

Ducted Systems Technical Services Service Tips Letter

Letter: **ST-012-2020 (Revised)**

Date: August 10, 2020

To: Ducted Systems (Factory Direct) S1 HVAC Branch Service, Sales, Warranty Managers

Ducted Systems (UPG/Applied) Distribution Service, Sales, Warranty Managers

Subject: Revised - Sun Pro Packaged and Split Systems Condenser Blade Failures

Product: Sun Pro Package Systems, Pro Split Condenser Systems (7.5 to 20 Tons)

Effective: January 1st, 2012 Expires: June 8, 2021

Summary: This letter is to address premature condenser fan blade rivet failures.

Ducted Systems Technical Services has been notified and reviewed condenser fan blade failures on Sun Pro Split and Package units. This reported concern was brought to our attention from field reports and our distribution partners. Although the number of reports of this concern is very low vs the quantity of units produced within the affected time frame listed above we have been committed to investigate and provide a resolution for job sites that have been affected by this issue. With the data collected from documented cases from our partners, our engineering team began a joint investigation with our fan blade manufacturer to understand the root cause of the failure.

What was found during this investigation was that under specific conditions and in certain environments, during the condenser fan blades rotation a natural resonating frequency of 38 hertz would be obtained and cause internal stress on the blade which would result in a failure at the blade rivets. We have been able to confirm and replicate this failure over multiple generations and applications. If a system is suspected of having these failures it is advised to contact the Product Technical Support team at 1-877-UPG-SERV (874-7378). Once contacted the team member will review the system's application and be able to determine if any warranty coverage applies or assist with an out of warranty concession on a case by case matter. No concession will be authorized without previous contact and approval by our Product Technical Support Team prior to the repair being made.

To correct this reported concern our engineering team has tested and approved a new fan blade that can be utilized to repair units that exhibit this failure. Additionally, the new fan blade has been implemented in current production models as of June 8th, 2020 to eliminate this reported concern. The new fan blade's current number is listed below for your convenience and is readily available from Source One Parts.

Part # \$1-02635587000 Description: FAN,PROP,24",CW,3-31,1/2"BORE

Ken Gise Product Technical Support ENG II Johnson Controls Ducted Systems 5005 York Drive, Norman OK 73069

Tel: 1-877-874-7378

Ian Boger

Product Technical Support ENG I Johnson Controls DX Ducted Systems 5005 York Drive. Norman OK 73069

Tel: 1-877-874-7378