

PRODUCT BULLETIN



Date: 9/19/02

Subject: New 80 Q&A

Dept: RLCS Marketing

Number: BY-103-02-40

Product Model No.
310AAV/JAV; 311AAV/JAV
312AAV/JAV; 315AAV/JAV

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With our new shorter, quieter, lighter and more versatile 80% furnace, we have been asked some questions as more and more dealers become familiar with the design. Some questions may apply to your market as well.

Flanges

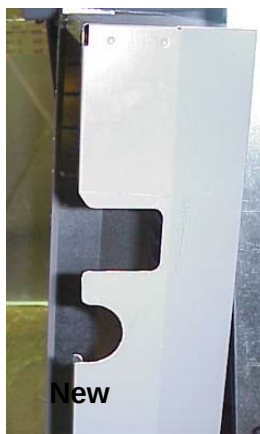
One of the frequently asked questions relates to the required **bending of the supply flanges**. We have some very good news from two different perspectives. The first is that we have adjusted our dies to increase the lance depths, which means the flanges are easier to form (they can be formed by hand). We have also developed a method for checking the flanges to give you as consistent a part as possible.

Additionally, although it is preferred practice to bend the flanges, we have determined that **it is not mandatory to bend the supply flanges** (for some installation applications, coil alignment is certainly made easier when the flanges are formed, and fortunately, they are now easier to bend).

Door Cut-Outs

We are also working on additional improvements to the product, including:

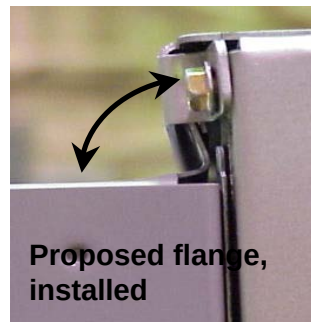
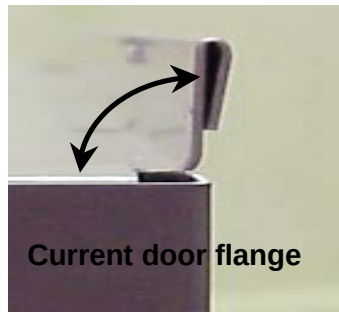
- Changing the left side door cut-outs for gas and electrical to be "holes"
- Revising the door top flue cut-out to be a hole (this will require a factory installed patch plate).



Proposed Door Hole Design- Electrical and Gas Left Side Entry

Door Fit

To improve the outer door fit up, as well as to reduce the likelihood of rattles, we are adjusting the flange on the outer door that inserts into the bottom plate. The result is a tighter fit of the door to the casing/bottom plate. This change will be implemented this week, barring any unforeseen barriers.



Proposed “Over bent” door flange to improve door tightness fit

Please stay tuned, as we will keep you informed regarding the confirmation and timing of these revisions.

Here are some additional questions and answers generated thus far. If you have additional ideas or answers, please provide them to us, so that we can share your ideas with your peers.

Q: The entry-level furnace doesn't come with a filter. That puts our brand at a disadvantage, doesn't it?

A: See the comparison below.

Competitor Filter Provision

MFR	Amana	Lennox	Trane	Goodman	York	ICP	Rheem
Builders Models	GCIC GUIA GUIB GUIC	G40	TUE TUD TDE	GPD GMP	PGDN PGHU	NDN6 NDC7	RGPH
Factory Supplied Filter	No Filter	No Filter	No Filter	No Filter	No Filter	No Filter	Filter (foam)

Q: There are no provisions for mounting a filter internally.

A: This is true, addressing the number one complaint homeowners have about furnaces: filter access. This is also true of many of the competitors listed above.

Although no one external filter arrangement fits all RNC applications, some choices are:

- Media cabinet (FILCAB)
- One Inch External Filter Rack (KGAFR0306ALL)
- Incorporate a rack in the return ductwork
- Filter grills

Q: This new furnace is shorter, and in Upflow RNC applications, ductwork has to be increased. That means more installation cost, doesn't it?

A: Several options are available, to either abate the impact, or take advantage of the shorter furnace height.

- Use a media cabinet on bottom return applications, along with perhaps a 1" filter for installed cost control. For future profit, include a sticker informing the homeowner that a media filter is available through the dealership. The media cabinet fills 5-3/4" of the 6-2/3" inches of height reduction. In addition, margins from the sale of the first EZ-Flex filter offset costs, and future margins from additional media filter sales generate a bonus and long-term revenue stream. Plus, the homeowner enjoys cleaner air and easy filter access.
- Use the height reduction to your advantage. Consider suspending the furnace in horizontal orientation if possible, providing the homeowner valuable floor space below. Or, consider placing the furnace on a shelving unit, storage cabinet, or roughed in platform of adequate strength. This approach may actually reduce ductwork cost, especially if side return is utilized, and increases homeowner satisfaction with usable storage space.
- The worst case cost impact is an additional three square feet of sheet metal, and possibly two rails to accept a filter, if no new installation method is used.

Q: The cutouts for the venting, electrical and gas pipe take additional time, and that's extra cost, correct?

A: It takes less than a minute for each cutout. Alternatively, knockouts are available for electrical on the casing left side, and for gas on the casing right side. The situation will certainly improve when the aforementioned door modifications are implemented.

Q: In RNC applications, Plumbers and Electricians aren't as skilled or well equipped as Heating Contractors to cut out the openings in the doors.

A: Have the Heating Installation crew cut out the openings beforehand. Or, better yet, have the Heating start up crew perform the cutouts after the Plumbers and Electricians have completed their connections.

Q: To connect vent pipe, the connection at the vent elbow is inside the furnace. B vent can't be connected directly to the vent elbow, because the cutouts in the doors aren't large enough to accommodate B-vent.

A: Approximately four-inch long section of single wall 3" diameter vent pipe is all that is required for most applications. Alternatively, draft hood connectors such as Selkirk's 4RV-DH Draft Hood Connector may be used. Other draft hood manufacturers part numbers will be communicated as we obtain that information. As an example, we are already working with American Metals, and Metal Fab at this time.

Q: Torsion Flex motor mounts caused many problems for competitors. Why did we adopt them?

A: The design now used on our new 80% furnace is a custom design that endured much testing. The commonly available version failed our safe transit tests, so we teamed up with General Electric's Engineering staff and our own highly skilled staff to create many improvements. For example, we discovered that revising the top arm orientation from 12 o'clock to 11 o'clock made a tremendous impact on the endurance of the mounting system. "Axial" position of the arms as located on the motor shell also greatly impacted blower system durability. These facts were demonstrated in both safe transit tests, and in our reliability labs, where 32 blower assemblies have been cycling on and off since November of 2000, and have collectively endured over 6,000,000 on/off cycles.

Q: How Quiet is this new furnace?

A: This furnace is 50% quieter than our previous line of products. Independent testing is being pursued, but recent in-house testing of one model size indicates that in low fire, where two stage furnaces operate most, our furnace is the quietest among those tested, including the brand making a claim to be the quietest. In addition, our single stage furnace is quieter than any brand we've tested, including the aforementioned competitor brand. We believe our new line of furnaces to be the quietest full line available, and we intend to prove this with independent lab testing.

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