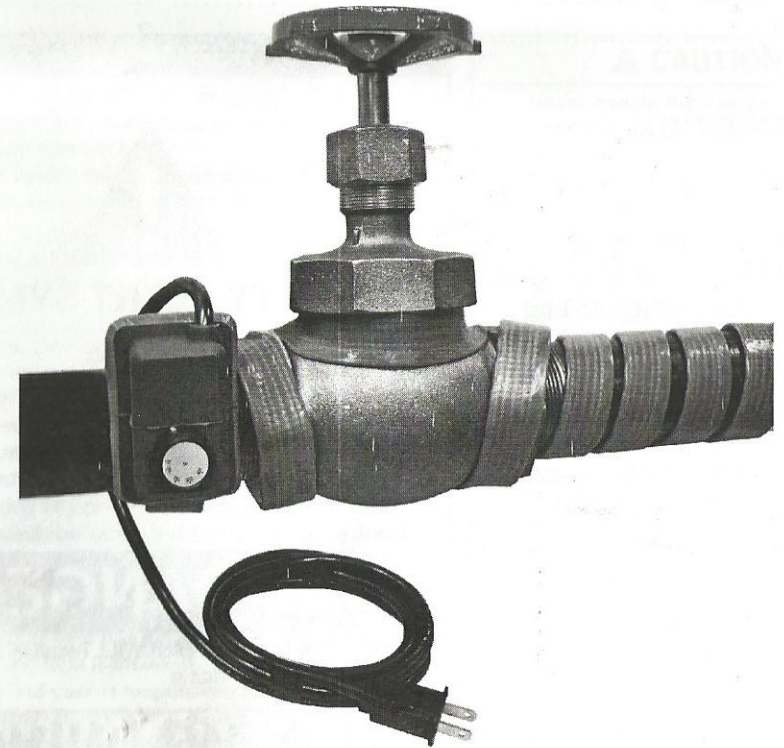


BriskHeat® XtremeFLEX®

**Silicone Rubber Heating Tapes with
Adjustable Thermostat Control**



(HSTAT Series) Instruction Manual

BriskHeat®

BriskHeat® Corporation

1055 Gibbard Ave, Columbus, OH 43201

Toll Free: 800-848-7673 Phone: 614-294-3376 Fax: 614-294-3807

Email: bhtsales1@briskheat.com

Web site: www.briskheat.com



Read and understand this material before operating or servicing these heating tapes. Failure to understand how to safely operate these heaters could result in an accident causing serious injury or death. These heaters should only be operated by qualified personnel.

TABLE OF CONTENTS

Introduction 2
 Safety Alert Symbol..... 2
 Important Safety Instructions..... 3
 Specifications..... 4
 Operating Instructions..... 5
 Troubleshooting Guide..... 6
 Warranty..... 7

INTRODUCTION

XtremeFLEX® HSTAT Silicone Rubber Heating Tapes with Adjustable Thermostat Control are designed for process temperature control, freeze protection, and supplemental heat.

Wrap the flexible heating tape around the desired object you want to heat, set the temperature, and it will maintain heat at the set temperature.



SAFETY ALERT SYMBOL

The symbol above is used to call your attention to instructions concerning your personal safety. It points out important safety precautions. It means **"ATTENTION! Become Alert! Your Personal Safety is involved!"** Read the message that follows and be alert to the possibility of personal injury or death.



Immediate hazards which WILL result in severe personal injury or death



Hazards or unsafe practices which COULD result in severe personal injury or death



Hazards or unsafe practices which COULD result in minor personal injury or property damage.


SAVE THESE INSTRUCTIONS!

Additional copies of this manual are available upon request.

IMPORTANT SAFETY INSTRUCTIONS



⚠ DANGER
 A person who has not read and understood all installation instructions is not qualified to install this product.

Agency Approvals
 73/23/EC (Low Voltage Directive)
Approvals valid only when installed in accordance with all applicable instructions, codes, and regulations.

⚠ DANGER

- Do not immerse heater in liquid.
- Keep volatile or combustible material away from heater when in use.
- Use heater only in approved locations.
- Keep sharp metal objects away from heater.

Failure to observe these warnings may result in electric shock, risk of fire, and personal injury.

⚠ CAUTION

- Never handle the heating tape while it is in operation; always disconnect the heating tape from the power source and allow to cool prior to handling.
- Inspect heating tape before use.
- Do not use heating tape with torn or worn surfaces.
- Do not wrap the heater over itself
- Do not repair damaged or faulty heaters.
- Do not crush or apply severe physical stress on heater or cord assembly.
- Unplug heater when not in use.
- Fasten heater to device using approved methods only.
- If spillage of foreign matter onto heater occurs, disconnect from power source and clean after heater has been allowed to cool.
- Never operate a heater without an appropriate heat sink (device being heated is considered a heat sink).
- Make sure there is a uniform fit prior to energizing. If there are air gaps between the surface to be heated and the heater, hot spots can occur that could result in burnouts due to overheating.

Failure to observe these warnings may result in personal injury or damage to the heater.

⚠ WARNING

End User Must Comply to the Following:

- Only qualified personnel are allowed to connect electrical wiring.
- Disconnect all supply power at the source before making any power connections.
- All electrical wiring must follow local electrical codes and highly recommend following NEC Article 427.
- Final installation / wiring is to be inspected by the authority who has jurisdiction in the area that the heating tape is installed.
- The end-user is responsible for providing a suitable disconnecting device.
- The end-user is responsible for providing a suitable electrical protection device. It is highly recommended that a ground fault circuit breaker is used.

Failure to observe these warnings may result in personal injury or damage to the heater.

SPECIFICATIONS

Operating conditions:

Maximum Exposure Temperature: 450°F (232°C)

Adjustable Thermostat Control 50-425°F (10-218°C)	120 or 240VAC Models
Power Density: 6.0 watts/in ² (0.009 watts/mm ²)	Moisture and Chemical Resistant
Suitable for Electrically Conductive Surfaces	120VAC model includes NEMA 1-15 plug

Width in (mm)	Length in (mm)	Total Watts	Part Number 120VAC	Part Number 240VAC (No plug)
0.5 (13)	24.0 (610)	72	HSTAT051002	HSTAT052002
0.5 (13)	48.0 (1220)	144	HSTAT051004	HSTAT052004
0.5 (13)	72.0 (1830)	216	HSTAT051006	HSTAT052006
0.5 (13)	96.0 (2440)	288	HSTAT051008	HSTAT052008
0.5 (13)	120.0 (3050)	360	HSTAT051010	HSTAT052010
1.0 (25)	24.0 (610)	144	HSTAT101002	HSTAT102002
1.0 (25)	48.0 (1220)	288	HSTAT101004	HSTAT102004
1.0 (25)	72.0 (1830)	432	HSTAT101006	HSTAT102006
1.0 (25)	96.0 (2440)	576	HSTAT101008	HSTAT102008
1.0 (25)	120.0 (3050)	720	HSTAT101010	HSTAT102010
2.0 (51)	24.0 (610)	288	HSTAT201002	HSTAT202002
2.0 (51)	48.0 (1220)	576	HSTAT201004	HSTAT202004
2.0 (51)	72.0 (1830)	864	HSTAT201006	HSTAT202006
2.0 (51)	96.0 (2440)	1152	HSTAT201008	HSTAT202008
2.0 (51)	120.0 (3050)	1440	HSTAT201010	HSTAT202010
3.0 (76)	24.0 (610)	432	HSTAT301002	HSTAT302002
3.0 (76)	48.0 (1220)	864	HSTAT301004	HSTAT302004
3.0 (76)	72.0 (1830)	1296	HSTAT301006	HSTAT302006
3.0 (76)	96.0 (2440)	1440	HSTAT301008	HSTAT302008
3.0 (76)	120.0 (3050)	1440/1800	HSTAT301010	HSTAT302010

OPERATING INSTRUCTIONS

⚠ WARNING
Read and understand this entire manual before operating this electric heating tape.

STEP 1

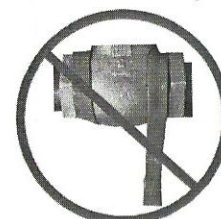
Remove heater from box. Visually inspect heater. Do not use if torn or damaged.

STEP 2

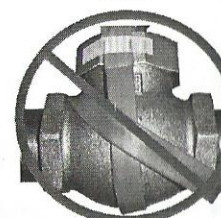
Installing your heating tape:

The flexible heating tape can be installed on both a flat and/or curved surface. For a flat surface, lay the heating tape onto the surface to be heated. For a curved surface, wrap the heating tape onto the surface to be heated. Attach the heating tape to the surface by using aluminum tape, fiberglass tape, or a mechanical clamping device which will not cause damage to the heating tape.

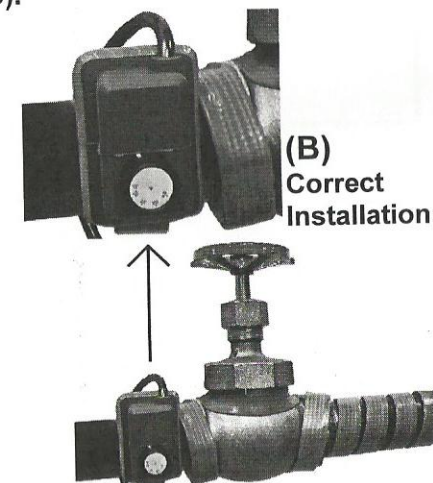
- The length of one entire side of the heating tape must be in full contact with the surface. Ensure the heating tape is not kinked, twisted, or any portion of the tape hanging free from the surface (A).
- Thermostat sensor must be in full contact with object to be heated. Sensor is located underneath temperature controller box (B).
- Do not overlap heating tape on itself (C).



(A) **Incorrect Installation:** Heating tape hanging free from the surface



(C) **Incorrect Installation:** Heating tape overlapped on itself



(B) **Correct Installation:**

STEP 3

For 120VAC: Plug power cord into appropriate outlet.

For 240VAC: Terminate power cord to appropriate electrical power supply. The power cable consists of two color-coded conductors, black and white. The black wire should be connected to Line 1. The white wire should be connected to Line 2. The power connections must be adequately rated to electrically support the voltage and amperage of the heater. The identification label located on the power cord displays voltage and amperage requirements.

STEP 4

Adjust dial to desired setting between 50-425°F (10-218°C).

⚠ WARNING Temperature controller dial and enclosure will become very hot after use. Always unplug heater and allow to cool prior to handling.

TROUBLESHOOTING GUIDE

Please read this guide prior to contacting BriskHeat®. This guide is designed to answer the most commonly asked questions. If you are unable to identify the problem or need additional assistance, please contact your local BriskHeat® distributor or contact us toll free (U.S. / Canada only) at 1-800-848-7673 or 614-294-3376 or bhtsales1@briskheat.com.

PROBLEM	SOLUTION(S)
Does not heat	Verify heater is connected to proper voltage. Check to see if there is a resistance reading (not an open circuit) in heater using an ohm meter.
Circuit breaker is tripping	Validate that the circuit breaker is capable of handling the amp requirement of heater. Examine heater and cord for any damage.

WARRANTY INFORMATION

The BriskHeat Corporation (hereinafter referred as ("BriskHeat")) warrants to the original purchaser for the **period of eighteen (18) months from date of shipment or twelve (12) months from date of installation**, whichever comes first, that the products manufactured by BriskHeat: (A) conform to the description and specifications as set forth in BriskHeat's current catalogue or in the quotation and drawings submitted by BriskHeat; and (B) are free from defects in materials and workmanship under prescribed use and service.

Remedy. BriskHeat's obligation and the exclusive remedy under this warranty shall be limited to the repair or replacement, at BriskHeat's option, of any parts of the product which may prove defective under prescribed use and service within eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever comes first, and which, following BriskHeat's examination, is determined by BriskHeats to be defective under conditions described herein: provided, BriskHeat has, at its option, a representative of BriskHeat present at start-up. BriskHeat shall not be liable for any incidental, consequential or special damages arising from any breach of warranty, breach of contract, negligence, or any other legal theory, including but not limited to, loss of use of parts or equipment or any associated equipment, cost of capital, cost of any substitute equipment, facilities or services, overhead, downtime costs, or claims of customer or purchaser for such damages. This remedy does not include labor costs for installation or removal of the equipment or parts covered by this warranty, and BriskHeat shall not be responsible for such labor costs.

Limitation. This warranty shall not apply to any product or part thereof which has been subject to accident, negligence, alteration, damage during shipment, improper service, abuse, or misuse, including but not limited to use beyond rated capacity. BriskHeat makes no warranty whatsoever with respect to accessories or parts not supplied or manufactured by BriskHeat. BriskHeat's obligation under this warranty shall be conditioned upon BriskHeat's receiving written notice of any defect within fifteen (15) days after its discovery, and, at BriskHeat's option, return of such equipment or parts prepaid to its factory at 1055 Gibbard Ave., Columbus, Ohio 43201.

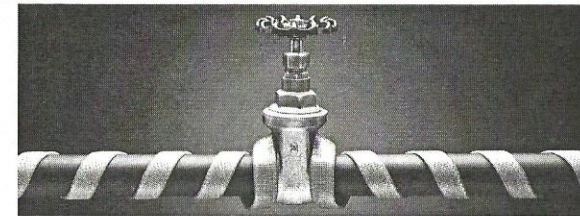
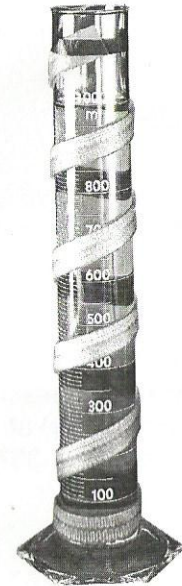
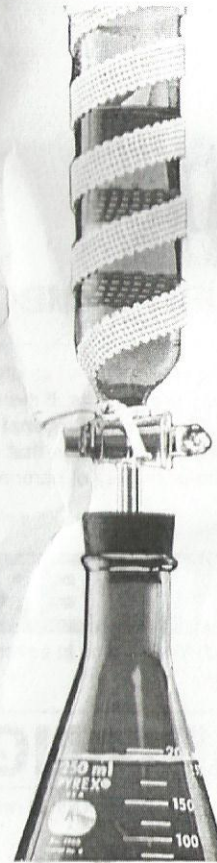
Disclaimer. **BRISKHEAT MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT AS IS EXPRESSLY SET FORTH ABOVE. NO AGENT, EMPLOYEE OR REPRESENTATIVE OF BH THERMAL HAS ANY AUTHORITY TO BIND BRISKHEAT TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY COVERING THE SALE OF ANY PRODUCT, AND UNLESS SUCH AFFIRMATION, REPRESENTATION OR WARRANTY MADE BY AN AGENT, EMPLOYEE OR REPRESENTATIVE IS SPECIFICALLY ENDORSED IN WRITING BY BRISKHEAT, IT SHALL NOT BE ENFORCEABLE BY ANY BUYER. BRISKHEAT MAKES NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY AND NO EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, EXCEPT AS IS EXPRESSLY SET FORTH ABOVE. BRISKHEAT SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES.**

This warranty allocates risk between the purchaser and BriskHeat as authorized by the Uniform Commercial Code and other applicable law.

BriskHeat®

XtremeFLEX®

Heating Tapes and Cords



BriskHeat®

BriskHeat® Corporation
1055 Gibbard Ave, Columbus, OH 43201
Toll Free: 800-848-7673
Phone: 614-294-3376
Fax: 614-294-3807
Email: bhtsales1@briskheat.com
Web site: www.briskheat.com

PN: 10315 Rev E

Instruction Manual



Read and understand this material before operating or servicing these heating tapes. Failure to understand how to safely operate these heaters could result in an accident causing serious injury or death. These heaters should only be operated by qualified personnel.

TABLE OF CONTENTS

Introduction..... 2
 Safety Alert Symbol..... 2
 Important Safety Instructions..... 3
 Specifications..... 4
 Installation..... 4
 Troubleshooting Guide..... 6
 Warranty..... 7

INTRODUCTION

XtremeFLEX® Heating Tapes and Cords are designed to provide a long and efficient service life with function, reliability, and safety in mind. For additional information concerning this, or other BriskHeat® products, please contact your local BriskHeat® distributor or contact us toll free (U.S. / Canada only) at 1-800-848-7673 or 614-294-3376.



SAFETY ALERT SYMBOL

The symbol above is used to call your attention to instructions concerning your personal safety. It points out important safety precautions. It means "ATTENTION! Become Alert! Your Personal Safety is involved!" Read the message that follows and be alert to the possibility of personal injury or death.



Immediate hazards which WILL result in severe personal injury or death



Hazards or unsafe practices which COULD result in severe personal injury or death



Hazards or unsafe practices which COULD result in minor personal injury or property damage.

SAVE THESE INSTRUCTIONS!

Additional copies of this manual are available upon request.

IMPORTANT SAFETY INSTRUCTIONS



! DANGER
 A person who has not read and understood all operating instructions is not qualified to operate this product.

! DANGER

- Do not immerse heater in liquid.
- Keep volatile or combustible material away from heater when in use.
- Do not use heater in hazardous locations
- Keep sharp metal objects away from heater.

Failure to observe these warnings may result in electric shock, risk of fire, and personal injury.

! WARNING

End User Must Comply to the Following:

- Only qualified personnel are allowed to connect the electrical wiring.
- All electrical wiring must follow local electrical codes and highly recommend following NEC Article 427.
- Final installation / wiring is to be inspected by the authority who has jurisdiction in the area that the heating blanket is installed.
- The end-user is responsible for providing a suitable disconnecting device.
- The end-user is responsible for providing suitable electrical protection device. It is highly recommended that a ground fault circuit breaker be used.

! CAUTION

- Never handle the heater while it is in operation; always disconnect the heater from the power source and allow to cool prior to handling.
- Inspect heater before use.
- Do not operate heater without a temperature control device.
- Never connect heating tape to a controller's output without assembling the two separable plug halves (if applicable).
- Never use B00 or BW0 series tape on a conductive surface.
- Do not use heater with torn or worn surfaces.
- If spillage of foreign matter onto heater occurs, disconnect from power source and clean after heater is allowed to cooled.
- Never operate a heater without an appropriate heat sink (device being heated is considered a heat sink)
- Do not operate heater at temperatures above rated temperature value
- Fasten heater to device using approved methods only
- Do not repair damaged or faulty heaters.
- Do not crush or apply severe physical stress on heater or cord assembly.
- Unplug heater when not in use.

Failure to observe these warnings may result in personal injury or damage to the heater.

SPECIFICATIONS

Type of XtremeFLEX® Heating Tape or Cord	Maximum Exposure Temperature	Nominal Watts per Square Inch (mm)	Outer Sheath Material
B00 Series: Standard Insulated Heating Tape	900°F (482°C)	8.6 (0.013)	Fiberglass
BIH Series: Heavy Insulated Heating Tape	900°F (482°C)	Standard: 8.6 (0.013) Wide: 5.1 (0.008)	Fiberglass
BIH-G Series: Grounded Heavy Insulated Heating Tape	482°F (250°C)	9.6 (0.015)	Fiberglass
BS0 Series: Silicone Rubber Heating Tape	450°F (232°C)	4.3 (0.007)	Silicone Rubber
BS0-G Series: Grounded Silicone Rubber Heating Tape	450°F (232°C)	4.3 (0.007)	Silicone Rubber
BW0 Series: High Temperature Standard Insulated Heating Tape	1400°F (760°C)	13.1 (0.020)	SAMOX®
BWH Series: High Temperature Heavy Insulated Heating Tape	1400°F (760°C)	Standard: 13.1 (0.020) Wide: 7.7 (0.012)	SAMOX®
HTC Series: Heating Cord	900°F (482°C)	1.8 (0.003)	Fiberglass
IFG: Heavy Insulated Heating Tape	482°F (250°C)	6.0 (0.009)	Fiberglass
ISR: Silicone Rubber Heating Tape	450°F (232°C)	3.0 (0.005)	Silicone Rubber

INSTALLATION

⚠ WARNING

Read and understand this entire manual before operating this electric heater.

STEP 1

Remove heater from box. Make visual inspection of heater. Do not use if torn or damaged.

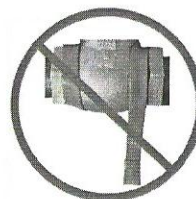
STEP 2

Installing your heating tape: The flexible heating tape can be installed on both a flat and/or curved surface. For a flat surface, lay the heating tape onto the surface to be heated. For a curved surface, wrap the heating tape onto the surface to be heated (A). The length of one entire side of the heating tape must be in full contact with the surface.

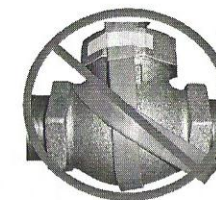


A.) Proper Installation

Ensure the heating tape is not kinked, twisted, or any portion of the tape hanging free from the surface (B). **Do not overlap heating tape on itself (C).** Attach the heating tape to the surface by using aluminum tape, fiberglass tape, or a mechanical clamping devices which will not cause damage to the heating tape.



B.) Incorrect Installation:
Heating tape hanging free from the surface



C.) Incorrect Installation:
Heating tape overlapped on itself

STEP 3

Connecting your heating tape to a power supply:

1. Your heating tape **must** be connected to an external control device. The heater must not be operated without some form of temperature control.

⚠ WARNING Your heater is designed to operate at a specific voltage. Refer to the label on the heater for proper operating voltage and wattage information. Failure to operate the heater at the specified rating could result in overheating of the heating blanket, the surface being heated or personal injury. Also note that too low of a supply of voltage will result in under heating.

All electrical connections must be made by qualified personnel and in accordance with all applicable codes and regulations.

2. Ensure the heater is protected by a properly sized circuit breaker or fuse.
3. Use of a ground fault circuit interrupter is highly recommended and maybe required.

4A. If heating tape came with a plug:
Plug power cord into appropriate controller.

4B. If heating tape did not come with a plug:
Two wires (same color) should be connected to the power source (or temperature control device) directly, through a junction box, or to a connector that is mated to a receptacle connected to the power source. BriskHeat® XtremeFLEX® Heating Tapes are non-polarized, allowing either wire to be connected to the neutral or hot. If BIH-G or BS0-G series, the third wire, designated by the color green (or a green stripe), should be connected to ground.

TROUBLESHOOTING GUIDE

Please read this guide prior to contacting BriskHeat®. This guide is designed to answer the most commonly asked questions. If you are unable to identify the problem or need additional assistance, please contact your local distributor/ representative or us at **1-800-848-7673, 614-294-3376**, or **bhtsales1@briskheat.com**.

PROBLEM	SOLUTION(S)
Does not heat	Verify heater is connected to proper voltage. Check to see if there is a resistance reading (not an open circuit) in heater using an ohm meter.
Circuit breaker is tripping	Validate that the circuit breaker is capable of handling the amp requirement of heater. The identification label located on the power cord displays the heater's amperage requirement. Examine heater and cord for any damage.

WARRANTY INFORMATION

The BriskHeat Corporation (hereinafter referred as ("BriskHeat")) warrants to the original purchaser for the **period of eighteen (18) months from date of shipment or twelve (12) months from date of installation**, whichever comes first, that the products manufactured by BriskHeat: (A) conform to the description and specifications as set forth in BriskHeat's current catalogue or in the quotation and drawings submitted by BriskHeat; and (B) are free from defects in materials and workmanship under prescribed use and service.

Remedy. BriskHeat's obligation and the exclusive remedy under this warranty shall be limited to the repair or replacement, at BriskHeat's option, of any parts of the product which may prove defective under prescribed use and service within eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever comes first, and which, following BriskHeat's examination, is determined by BriskHeats to be defective under conditions described herein: provided, BriskHeat has, at its option, a representative of BriskHeat present at start-up. BriskHeat shall not be liable for any incidental, consequential or special damages arising from any breach of warranty, breach of contract, negligence, or any other legal theory, including but not limited to, loss of use of parts or equipment or any associated equipment, cost of capital, cost of any substitute equipment, facilities or services, overhead, downtime costs, or claims of customer of purchaser for such damages. This remedy does not include labor costs for installation or removal of the equipment or parts covered by this warranty, and BriskHeat shall not be responsible for such labor costs.

Limitation. This warranty shall not apply to any product or part thereof which has been subject to accident, negligence, alteration, damage during shipment, improper service, abuse, or misuse, including but not limited to use beyond rated capacity. BriskHeat makes no warranty whatsoever with respect to accessories or parts not supplied or manufactured by BriskHeat. BriskHeat's obligation under this warranty shall be conditioned upon BriskHeat's receiving written notice of any defect within fifteen (15) days after its discovery, and, at BriskHeat's option, return of such equipment or parts prepaid to its factory at 1055 Gibbard Ave., Columbus, Ohio 43201.

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This warranty allocates risk between the purchaser and BriskHeat as authorized by the Uniform Commercial Code and other applicable law.