN
SB0222 March 6th, 2023 Revision 01

D. Parts

Following parts are to be procured by Saft:

Description	Saft P/N	Quantity per battery	
		Pre SB0222	Post SB0222
One-way valve 	415690	0 Non procurable	1
One-way valve 	416710	1	0

E. Spares

Not applicable

F. Reidentified part

Not applicable

G. Tooling

Not applicable

4. Accomplishment instructions

A. General

Observe all warnings and caution instructions contained in the CMM 443CH1 24-36-06.

CAUTION: BATTERY DISASSEMBLY SHOULD ONLY BE PERFORMED ON A FULLY DISCHARGED BATTERY. REFER TO CHAPTER Residual discharge and Cell shorting in the CMM 443CH1 24-36-06.

Safety

CAUTION: BE CAREFUL. REMOVE RINGS, WATCHES, NECKLACES, METALLIC BELTS OR OTHER JEWELRY TO AVOID ELECTRIC SHOCK.

CAUTION: DO NOT TILT THE BATTERY WHILE DOING MAINTENANCE, ANY CONTACT OF SKIN WITH ELECTROLYTE CAN CAUSE SEVERE BURNS.

Local safety regulations should be followed as safety regulations in force.



SERVICE BULLETIN
SB0222 March 6th, 2023 Revision 01

B. Description of the upgrade

Accomplishment instructions per the maintenance manual CMM 443CH1 24-36-06

Items shown (###) are items in the IPL Figure 10001 (page 10005) of the CMM 443CH1 24-36-06.

(1) Removal of the complete cover (020)

CAUTION: Avoid contact between the cover and the cell terminal of links.

- Undo the retaining latches.
- Remove the battery cover complete (020).

(2) Inspection of the one-way valve (370) for visual signs of cracks

- Visual inspect the installed one-way valve (370) Saft P/N 415690 for any signs of cracks.
If crack on the one-way valve (370) Saft P/N 415690 is identified, example in figure 004, it shall be removed in accordance with point (3).
- Visual inspect the gap between the tube and the one-way valve (370) **Saft P/N 415690** as indicated in figure 001. The **gap must be between 8 to 11 mm**. The measurement is done visually or with an insulated tool.
If the gap is less than 8 mm, the one-way valve must be replaced in accordance with point (3)
If the gap is over 11 mm, adjust the one-way valve in the gap 8 to 11 mm to the tube.
- Else, if one-way valve (370) is not defective, install the complete cover point (5) or continue the maintenance tasks applicable.

(3) Remove the one-way valve (370) Saft P/N 415690

- Remove the one-way valve (370) by gently pulling on the one-way valve to remove it from the vent tube, refer to figure 002.
- Scrap the defective one-way valve (370).

(4) Installation of the new one-way valve (370) Saft P/N 416710

CAUTION: The one-way valve (370) must be installed oriented properly and must not touch other components; sensor connector harness or metal spacer.

- Install the new one-way valve (370) from inside the box (380) on the box vent tube, refer to figure 002.
- Make sure that the one-way valve (370) Saft P/N 416710 is installed fully and reaches a stop as indicated on the schematic in figure 003 (to 90° tube).
- Once replacement done add on the battery logbook in the column “comments” the following mention: “SB0222 applied”.

(5) Install the complete cover (020) or continue the maintenance tasks.



SERVICE BULLETIN
SB0222 March 6th, 2023 Revision 01

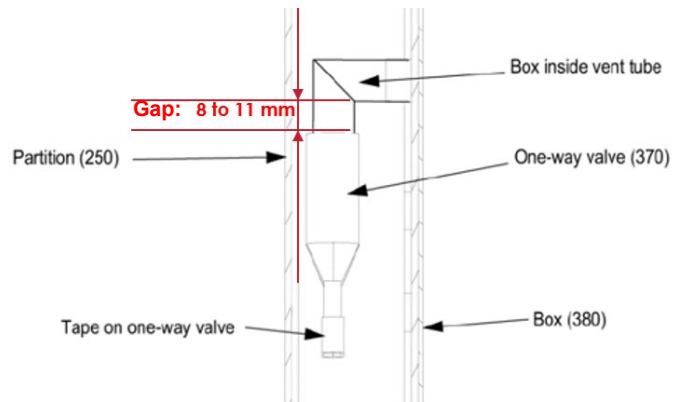


Figure 001 – Gap between the one-way valve (370) Saft P/N 415690 with the vent tube

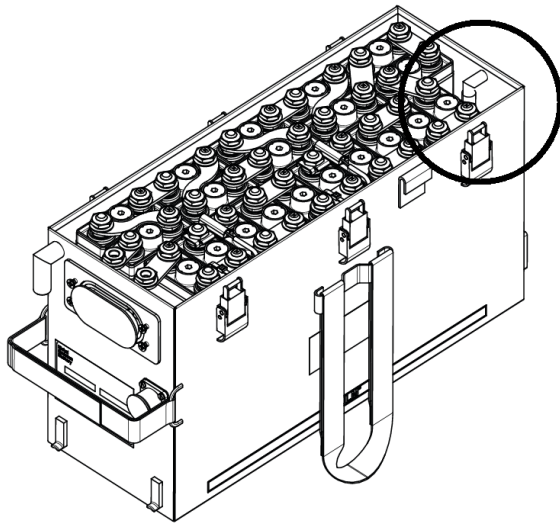


Figure 002 – Detailed view one-way valve (370) location and clearance for handling.

SAFT

SERVICE BULLETIN SB0222 March 6th, 2023 Revision 01

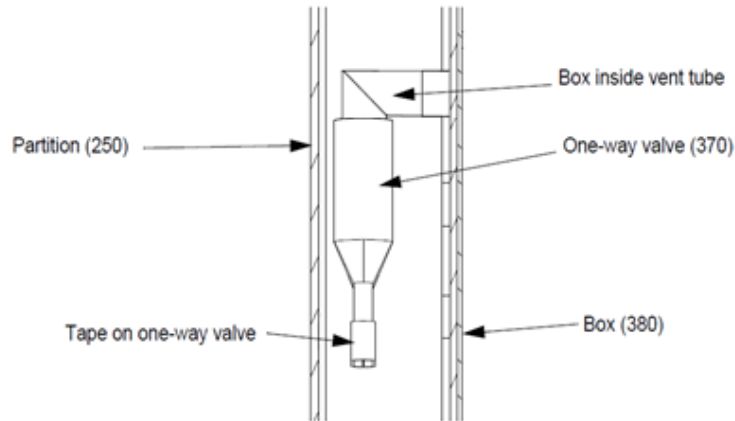


Figure 003 – One-way valve (370) Saft P/N 416710 installation



Figure 00

4 – Example of cracked one-way valve (370)

Copyright ©2023 Saft

This document and all information contained herein are the property of Saft. Its use is restricted solely to the maintenance of Saft batteries and may under no circumstances be used for any other manufacturer's products. No person may, in whole or in part, duplicate, use, or disclose this information for any other purpose without the prior written consent of Saft.