



BARKER

Electric

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*"For the Best
in Service"*

To Our Valued Service Agreement Customers,

This letter is an overview, concerning the HVAC industry's mandate which will take effect in 2010. All new equipment manufactured will feature a 410A freon. This is a monumental change in the HVAC world. The current and most common freon of choice, R-22, has been a proven and tested commodity which has served the industry well. R-22 will not be manufactured in new equipment by any air-conditioning manufacturer i.e. Trane, Rheem, Carrier, Lennox, etc., after December 31, 2009. Starting January 1, 2010, all equipment produced will be compatible with 410A freon only. R-22 will be available on the open market, purchased by compliant air conditioning businesses until January 1, 2020. This is to ensure the upkeep and maintenance of all R-22 equipment currently in the market place. Listed below are some major concerns and solutions Barker Air Conditioning will use to address the situation:

How does the change to 410A freon affect me?

Both pieces of equipment in "split systems," the outside condensing unit and the inside air-handler, need to be 410A equipment. Florida's outdoor climate and our proximity to the ocean and its salt air cause an enormous rust problem. The outside condensing units suffer the most from these weather conditions and are more likely to have irreparable freon leaks, causing them to be replaced. The inside air-handler has a longer life cycle than the weather exposed condensing unit. We have always recommended our customers to get the full life out of their units, running them until they fail. This has led many people to replace the air-handler and condensing units at different times. This has never been a problem, as brands have always been compatible; a Rheem air handler could be matched with a Trane condensing unit, and different seer rated equipment have always been compatible; a 10 seer air-handler could be matched with a 13 seer condensing unit. This changes with 410A equipment because both pieces have to be made for 410A, and there are no exceptions. In 2011, if you have an R-22 system and your outside condensing unit has an out-of-warranty compressor which needs to be replaced, you are going to have to replace the inside air-handler as well. There will be no alternatives.

Another major point of concern is the copper line set which connects your air-handler to your condensing unit. The copper lines which connect the two pieces are the original, installed when the house/condo was built. This copper line set transfers the freon between the two pieces of equipment and is coated with R-22. When changing an R-22 system to a 410A system, there are two options in dealing with the line set. 1) The most ideal option is to replace the line set when replacing your system. This ensures that the proper sized copper lines are installed and have never had R-22 within them. The drawback for the consumer is that this can be a costly procedure, given the high price of copper as well as the accessibility of running the new lines. 2) The next option is less costly to the consumer; that is to flush out the freon lines with a 410A flush kit. There are many brands out on the market: presently, Barker has experienced success with a flush kit made by Ace. We converted fifteen R-22 systems to 410A systems, using this Ace flush kit successfully. The flush kit is not 100% effective as is changing out the copper lines all together, but so far the results have been encouraging.

However, the size and condition of the copper line set are also a concern for 410A freon. 410A produces a greater pressure on the copper line set and equipment than the R22. With most copper line sets being enclosed in slabs or chases, they are not visible and one can not clearly detect its condition. There will be no guarantee

that the high pressures from the 410A freon will not cause any leaks or ruptures in an older copper line set. The replacement of the copper lines will be unavoidable in certain cases.

If I have an older air conditioning system or one of my pieces of equipment (air handler or condensing unit) is significantly older than the other, what should I do?

This is a situation which many people are facing; the good news is that there are options. If your system as a whole (both pieces) is over 8 years old or out of warranty and is entering the end of its life cycle, you have two options: 1) You can run the system until it fails, and then change the system as a whole to 410A equipment or 2) You can change your system out for another R-22 system. Why would we even recommend this option if R-22 is being phase out? We know that R-22 is a proven commodity. Our technicians have been working, troubleshooting, and installing R-22 equipment since the inception of our business. Over 90% of our customers have R-22 systems. We are learning more about 410A freon every day, and we will certainly learn more about it as it starts to enter the market in larger quantities. Trane will stand by the warranty of all R-22 parts, including compressors, evaporator coils, and condensing coils. One drawback might be a rising cost of R-22 as its production decreases until its extinction in 2020, but we have seen numerous R-22 "drop-in" freons that are compatible with R-22 systems. By the time you are ready for your next air conditioning system (2020), 410A will have been the feature equipment on the market for over 10 years; we will know all aspects of its operation. It is one thing for manufacturers to tell you about 410A freon and to give classes about it, but the true test will be when it hits the market in massive quantities for both commercial and residential application. If you have a situation where one piece of air conditioning equipment is significantly older than its counterpart, you should strongly consider replacing the older piece within the next year. An example would be if you're inside air-handler is 12 years old and just last year your compressor went bad and you changed your outside condensing unit. In 2009, you will have a 13 year old air handler and a 1 year old condensing unit. You really should change out that air-handler to avoid a possible problem that is imminent. If your air-handler gives out in 2011, you need to install a new 410A air-handler because that is what is available; R-22 air-handlers are now extinct. You would have to replace that 3 year old R-22 condensing unit because you cannot have a 410A air-handler with an R-22 condensing unit. Barker Air Conditioning does not want to see a customer of ours only get three years on their condensing unit investment. Many people have a decision to either stay with R-22 now, and invest in keeping it or allow their unit to run its course. When it is time for 410A, then that is what you will purchase.

When will R-22 cease to be available?

Barker Air Conditioning will stand behind Trane and Rheem brands which we install. We are a Trane Comfort Specialist; Trane is the product we believe in and have had the most success. Trane is committed to continue to manufacture R-22 equipment through September 2009. At that point, they will start to turn their factories over to ensure they are tooled for 410A equipment, and the R-22 equipment produced from October-December 31, 2009, will be limited. Rheem is getting out of R-22 equipment much earlier and will cease to manufacture R-22 product after August 31 of this year. We will be carrying Trane R-22 products through 2009, but we recommend not to wait until the latter part of the year to make a decision. The supply will be limited, depending on expediting the product.

What other concerns should I have?

A big concern of the consumer should be rogue air-conditioning companies and technicians. You need a special refrigerant license to be able to work with 410A. You also need to make sure that you are dealing with a company who has proven itself and knowledgeable technicians who have attended classes on the troubleshooting of 410A product. Within our new building, a classroom has been established, and we are requiring all of our technicians to take 5 classes on 410A, taught by our product representatives. As a Trane Comfort Specialist, we have the full support of one of the HVAC industry's top name brands to keep us updated with any information we need. Our biggest fear is the HVAC outfits who could walk up to an R-22 system and start using 410A or vice versa. This could be not only detrimental but also costly for your air conditioning unit.

I appreciate this information, but still have more questions. Whom may I call for more information?

I realize I can not address all of the 410A concerns in a brief letter. I have tried to cover as many main points as possible. If you have any questions or concerns or would like more information on this situation, please call the office at your convenience. Please inform the girls the call is in reference to the "410A change," and they will connect you to the right party. All questions in the Sebastian area should be directed to that office at 589-9899.

Hopefully, this letter has educated you, regarding this major change in the HVAC industry. We, at Barker Air Conditioning, appreciate all of our customers and want to continue helping you with all of your HVAC needs. We believe we are the elite HVAC Company in Indian River County, and one you know you can count on for the best service. Please stop by and visit us in our new building. You will be glad to know that your HVAC Company is here for the duration, satisfying all of your needs and concerns.

Sincerely,

JW Colontrelle
General Manager
Barker Air Conditioning