

TECHNICAL INFORMATION COMMUNICATION



Quality and Continuous Improvement

Number: TIC2021-0011

Date: 6/18/2021 rev 5/27/2021

Title: 2021 Infinity/Evolution Temporary Control Substitution

Product Category: Residential Communicating Control

Situation:

The widespread global commodity shortage, along with a recent fire in the supplier's processor chip factory, have significantly impacted lead times and available quantities of wall controls.

Due to supply constraints, Carrier and Bryant are offering temporary solutions recommending all 1-Stage, 2-Stage and 5-Stage Infinity® and Evolution™ 18/19VS systems with a gas furnace be installed with temporary 24V thermostats until Infinity® control inventory normalizes. A homeowner's existing 24V thermostat may also be used, if compatible. These systems will only perform up to their non-UI AHRI ratings until the Infinity system control is swapped.

See Appendix A for Carrier's Product Bulletin and Appendix B for Bryant's Product Bulletin.

This document will help explain what type and how to wire a 24V thermostat into a communicating system.

Eligible Model Numbers:

Infinity® System Control	SYSTXCCITC0-B
Infinity® System Control	SYSTXCCWIC01-B
Evolution™ System Control	SYSTXBBECC01-B
Evolution™ System Control	SYSTXBBWEC01-B

Type of 24v thermostat	Application
1-Stage Heat / 1-Stage Cool **	FE Fan coil must use communicating control or a 1-stage thermostat
1-Stage Heat / 1-Stage Cool **	Gas Furnace
** If outdoor unit is a heat pump, heat pump thermostat is required.	

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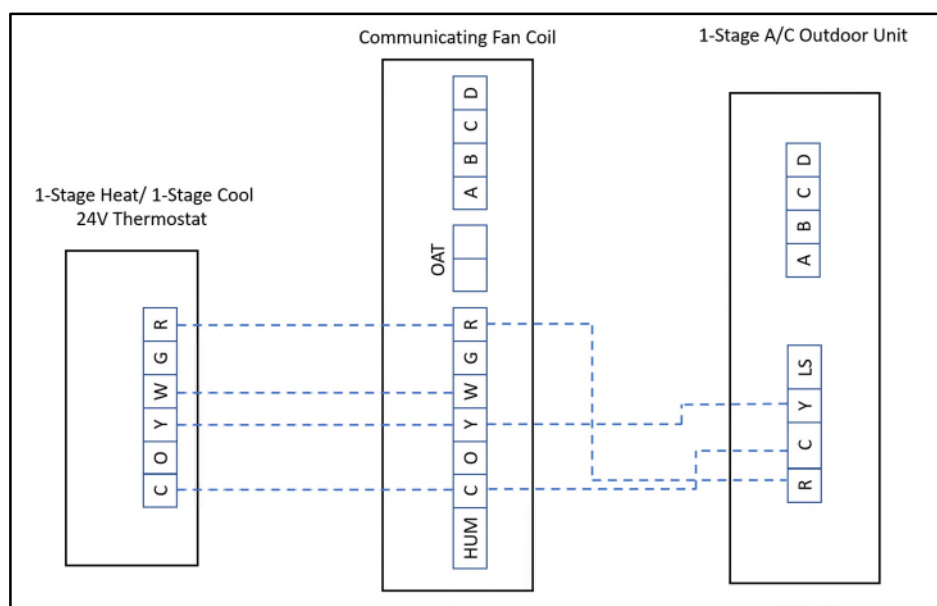
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Solution:

The solutions in this document may vary from the Product Marketing Bulletin. This bulletin is addressing emergency wiring situations as well as temporary wiring installations with limited wires.

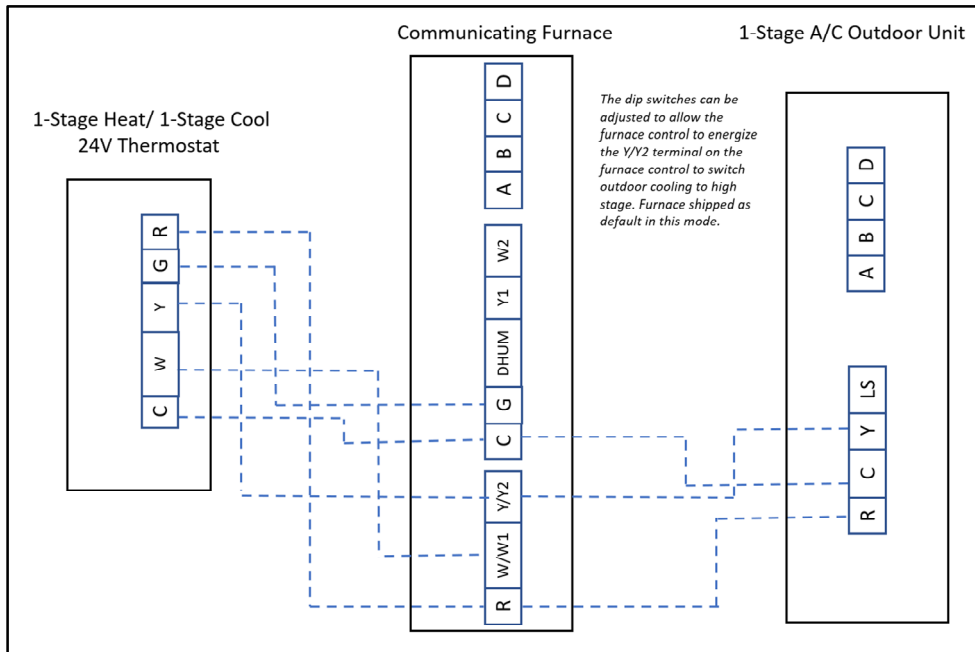
Type of System	Type of 24V Thermostat	Wires Between Indoor Unit & Thermostat	Wires between Indoor Unit & Outdoor Unit	Wire Diagram Figure
1-Stage A/C + Communicating Fan Coil	1-Stage Heat/ 1-Stage Cool	4	3	1
1-Stage A/C + Communicating Furnace	1-Stage Heat/ 1-Stage Cool	5	3	2
2-Stage A/C + Communicating Fan Coil	1-Stage Heat/ 1-Stage Cool	4	3	3
2-Stage A/C + Communicating Furnace	1-Stage Heat/ 1-Stage Cool	5	3	4
2-Stage HP + Communicating Fan Coil	1-Stage Heat/ 1-Stage Cool (Heat Pump)	5	5	5
2-Stage HP + Communicating Furnace	1-Stage Heat/ 1-Stage Cool (Heat Pump)	6	6	6
5-Stage A/C + Communicating Fan Coil	1-Stage Heat/ 1-Stage Cool	4	3	7
5-Stage A/C + Communicating Furnace	1-Stage Heat/ 1-Stage Cool	5	4	8
5-Stage HP + Communicating Fan Coil	1-Stage Heat/ 1-Stage Cool (Heat Pump)	5	5	9
5-Stage HP + Communicating Furnace	1-Stage Heat/ 1-Stage Cool (Heat Pump)	6	6	10
VS A/C ODU + FE4A Fan Coil	1-Stage Heat/ 1-Stage Cool	4	2	11
VS A/C ODU + Furnace	1-Stage Heat/ 1-Stage Cool	5	3	12
VS HP ODU + FE4A Fan Coil	1-Stage Heat/ 1-Stage Cool (Heat Pump)	5	4	13
VS HP ODU + Furnace	1-Stage Heat/ 1-Stage Cool (Heat Pump)	6	5	14
Geothermal + Communicating Fan Coil	1-Stage Heat/ 1-Stage Cool (Heat Pump)	5	4	15



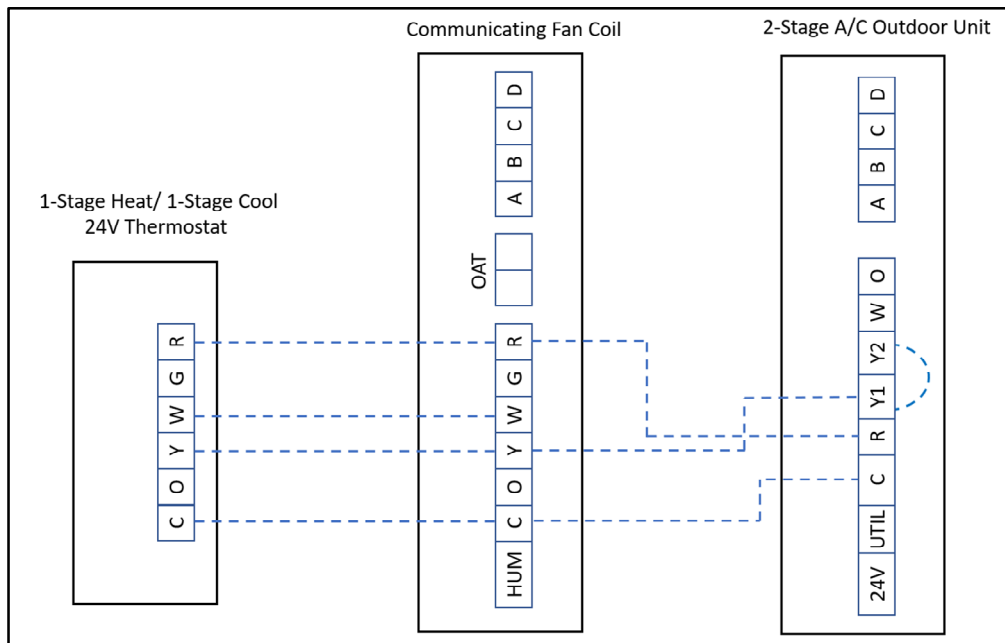
(Figure 1)

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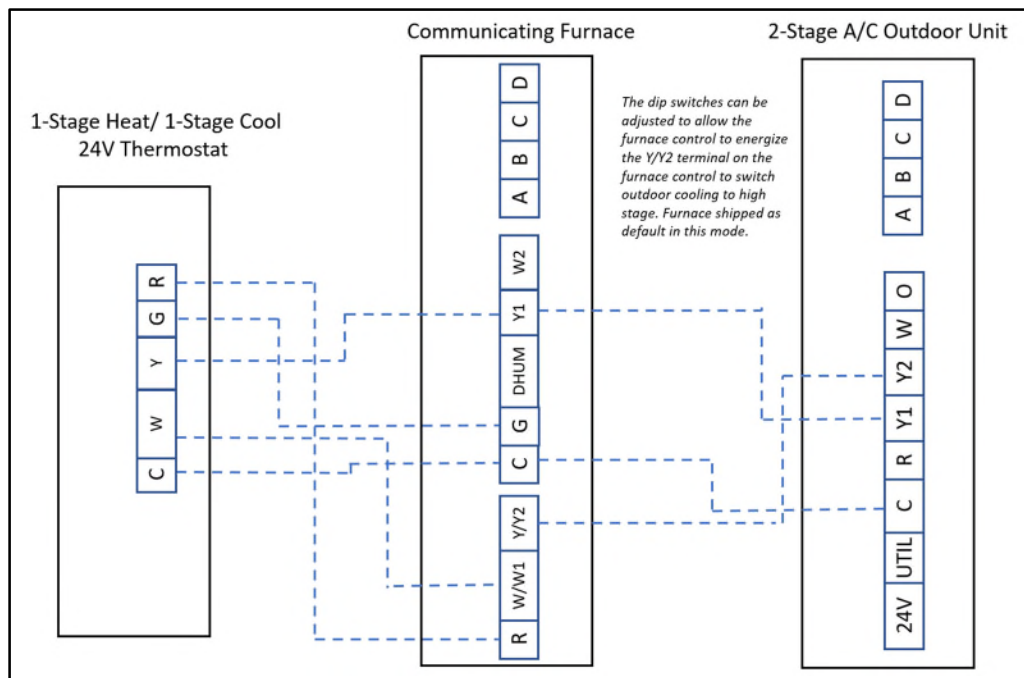
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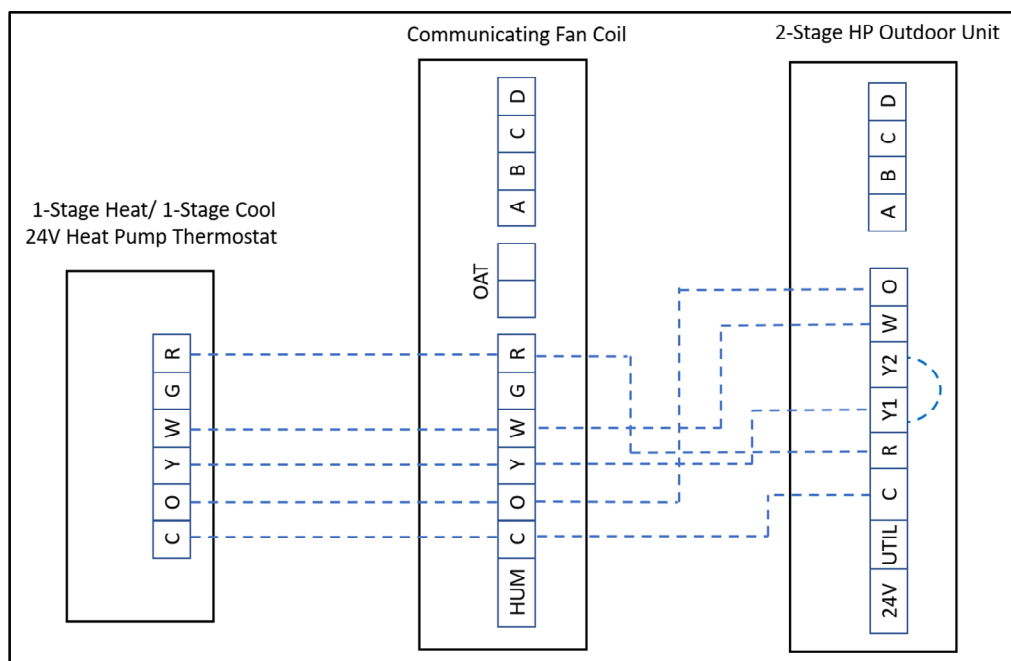
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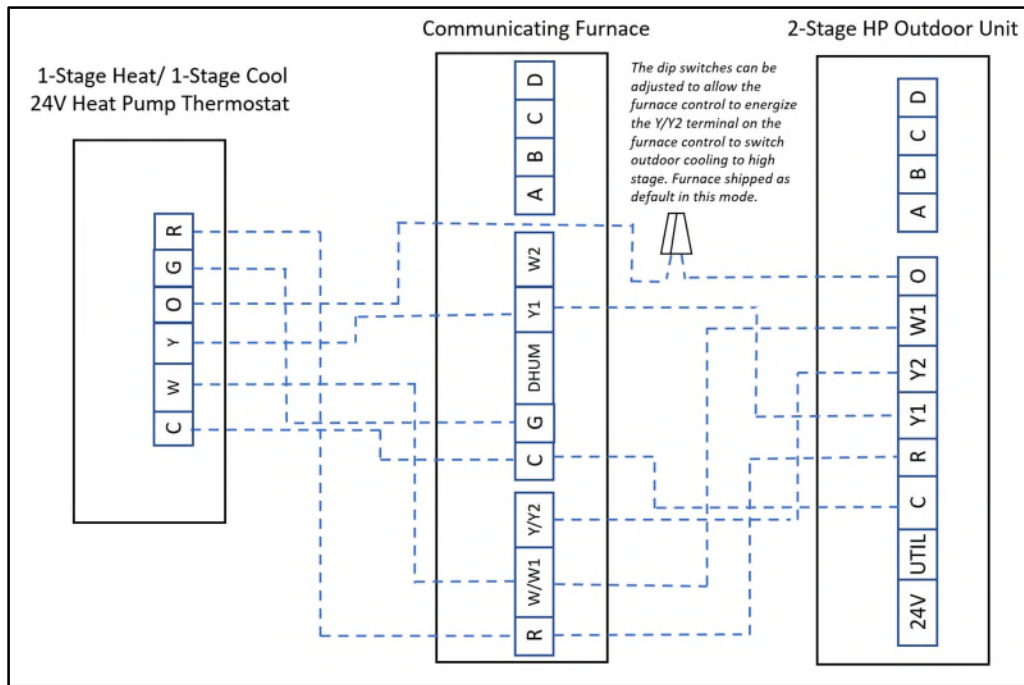
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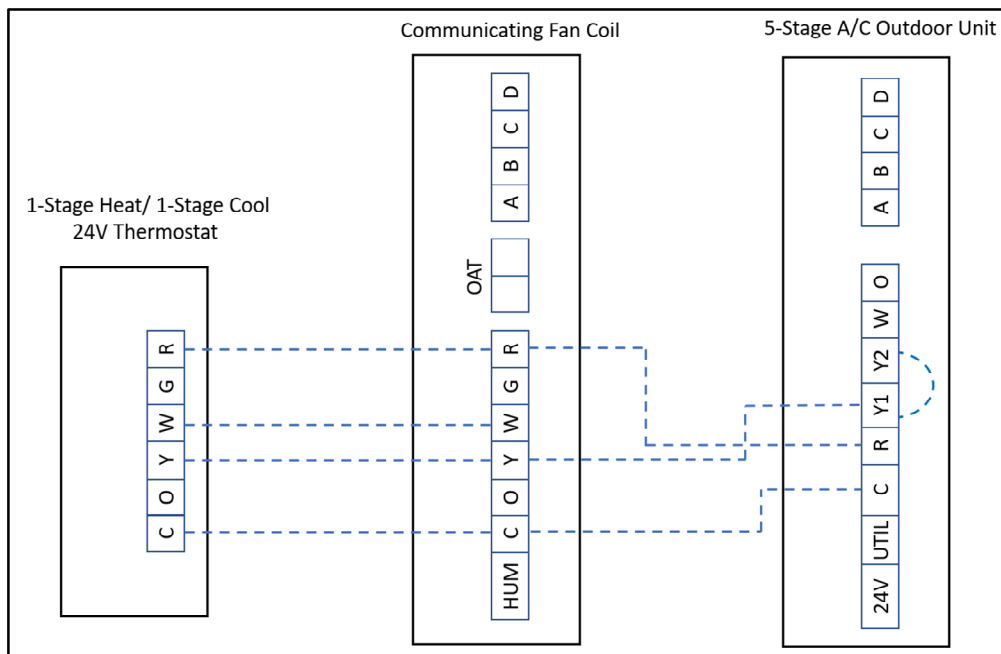
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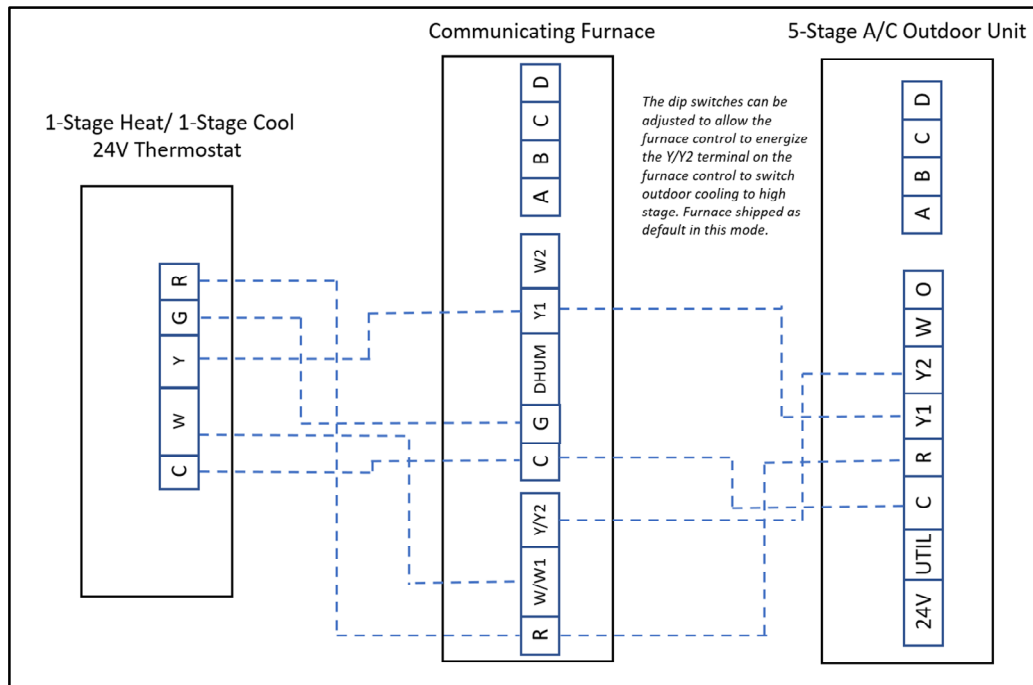
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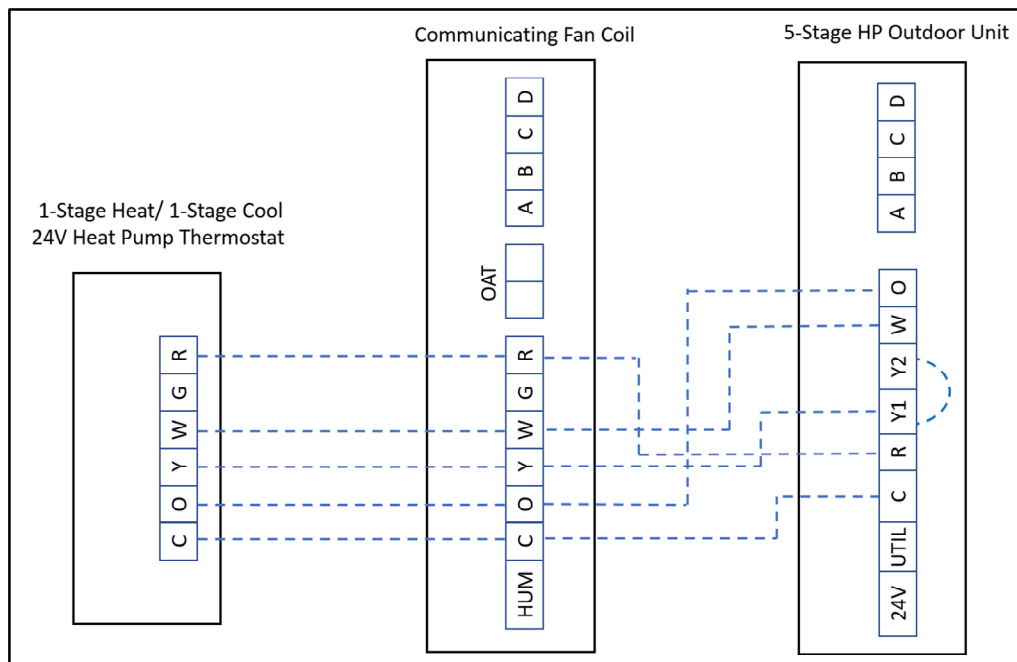
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(Figure 8)

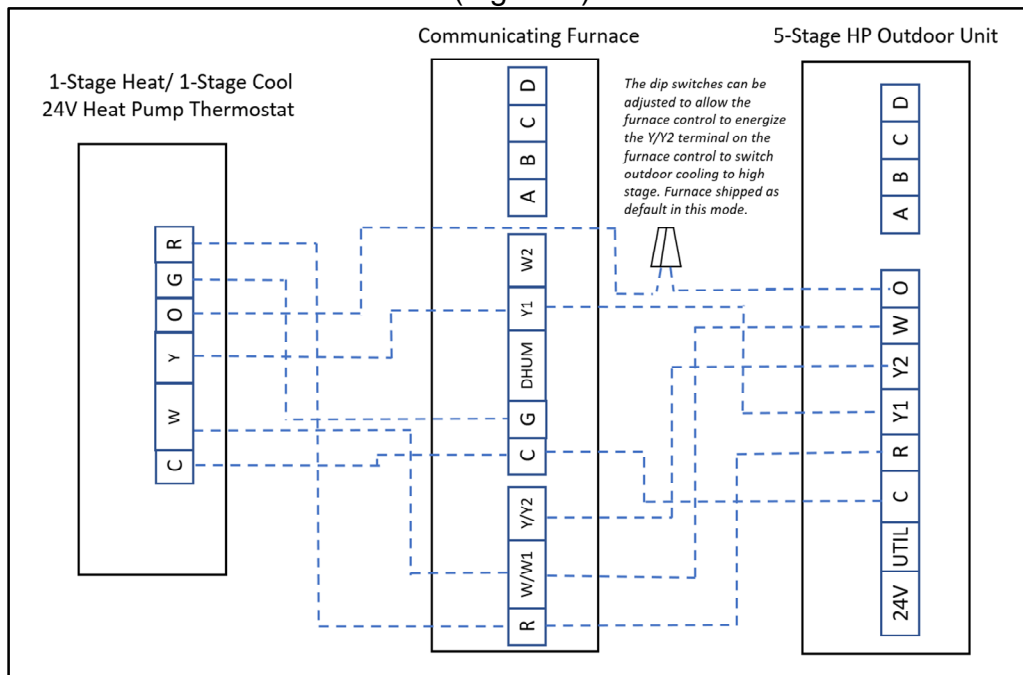


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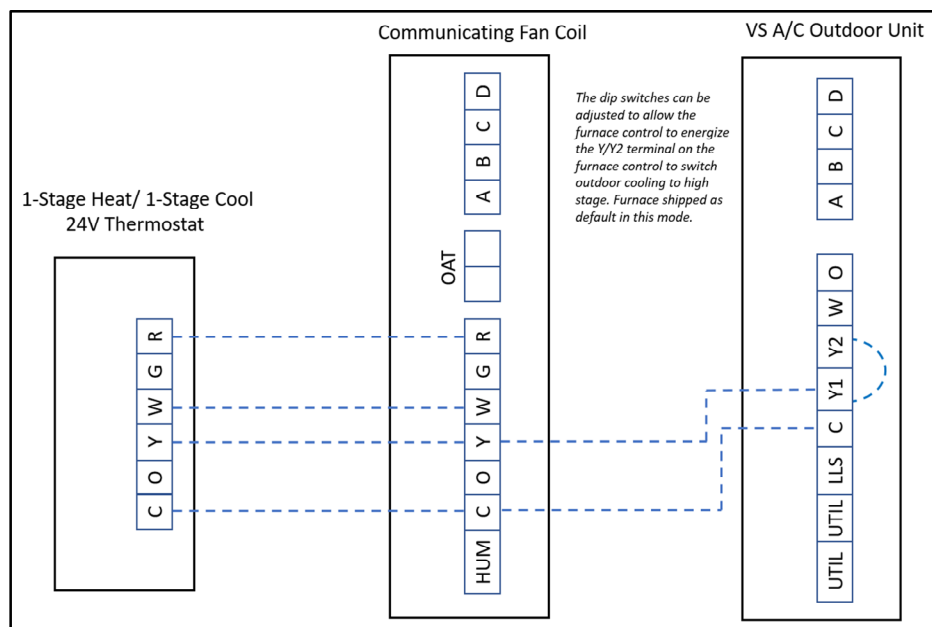
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(Figure 9)



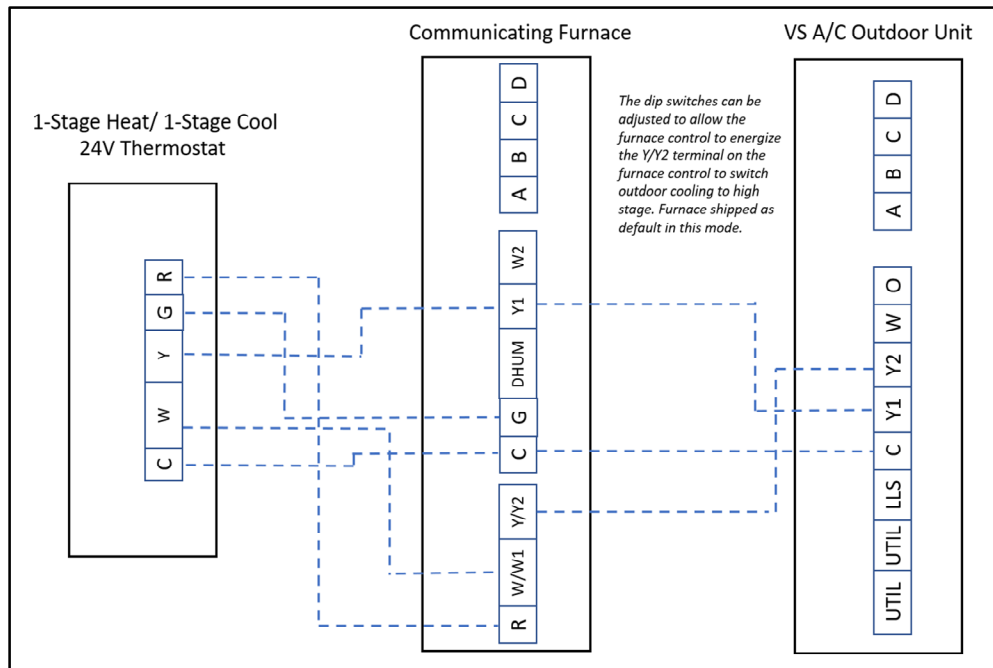
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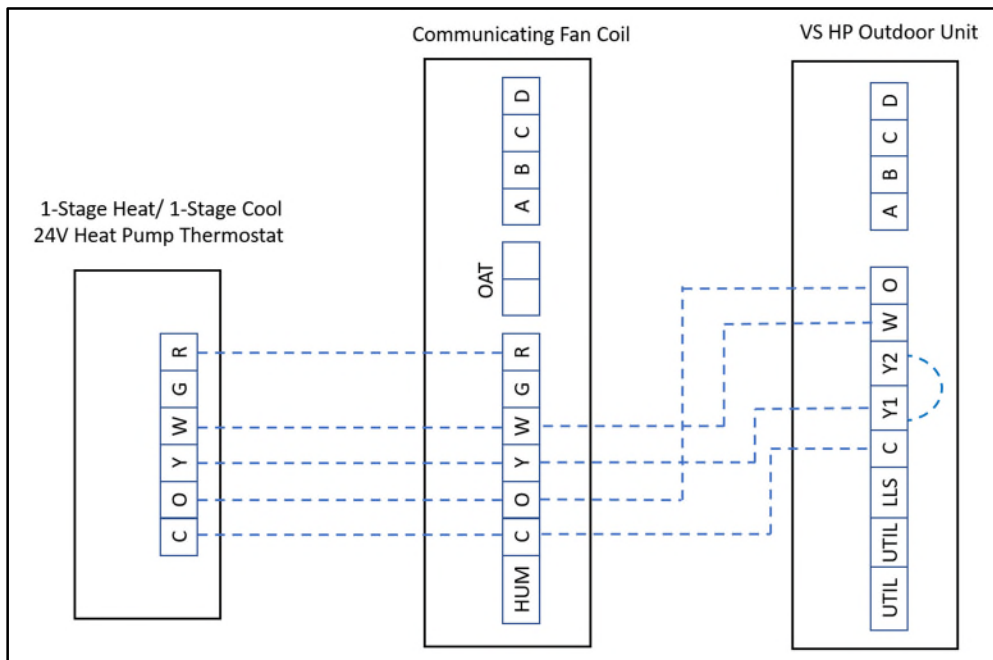
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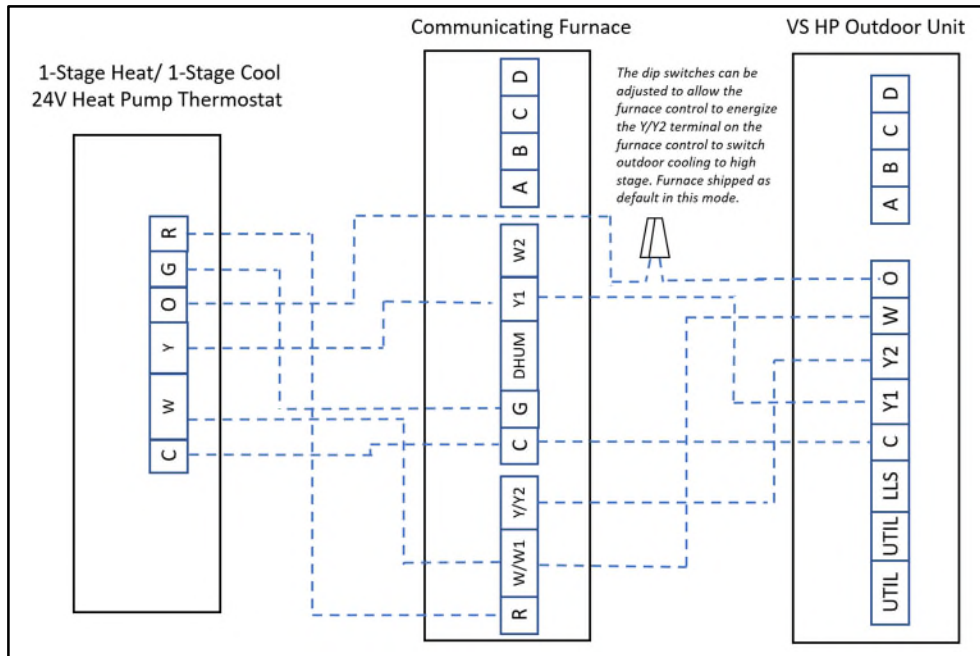
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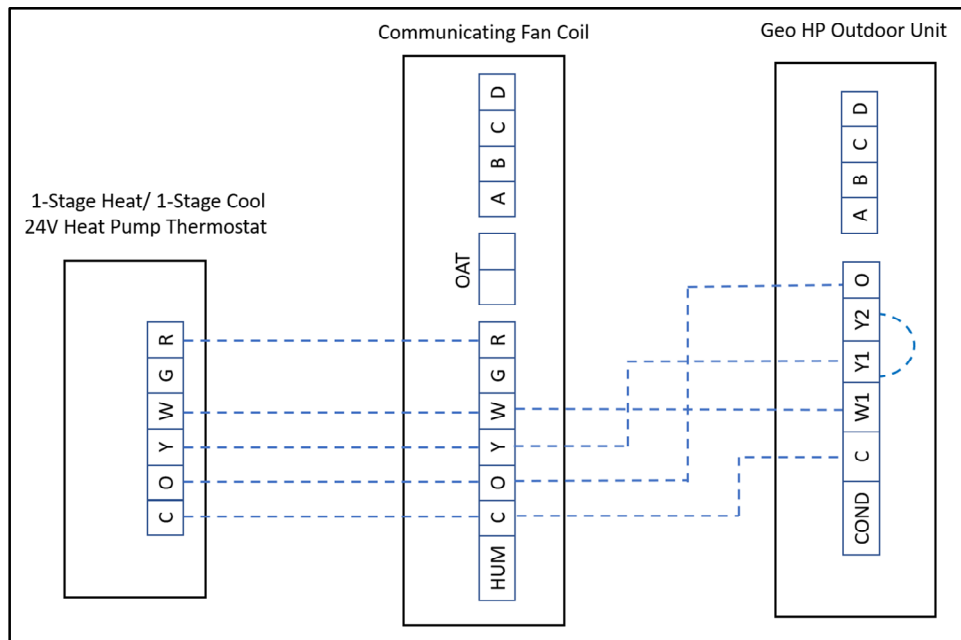
(Figure 13)

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(Figure 14)



(Figure 15)

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TECHNICAL INFORMATION COMMUNICATION



Appendix A

Date	Subject	Department
5/28/2021	Infinity® System Control Shortage	Product Marketing
Bulletin Number	Product Model Number(s)	Author Name/Email
101-21-34	SYSTXCCITC01-B, SYSTXCCWIC01-B, SYSTXCCICF01-B, SYSTXCCWIF01-B	Frank.David@carrier.com

Infinity® System Control Shortage

The widespread global commodity shortage, along with a recent fire in the supplier's processor chip factory, have significantly impacted lead times and available quantities of wall controls.

Temporary Solution: Due to supply constraints, Carrier is recommending that all single stage, 2-stage and 5-stage Infinity® 18/19VS systems with a gas furnace be installed with a temporary 24V thermostat provided by distribution (see AHRI for rated combinations). A homeowner's existing 24V thermostat may also be used, if compatible. These systems will only perform up to their non-UI AHRI ratings until dealers can return to swap for the Infinity system control once inventory increases.

Exceptions: Any system with the Infinity® 26/24 with Greenspeed® Intelligence OR FE fan coil MUST be installed with an Infinity system control, which will ship to distribution one-to-one based on 26/24 unit shipments. FE fan coil ratings and additional rated combinations of systems using a 24V thermostat are being reviewed.

Timing: Supply constraints are expected through the remainder of 2021 and we anticipate being able to support monthly shipments of new Infinity equipment sales by November/December.

Program Details: Carrier will fund a \$120 temporary control labor rebate to dealers for new Infinity systems sold June 1 through October 31 that require a temporary 24V thermostat. The rebate will be given after the 24V thermostat is replaced by the Infinity system control. Carrier will continue to evaluate the program for need as stock of controllers normalizes. To participate, distributors must [opt in by emailing Gavin.Larson@carrier.com](mailto:Gavin.Larson@carrier.com). Carrier will then complete enrollment and [dealers must submit a claim](#) after 24V thermostat replacement. Consumers shall not be subject to the 100% satisfaction guarantee if the issue is a result of

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TECHNICAL INFORMATION COMMUNICATION



the temporary control but will be once the Infinity system control is installed. Speak to your RSM for full program details.

Eligibility: All dealers are eligible if their distributor has opted in.

Sales Period: 6/1/2021 – 10/31/2021

Claiming Period: 6/1/2021 – 12/15/2021

Temporary Control Labor Rebate: \$120 (100% factory funded)

Requirements:

- Infinity unit / system
 - Model Number
 - Serial Number
- Infinity system control (once available)
 - Model Number
 - Serial Number

Warranty Information: While inventory is impacted, warranty replacements will not be provided by the factory. Instead, existing Infinity system controls requiring warranty replacement will follow the same process as new 18/19VS sales. Controls will be swapped with a temporary 24V thermostat provided by distribution.

Additional Resources:

- [Talking Points for Homeowners](#)
- [Semiconductor Equipment Maker at Center of Global Chip Shortage](#)

Model Numbers:

Air Conditioner	Heat Pump	Furnace	Fan Coil	Geothermal
24VNA0	25VNA0	58TN0	*FE	*GC
*24VNA6	*25VNA4	58TN1		
24VNA9	25VNA8	59MN7		
24ANB1	25HNB6	59TN6		
24ANB7				
24ANB6				

*Control stock reserved for new sales of the Infinity 26, GC and FE fan coil to maintain optimal performance.

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TECHNICAL INFORMATION COMMUNICATION



Recommended Thermostats (Note: Any 24V 2-stage thermostat will work):

Carrier Co-Branded	Description
EB-STATE5CR-01	ecobee Smart Thermostat Pro with voice control powered by Carrier
EB-STATE3LTCR-01	ecobee3 lite Pro Powered by Carrier
TC-NHP01-A	Edge Thermostat (sold through RC)
TC-PHP01-A	Edge Thermostat (sold through RC)
TP-NRH01-B	Edge Thermostat (sold through RC)
TP-PHP01-A	Edge Thermostat (sold through RC)
TP-PRH01-B	Edge Thermostat (sold through RC)

Features affected when using a temporary 24V thermostat to control an Infinity system:

- No operation of Infinity® zoning equipment (all dampers must be fully opened)
- Humidity control reduced to a single speed or 2-stage system capability
- Temperature control reduced to a single speed or 2-stage system capability
- Energy tracking not available and history will not be saved for new control
- Last 10 faults will be empty when the new control is connected
- The unit will not show up on the dealer portal unless an ecobee powered by Carrier thermostat is selected, but it won't have information other than what's provided for non-Infinity systems.

Wiring information for temporary 24V thermostat (details found in installation instructions):

- Infinity 2-stage and 18/19VS as a 2-stage system with furnace
 - Infinity furnace 2-stage 24V
 - TSTAT capable of 2-stage operation
 - Wire Y1 and Y2 at OD
 - Use Y and Y/Y2 at stat
 - Use Y1 and Y2 at the furnace
 - TSTAT capable of 1-stage operation
 - Wire Y1 and Y2 together at OD
 - Use Y at stat
 - Jumper Y1 and Y2 together at the furnace

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TECHNICAL INFORMATION COMMUNICATION



Appendix B:

Date	Subject	Department
5-28-2021	Evolution™ Connex™ System Control Shortage	Product Marketing
Bulletin Number	Product Model Number(s)	Author Name/Email
BY-103-21-30	SYSTXBBECC01-B, SYSTXBBWEC01-B, SYSTXBBECF01-B, SYSTXBBWEF01-B	Frank.David@carrier.com

Evolution™ Connex™ System Control Shortage

The widespread global commodity shortage, along with a recent fire in the supplier's processor chip factory, have significantly impacted lead times and available quantities of wall controls.

Temporary Solution: Due to supply constraints, Bryant is recommending that all single stage, 2-stage and 5-stage Evolution™ 18/19VS systems with a gas furnace be installed with temporary 24V thermostats provided by distribution (see AHRI for rated combinations). A homeowner's existing 24V thermostat may also be used, if compatible. These systems will only perform up to their non-UI AHRI ratings until dealers can return to swap for the Evolution Connex system control once inventory increases.

Exceptions: Any system with the Evolution™ Extreme Variable Speed 26/24 with Puron® Refrigerant OR FE fan coil MUST be installed with an Evolution Connex system control, which will ship to distribution one-to-one based on 26/24 unit shipments. FE fan coil ratings and additional rated combinations of systems using a 24V thermostat are being reviewed.

Timing: Supply constraints are expected through the remainder of 2021 and we anticipate being able to support monthly shipments of new Evolution equipment sales by November/December.

Program Details: Bryant will fund a \$120 temporary control labor rebate to dealers for new Evolution systems sold June 1 through October 31 that require a temporary 24V thermostat. The rebate will be given after the 24V thermostat is replaced by the Evolution Connex system control. Bryant will continue to evaluate the program for need as stock of controllers normalizes. To participate, distributors must [opt in by emailing Gavin.Larson@carrier.com](mailto:Gavin.Larson@carrier.com). Bryant will then complete enrollment and [dealers must submit a claim](#) after 24V thermostat replacement. Consumers shall not be subject to the 100% satisfaction guarantee if the issue. Only trained and qualified personnel should design, install, repair and service HVAC systems and equipment. All national standards and safety codes must be followed when designing, installing, repairing and servicing HVAC systems and equipment. It is the responsibility of the Dealer to ensure local codes, standards, and ordinances are met.

TECHNICAL INFORMATION COMMUNICATION



is a result of the temporary control but will be once the Evolution Connex system control is installed. Speak to your RSM for full program details.

Eligibility: All dealers are eligible if their distributor has opted in.

Sales Period: 6/1/2021 – 10/31/2021

Claiming Period: 6/1/2021 – 12/15/2021

Temporary Control Labor Rebate: \$120 (100% factory funded)

Requirements:

- Evolution unit / system
 - Model Number
 - Serial Number
- Evolution Connex system control once available
 - Model Number
 - Serial Number

Warranty Information: While inventory is impacted, warranty replacements will not be provided by the factory. Instead, existing Evolution Connex system controls requiring warranty replacement will follow the same process as new 18/19VS sales. Controls will be swapped with a temporary 24V thermostat provided by distribution.

Additional Resources:

- [Talking Points for Homeowners](#)
- [Semiconductor Equipment Maker at Center of Global Chip Shortage](#)

Model Numbers:

Air Conditioner	Heat Pump	Furnace	Fan Coil	Geothermal
*186CNV	*284ANV	880T	*FE	*GC
189BNV	280A	935CA		
180B	286B	987M		
187B	288BNV	986T		
186B				

*Control stock reserved for new sales of the Evolution Extreme 26, GC and FE fan coil to maintain optimal performance.

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Bryant Co-Branded	Description
EB-STATE5BR-01	ecobee Smart Thermostat Pro with voice control powered by Bryant
EB-STATE3LTBR-01	ecobee3 lite Pro Powered by Bryant
T2-NHP01-A	Edge Thermostat (sold through RC)
T6-NRH01-B	Edge Thermostat (sold through RC)
T6-PRH01-B	Edge Thermostat (sold through RC)

Features affected when using a temporary 24V thermostat to control an Evolution system:

- No operation of Evolution™ zoning equipment (all dampers must be fully opened)
- Humidity control reduced to a single speed or 2-stage system capability
- Temperature control reduced to a single speed or 2-stage system capability
- Energy tracking not available and history will not be saved for new control
- Last 10 faults will be empty when the new control is connected
- The unit will not show up on the dealer portal unless an ecobee powered by Bryant thermostat is selected, but it won't have information other than what's provided for non-Evolution systems.

Wiring information for temporary 24V thermostat (details found in installation instructions):

- Evolution 2-stage and the 288/189 BNV as a 2-stage system with furnace
 - Evolution furnace 2-stage 24V
 - TSTAT capable of 2-stage operation
 - Wire Y1 and Y2 at OD
 - Use Y and Y/Y2 at stat
 - Use Y1 and Y2 at the furnace
 - TSTAT capable of 1-stage operation
 - Wire Y1 and Y2 together at OD
 - Use Y at stat
 - Jumper Y1 and Y2 together at the furnace

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