

## 10 Helpful Hints for Coil Replacement – Volume # 3

Below is a list of things that you need to know in order to replace coils adequately. These are just some helpful hints that will make your job easier.

- (1) You rarely have to worry about performance on a replacement coil. The “Laws of Physics” dictate that if you duplicate the face area, fins, and circuiting on a coil, then you automatically duplicate the performance.
- (2) Performance Part 2 – Coils make great filters and when you take an old, inefficient coil out of service that has rarely been cleaned, you don’t have to worry about performance. The replacement coil that you can supply will probably give you about 50% more performance than the one you replaced. You don’t really have to do much to look like a hero.
- (3) Connection sizes and locations are easily the most difficult part of the coil to duplicate. This is particularly true if the coil is still in service. What you probably haven’t considered is that often when the coil is replaced, so is the piping. You only have to get the connections in approximately the same location. But you’ll never know if you don’t ask. About ½ the time you don’t have to be exact, because the valves and piping will be replaced also.
- (4) You can make a coil last 50% to 100% longer by simply increasing the wall thickness of the tubes and return bends. The cost to do this often is less than 20% of the coil. If I told you that you could double the life of a coil for only a 20% add, would you do it? Of course!
- (5) Pricing a coil is no big deal. You only need to know the coil type (steam, water, etc.) rows, fins, height and length and you can work up an accurate price. There is much additional information that you need to actually build the coil. Things like depth, connection size and location, casing dimensions, etc. have no effect on price.
- (6) Lots of coils never have to be field measured. The beauty of replacing Carrier, Trane, McQuay or York coils is that once you have the coil model number, you know exactly what the coil is. Large manufacturers are production oriented and everything has to be the same. It takes the mystery

out of figuring out what's in the unit. Of course, the secret is to be actually able to get the model number.

- (7) The coil model number is not the same as the unit model number. It's not enough to just get the model number of the air handling unit. There are many varieties and sizes of coils that go into any unit. The secret is to get the coil model number. It sounds easy, but it's not. There is no easy place to put a tag on a coil. Many coils don't have them, and if they did, they fell off a long time ago. Often you have to find the original approved drawings, or some records that clearly indicate what's there.
- (8) Should you rely on "a coil expert" to give you accurate information on a coil replacement? Only if you have a high tolerance for pain! There are not a lot of highly trained, technical people out in the field who can give you good reliable information. You usually have to gather this information yourself.
- (9) Circuiting coils exactly is a difficult proposition. Just know that you're trying to feed the same number of tubes as the old coil and it really doesn't matter how you do it. We've had people send in drawings with every return bend traced in to show us every exact tube and tube pattern. It doesn't matter. Performance is a function of how many tubes you feed and how fast the water is traveling through the coil. It has nothing to do with which tubes you feed. It's not necessary to get too fancy.
- (10) Lastly, when you need to replace a coil, just call USA Coil & Air. We replace thousands of coils every month and the people you will talk to have been doing this for 20 years. I can almost promise you that no matter what your coil looks like, one of our guys at USA has seen it before. We'll make your job a lot easier.



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