Customer:_____

Sales Representative: _____

Model Number: _____

Serial Number: _____

Field Start-Up Sheet

Fan Box

****Please Print****

INITIAL INSPECTION

I. Installer Responsibilities

1. Remote Panel: All interconnecting wires run from remote to unit ☐ Yes
   Remote Panel Location: ☐ Inside Wall ☐ Outside Wall ____ Feet From Unit (approx.)
2. Electrical Supply properly installed to main panel, at the voltage and amperage as stated on the unit nameplate ☐ Yes
3. Multi-section units: joints caulked at mating frames, all bolts and nuts installed and tightened, seam tape applied ☐ Yes
4. Upright Units: Legs attached and bolted, shimmed properly so unit does not "rock" ☐ Yes
5. Duct connections made and sealed properly ☐ Yes
6. Discharge head installed secure, with diffuser blades tightened and in the open position ☐ Yes
7. All "shipped loose" items installed properly - filters, vibration isolators, smoke detectors, dampers, louvers, service lights supply fan belts, service platform, roof curb, humidistat, CO detector, etc. ☐ Yes
12. All shipping and rigging paint scratches have been properly touched-up ☐ Yes

Comments:_____

_____

II. Miscellaneous Items

1. Visible Physical Damage? _____ NO IF YES, Specify_____
2. Type of Installation: ☐ Outdoor ☐ Indoor ☐ Roof Curb ☐ Platform ☐ Post ☐ Suspended ☐ Upright
3. Hardware Tight & Secure ____ 4. Damper Linkages Secure _____

Comments: _____

III. Fan & Motor Sheaves

1. ___ Fan & Motor Sheaves Secured Tightly to Shafts
2. ___ V-Belts Aligned Properly
3. ___ Fan Bearing Set screws Tight
4. ___ Fan Motor Manufacturer_____ HP_____ FLA_____ Frame Size _____
5. ___ Bushing Bolts Secure
6. ___ V-Belts Tensioned Properly
7. ___ Fan Bearing Mounting Bolts Tight

Comments: _____

IV. Filters

1. ___ Filters Installed Properly 2. Type: ☐ Aluminum ☐ Pleated 30% ☐ Pad & Frame ☐ Other

Comments: _____

V. Electric Service

1. Electrical Service Provided to Unit: ____ Volts ____ Phase ____ Hertz _____ Amps
2. Unit Nameplate Electrical Requirement: ____ Volts ____ Phase ____ Hertz _____ Amps
3. Terminal Strip Wires Tight: Main Panel ☐ Yes Remote Panel ☐ Yes
4. Componentry and Relays Mounted Securely in Place ☐ Yes
5. Main Fusing Size: ____ Volts ____ Amps 6. Overload Heater Size _____
6. The Unit has been grounded by the installer at the main unit panel ☐ Yes

Comments: _____

VERIFICATION OF OPERATION

NOTE: Refer to the Sequence of Operation & Wiring Diagram in the Owners Manual for specific data on this unit. See Factory Start-up & Test Sheet in the Unit Owners Manual to note the unit settings prior to shipment.

I. Fan Operation

1. The Inlet Damper is fully open when fan comes on ☐ Yes ☐ NA Discharge Damper operates properly ☐ Yes ☐ NA
2. Fan Rotation is in the same direction as the rotation arrow ☐ Yes
3. Discharge External Static Pressure _____ " W.C.
4. Check the following:

	Unit Off	Unit Running	
Phase 1:	_____ Volts	_____ Volts _____ Amps	*Verify the motor running*
Phase 2:	_____ Volts	_____ Volts _____ Amps	*amps does not exceed the*
Phase 3:	_____ Volts	_____ Volts _____ Amps	*motor nameplate FLA*

II. Miscellaneous Operational Checks:

1. With the unit fan operating, the circuit check lights are illuminated ☐ Yes
2. If furnished, the time clock has been programmed per owner instructions, and training provided to him by me ☐ Yes
3. The electrical drawing and sequence of operation is taped to the enclosure door. ☐ Yes
4. The owners manual was reviewed by me with the owner, and placed back inside the unit enclosure ☐ Yes
5. The owner was instructed by me on the operation of the following controls and options (check those that apply):

☐ Keyed Switches on remote panel
☐ Smoke Detector
☐ Magnahelic Gauge
☐ 120V GFI Outlet
☐ Fan Bearing Grease Type & Lube Cycle
☐ Discharge Head Deflection Blade Adjustment
☐ _____

☐ 3-phase Power Monitor
☐ CO Detector
☐ Photohelic Gauge
☐ Dirty Filter Light/Alarm
☐ Filter Maintenance
☐ _____

Comments

_____

_____

_____

THE ABOVE START-UP WAS PERFORMED BY

Company Name: _____ Date: _____

Phone Number: (_____) - _____ Fax Number: (_____) - _____

My Name (Service Tech) _____

- MAKE A COPY FOR YOUR FILES AS NECESSARY

The Owner Representative that I met with and discussed the unit controls and operation was:

NAME: _____ **TITLE:** _____
(Please Print)

CUSTOMER'S AUTHORIZED SIGNATURE
I acknowledge that I have been instructed on the operation of this unit:

Signature_____ Date: _____ Phone No. _____

After Completion, Return this start-up sheet to:

AbsolutAire, Inc.

5496 North Riverview Drive
Kalamazoo, MI 49004

Phone: (800) 804-4000 Fax: (269) 382-5291
www.absolutaire.com

(stupfb) ***2/03***

ABSOLUTAIRE, INC.
GENERAL INSTALLATION INSTRUCTIONS
Fan Boxes and Unheated Make-Up Air Units

The following recommendations are not intended to replace or void any requirements of federal, state or local codes having jurisdiction. All local authorities having jurisdiction should be consulted before installation is made. The unit should be installed in accordance with the National Electrical Code, NFPA 70 current edition.

Inspect the unit for visible damage. The unit was thoroughly inspected before leaving the factory, and the carrier has accepted and signed for it. Any damage or irregularities should be noted at the time of delivery and immediately reported to the delivery carrier. Request a written inspection report from the Claims Inspector to substantiate any necessary claim. File the claim with the delivery carrier, not with AbsolutAire, Inc.

Further inspect the unit as follows:

A) Unlatch and open Unit Access Doors. Inspect for internal damage.

B) Remove and inspect all loose-shipped items, including remote mount control panel. Make certain all items are undamaged.

If questions or complications should arise regarding the application or installation of the AbsolutAire Air Handling System, that cannot be solved by using these instructions, our Maintenance Guidelines, or the Troubleshooting Guide, please feel free to contact us at (269) 382-1875.

It is the responsibility of the installing contractor to see that the unit is installed within the manufacturers design parameters, as stated on the rating plate, and that the start-up procedure specified by the manufacturer is followed. Failure to comply may void our warranty and/or the component manufacturer's warranty.

INSTALLATION

Inspect the blower wheels, shaft and motor for any shipping blocks which must be removed before operation.

ROOFTOP/CURB MOUNTED

For a unit that discharges downward through a curb, locate the required opening for connecting ductwork. Cut through roof deck for connection of duct to blower discharge. Allow adequate, at least one inch, clearance on all sides between ductwork and decking material. Position the curb on the roof in relation to the roof penetration, as shown on the blueprint. Secure the curb to the structural members. The curb may now be flashed into the roof. Roof top, down discharge units are provided with a skirt that is larger than the curb on all sides. This allows for roofing up to the top of the curb, if so desired. On applicable models, attach the furnished support legs to the intake end of unit, one on each side. The unit may now be lifted up onto the curb.

NOTE: Units which discharge down through the curb with discharge dampers must have the roof opening cut large enough to allow access to the damper motor and linkage from below the roof. The damper should be mounted and motor wired with pigtail provided before the unit is set on the curb.

NOTE: We recommend the connection of a short length of ductwork to the unit before setting on the curb to extend through the roof if minimum (1") clearance is being used around the duct.

PAD MOUNTED

For a unit designed to mount on a pad or other support and discharge horizontally, vibration isolators are recommended. A channel iron support adequate to carry the weight of the unit must be secured to the bottom of the unit, one at each end, extending at least 3" past the sides of the unit. On standard models, four vibration isolators will be used, one for each corner of the unit. If there is any question, refer to your submittal or record drawing for size, quantity, and location of isolators. Anchor the vibration isolators to the pad. The unit may now be set down onto the isolators and bolted to them.

INDOOR/SUSPENDED

For a unit designed to be suspended within the building, hanger rods and channel iron adequate to support the weight of the unit will be required. On standard models, the channel iron must be secured to the bottom of the unit, one at each end, extending at least 3" past the sides of the unit. Refer to your submittal or record drawing for size, quantity, and location of channel iron and isolators. Attach the hanger rods to the building structure so they hang down to the channel extensions under the unit. Make sure the rod location does not interfere with the removal of unit access panels. Provide one suspension type vibration isolator in each hanger rod. The minimum combined ratings of the vibration isolators and suspension materials should equal the total weight of the fully assembled unit. Move the unit to its installation location. Fully assemble the unit with all included components (motorized discharge dampers, etc.) Raise the unit so that one hanger rod drops through holes in the channel extensions. Attach two nuts to hanger rods and level unit, jamb the two nuts together to prevent loosening.

The unit is now ready for wiring, and connection to any required ductwork.

WIRING

All electrical wiring must be in accordance with applicable codes and standards. See the electrical diagram on the unit door or in the service manual before attempting any wiring. Refer to the unit rating plate for required incoming voltage and phase. Check for concurrence with voltage and phase shown on the wiring diagram.

Refer to wiring diagram for numbers of wires needed for main power connection and remote control wiring. Field wiring is shown with dashed lines.

WARNING! ! ! - Spark testing or shorting of control wires by any means will render the control transformer inoperative. DO NOT allow this to happen as it IS NOT covered under the warranty.

We recommend that the wires for the control circuit be routed through the conduit provided with the main electrical service to the equipment. This procedure is provided for in Chapter 3, Article 300-3(a) of the NFPA 70 1984 National Electrical Code. It reads as follows: "Conductors of 600 volts or less shall be permitted to occupy the same equipment wiring enclosure, cable or raceway, without regard to whether the individual circuits are alternating current or direct current, where all conductors are insulated for the maximum voltage of any conductor within the enclosure, cable or raceway."

An electric disconnect switch having adequate ampacity shall be installed in accordance with Article 430 of the National Electric Code (N.E.C.), ANSI/NFPA 70. If not factory installed, please refer to the unit rating plate for voltage and ampacity requirements.

Open cover on disconnect box, connect line voltage wiring to terminal block provided. Then feed the control wiring through the conduit to the master panel. Connect color coded and/or numbered control wires to terminal strip per the wiring diagram.

DUCTWORK

Ductwork must be sized and installed in accordance with applicable codes and standards. On units mounted outdoors, it is recommended that all discharge and return air ducts be insulated to prevent condensation during the "Off" cycle in cold weather. A fresh air intake hood with bird screen and/or filters can be supplied by AbsolutAire with the heater. Our intake hood or one of a similar design is recommended.

On units mounted indoors with through the roof intake ductwork, a suitable weather resistant intake hood must be installed. Sheet metal standards should be adhered to to ensure uniform air delivery to the heater inlet. This aids in preventing moisture entrainment. When using a through the wall intake duct, an intake louver properly sized should be used, having adequate moisture baffling characteristics for the design air volume.

In lieu of an intake louver, a wall mounted intake hood with mesh screen may be used. This can be supplied by AbsolutAire. It is recommended that all intake ductwork which is exposed to the heated space be insulated.

The requirements for discharge ductwork are usually considerably less than with a conventional system, as the pressurization principle lends itself to effective air distribution. Generally, a "Splash Plate" or other method of distributing the air is all that is necessary.

SOUND CONTROL

Flexible connectors should be employed on all ductwork connections. Unit vibration isolators are recommended for suspended units and can be supplied by AbsolutAire as optional equipment.

Energize the system and check for unusual noises or vibrations, etc. Check the fan for proper rotation. THIS MUST BE A VISUAL CHECK as fans will move air even if they are running backward, but the system will not perform properly. Check the amp draw to all motors to insure it does not exceed the rated maximum current rating of the motor.

PROCEED WITH THE FIELD START-UP AND CHECK LIST

ABSOLUTAIRE, INC.
5496 North Riverview Drive
Kalamazoo, MI 49004-1595
Telephone: (269) 382-1875
Facsimile: (269) 382-5291

ABSOLUTAIRE, INC.

MAINTENANCE GUIDELINES

Unheated Make Up Air and Fan Box Models

5496 North Riverview Drive / Kalamazoo, MI 49004
Phone (800) 804-4000 / Facsimile (269) 382-5291

Your ABSOLUTAIRE product is engineered to provide trouble-free operation.
In order to assure proper performance the following maintenance schedule is recommended.

MOTOR:

Check the motor sheave set-screws and the motor slide base bolts for tightness upon initial start-up and before each heating season. The motor bearings are pre-lubricated at the factory for initial operation but should be re-lubricated (when provided with grease fittings) at six (6) month intervals. AbsolutAire recommends the use of Shell Oil Company's "Dolium R", Chevron Oil's "SRI No. 2", or Texaco "Premium RB" lubricant. Clean the grease fitting and then apply the grease with a proper grease gun. Use two full strokes for each bearing.

CAUTION: Do not over lubricate.
Keep grease clean.
Lubricate motors at standstill.
Do not mix petroleum grease with silicone grease.

BLOWER:

After initial start-up, check the tightness of the fan sheave, fan hub set screws, fan bearing collar set screws, and fan bearing mounting bolts. Also when re-tensioning the v-belts, when re-lubricating the fan bearings, and before each cooling season.

Most FB Models with 18" and smaller blowers are provided with pre-lubricated sealed bearings which require no additional lubrication for the life of the bearing. Some Models are provided with pillow block bearings and should be lubricated annually using the following (or equivalent) grease:

ESSO Beacon 325 or Shell Alvania #3 or equivalant

Clean the grease fitting and then apply the grease with a proper grease gun. Inject enough grease until a small amount shows between the seal and the bearing race.

Examine the blower wheel at six (6) month intervals for accumulation of dust and dirt on the fan blades. Any build-up must be cleaned off to maintain performance. If the accumulation is heavy, more frequent cleaning may be required.

BELTS: Due to belt stretching, adjust belt tension after the first one hundred (100) hours of operation. Check belts every three months thereafter for proper tension. Do not over tighten. Adjustment should result in a belt deflection of 3/4" to 1" for each foot of span when applying medium thumb pressure inward at the center of the span.

FILTERS: Inspect monthly until an appropriate schedule can be established, based on need. Replace or clean as necessary.

AIR PRESSURE SWITCHES: An annual check of the tubes for dirty filterswitches, and the entering and leaving side of building pressure switches, should be made to insure against blockage.

DAMPER AND MOTOR: Check linkage connection and/or set screws for tightness. Lubricate the damper bushings as required.

PAINTING: After unit installation, touch up any scratches caused by handling. Periodic touch-up painting should be done thereafter as needed.

GASKETS: Inspect door gasket seals annually. Replace those showing damage or deterioration.