



Ducted Systems Technical Services Service Tips Letter

Letter: **ST-007-2019**

Date: May 10, 2019

To: All Ducted Systems Branch Service, Sales, and Training Managers
All Ducted Systems Distribution Service, Sales, and Training Managers

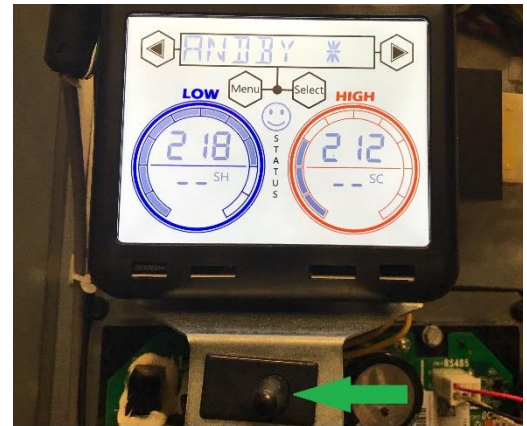
Subject: **Control Software Change – Variable Capacity Outdoor Control / Outdoor Display.**

Product: Residential Split System variable capacity heat pump and air conditioning models YZV, HC20, HL20, YXV, AC21, AL21

The model numbers listed above contain an outdoor control with an interactive touch screen display that is used for unit installation, control setup, equipment service, and diagnostics. The touch screen display contains a backlight feature and display is activated by a door switch located below the display as shown below.

The door switch utilized is a normally open switch. The switch is connected to the DOOR SWITCH terminal on the outdoor control using a wire harness that contains two yellow wires. When the door switch circuit is open, the backlight and display are activated. We have received complaints of damage to the door switch under normal use and service. The damage results in the door switch being stuck either open or closed. Since the variable capacity control activates the display when the door switch circuit is open, the end user can still use the control by unplugging the switch harness from the DOOR SWITCH terminal.

To improve product quality the door switch will be removed on new production units. Due to this, a new version of the software is required for the outdoor control. The variable capacity product is controlled by a touch screen HX™ thermostat. Software updates for this system are sent “OTA” (over the air.) On 05/10/2019 outdoor display software version, 1.08 will be sent out via a mass OTA update. Any system connected to Wi-Fi via the HX™ thermostat should receive this update. Once the update takes place, the outdoor unit door switch circuit will become inactive.



If a field installed unit is not connected to Wi-Fi it will not receive a software update. If the door switch fails and the control software is not at least version 1.08, the switch must be replaced with switch part number S1-02435738000.

The outdoor control software version can be found using the room thermostat. Push the thermostat status icon and scroll to VS CONTROL. The software version will be listed on the line titled S/W.



Backlight and Variable Capacity outdoor control activation will be controlled by the navigational response from either the MENU and/or SELECT buttons once the control contains software version 1.08 or higher.

Upon unit power-up, the control display will be on for 60 minutes. If the control does not receive a navigational response for greater than 60 minutes, the control will turn off the display.

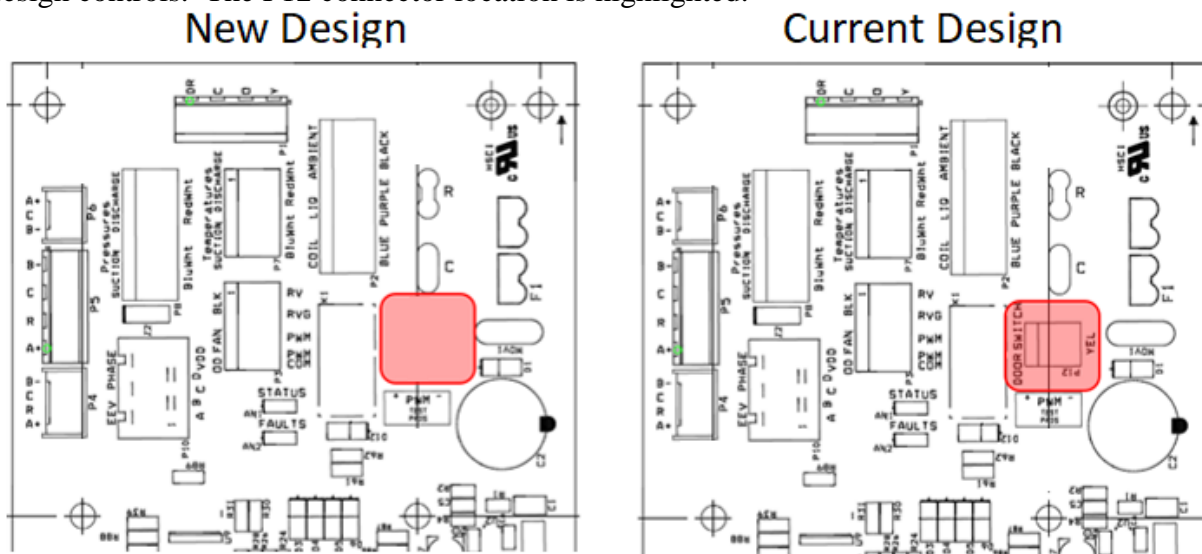
Awake-Energize Display: If the controls sense a navigational response from **either** the MENU or SELECT buttons greater than 2 seconds, the control will turn on the display. If the control does not receive a navigational response for greater than 60 minutes, the control will turn off the display.

De-Energize the Display: If the controls sense a navigational response from **both** the MENU and SELECT buttons greater than 5 seconds, the control will turn off the display.

To turn the display on – hold down the MENU or SELECT button for > 2 seconds.

To turn the display off - hold down the MENU and SELECT buttons for > 5 seconds.

The variable capacity outdoor control door switch wiring connects to the P12 DOOR SWITCH terminal on the current outdoor control board. Moving forward, terminal P12 will be removed from this control, and controls will contain software version 1.08 or higher. The control part number will change to a kit number (S1-33103742000) that includes installation and operating instructions. Controls that do NOT contain the P12 door switch header will include a decal that includes operation instructions to activate the display. When factory inventory of outdoor controls containing the P12 header have been exhausted, production will shift to the new control and the units will NOT be built with an outdoor control door switch. See the example below of new and current design controls. The P12 connector location is highlighted.



If a replacement control is installed in a field installed unit and the control does not contain the P12 connector, the unit door switch and YELLOW door switch wire harness should be removed and discarded.

If a field installed outdoor unit receives outdoor control software update 1.08, the door switch will no longer be needed and should be removed during routine / yearly equipment maintenance. If the control software is at least version 1.08, the door switch will no longer function to activate or deactivate the display.

If you have any questions on this feel free to call Ducted Systems Technical Services at 1-877-UPG-SERV and speak with a technical support representative.


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