YORK BY JOHNSON CONTROLS	AIR HANDLING UNITS	
START-UP CHECKLIST	Supersedes: 100.00-CL1 (309)	Form 100.00-CL1 (909)

AIR HANDLER START-UP CHECKLIST

OFFICE LOCATION _____ UNIT TAG # _____

QUALIFIED TECHNICIAN _____ UNIT MODEL # _____

JOB NAME _____ UNIT SERIAL # _____

YORK JOB ID OR CONTRACT # _____ START DATE _____

JOB SITE LOCATION _____

JOB SITE CONTACT AND PHONE # _____

IMPORTANT SAFETY REQUIREMENT: FOLLOW THE LATEST"LOCK OUT TAG OUT" PROCEDURE.

PRE START-UP

GENERAL UNIT INSPECTION

Identify and perform appropriate “lock out/tag out” and safety rules. For details on points below see appropriate section of the Installation Instruction provided with each air handler.

For VFD equipped air handlers, refer to the VFD forms for additional requirements.

Serious damage to the AHU and/ or system is eminent if the AHU is operated under any of the following conditions:

- ***Without proper control of dampers.***
- ***With smoke dampers closed.***
- ***During a fire alarm or smoke purge test.***
- ***Any airflow restriction greater than normal.***

Solution	AH Units	Form	102.20-NOM1	Air Modulator	VFD	Form	100.41-NO1
Custom	AH Units	Form	100.31-NOM1				

□ Equipment received as ordered.	□ Verify all ductwork is complete and available for full air flow.
□ Unit checked for damage to interior and exterior.	□ Unit installed with proper clearances.
□ Unit installed on flat and level surface. Outdoor unit mounted within roof slope limitations where applicable.	□ Visually inspect roof curb for tight seal around unit.
□ Terminal screws and wiring connections secure in control, electric and Air Modulator panels.	□ Clean air filters installed properly and secured.
□ Air hoods installed properly.	□ Filter gauge set to zero.
□ Condensate drain properly trapped.	□ All field wiring complete and inspected.
□ All wiring and tubing connections made at shipping splits.	□ All shipping splits sealed and secured properly.
□ All field piping connections complete.	□ Pipe chase floor sealed at penetrations.
□ All shipped loose parts installed.	□ All shipping bolts and other material have been removed. (Fan, VIFB, Energy Recovery Wheel, Damper).
□ Installer has cleaned out interior.	□ Damper linkage is tight and in correct "power off" position.
□ Verify all plug-ins and wire connections are tight on UV equipment.	□ Controls installation complete.
□ Verify Energy Recovery Wheel turns freely and wheel segments are fully engaged.	□ Verify correct piping of split system. Reference Section 2 of Solution IOM & Split System Application Guide (050.40-ES3).

FAN INSPECTION	
□ Check bearings and locking collars for properly tightened setscrews, bolts and nuts.	□ Fan wheel properly aligned, tight on shaft and freely moving.
□ Sheaves properly aligned and tight on shaft.	□ Check fan base isolators and thrust restraints for proper adjustment. **Note: Do not remove functional bolts from seismic isolators.**
□ Belt tension adjusted properly per drive pkg. label on fan.	
□ Check fan alignment with unit discharge. Adjust with isolation.	□ Fan bearings have been re-lubricated properly.

START-UP

PERFORM THE FOLLOWING STEPS IN ORDER:

Refer to safety standards. Ensure all door latches are secured before starting.

□ 1. With all Electric Power off, all disconnect switches open and fuses removed, check each circuit with an Ohm meter to ground observing no continuity. Reinstall fuses.	□ 8. Immediately check current draw of each leg of each motor.
□ 2. Energize power to the unit disconnect switch.	□ 9. VFD, refer to manufactures start up guide
□ 3. Verify correct voltage, phase and cycles.	□ 10. Check doors and latches for air leaks.
□ 4. Energize fan motor(s) briefly (bump) and check for correct fan rotation.	□ 11. Check for obvious audible leaks.
□ 5. Check operation of dampers. Insure unit will not operate with all dampers closed.	□ 12. Apply steam to cold coils slowly to prevent damage.
□ 6. Energize fan motor(s). Observe fan(s) for smooth operation.	□ 13. Observe energy recovery wheel rotation.
□ 7. Check motor nameplate Full Load Amp rating.	

RECORD DATA

POWER SUPPLY: Unit Nameplate V___ PH___ CYC, ____ Verify V _____/ _____/ _____

DATA	SUPPLY FAN MOTOR	EXHAUST/RETURN FAN MOTOR
Nameplate	Volts _____ Amps _____	Volts _____ Amps _____
Run Amps	_____/ _____/ _____	_____/ _____ / _____
Catalog Number	_____	_____
Spec Number	_____	_____
Horse Power	_____	_____
RPM	Nameplate _____ Actual_____	Nameplate _____ Actual _____
Frame size	_____	_____
Service Factor	_____	_____
Jump (Skip) Frequencies	_____/ _____/ _____	_____/ _____ / _____
	SUPPLY FAN	EXHAUST/RETURN FAN
Manufacture Name	_____	_____
Type or Model Number	_____	_____
Code or Shop Order Number	_____	
Serial Number	_____	_____
	SUPPLY FAN DRIVE KIT	EXHAUST/RETURN FAN DRIVE KIT
Belts (Qty & ID #)	_____	_____
Belt Tension	Tag_____ Actual _____	Tag_____ Actual _____
Fan RPM (DN)	Tag_____ Actual _____	Tag_____ Actual _____

OTHER UTILITIES

Steam Pressure	Heating Coils _____PSI,	Humidifier _____PSI
Hot Water Pressure/Temp.	Supply _____PSI, _____°F,	Return _____PSI, _____°F
Chilled Water Pressure/Temp.	Supply _____PSI, _____°F,	Return _____PSI, _____°F
Potable Water Pressure	_____PSI,	Pneumatic Air Pressure _____PSI

MAINTENANCE

Upon completion of start-up the customer assumes responsibility for periodic maintenance of this equipment in order to continue warranty. Refer to the Installation Operation and Maintenance Manual (Form 102.20-NOM1).

Customer's agent signature: _____ **Date:** _____

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