

Unitary Products Technical Services Special Program Letter

Letter: **YS-SP01-2018**

Date: January 10, 2018

To: Chris Lockhart

Virginia Air Distributors

Midlothian, VA

For Distribution to select Channel Partners only, Not for General Publication.

Subject: Notification of Two Stage Furnace Board Issue – Component failure in limited,

specific production quantities of units.

Product: TM8Y, RGF2L, TM9Y, & RGF29 Two Stage Standard ECM Residential Gas

Furnace Models

Summary: This letter is in follow up to YS-SP06-2017 and YS-SP07-2017 and provides additional

information to be used for furnace inventory rework related to blower motor wiring

and control board return process.

Due to the availability of control board S1-33103494000 at the distribution level, some controls were "borrowed" from known good furnaces in customer inventory based on control board date codes to provide service parts for equipment already installed. There is also the need to re-work affected distributor inventory based on unit serial numbers provided in the previous YS-SP letters listed above.

All wiring connections on the furnace control for the two stage standard ECM gas furnace are the same with the exception of some indoor blower motor speed taps. Although speed taps should always be adjusted in the field at time of furnace installation based on external duct static pressure, outdoor unit capacity, (if applicable) and temperature rise during gas heating operation, the blower speed taps should be placed on the factory speed tap settings during furnace re-work.

The unit wiring diagram is the same for all two stage standard ECM gas furnaces regardless of specific furnace model. Below is an image of the notes on the unit wiring diagram. Note 2 references motor speed tap settings.

NOTES:

- If any of the original wire as supplied with the furnace must be replaced, it must be replaced with wiring material having a temperature rating of at least 221 degrees F (105 degrees C).
- Blower motor speed connections shown are typical, but may vary by model and application.

When performing re-work on affected furnaces (control board replacement) use the tables listed below for proper indoor blower motor factory speed tap settings.

Factory wiring – blower motor speed taps – 80% models:

INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
60	1200	RED	GRAY	BLU	YEL	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
80	1600	RED	GRAY	BLU	YEL	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
80	1200	RED	BLU	BLK	YEL	GRAY
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
100	1600	RED	BLU	BLK	YEL	GRAY
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
100	2000	RED	GRAY	BLU	YEL	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
120	2000	RED	BLU	BLK	YEL	GRAY

Factory wiring – blower motor speed taps – 90% models:

INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
40	1000	YEL	RED	BLK	BLU	GRAY
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
60	1200	YEL	RED	BLU	GRAY	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
80	1200	RED	YEL	BLU	GRAY	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
80	1600	RED	YEL	GRAY	BLU	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
100	1600	RED	GRAY	BLU	YEL	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
100	2000	RED	YEL	BLU	GRAY	BLK
INPUT	CFM	PARK	LO HEAT	HI HEAT	LO COOL	HI COOL
120	2000	RED	YEL	BLU	GRAY	BLK

We have received several inquiries as to whether or not control boards replaced on your inventory units need to be returned to us. We have confirmed with the vendor that we do want suspect control boards returned to us for analysis. Controls must be returned to our Warranty Return Center at the following address:

Johnson Controls Inc. 801 E. 37th Street North Building 6, Dock 12 Wichita, Kansas 67219

Attention: Eric Joseph

Please use UPS Ground (account #89V4F9) when shipping these controls back to us.

We will advise further information as it becomes available.

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