

SERVICE BULLETIN

International Comfort Products

TM



Number: I081

Issued: 4/22/2014

Title: Revised Inducer Housing Pressure Tap

Revision:

Expires: N/A

Dept: Building & Industrial Systems

Category: Informational

PRODUCT CATEGORY: Condensing gas furnaces

MODELS AFFECTED:

N9MSB, N9MSE, *9MXT/E, *9MVT/E, WFHR, WFSR, WFAR & R9MSB

Serial Number(s):

Beginning with serial number A1415

SITUATION:

The inducer housing pressure switch (HPS) on some model furnaces is opening during furnace operation. Site visits and testing have determined the primary cause of this issue to be significant oversizing of the furnace and installation related; specifically, incorrect venting and condensate drainage. However, under some conditions, water droplets from condensed flue gas can migrate into the inducer housing pressure port through capillary action. The condensation droplets momentarily block the pressure signal to the inducer HPS causing the pressure switch to open.

SOLUTION:

To understand issues related to inducer housing pressure switch trips, refer to Information Bulletin I079 and TIC 2013-0007. Verify there are no other installation related issues affecting the operation of the Housing Pressure Switch.

To stop the capillary action of the water droplets from migrating into the inducer housing pressure port, the inside diameter of the pressure port on the inducer housing cover has been increased to 3/16-in. This is the same diameter referenced in Information Bulletin I079.

The new inducer housing will be phased into production and is expected to be completed by week 15, 2014.

Modulating models are not referenced in this bulletin. Modulating models do not use an inducer housing pressure tap and are not affected by this bulletin.

Factory Action:

All inducers with a larger pressure switch port will be identified by two marking:

1. A recessed "X" will be molded into the triangular flange just below the exhaust outlet of the inducer housing. See Fig 1.
2. The color of drain gaskets stubs on the back of the inducer housing that insert into the collector box are now green in color. See Fig 2.

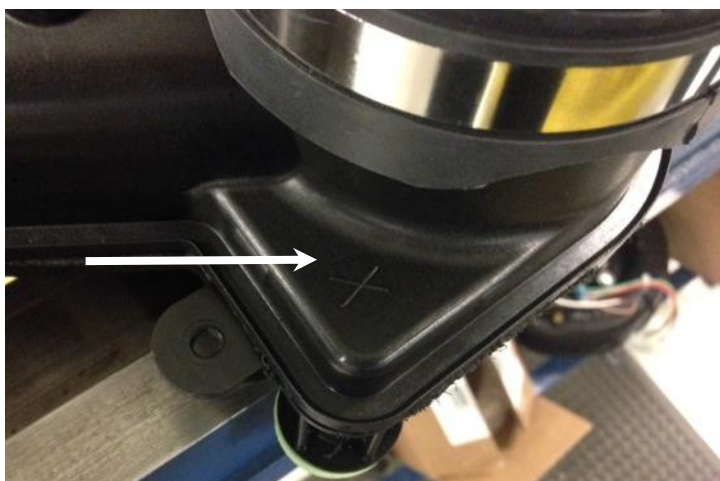


Fig. 1-"X" embossed in inducer housing



Fig. 2-Green Inducer Drain Gaskets

Distributor Action:

The furnaces will continue to be shipped with standard packaging until all models are built with the new inducer housing. When the new inducer housing has been fully implemented across all the models, the white shipping label will be changed to light blue with black lettering. The shipping label color change is temporary and only intended to help highlight the inducer mold update. The labels will revert back to the standard white approximately 2 months after the change.

Field Action:

It is not necessary to replace any inducer housing in the field with a new inducer assembly. Any furnace exhibiting nuisance pressure switch tripping can be corrected with the information found in Information Bulletin I079 and TIC 2013-0007.

Furnaces with PSC inducer assemblies use a unique inducer assembly for each input range. Furnaces sizes that share an inducer assembly are further differentiated by the use of an inlet choke plate on the back (inlet) of the inducer assembly. For reference, choke and restrictor dimensions are shown in Table 1 and Figure 3 below.

The 40,000 BTUH furnace also uses an inducer outlet restrictor when the vent pipe is 10 ft. or less. The outlet restrictor is only shipped in the loose parts bag of 40,000 btuh models.

Inducer Choke Usage-Single and Two Stage PSC Inducers				
Input BTUH	Part Name	Part Number	Outside Diameter (mm)	Inside Diameter (mm)
40,000	Outlet Restrictor*	1185623*	60.3	31.75
	Inlet Choke	1185620	77.0	44.75
60,000	Inlet Choke	1185619	77.0	31.75
80,000	Not Used	Not Used	Not Used	Not Used
100,000	Inlet Choke	1185620	77.0	44.75
120,000	Not Used	Not Used	Not Used	Not Used
140,000	Not Used	Not Used	Not Used	Not Used
*Only used with vents 10 ft. or less. Shipped in Loose Parts Bag of 40,000 models				
Chokes are not used on modulating furnace variable speed inducers				

Table 1