

# TECHNICAL INFORMATION COMMUNICATION



Quality and Continuous Improvement

**Number: TIC 2025-0016**

**Date: 5/28/2025**

**Title: New Rating & Oil return algorithm**

**Product Category: Crossover D5CURAH & D5CUHAH w/Res Fan coils and Furnaces**

## **Products Affected**

DLS Crossover systems consisting of DS condensing units paired with Res. Non-communicating fan coil and furnace combinations. Serial number indicates production start with updated oil return software.

## **Serial range:**

Model	Serial #	Software	PCB	Model	Serial #	Software	PCB
D5CURAH18AAK	V252047060	TBD	TBD	D5CUHAH18AAK	V252541794	YES	Avail 6/25/25
D5CURAH24AAK	V252044932	TBD	TBD	D5CUHAH24AAK	V252041062	NA	NA
D5CURAH30AAK	V252045247	TBD	TBD	D5CUHAH30AAK	V251842118	YES	Avail 6/25/25
D5CURAH36AAK	V252045565	TBD	TBD	D5CUHAH36AAK	V252041206	YES	Avail 6/25/25
D5CURAH48AAK	V251943235	TBD	TBD	D5CUHAH48AAK	V251842190	YES	Avail 6/25/25
D5CURAH60AAK	V251943253	TBD	TBD	D5CUHAH60AAK	V251842262	YES	Avail 6/25/25

## **Situation**

Based on customer feedback regarding initial ratings with crossover products, changes have been made to the condenser to address initial ratings and improve efficiency of the equipment. These changes can be made in two manners – 1. Software flash condensing unit PCB 2. Replacement of condensing unit PCB after 6/25/2025. This change **ONLY** applies to D5CURAH and D5CUHAH condensing unit paired with rated Carrier Residential fan coil and furnaces.

**\*Communicating systems are not affected by this update\***

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# TECHNICAL INFORMATION COMMUNICATION



## Technical Information

Updated oil return algorithm, new algorithm will allow for system operation with non-communicating fan coils/furnaces without the need for Oil recovery operation in 30min intervals has extended to 2hours. This change bears no impact on quality or product life cycle Robust testing has been completed with no increase in product reliability concerns.

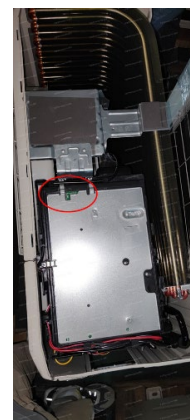
## Product Number Update:

Product number	Software update	PCB Replacement	Implemented in manufacturing
D5CUHAH30AAK01	YES	Optional	NO
D5CUHAH30AAK02	NO	NO	YES

## Software Flash:

Condensing unit software can be flashed, flashing tools will be distributed and coordinated via local DLS/VRF TSM for region, along with any additional instructions. Below are images of software flashing procedure.

1. Remove top cover of ODU and plastic PCB cover: Identify and locate 5 EXPOSED pins on the left corner of the PCB circled in **RED** below. (small chassis)

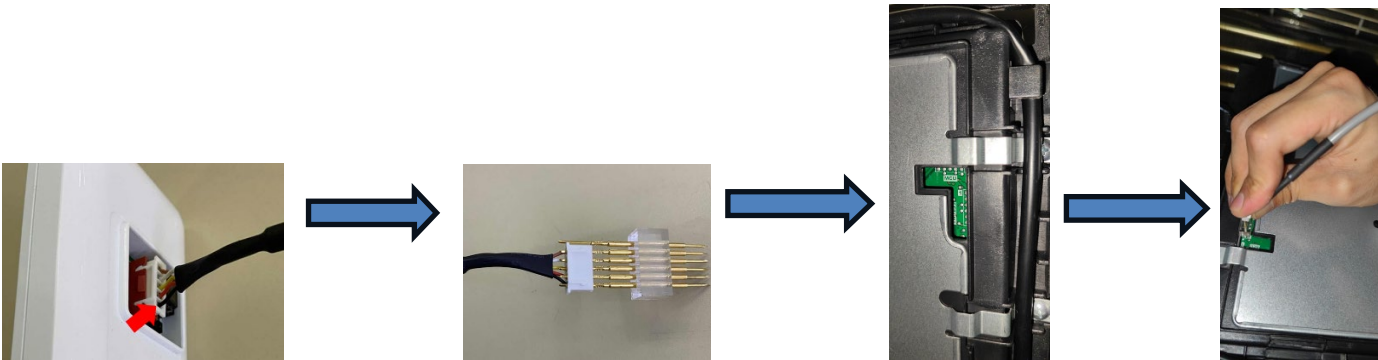


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- Align Pins of programming tool, with 5 exposed pins picture above, PINS must make full contact with PCB for all



- Writing software upgrade: With the pins fully seated against PCB solder terminal press and hold “write in” button until display shows C\_S(successful) E\_O(failed), then release. If E\_O is received re-align pins and re-flash.

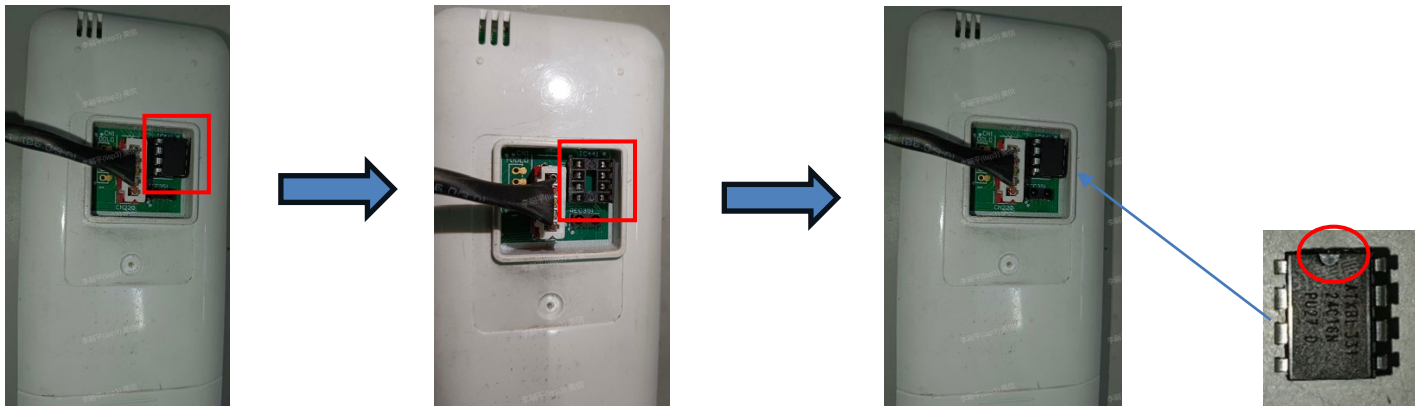


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4. Each SKU tonnage will require unique software, flashing kits will include 1 programmer and multiple chips. Chips will carry individual software for each unique tonnage model 18, 30, 36, 48 and 60K respectively. Chips will need to be changed between outdoor unit sizes requiring upgrade. See below



**NOTE:** For more detailed instructions please contact your local TSM for additional support and instructions as pin location will change based on tonnage.

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