Air Switch – Pressure Setting and Trouble Shooting –Summary

The Air Switch is an in field adjusted device that senses air pressure when the fan is running. The factory setting is usually ok. The dryer is tested at the factory without grain therefore an adjustment may be necessary.

On a GSI Competitor single fan dryer the light above the fan switch illuminates and on a GSI multi fan dryer the fan switch illuminates when air pressure is sensed.

Air pressure must be sensed within 20 seconds of the fan starting or the dyer will shut down and the computer will display an error message "NO AIRFLOW". Air pressure can only be sensed if the dryer is completely full of grain. The Air Switch senses pressure when the fan is up to about ½ of its normal speed. The air switch will stop sensing pressure when the fan has slowed to about ½ of its operating speed.

If the indicator light does not illumine or flickers you will get a "NO AIRFLOW" shut down.

With the dryer full of grain adjust the air switch by turning the adjusting screw on the face of the air switch to be more sensitive counter clockwise in ¼ or ½ turn increments. Turn screw until you have a steady light. If the fan switch light comes on before the fan is started turn the adjusting screw clockwise or it will take too much pressure to activate the switch.

Use the fan light as an adjustment indicator. When properly adjusted the light will be illumined without a flicker.

Tip: To avoid shutdowns temporarily bypass the air switch safety while making the adjustments, until the fanlight indicates steady air pressure.
To bypass the air switch on a Competitor single fan dryer move the computer dip switch number 8 to the left. Be sure to move back to right after adjustment. On a Multi fan dryer change the setting in the dryer setup "Air Switch Testing" to "NO". This resets automatically when the computer in rebooted.
It is crucial to reinstate the air switch safety as soon as the adjustment is made. Be sure!!! Never run the dryer without this safety.

TO TEST FIRE THE DRYER without grain
follow the "air switch bypass" "tip" instructions or your manual or on the decal in the dryer panel. Remember!!! DO THIS WITH CAUTION bypassing the air switch eliminates the safety.

Other Possible Causes for air pressure loss:

The dryer must always be full of grain while in the drying process. If the dryer is being unloaded faster than the fill auger is filling the dryer air will escape through the screens causing air pressure loss. Note: The fill auger must always fill the dryer faster than the unloading auger is taking the grain away.

The fill auger may have loaded the dryer fast when first started but over the course of time the auger may slow down because of some restriction from leaves, chaff, straw or some other foreign material over the auger intake.

Although not common the filter on the air switch may be plugged or is wet or possibly even frozen. Service the filter.

Voltage Test:

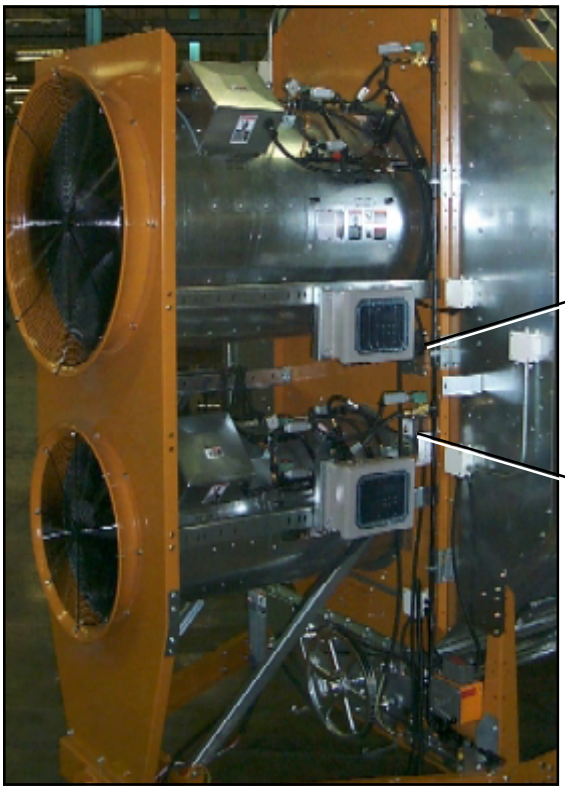
Negative: J7-10
Positive: N/O J7-09
N/C J7-11 (5 VDC)

Note: The air switch cannot be jumpered out. Both high and low air pressure is sensed.

Back of Switch Should be labeled C NC NO
Some Switches Were Shipped Mislabled

PNEG-1350
Network Series Air Switch Adjustment

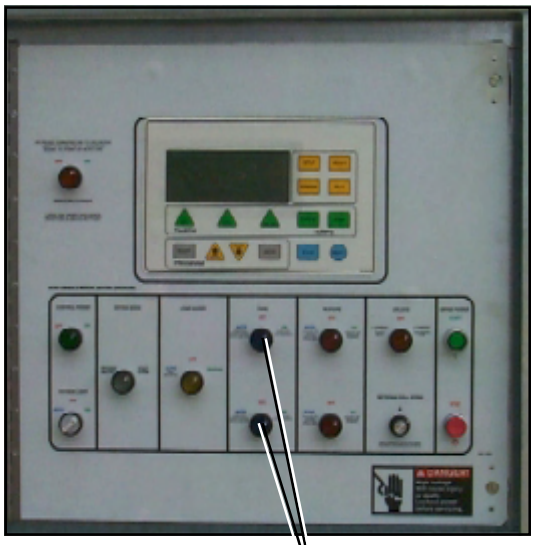
Air Switch locations.



Upper Air Switch.

Lower Air Switch.

IMPORTANT: ***To adjust the air switch the grain columns need to be full of grain so that the plenum can build up air pressure and close the air switch.***



Fan Switches

1. With the Load Auger, Fan, Heater, and Unload switches in the off position turn on the Control power then push the Dryer Power Start switch.

2. With power now applied to the dryer flip one of the fan switches to the on position and watch for the light to illuminate the fan switch knob. If the light illuminates when the fan reaches half its full speed, then no adjustment is required. However, if the light does not illuminate until the fan is running at full speed or the light does not illuminate at all and the dryer shuts down, then the air switch is adjusted too high (skip to step 3a). If the light illuminates before the fan reaches half its full speed the air switch is adjusted too low (skip to step 3b).

3a. If the light illuminates after the fan reaches full speed or did not illuminate at all and the dryer shut down then the air switch needs to be made more sensitive. Turn adjustment screw in the more sensitive direction (counter clockwise). Make this adjustment on the air switch 1/4 turn at a time and each time restart the fan and watch to see when the light illuminates.

3b. If the light illuminates before the fan reaches half its full speed then the air switch needs to be less sensitive. Turn adjustment screw in the less sensitive direction (clockwise). Make this adjustment on the air switch 1/4 turn at a time and each time restart the fan and watch to see when the light illuminates.

4. Flip the fan switch to the off position and watch the light. Now it should go out when the fan is about half its full speed. Adjust the air switch if necessary. Remember that *less sensitive* (clockwise adjustment) will require a higher fan speed to close the air switch, and *more sensitive* (counter clockwise adjustment), the switch can close at a slower fan speed.

Back of Air Switch - Correct Labelling