Storage
Long-term storage requires special attention. Units should be stored on a level, solid surface, preferably indoors. If outside storage is necessary, protect the units against moisture and dirt by encasing the cartons in plastic or some similar weatherproof material.

Unpacking
Place carton in an upright position and remove staples or use a sharp (knife edge) tool to CAREFULLY cut or scribe the sealing tape on both sides at the top of the carton. Open carton flaps. Remove any cardboard and wooden filler pieces, as well as loose components or accessories shipped with the unit.

Carefully remove the unit from the carton. Inspect the unit for any damage that may have occurred during transit and check for loose, missing or damaged parts.

Installation
WARNING
To reduce the risk of fire, electrical shock, or injury to persons, observe the following:

1. Use this unit only in the matter intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.

2. Before servicing or cleaning unit, switch power off at service panel and lock service panel to prevent power from being switched on accidentally.

3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.

4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back-drafting. Follow the heating equipment manufacturer’s guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.

5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

6. Ducted fans must always be vented to the outdoors.

7. Acceptable for use over a bathtub or shower when installed in a GFCI protected branch circuit.

8. Install fan at least five feet (1.52m) above floor.

9. Never place a switch where it can be reached from a tub or shower.

10. This unit must be grounded.

Figure 1: Dimensions

Description
The PennBarry Transfan fits between studs in walls 3-3/4" to 5" thick. White plastic grill on both sides of wall allows even air diffusion. Adjustable speed switch controls air delivery from 50 to 225 CFM. 115V, 60 Hz. motor is pre-wired to junction box. UL listed. AMCA certified air deliveries.

Receiving and Handling
PennBarry fans are carefully inspected before leaving the factory. When the unit is received, inspect the carton for any signs of tampering. Inspect the unit for any damage that may have occurred during transit and check for loose, missing or damaged parts. Mishandled units can void the warranty provisions. PennBarry is not responsible for damages incurred during shipment.

Avoid severe jarring and/or dropping. Handle units with care to prevent damage to components or special finishes.
CAUTION
1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.

3. Please read specification label on product for further information and requirements.

GENERAL SAFETY INFORMATION
1. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

2. Motor must be securely and adequately grounded. This can be accomplished by wiring with a grounded, metal-clad raceway system, by using a separate ground wire connected to the bare metal of the motor frame, or other suitable means.

3. Always disconnect power source before working on or near a motor or its connected load. If the power disconnect point is out-of-sight, lock it in the open position and tag to prevent unexpected application of power.

4. All moving parts should be guarded.

5. Be careful when touching the exterior of an operating motor - it may be hot enough to be painful or cause injury. With modern motors this condition is normal if operated at rated load and voltage - modern motors are built to operate at higher temperatures.

6. Protect the power cable from coming in contact with sharp objects.

7. Do not kink power cable and never allow the cable to come in contact with oil, grease, hot surfaces or chemicals.

8. Make certain that the power source conforms to the requirements of your equipment.

9. Wiping or cleaning rags and other flammable waste materials must be placed in a tightly closed metal container and disposed of later in the proper fashion.

10. When cleaning electrical or electronic equipment, always use an approved cleaning agent such as dry cleaning solvent.

INSTALLATION
1. The PennBarry Transfan consists of the fan assembly with one of the grills already mounted, a second unattached grill, two (2) long bolts and two (2) wire nuts.

   Install in interior wall only.

2. Cut the opening for the room to room fan between studs, usually spaced on 16" centers. Studs can be located by tapping lightly with a hard object, by using a strong magnet that will indicate the location of nails or by using a stud finder.

3. Using the template as a guide, cut rectangular openings on both sides of the wall. The dimensions of the openings should be 12-3/4" wide X 10-1/4" high.

   The two openings must be aligned perfectly, otherwise the grill may not completely cover one of the openings.

4. Follow the National Electrical Code and all other applicable local codes, provide a 115 volt, 60 Hz. power supply line.

   The Transfan is suitable for use with solid-state speed controls. As such, a built-in adjustable speed switch eliminates the need for a separate wall switch.

5. Remove the two (2) small sheet metal screws to open the junction box on the fan. Measure the thickness of the wall and slide the telescopic sleeve of the unit to this required thickness.

6. Place the room to room fan in the wall opening, with the attached grill facing the room to which the air is to be exhausted.

7. Slide the Transfan back a couple of inches, and feed the wires through the hole in the bottom section of the junction box. Make the necessary connections by using the two (2) wire nuts (furnished). A separate ground wire must be connected to the grounding screw.

8. Replace the cover of the junction box.

9. Slide the room to room fan into its permanent position and install the unattached grill. Secure tightly using the two bolts (furnished).

Maintenance
\textbf{CAUTION} Disconnect power source before working on fan.

LUBRICATION
Motor is permanently lubricated at factory.

CLEANING
Grills may be cleaned using a vacuum cleaner with appropriate attachments or by using a clean cloth.

Figure 2: Wiring Diagram
Parts Replacement
If replacing parts, do so with properly selected components which duplicate the original parts correctly. Incorrectly sized parts can damage the fan.

Order replacement parts through the dealer from whom the product was originally purchased. Please provide following information:

1. Model number
2. Serial number (if any)
3. Part descriptions and number as shown in parts list

### Table 1: Parts List

<table>
<thead>
<tr>
<th>Ref. #</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Housing frame with orifice plate</td>
<td>NA</td>
</tr>
<tr>
<td>2</td>
<td>Housing sleeve</td>
<td>NA</td>
</tr>
<tr>
<td>3</td>
<td>Motor mounting bracket</td>
<td>NA</td>
</tr>
<tr>
<td>4</td>
<td>Connection box</td>
<td>NA</td>
</tr>
<tr>
<td>5</td>
<td>Connection box cover</td>
<td>NA</td>
</tr>
<tr>
<td>6</td>
<td>Motor</td>
<td>60027</td>
</tr>
<tr>
<td>7</td>
<td>Fan blade</td>
<td>50556</td>
</tr>
<tr>
<td>8</td>
<td>Grill, front (with label)</td>
<td>55130-L</td>
</tr>
<tr>
<td>9</td>
<td>Grill, rear</td>
<td>55130</td>
</tr>
<tr>
<td>10</td>
<td>Knob (Chrome plated)</td>
<td>NA</td>
</tr>
<tr>
<td>11</td>
<td>Adjustable speed switch</td>
<td>52151</td>
</tr>
<tr>
<td>12</td>
<td>1/4&quot;-20 X 1 1/4&quot; Round head slotted bolts</td>
<td>NA</td>
</tr>
<tr>
<td>13</td>
<td>Wire nuts for electrical connection</td>
<td>NA</td>
</tr>
</tbody>
</table>
# Troubleshooting Checklist

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause(s)</th>
<th>Corrective Action</th>
</tr>
</thead>
</table>
| **Excessive noise** | 1. Defective or loose motor bearings  
2. Ventilator base not securely anchored  
3. Loose or unbalanced wheel/propeller  
4. Misaligned pulleys or shaft  
5. Loose or damaged wheel/propeller  
6. Wheel running in wrong direction | 1. Replace motor with same frame size, RPM, HP  
2. Reset properly  
3. Tighten screws, remove build-up, balance wheel/propeller  
4. correct alignment  
4. Replace wheel/propeller  
6. Reverse direction |
| **Fan inoperative** | 1. Blown fuse or open circuit breaker  
2. Loose or disconnected wiring  
3. Defective motor  
4. Broken belts | 1. Replace fuses or circuit breaker  
2. Shut off power and check wiring for proper connections  
3. Repair or replace motor  
4. Replace belts |
| **Insufficient airflow** | 1. Open access doors or loose sections of ducts  
2. Clogged filters  
3. Operation in wrong direction  
4. Insufficient make-up air direction | 1. Check for leakage  
2. Clean filters  
3. Correct rotation of wheel  
4. Add make-up fan or louver opening |
| **Water leaking into ductwork or collection of grease under fan** | 1. Fan installed with slope in the wrong direction  
2. Clogged drain spout  
3. Cooling tube or motor dome top removed  
4. Grease container full | 1. Slope should be fitted in the direction of the drainage opening or grease collection box and drain spout  
2. Clean drain spout  
3. Install new cooling tube with gasket and dome top  
4. Empty grease box |
| **Motor overheating** | 1. Overvoltage or under voltage  
2. Operation in wrong direction  
3. Fan speed too high  
4. Incorrect motor (service factor 1.0, low ambient temperature)  
5. Blocked cooling tube or leaky gasket  
6. Undersized motor | 1. Contact power supply company  
2. Reverse direction of motor  
3. Slow down fan by opening variable pitch pulley on motor shaft  
4. Replace motor with correct open, NEMA service factors (1.15 or higher) with 40 degrees ambient  
5. Remove blockage and seal cooling tube in place  
6. Check motor ratings with catalog speed and air capacity chart |

**Note:** Care should be taken to follow all local electrical, safety and building codes. Provisions of the National Electric Code (NEC), as well as the Occupational Safety and Health Act (OSHA) should be followed.

All motors are checked prior to shipment. If motor defects should develop, prompt service can be obtained from the nearest authorized service station of the motor manufacturer while under warranty. Exchange, repair or replacement will be provided on a no charge basis if the motor is defective within the warranty period. The PennBarry representative in your area will provide a name and address of an authorized service station if requested. **WARNING:** Motor guarantee is void unless overload protection is provided in motor wiring circuit.
Limited Warranty

What Products Are Covered
PennBarry Fans and Ventilators (each, a "PennBarry Product")

One Year Limited Warranty For PennBarry Products
PennBarry warrants to the original commercial purchaser that the PennBarry Products will be free from defects in material and workmanship for a period of one (1) year from the date of shipment.

Exclusive Remedy
PennBarry will, at its option, repair or replace (without removal or installation) the affected components of any defective PennBarry Product; repair or replace (without removal or installation) the entire defective PennBarry Product; or refund the invoice price of the PennBarry Product. In all cases, a reasonable time period must be allowed for warranty repairs to be completed.

What You Must Do
In order to make a claim under these warranties:

1. You must be the original commercial purchaser of the PennBarry Product.
2. You must promptly notify us, within the warranty period, of any defect and provide us with any substantiation that we may reasonably request.
3. The PennBarry Product must have been installed and maintained in accordance with good industry practice and any specific PennBarry recommendations.

Exclusions
These warranties do not cover defects caused by:

1. Improper design or operation of the system into which the PennBarry Product is incorporated.
2. Improper installation.
3. Accident, abuse or misuse.
4. Unreasonable use (including any use for non-commercial purposes, failure to provide reasonable and necessary maintenance as specified by PennBarry, misapplication and operation in excess of stated performance characteristics).
5. Components not manufactured by PennBarry.

Limitations
1. In all cases, PennBarry reserves the right to fully satisfy its obligations under the Limited Warranties by refunding the invoice price of the defective PennBarry Product (or, if the PennBarry Product has been discontinued, of the most nearly comparable current product).
2. PennBarry reserves the right to furnish a substitute or replacement component or product in the event a PennBarry Product or any component of the product is discontinued or otherwise unavailable.
3. PennBarry's only obligation with respect to components not manufactured by PennBarry shall be to pass through the warranty made by the manufacturer of the defective component.

General
The foregoing warranties are exclusive and in lieu of all other warranties except that of title, whether written, oral or implied, in fact or in law (including any warranty of merchantability or fitness for a particular purpose).

PennBarry hereby disclaims any liability for special, punitive, indirect, incidental or consequential damages, including without limitation lost profits or revenues, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, downtime, shutdown or slowdown costs.

The remedies of the original commercial purchaser set forth herein are exclusive and the liability of PennBarry with respect to the PennBarry Products, whether in contract, tort, warranty, strict liability or other legal theory shall not exceed the invoice price charged by PennBarry to its customer for the affected PennBarry Product at the time the claim is made.

Inquiries regarding these warranties should be sent to: PennBarry, 1401 North Plano Road, Richardson, TX 75081.