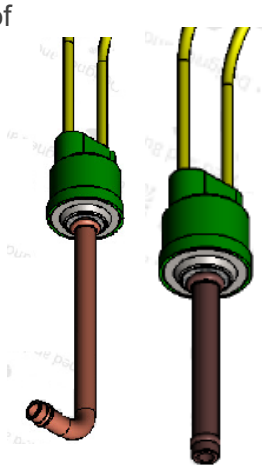
Ducted Systems Technical Services: YS Letter

Letter: YS-002-22
Date: January 25, 2022
To: Ducted Systems (Factory Direct) S1 HVAC Branch Service, Sales, Warranty Managers
Ducted Systems (Applied) Distribution Service, Sales, Warranty Managers
Subject: **High Pressure Switch Failures**
Product/s: All current residential split system outdoor heat pump and air conditioning models (except HMH7) containing pressure switch S1-02546848000, S1-02547283000, S1-02550188000.
Effective: January 25, 2022 Expires: January 25, 2024

Summary: Labor and refrigerant allowance for replacement of a failed high pressure switch.

Dear valued customer,
we've received several complaints involving high pressure switch "stuck open" failures on many of our residential air conditioning and heat pump split system models. Vendor analysis of returned failed switches show most of the failures are due to moisture ingression into the switch contacts, however the entry point of the moisture points to the piping side of the switch. None of our switches are installed on unit piping with the switch piping pointing upwards. All our switches are installed with the wiring side up as shown in the image on the right.



All 3 switches are “auto-reset” and have a cut in (close) and cut out (open) pressure. It is important to test a switch by checking refrigerant circuit pressure and use an ohm meter to check for continuity. The switch open pressure is 650 psi. and the switch should automatically re-close at 450 psi. There is generally a +/- tolerance of 10 to 15 psi. Heat pump model units all contain defrost controls that can lock the equipment out for high pressure events. If a heat pump is experiencing high pressure faults, and the pressure switch is not stuck open, do not assume that the high pressure switch is faulty. In most cases, the switch is most likely performing its intended function. Make sure to check for proper indoor air flow first, then check unit charge using the heating charging charts in the outdoor unit installation manual.

For units within serial number range W1M8 – W2D0 that experience a high pressure switch failure this service letter may be used to allow a replacement high pressure switch, liquid line filter drier, unit refrigerant charge (if necessary), and 4 hours labor toward unit repair. We recommend to re-cover and re-use the existing refrigerant charge. This letter is to be used on a case-by-case basis. Retain the failed pressure switch for a period of 90 days in case it is requested returned for analysis. A copy of the contractor service ticket/work order/invoice should be submitted with all warranty claims regarding this issue.

If you have any questions on this feel free to contact Ducted Systems Residential Technical Services at 1-877-874-7378 and speak with a technical support representative or email us at be-ams-be-ductedsystemsresidentialdistributorsupport@jci.com

Warm regards,
Casey McConnaughy
Ducted Systems Technical Support Engineer II – Residential Technical Support
Johnson Controls