



SERVICE AND APPLICATION NOTES

C-14-06
August 29, 2014

Update on TXV Operation and Performance in Residential Air Conditioner and Heat Pump Systems

AFFECTED PRODUCT:

Thermal expansion valve (often abbreviated as TEV, TXV, or TX valve)

OVERVIEW:

Over the past few weeks, Lennox has been diligently working with our suppliers, testing laboratories and manufacturing locations to determine the root cause of the TXV issue described in the previous service and applications notification, C-14-05 - Potential Contaminants Affecting TXV Operation and Performance in Residential Air Conditioner and Heat Pump Systems.

OBSERVATIONS:

Our testing to date suggests that a change in a processing chemical used by one of our sub-tier suppliers could be a primary contributor to the problem. The supplier has since stopped using this particular chemical and has reverted back to an older version in production. Lennox continues to investigate the exact mechanism at work to understand remedial actions, and we will provide you with updates as we have them.

RECOMMENDED ACTION:

We recommend the following when you see an unusual TXV failure:

1. Replace the TXV.
2. Install or replace the liquid line drier at the indoor TXV.
3. Use "Best Practices" when installing or opening a system and replacing components.
 - A. Use nitrogen when brazing
 - B. Pressure test for leaks
 - C. Evacuate system
4. Charge the system with R-410A and check the operation of system.

NOTE: *If the system is a heat pump, verify proper operation of the outdoor expansion valve in heating. For more information regarding Best Practices, please refer to the system's installation instructions.*

We will continue to take the proper actions to address this failure and will share information with you as we learn additional details regarding the best method to remedy the problem in the field.

We apologize for the inconvenience. Please contact us at (800) 453-6669 for additional information or questions.

Sincerely,
Lennox Technical Support