SERVICE BULLETIN
SB0721 Rev - June 15, 2022

Saft Battery Type 425CK1 (P/N 416392)
Hamilton Sundstrand P/N 5915609-2
Bombardier P/N C07500016-001)

Field Replacement of Cell P/N 024036-000

1. SB Summary
This service bulletin describes the procedure to remove and replace Saft cell type CVK420KA P/N 024036-000 per the inspection criteria on specific Saft battery type 425CK1 P/N 416392 serial numbers.

2. Planning information

A. Effectivity
Holders of the Saft battery type 425CK1 (P/N 416392) with the Saft / Hamilton Sundstrand serial numbers listed in Table 1 below.

Table 1 Affected Saft / Hamilton Sundstrand Battery Serial Numbers

09052002610F2 / AARR000562	0905200261D66 / AARR000576
09052002610F3 / AARR000563	0905200261D69 / AARR000579
09052002610F5 / AARR000565	090520026238B / AARR000581
0905200261D5E / AARR000568	09052002626FA / AARR000583
0905200261D61 / AARR000571	0905200263CFC / AARR000584

B. Reason
Cells contained within 425CK1 (P/N 416392) batteries identified in Table 1 were manufactured with suspected cell covers that are prone to cracking at the vent valve location in an as-molded condition.

C. Description
This service bulletin provides the instructions to remove and replace CVK420KA (P/N 024036-000) cells contained within the batteries listed above in Table 1.

D. Compliance
This service bulletin shall be accomplished by a qualified battery maintenance technician as a one-time cell inspection during the next scheduled maintenance activity of Saft battery type 425CK1 (P/N 416392). This is not safety related as the vent valves will function as designed due to the design of the cover.

E. Approval
The technical content of this service bulletin has been reviewed and accepted by SAFT. Airbus please provide approval statement for this service bulletin.

F. Manpower
Estimated man-hours: less than 30 minutes.

G. Weight and balance
No change.

H. Electrical load data
Not change.

I. Software accomplishment summary
N/A

J. References
CMM 24-32-23 Mar 03/2021
Saft Battery Information Sheet

K. Publication Affected
N/A

L. Interchangeability of Parts
Not affected.

3. Material Information

A. Material price and availability
For parts contact Saft at aircraft@saftbatteries.com to coordinate replacement parts.
- CVK420KA cells P/N 024036-000 to be provided

B. Industry support
If technical assistance is needed, contact Aviation Product Support at aircraft@saftbatteries.com.

C. Material necessary for each aircraft
N/A

D. Parts
- Cell CVK420KA P/N 024036-000

E. Spares
N/A

F. Reidentified part
N/A

G. Tooling

EQUIPMENT	MINIMUM EQUIPMENT SPECIFICATION		SOURCE OR CAGE CODE	REPRESENTATIVE TYPE (MFG MODEL/CAGE)
	CHARACTERISTICS	RANGE ACCURACY TOLERANCE		
Torque wrench	Insulated	0 to 15 N-m (0 to 133 lb_f-in)	Commercially Available	McMaster-Carr (7936A12)
Universal vent wrench	-	-	V09052 F6177	093365-000 413876
Equalizing resistors	-	1 Ω 3 W	F6177	164829
Cell puller tool	Fully insulated	-	F6177	416159

4. Accomplishment instruction

A. General
Observe all warnings and cautions contained in the Component Maintenance Manual (CMM) 24-32-23.

B. Procedures
NOTE: The () are the items numbers as provided within CMM 24-32-23.

Step 1. Perform 42A or 21.5A discharge to 21.0V.

Step 2. Remove the cover complete (030) by opening the 6 latches.

Step 3. Remove the nuts (070 and 143) and the washers (080 and 145) that attach links (090 to 130) to the cells (140).

Step 4. Remove all links (090 to 130).

Step 5. Attach a shorting resistor T01 to each cell.

Step 6. After the shorting resistor is approximately room temperature then as needed fully screw the cell extractor tool T04 onto a cell terminal then pull up to remove the cells (140) until all cells have been removed.

CAUTION: MAKE SURE CELL POLARITY IS CORRECT, DOUBLE CHECK CELL ORIENTATION TO FIGURE 7003 - Battery layout of CMM 24-32-23.24-32-23

NOTE: To facilitate cell installation and make sure cell orientation is respected, first layout the cells outside the box per figure 7003 - Battery layout of CMM 24-32-23.

Step 7. Install the new cells (140) starting from the end of each row following the polarity orientation per figure 7003 - Battery layout of CMM 24-32-23.

Step 8. Install the last cell into position by carefully pushing onto both cell terminals at once using a block of soft wood (if the cell insertion is too difficult, remove one or two liner-spacers).

Step 9. Verify, once again, the polarity of each cell according to the figure 7003 - Battery layout of CMM 24-32-23.

Step 10. Make sure that the cell terminals lower nuts (150) are torqued according to Fits and clearances chapter of CMM 24-32-23.

Step 11. Lightly lubricate the terminals and the links (090 to 130) with M02 (use a non-metallic paintbrush).

Step 12. Install the links (120) equipped with thermostats T2 & T3 (260.2 and 260.3) on the cells (140) according to figure 7003 - Battery layout of CMM 24-32-23.

Step 13. Install remainder of the links (090 to 130) on the cells (140) according to the figure 7003 - Battery layout of CMM 24-32-23.

NOTE: Make sure the cables of the heater harness, thermostats, and thermistors are not pinched. Strictly respect the cable path illustrated.

Step 14. Install the thermistors S1 (260.1) and S2 (260.4) of sensor assembly (260) according to figure 7003 - Battery layout of CMM 24-32-23.

Step 15. Install the washers (080 and 145) and nuts (070 and 143). Torque the nuts (070 and 143) according to Fits and clearances chapter of CMM 24-32-23.

Step 16. Lightly lubricate the nuts (070 and 143) and the washers (080 and 145) with M02 (use a non-metallic paintbrush).

Step 17. Mark the mod-dot label as reflected in Figure 1 by permanently crossing out “2”.

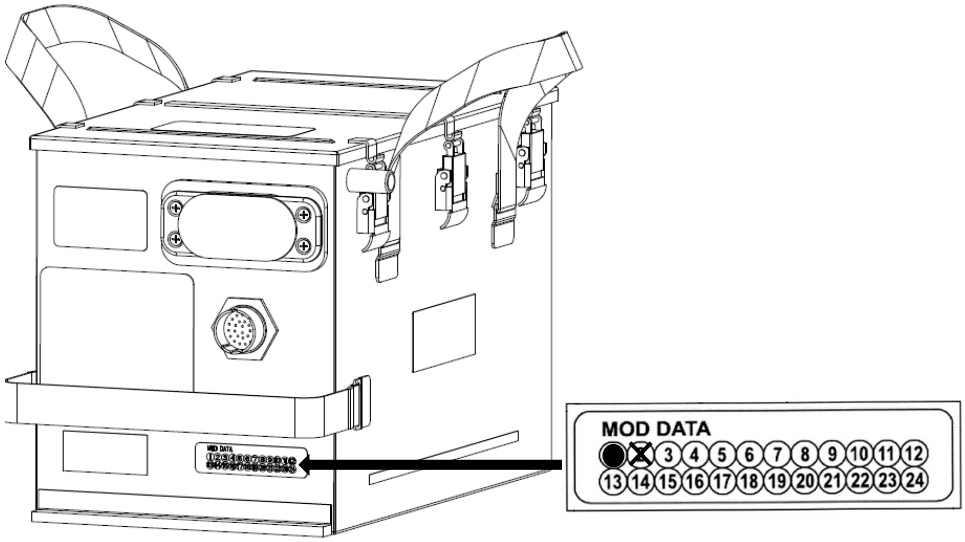

Figure 1 Mod-dot label marking

Step 18. For batteries returning to service, perform the following:

- Charge per step paragraph 5-1 on page 3 of CMM 24-32-23.
- Adjust electrolyte leveling per paragraph 7-6 on page 5005 of CMM 24-32-23.
- Perform nut tightness per paragraph 7-3 on page 5005 of CMM 24-32-23.
- Install cover complete (030) by latching 6 latches.
- The battery is ready to return to service.

Step 19. For batteries to return to storage, refer to Storage section of CMM 24-32-23 on page 15001.

Step 20. The defective cells must be damaged to prevent re-use.

- Attach a shorting resistor and allow to stand for 12-24 hours.
- Remove the shorting resistor and permanently damage by bending one of the terminals.
- Any electrolyte leakage should be cleaned and dealt with as outlined in the Saft Battery Information Sheet for Nickel-Cadmium cells.
- Dispose of defective cells per with applicable transport, health and safety and recycling regulations.