

BulkTobac

A DIVISION OF GAS-FIRED PRODUCTS, INC.

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TO: All BulkTobac, Taylor, Long and Powell HeatX Conversion Kit Owners

FROM: Martin Brice

DATE: June 9th 2003

SUBJECT: HeatX FIRE HAZARD WARNING

I am writing this memo to remind you of previous fire hazard warnings. This memo includes how to inspect your barn and how to ensure that you have protected your barn against potential known fire hazards.

A. BULKTOBAC PLENUM SCREEN (RETURN AIR SCREEN)

We have previously notified you that the _" galvanized steel hardware cloth screens that normally cover the bottom plenum on the return air side of all downflow barns (e.g., BulkTobac, Premium, and Grower Built Barns) and upper plenum on all upflow barns (e.g. Roanoke/BulkTobac Box Barns built after 1990) between the furnace room back wall (with inspection window) and the floor have in some instances: A) been removed B) been damaged C) do not cover the entire opening across the back of the barn, or D) are the wrong size material with too large an opening. If this screen is not properly installed or is damaged, an opening can result where debris, such as old dried tobacco leaves, paper, trash, etc., can be sucked up past the hot heat exchanger, catch fire, and be blown into the top of the barn. **THIS IS A FIRE HAZARD.**

Please, immediately check your barn to make sure that the bottom plenum screen is properly installed and that no combustible debris is underneath the heat exchanger or on the furnace room floor. The _" galvanized steel hardware cloth screens can be purchased at most hardware stores, home centers or building supply stores. See B-936 enclosed for protective screen information

Failure to have properly installed bottom plenum screens can result in fire, damage to property or personal injury. If the bottom plenum screens are not properly installed, please correctly install them at once.

With this notice please find enclosed a pictorial illustration of the sequence of events that will result in a fire if the screen does not cover the entire plenum opening, form B-935. Please use this visual aid to explain to your non-English speaking workers the consequences of letting debris enter into the area below the heat exchanger.

Note: Even if the screen is secure always check the area below the heat exchanger for debris before each cure.

B. HEAT SHIELD KITS

We have received field reports that, in some cases, Heat Shield Kits have not been installed per our installation instructions. We want to alert and warn you of a potential fire hazard with BulkTobac type HeatX Heat Exchangers that are improperly installed.

It is extremely important that all HeatX Heat Exchangers installed in BulkTobac, Premium, Roanoke/BulkTobac Box Barns built after 1990, and Grower Built Barns are installed per the installation instructions that were supplied with the Heat Shield Kits. We urge all installers and owners to check the following critical points:

- 1. ...that aluminum heat shields are installed over all horizontal and vertical wooden floor supports, bottom plates and floor sections. This is Kit No. 6177302.
- 2. ...that an aluminum heat shield is installed on the back wall of the furnace room itself if the burner is oriented to the rear of the furnace room doors. This is Kit No. 6177309. If the burner is oriented to the side, no additional back wall heat shield is needed.
- 3. ...that a heat shield is installed on the underside of any wooden roof members and the roof itself if they are within 36 inches of any part of the heat exchanger. This applies to both upflow **and** downflow furnace configurations. This is Kit No. 6177309.

Always use aluminum heat shield kits, as aluminum reflects heat. Do not use steel type materials as they do not reflect but, instead, absorb and conduct heat.

If you find any Heat Exchanger that has not been properly installed, immediately discontinue use of the HeatX Heat Exchanger and reinstall it per the instructions. **Failure to comply with our written instructions can result in fire, damage to property or personal injury.**

If you need copies of the installation and operating instructions or would like to order additional Heat Shield Kits for the floor, back wall or ceiling of any barn with a HeatX Heat Exchanger installed in it, please contact us at 1-800-438-4936.

C. <u>CHECK THAT THE FLEXIBLE GAS CONNECTOR HAS BEEN REPLACED BETWEEN THE MANIFOLD AND THE BURNER.</u>

Please find below a detailed explanation of the gas connector replacement.

The purpose of section is to remind you that the flexible gas connector on the HeatX conversion kits must be replaced and explain the steps you need to take if the connector was not replaced in 2002.

Nature Of The Problem

The flexible connector manufacturer informed us that excessive vibration can result in failure of their connector. We have conducted extensive testing to determine that the vibration on certain models of barn (principally BulkTobac and Long) can lead to failure of the connector. In the interest of safety, regardless of the model of barn, the flexible metal connector must be replaced on all HeatX units.

Solution

We have tested and approved a new copper connector assembly to replace the flexible stainless steel connector between the control arm and the burner (see the attached illustration to assist with identification). The connector is available at no charge.

The replacement process takes approximately 10 minutes per barn.

How To Get The New Copper Connector Assemblies.

Simply fill out the enclosed postage paid reply card and mail it to us. It is important that both the quantity of

HeatX units and the style of barn are indicated on the reply card.

When we receive the card we will send you the replacement connectors and replacement warning labels for the HeatX unit at no charge.

To avoid duplicate shipments, Gas Connector kits will only be shipped to the actual owner of the HeatX Heat Exchanger Conversion Kits and NOT to Gas Companies or Installing Dealers.

Copies of the warning labels are enclosed with this notice.

NOTE: Please read the warning labels carefully, if you have any questions regarding the warnings and how to comply with them, please call customer service.

D. CHECK FOR GAS LEAKS

It is important on start up and at least on an annual basis that all pipe fittings and joints in the gas train and all gas connections are checked for leaks. This is for your safety. To check for leaks, simply make up a solution of dishwashing liquid and water and brush or spray this solution on to all gas connections. If there are bubbles, then there is a leak that must be repaired. While the gas train has been tested and checked at the factory before shipment, it is important to double check the soundness of all gas connections once the unit has been installed in the barn and then before each curing season. We cannot recommend too strongly that you check for leaks.

E. OTHER CONSIDERATIONS

- 1. The gas pressure must not exceed the 15-PSI recommended setting. During our inspection of heat exchangers we have found that a number of growers are successfully curing at lower gas pressures. Using lower gas pressures and therefore a longer "ON" cycle can actually reduce your fuel bill.
- 2. Higher settings can cause over firing and damage the unit. It is designed to operate at a maximum of 500,000 BTUs
- 3. Never use a larger orifice than the one installed by the factory in your unit.

Please immediately check your barns to confirm the following:

All Heat Shields have been properly installed.

The bottom plenum screens are the correct material and are properly installed.

The original flexible gas connector has been replaced with a copper tube assembly supplied by BulkTobac.

The Warning labels enclosed have been installed on the unit.

There are no gas leaks in manifold assembly or connections.

Our goal is to make your Tobacco barn as safe as we know how. Thank you for your prompt attention to these matters.

Enclosures

BulkTobac Fire hazard warning (B935)
BulkTobac Screen placement diagram (B936)
BulkTobac Warning labels (B937)
Connector Identification illustration (B938)
Copper connector request reply card

BULKTOBAC BARN COMBUSTIBLE DEBRIS FIRE HAZARD WARNING

№ WARNING



FIRE HAZARD

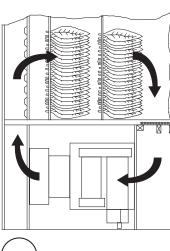
DO NOT allow debris to collect under the heat exchanger.

- 1/2" hardware doth must completely cover the return air plenum to prevent any leaves or trash from passing into the area below the heat exchanger.
- Before operating the furnace check that thefloor below the heat exchanger is clear of debris or trash before operating the furnace.

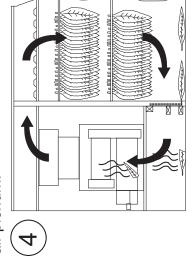
Failure to prevent debris collecting under the heat exchanger may result in death, personal injury or property damage.

3

On the final day of curing.....



Leaves on the floor collecting by the return air plenum.

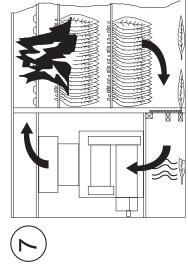


If the recirculating air picks up the debris it can into contact with the heat exchanger

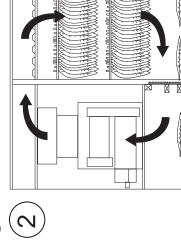
Debris under the heat exchanger will

become very hot and dry.

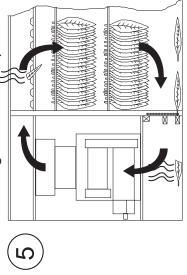
9



Because the tobacco is already dry and at a temperature around 160F it can ignite



Leaves can pass through gaps in the screen covering the return air plenum



The air can carry the smoldering debris into the top of the tobacco.





Once the tobacco catches fire it will burn very rapidly.

The debris can cause the tobacco to

begin smoldering.

BulkTobac - WARNING LABELS

NWARNING



FIRE HAZARD

- Heat shields provided must be properly installed. NO exposed wood can be within 36 inches of the heat exchanger. For more information see the installation manual or contact the manufacturer.
- Check all gas connections regularly to ensure they are tight.
- Check that the orifice is tight regularly.

 The gas line must be a copper tube. If the line is a corrugated metal hose contact the manufacturer for a replacement.
- There must be at least 500 square inches open area for combustion air.
- The vent supplied with the HeatX must be properly installed to the manufacturers instructions.
- Do NOT exceed the maximum gas inlet pressure. See rating plate for details. BulkTobac barns
- 1/2" hardware cloth must completely cover the return air plenum to prevent any leaves or trash from passing into the area below the heat exchanger.
- Before operating the furnace check that the floor below the heat exchanger is clear of debris or trash before operating the furnace.

Roanoke and Dixie barns

- The wood 2 x 4 behind the heat exchanger cabinet must be completely removed. Contact the manufacturer for removal instructions.
- There must be 2" clearance between the back of the heat exchanger and the heat shield.

Dixie barns

Dixie barns must have a spacer kit installed to give a 2" clearance between the back of the heat exchanger and the heat shield. Contact manufacturer for details.

Failure to follow these instructions may result in death, serious injury or property damage. PN 42834150 rev 02/02

WARNING



⚠ WARNING



MOVING PARTS HAZARD

Do NOT operate the fan without the guards covering the pulley in place.

Failure to follow these instructions may result in death, serious injury or property damage.

Applies to BulkTobac and Powell barns only.

EXPLOSION HAZARD

All barn models

Do not use or store gasoline or other flammable liquids in open containers in the furnace room or barn.

Oil burners

Ensure that the oil burner is serviced regularly, at least once per year by a qualified service technician.

Failure to follow these instructions may result in death, serious injury or property damage.

PN 42834160 rev 02/02

WARNING



ELECTRIC SHOCK HAZARD

Disconnect electrical supply before servicing

Failure to follow these instructions may result in death, serious injury or property damage.

⚠ WARNING



TRIP HAZARD

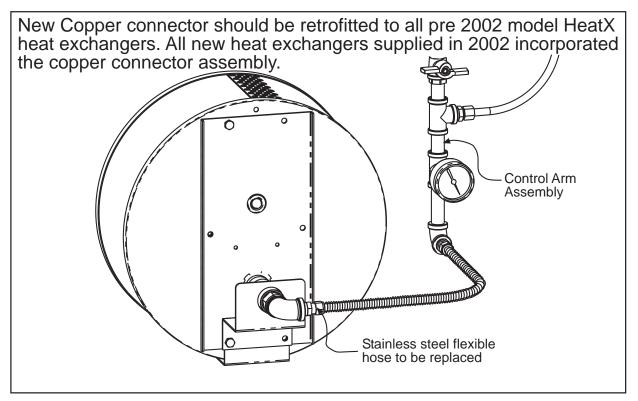
Watch your step.

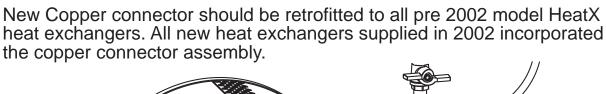
Use caution when entering or leaving the furnace room.

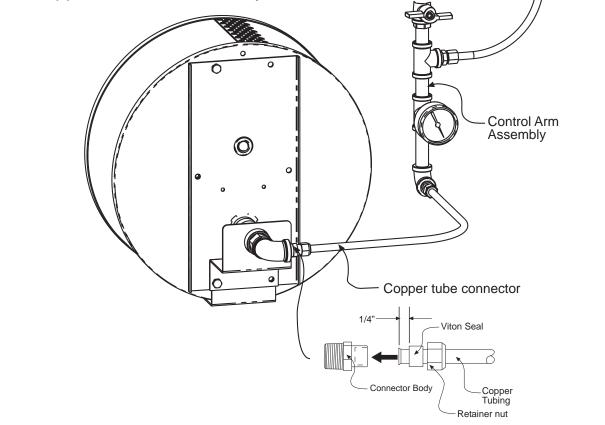
Failure to follow these instructions may result in serious injury.

06/03 Form B-937

Gas Connector Identification Sheet



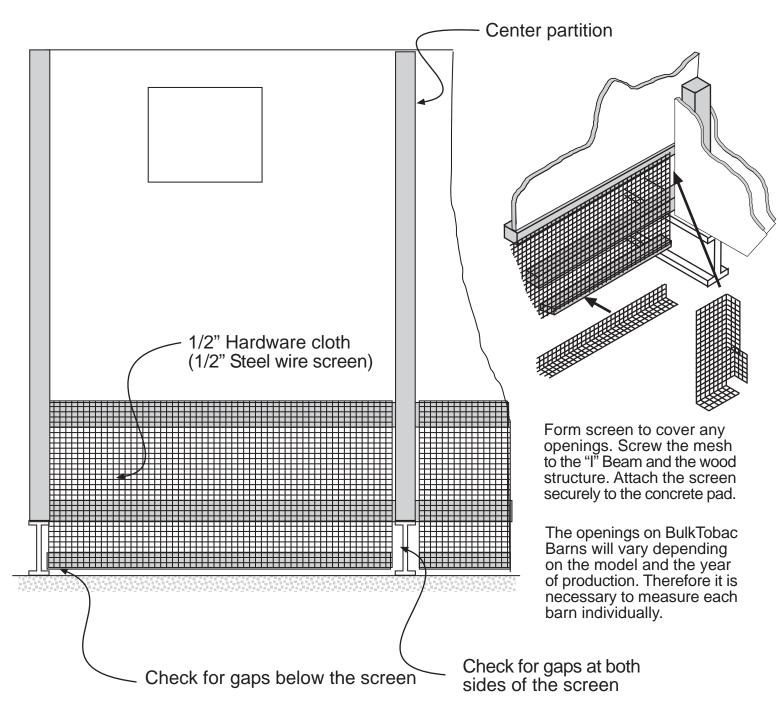




06/03 Form B-938

HEATX PROTECTIVE SCREEN INFORMATION SHEET

VIEW INSIDE A BULKTOBAC PORTABLE RACK BARN SHOWING THE HARDWARE CLOTH COVERING THE RETURN AIR PLENUM



MAKE SURE THERE ARE NO GAPS AROUND THE PROTECTIVE SCREEN!

COVER ANY OPENINGS USING STEEL 1/2" HARDWARE CLOTH TO PREVENT DEBRIS GETTING INTO THE AREA BELOW THE HEAT EXCHANGER. FAILURE TO PREVENT DEBRIS UNDER THE HEAT EXCHANGER CAN RESULT IN A FIRE.

06/03 B-936