Duct Cleaning Procedure

1). Ask the customer to show you where the furnace is located. What you are looking to see is how the equipment is going to have to be set up. You are also looking at all the different runs coming off the furnace, if there are any crawlspaces, basically diagnosing the job. Is the basement finished or unfinished?

2). After looking around in the basement or wherever the furnace is an accurate vent count is needed. Always have the customer walk through the house with you and count all the heat vents and cold air returns. This is a good idea because if anything gets missed they have to take a portion of the blame.

3). Once all the vents have been counted, take the time to get a signed copy of the work order. This will ensure that they are aware of the finial cost before the work gets started.

4). Now the customer has agreed to have the work done you can begin. Go into the basement and turn the furnace off using the on/ off switch normally; located on the side of the furnace.

5). Decide which window is best for dragging the equipment in and remove it. If there are no windows or no other basement access, rethink the plan. Usually in these rare cases a back door or patio will be all right. If this method is used be sure to put enough tarps or runners down and be careful.

6). Unload trailer of all equipment. Drag the vacuum hoses in thru the desired access for that job. Be sure to get as close to the furnace as possible and leave some play in case another approach is deemed better. Pull the vacuum to the end of the vacuum hoses and connect the two.

7). Connect air hose to air compressor and attached appropriate number of hoses to reach to the furthest vent in the house.

8). Take all necessary tools in the basement and set up a work area. This will help to keep all equipment together and allow the customer to still be able to move around freely in their house. Necessary equipment would include: air lines, whips, duct balls, screwdrivers, a drill, 1” diameter drill bit, hole cutter, sheet metal (at least 2 pieces), screws, duct plugs, foil tape and blue tape or magnets.

9). Try to get as close to the plenum as possible with a drill and the whole cutter, proceed to cut at least two 8” holes. Drill one hole on the supply side and the other on the return side.

10). Remove the hole cutter from the drill and attach the 1” diameter drill bit. It doesn’t matter which side is done first, but pick either the supply side or the return side. Go to the end of the trunk that has been selected to be done. Where each duct or cold air return falls into that main trunk line dill a 1” hole. After the hole is drilled in the main trunk line

follow that duct until it terminates. Along that duct every 20 feet or at every bend or awkward turn another hole needs to be drilled. Repeat this step for every duct or c.a.r. that branches off those main trunk lines. Once the cleaning starts additional holes may need to be drilled.

11). Remove the filter from the furnace and seal with a plastic bag or tape it off. This allows a vacuum to only be created to the side of the system being worked on. Put filter back in and put all door back on.

12). Hook the vacuum up to one of the 8" holes that was drill on the main trunk line. It doesn't matter which is done first, but that is the side that is cleaned first.

13). Everything is now all set up. Start the vacuum and air compressor.

14). Assuming a multi floor home is being cleaned, always start on the 2nd floor. First blow each vent off with the air before removing it. Any dust on the vent will start to be sucked into the vacuum as well as any debris at the elbow. Remove the vent form the wall. Attach the forward whip and push it through the duct until it gets to the bottom (basement level). Snake thru several times. Put the vent back on and close the vent. If there is no open or close flap the vent needs to be taped off. This helps create a stronger vacuum. Repeat this step for all vent and c.a.r. on the 2nd floor. **(Remember to only clean the side of the system the vacuum is attached to. The cleaning is done in two parts.)**

15). Once all the vents on the 2nd floor are cleaned for the side e of the system being worked on take equipment down to the 1st floor. If all the vents are on the floor they only need to be blown with the air and closed or taped off. If the vents are on the wall repeat the same method as the 2nd floor (step 14). All c.a.r.s need to be taken off regardless to prevent any blow back while in basement, these are the extremely dirty ones.

16). All vents are now cleaned for the side of the system being worked on, bring all equipment into basement level. It is best to start at an end opposite of the vacuum to work backwards. At each hole drilled in the individual ducts snake thru with the reverse whip. This pulls the debris from the duct into the main trunk line. Repeat this for all ducts.

17). Now each individual run has been snaked thru start at the far end and snake the main trunk to pull all debris into vacuum.

18). Disconnect the vacuum and switch it to the other side of the system and repeat steps 14 – 17.

19). Before breaking down the equipment remove filter and see if there is any debris inside the furnace that needs to be vacuumed out. Sweep any metal shavings from cutting the holes into the vacuum also.

20). Plug all 1” holes with rubber duct plugs. Seal 8” vacuum hole with sheet metal. Sheet metal needs to have edges foil taped and screwed in. After all holes are sealed and furnace is back together begin to break the equipment down.

21). Once all the equipment is loaded up, return to basement and put a service label on the sheet metal and make sure the furnace kicks back on. Also don’t forget to reopen all vents and c.a.r. and take bag off of filter.