



Service Information

File In/With:

SI0329

New 417

Equipment Affected: YVAA, YLAA, and YPAL

Microchannel Coil (MCHX) - Cleaning

GENERAL

This Service Information letter is to provide a guideline for cleaning of MCHX coils in the field. Cleaning of heat exchanger surfaces may be required to maintain proper operation of the unit. Failure to follow product cleaning guidelines can result in heat exchanger damage, including leaks or loss of performance.

- DO NOT use coil cleaners or any chemical on a microchannel coil. This can cause severe damage to the coils.
- DO NOT use a pressure washer to clean the coils.
- DO NOT contact the coil with a hard surface such as a hose nozzle or metal vacuum nozzle or any other tool.

SOLUTION

Regular cleaning is an essential part of maintaining the integrity and heat transfer properties of heat exchangers. The reduced depth and parallel tube layout of MCHXs minimize the restriction of cleaning water through the heat exchanger. This can provide a shorter and more direct path for cleaning water to carry away dirt and debris in MCHXs during regular maintenance. In addition, the simple fin layout in MCHXs makes it possible to use nylon bristle brushes to sweep debris on the heat exchanger face without the use of water

The following cleaning procedures are recommended when cleaning is required. Failure to follow product cleaning guidelines can result in heat exchanger damage, including leaks or loss of performance.

- Johnson Controls recommends use of clean, potable water to clean MCHX. Johnson Controls does not permit the use of chemical cleaners to clean MCHXs. Clean, potable water is the most suitable cleaning agent. City tap water is recommended.
- Remove surface debris such as dirt, leaves, insects, fibers, etc. with a vacuum cleaner having a soft attachment rather than a metal tube. Compressed air blown from the inside out can also be used. When brushing debris off the face of the heat exchanger, a soft bristle (not wire) brush can be used to remove dirt and debris from coil

Work on this equipment should only be done by properly trained personnel who are qualified to work on this type of equipment. Failure to comply with this requirement could expose the worker, the equipment and the building and its inhabitants to the risk of injury or property damage.

The instructions on this service bulletin are written assuming the individual who will perform this work is a fully trained HVAC & R journeyman or equivalent, certified in refrigerant handling and recovery techniques, and knowledgeable with regard to electrical lock out/tag out procedures. The individual performing this work should be aware of and comply with all Johnson Controls, national, state and local safety and environmental regulations while carrying out this work. Before attempting to work on any equipment, the individual should be thoroughly familiar with the equipment by reading and understanding the associated service literature applicable to the equipment. If you do not have this literature, you may obtain it by contacting a Johnson Controls Service Office.

Should there be any question concerning any aspect of the tasks outlined in this bulletin, please consult a Johnson Controls Service Office prior to attempting the work. Please be aware that this information may be time sensitive and that Johnson Controls reserves the right to revise this information at any time. Be certain you are working with the latest information.

surface. Care must be taken to prevent damage to the coil. The brush should not be contaminated with other metallic debris such as copper shavings. Do not contact the heat exchanger with the vacuum nozzle, air nozzle, or any other tool.

- Water pressure for cleaning should not exceed the pressure of the spray from a common garden hose with attached nozzle. Use a gentle spray from a spray nozzle with a plastic end or put your finger on the end of the spray nozzle to reduce impact and provide a gentle spray. Pressure washers should not be used as they can significantly increase water pressure and damage the heat exchanger. The cleaning should be from the inside out to drive fibers and dirt out of the heat exchanger.