



Johnson Controls Unitary Products  
5005 York Drive  
Norman, OK 73069  
1/877-874-7378

**DATE:** December 30, 2011

**YS-029-11**

**TO:** All York Branch Service Managers  
All York Distribution Service Managers  
All Regional Managers

**SUBJECT:** Cracked Condensate Pans – All 33” Furnace Models

As discussed at the fall Tech Conference, we are receiving reports of cracked drain pans on the 33” furnaces. Unlike the issue we experienced in 2008, we have not been able to determine a cause for these cracks. While these cracks are occurring at a relatively low rate, we are putting a higher focus on the issue.

We are investigating all potential causes and solutions, as well as attempting to define changes that would make the pan more robust for the type of failure being experienced. While we would like to implement a solution right away, at this point, we do not have enough field returns to effectively characterize the issues causing the cracks.

For the purpose of analysis, we ask that any cracked pans replaced under warranty on units built since January 2009 (serial W0A9xxxxxx) are returned for analysis.

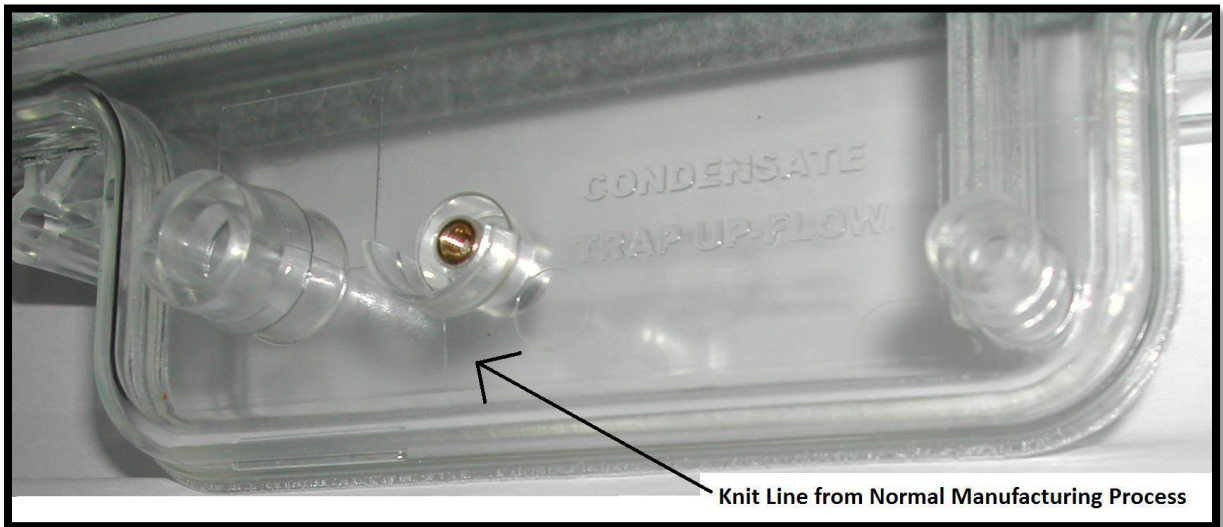
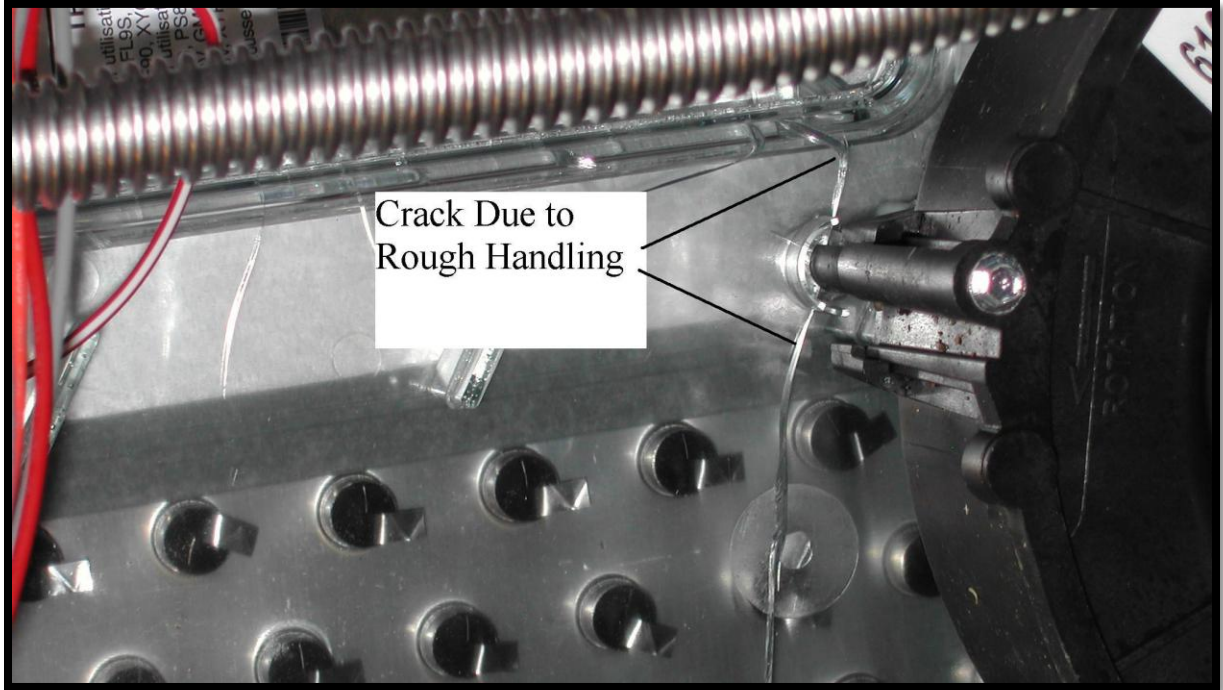
This YS letter provides a one hour labor allowance for the replacement of any drain pan with an (ESC) or freight damage/handling crack, subject to the return of the drain pan. Record the serial number of the furnace the pan was removed from in permanent marker on the face of the pan. If the serial number is not written on the pan, we will not be able to match it up against the claim and approve the labor.

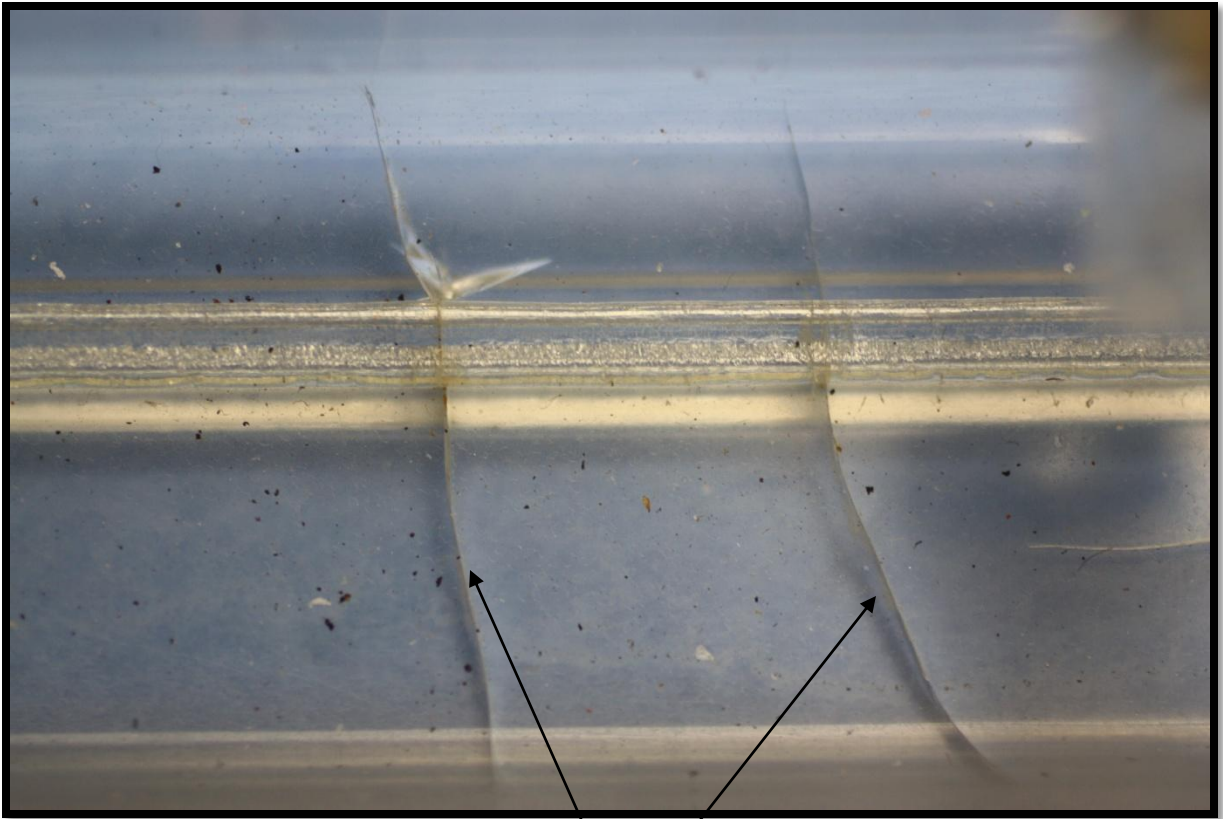
Condensate pan return address:

Johnson Controls Inc.  
801 E. 37th Street North  
Building 6, Dock 12  
Wichita, Kansas 67219

## Background Information

The photos below illustrate cracks typical of two of the three potential failure modes (environmental stress cracking (ESC) and rough handling). Knit lines are part of the normal molding process, are **not** considered a defect, and are **not** a cause of leaks.





Environmental Stress Cracks (ESC) on Seam of Pan

ESC is the premature initiation of cracking and embrittlement due to contact with specific fluids. The characteristics of ESC failures are shown in the image above, with cracks initiated at the seam and moving perpendicular to the line. Such ESC can be initiated by chemicals such as:

Adhesives  
Paints  
Lacquers  
Lubricants  
Cleaning Agents

Aerosol Sprays  
Anti-Rust Agents  
Leak Detection Fluids  
Plasticizers and Inks

In 2008, we identified several chemicals in the plant that could cause ESC and purged them from our operations. Since then, we have conducted multiple reviews of chemicals used at the plant and none were found to initiate such cracks.

If you observe ESC, please collect detailed information regarding the chemicals used at the site and forward to your Unitary Products technical representative. This will help us determine prevalence of specific fluids causing the cracks.

Please feel free to contact the undersigned if you have any questions. Thanks for your help and cooperation in helping resolve this issue.

Mark Freund  
Manager, Residential Field Service  
Johnson Controls Unitary Products

Robert Cabrera  
Director of Heating Engineering  
Johnson Controls Unitary Products