

Models- 18500, 18500-220V "Turbo Towel"

Page 2	Product Information
Page 3	Specifications
Page 4	Important Safety Instructions
Page 5	Product Dimensions
Page 6-12	Installation
Page 13	Installation and Operating Safety
Page 14	Operating Instructions and Maintenance
Page 15	Troubleshooting
Page 16	Drawings

PRODUCT INFORMATION

Please take a moment to fill out the information below in order to aid us with any future sales or service inquiries. Model number and serial number information can be found on the serial tag located inside the control box and/or on the lower exterior of the can. Key number can be found on the tag that comes attached to the keys. There may be more than one key number depending on unit.

Please keep this information with your records.

MODEL#:_____

SERIAL#:_____

KEY NUMBER(S):_____

DATE PURCHASED:_____

DISTRIBUTOR:_____

**J.E. Adams Industries
1025 63rd Ave. S.W.
Cedar Rapids, IA 52404
1-800-553-8861
www.jeadams.com**

Specifications

120 Volt model

Unit specifications: 18500
Voltage: 120vac, 60hz
Amperage: (1) 30 amp service is required for this unit, dedicated line.

Blower specifications

Blower – (1) High performance Regenerative blower, 120vac, 20 amps, 60hz

220 Volt model

Unit specifications: 18500-220V
Voltage: 220vac, 60hz
Amperage: (1) 20 amp service is required for this unit, dedicated line.

Blower specifications

Blower – (1) High performance Regenerative blower, 220vac, 6 amps, 60hz

DUTY CYCLE: 6 minutes on, 4 minutes off.

NOTE: “UNIT INTENDED FOR COMMECIAL USE ONLY”

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE)

WARNING – To reduce the risk of fire, electric shock, or injury:

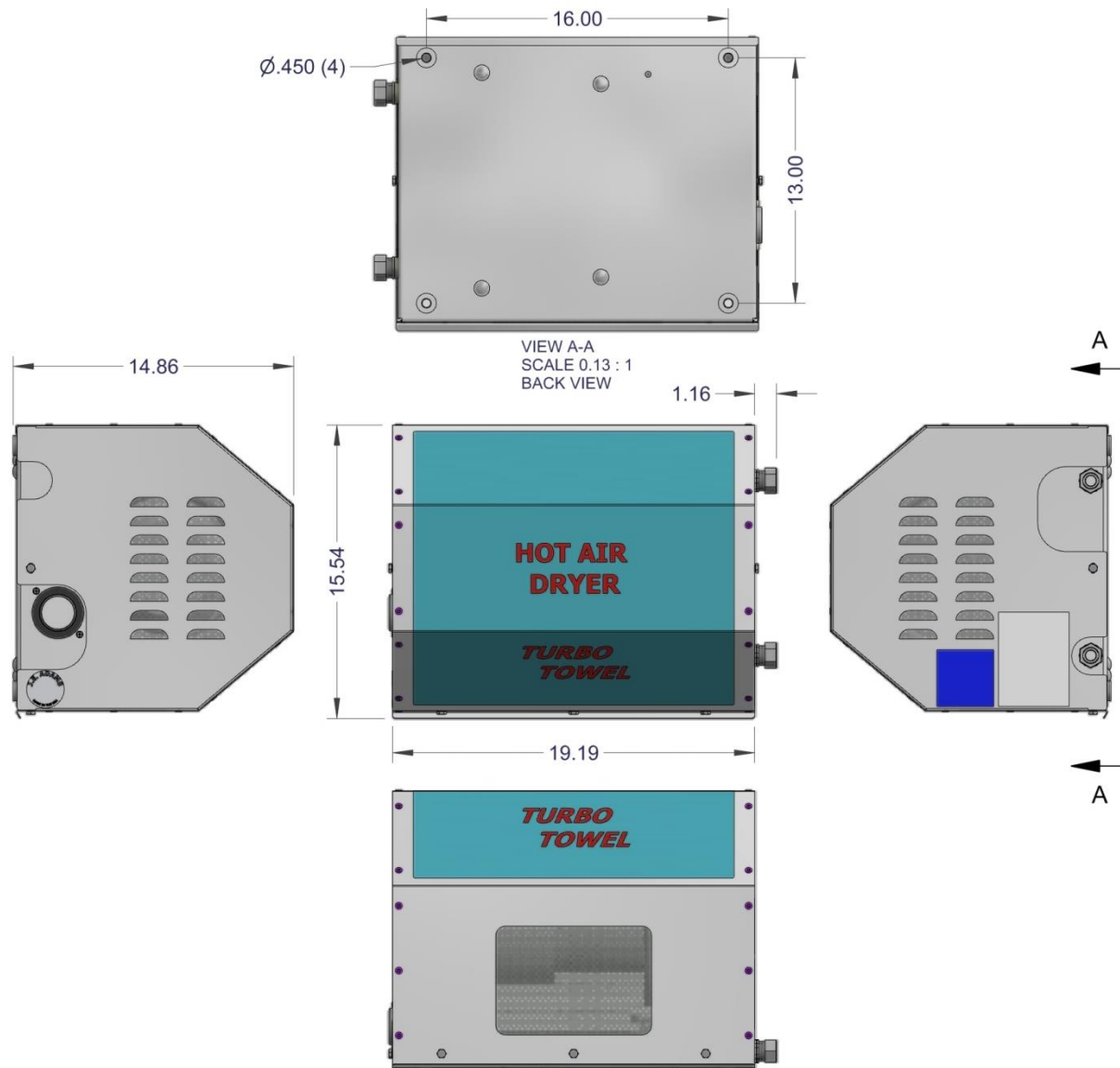
- Use only as described in manual. Use only manufactures recommended attachments.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dirt and anything that may reduce flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not use near flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
- Do not use near anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not spray of the chemicals on dashboard, instrument area, consoles, door panels, etc. Decorative trim pieces such as these can become damaged from contact with chemicals.

SAVE THESE INSTRUCTIONS

- **Installation Instructions:**
- Determine location to mount unit (“**DANGER**” “**THIS EQUIPMENT INCORPORATES PARTS SUCH AS SWITCHES, MOTORS, OR THE LIKE THAT TEND TO PRODUCE ARCS OR SPARKS THAT CAN CAUSE AN EXPLOSION. WHEN LOCATED IN GASOLINE-DISPENSING AND SERVICE STATIONS INSTALL AND USE AT LEAST 20 FEET (6 M) HORIZONTALLY FROM THE EXTERIOR ENCLOSURE OF ANY DISPENSING PUMP AND AT LEAST 18 INCHES (450 MM) ABOVE A DRIVEWAY OR GROUND LEVEL.**”
- Run electrical service to that location.
- **Grounding Instructions:** This appliance must be connected to a grounded metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.
- All local and national electric codes must be followed for installation and use.
- Licensed electricians are recommended for installation.

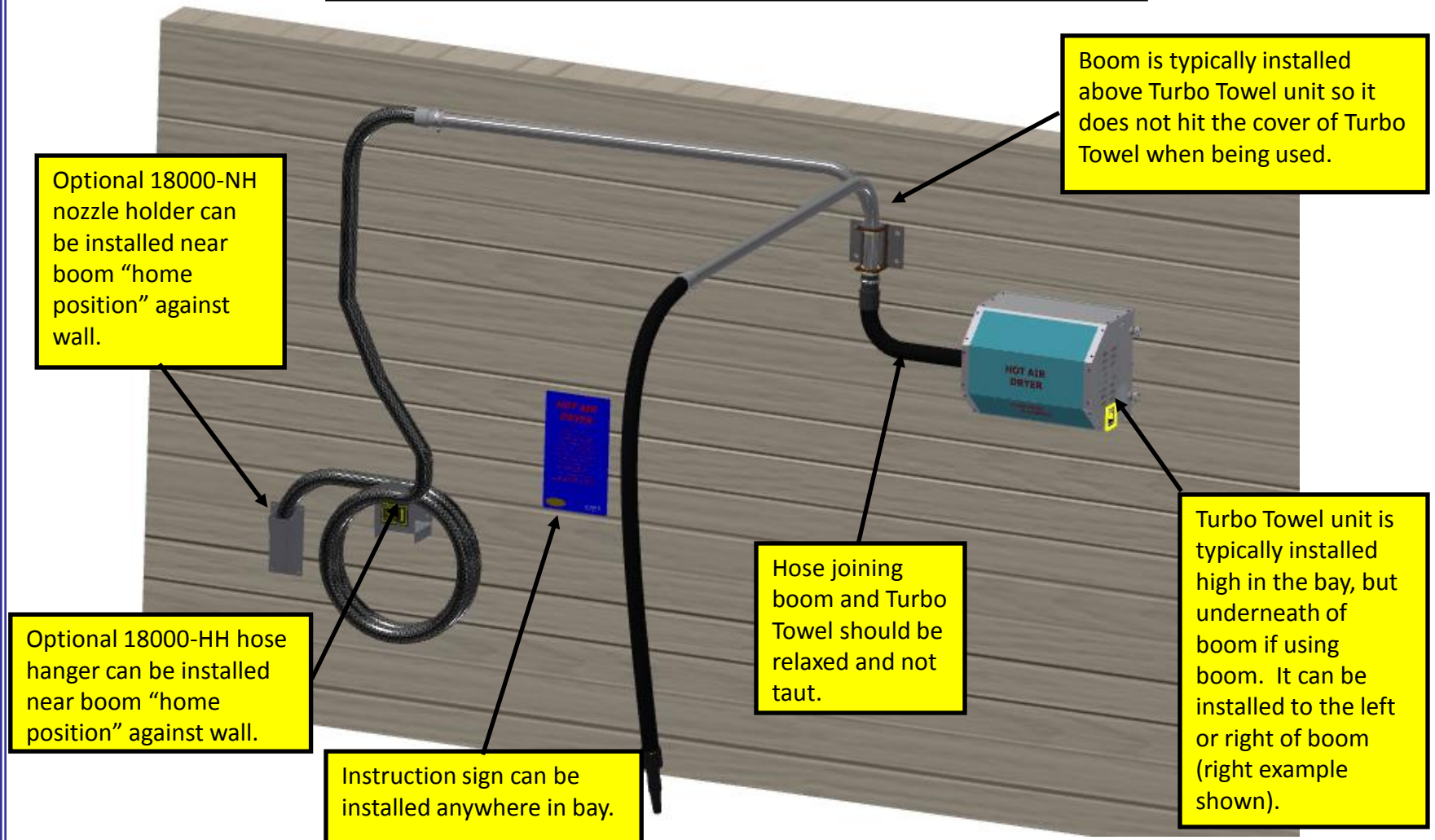
INSTALL INBAY INSTRUCTION SIGN NEAR HOSE OR END USER AREA!

PRODUCT DIMENSIONS



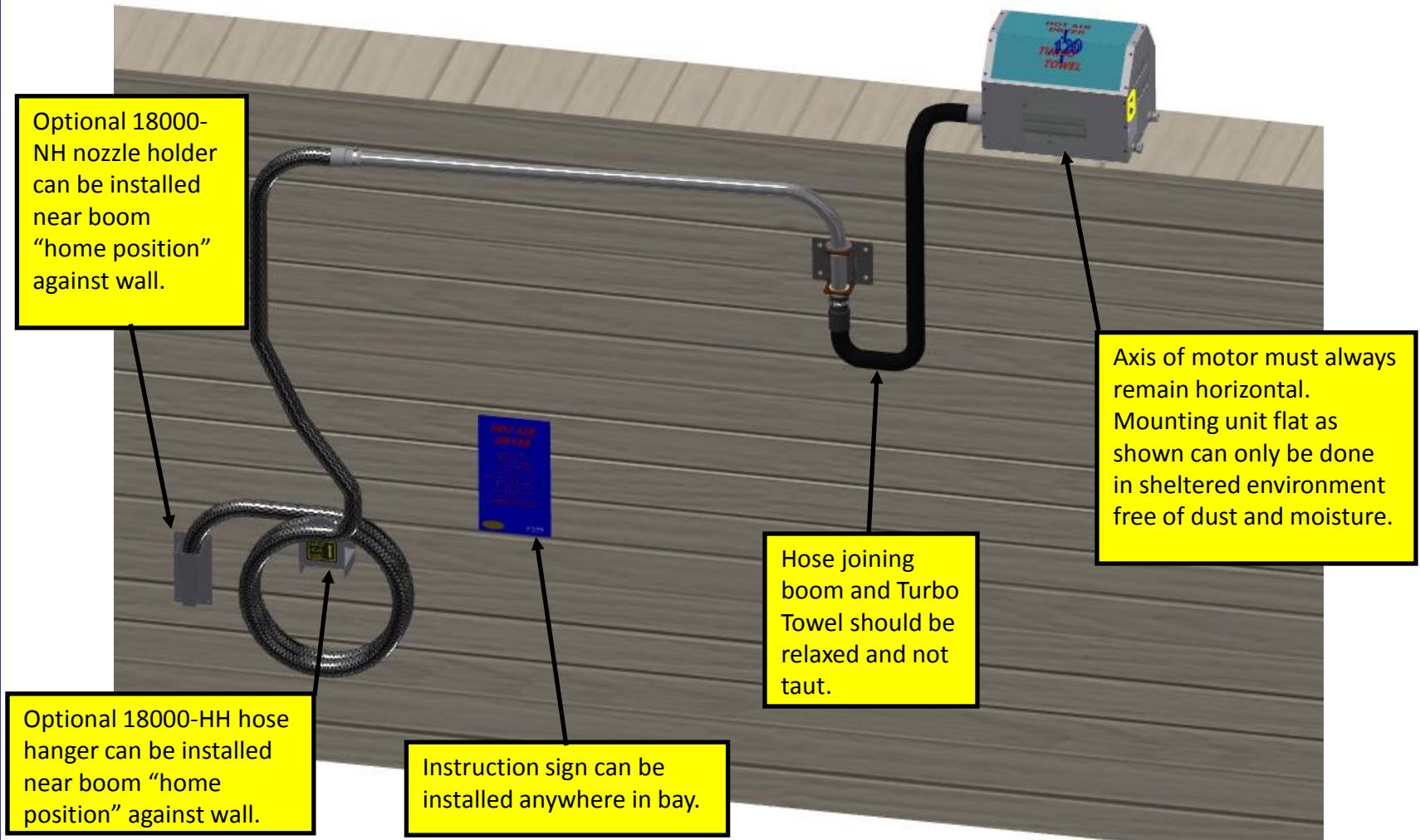
TYPICAL INSTALLATION

Typical in-bay installation with boom (cutting hose is mandatory when using boom).
When no boom is used, simply locate hose hanger under Turbo Towel unit. Note blower must be mounted with motor axis horizontal never vertical.

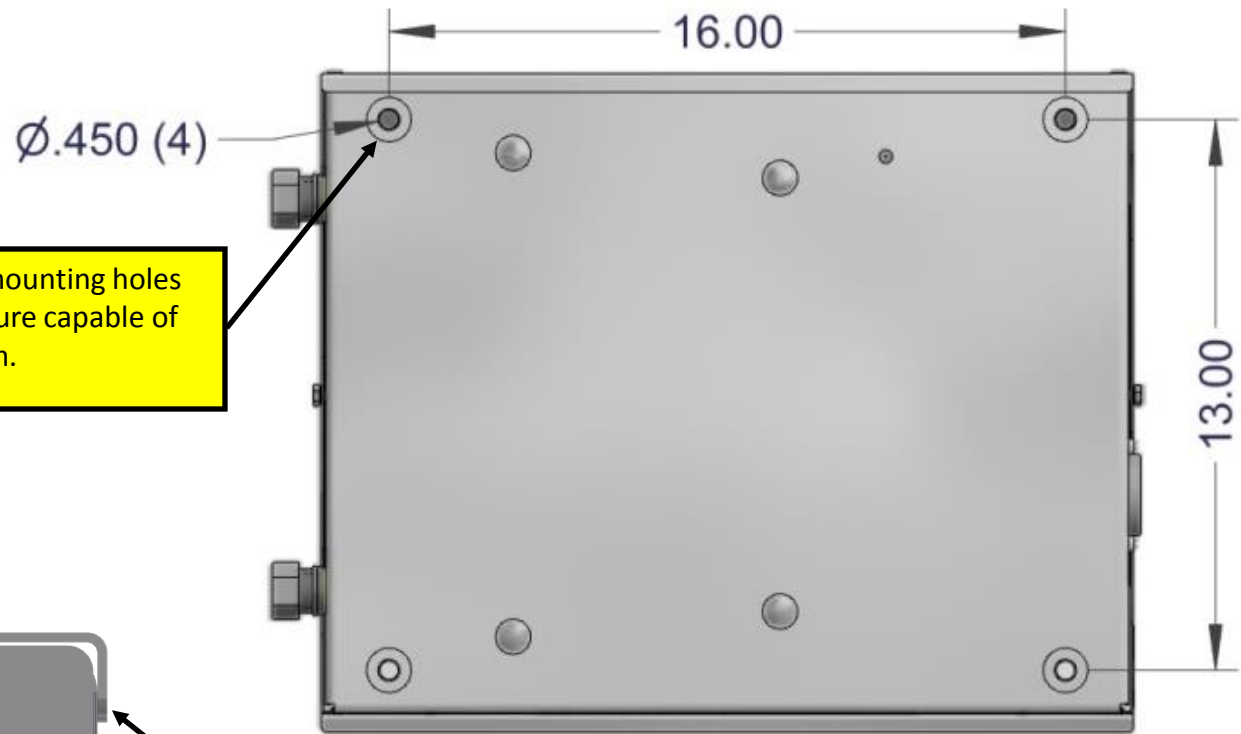


OPTIONAL HORIZONTAL INSTALLATION

Mounting unit flat vs. wall mount is optional but only when unit is in a clean dust free, moisture protected environment. Area within 2 feet of Turbo Towel must be free of any insulation so as not to impact air intake.



Mounting Instructions

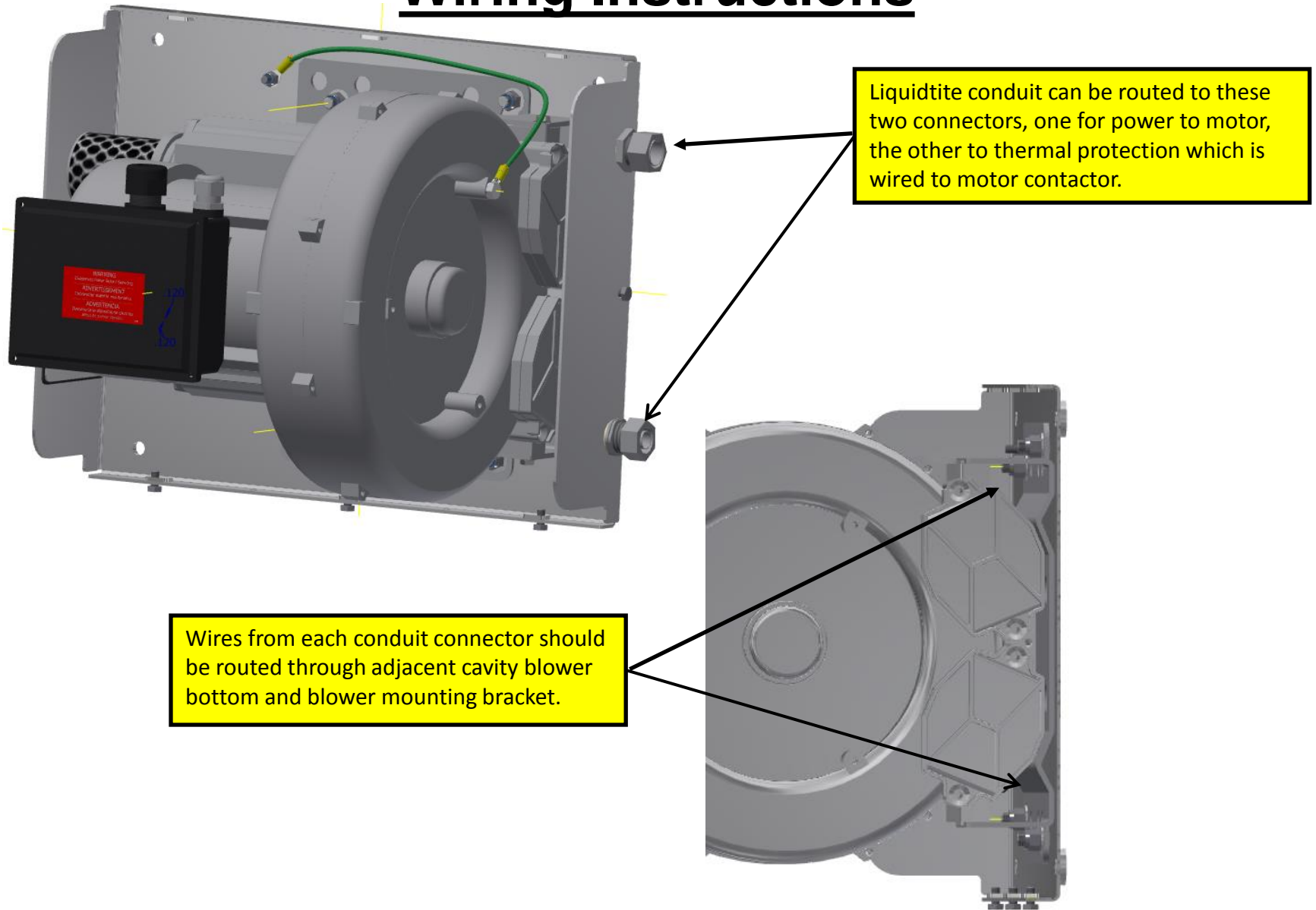


Very important that all (4) mounting holes on base plate engage structure capable of supporting 100 lbs minimum.



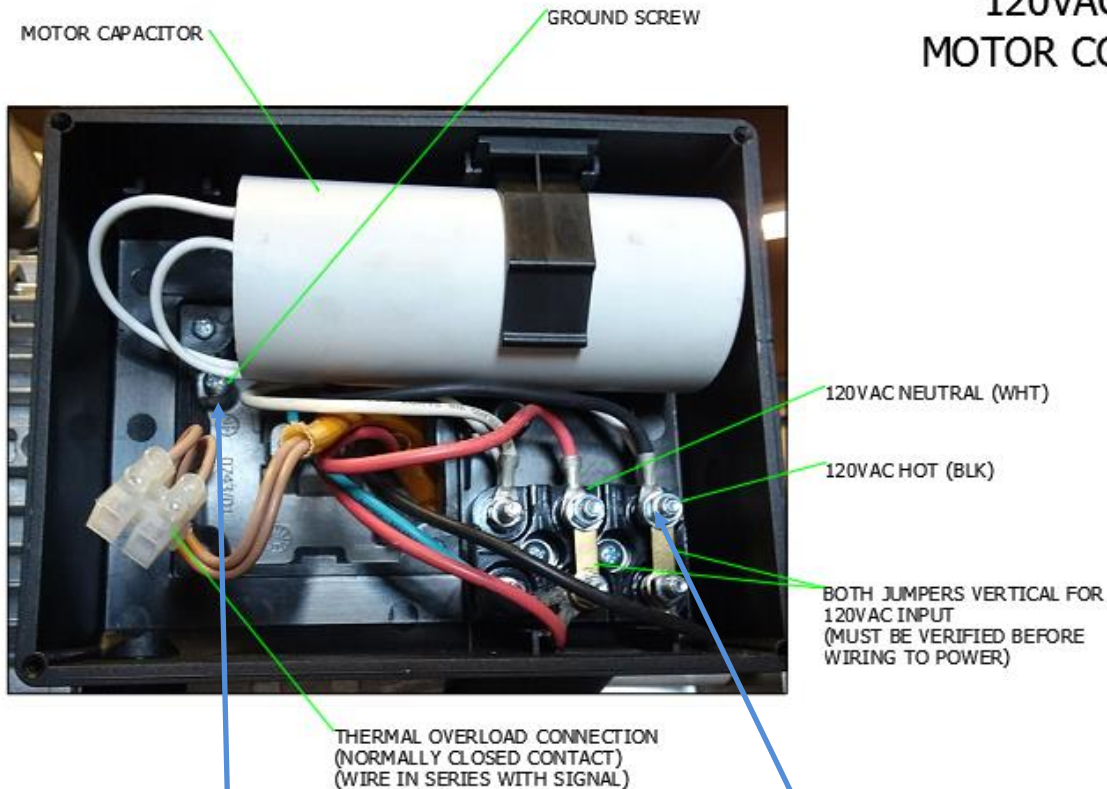
Turbo Towel cover hooks over top of base plate so surface unit is mounted needs to be reasonably flat so this spacing is maintained. Cover screw hole alignment could also be compromised if mounting surface is extremely uneven.

Wiring Instructions

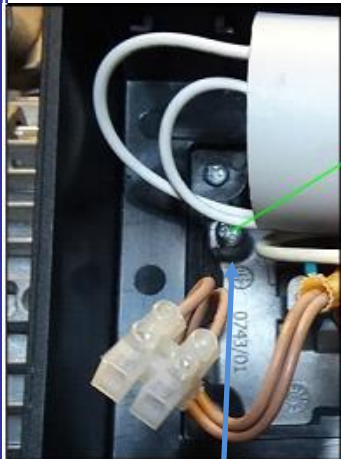


120VAC Motor Wiring Instructions

120VAC FROM MOTOR CONTACTOR

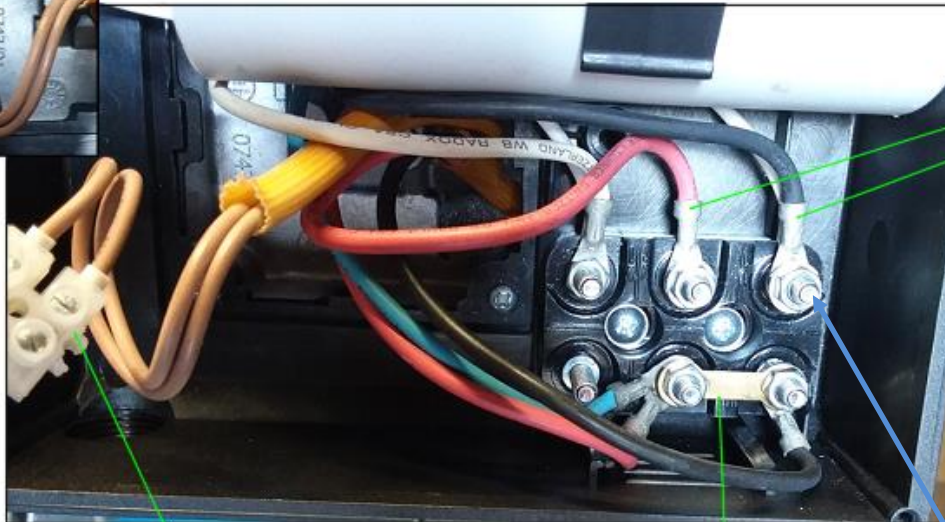


220VAC Motor Wiring Instructions



GROUND SCREW

220VAC FROM
MOTOR CONTACTOR



JACKETED CABLE THERMAL OVERLOAD
THROUGH SMALLER STRAIN RELIEF

JACKETED CABLE POWER WIRES
THROUGH LARGER STRAIN RELIEF

220VAC LEG 2 (RED)

220VAC LEG 1 (BLK)

Ground screw is tucked
underneath capacitor.

THERMAL OVERLOAD CONNECTION
(NORMALLY CLOSED CONTACT)
(WIRE IN SERIES WITH SIGNAL)

BOTH JUMPER PLATES
STACKED BETWEEN STUDS



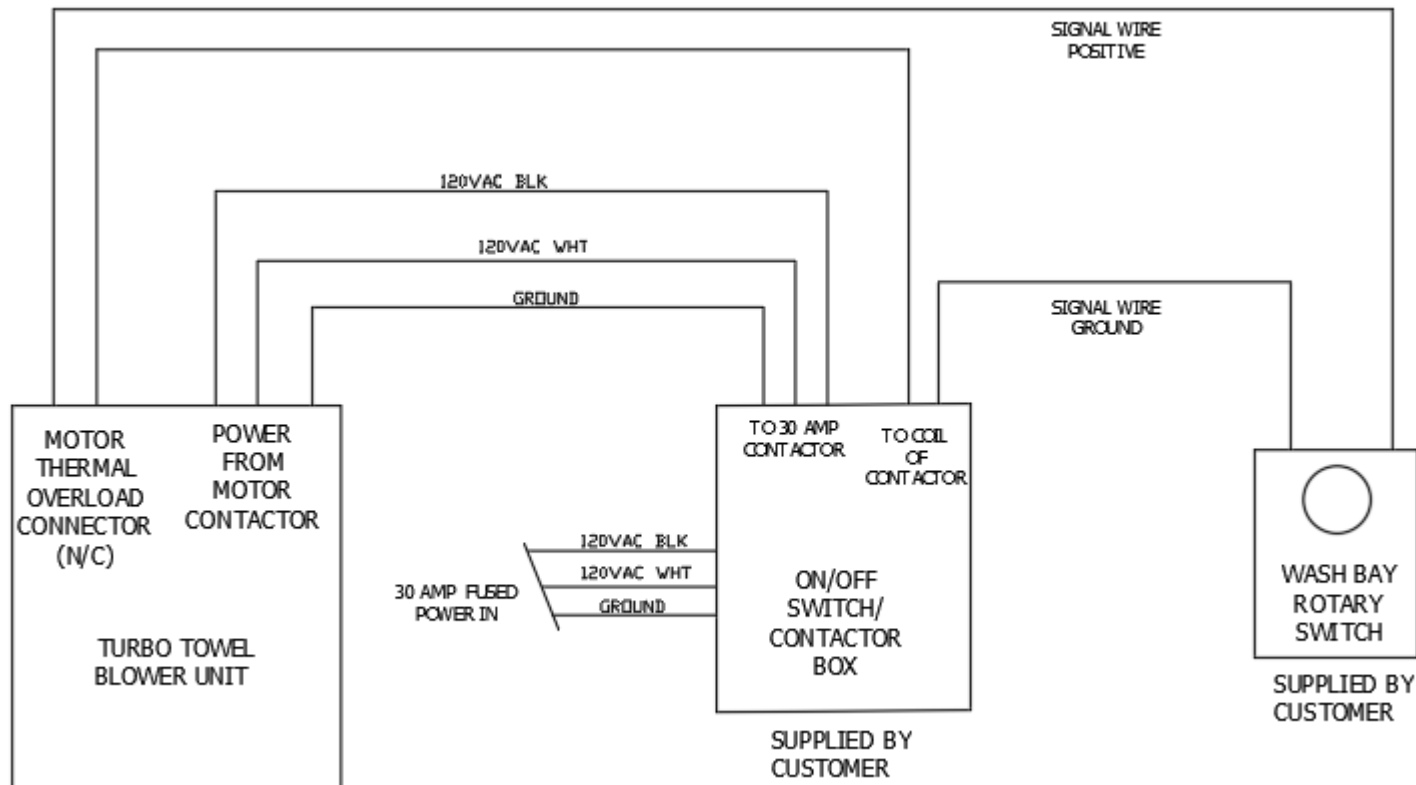
8mm nut, 5mm thread.
#10 ring terminal

EXTERNAL BLOWER CONTROL WIRING SCHEME

When wiring direct to the rotary switch in a carwash bay, below is a typical 120V scenario showing a shut off box with motor contactor. **NOTE: TURBO TOWEL SHOULD BE INSTALLED AND SET UP PER LOCAL ELECTRICAL CODES BY QUALIFIED ELECTRICIAN.**

120VAC
Example

Signal wire coming from wash bay's equipment selector switch could be many voltages and AC or DC. Determine signal attributes and purchase compatible motor contactor.

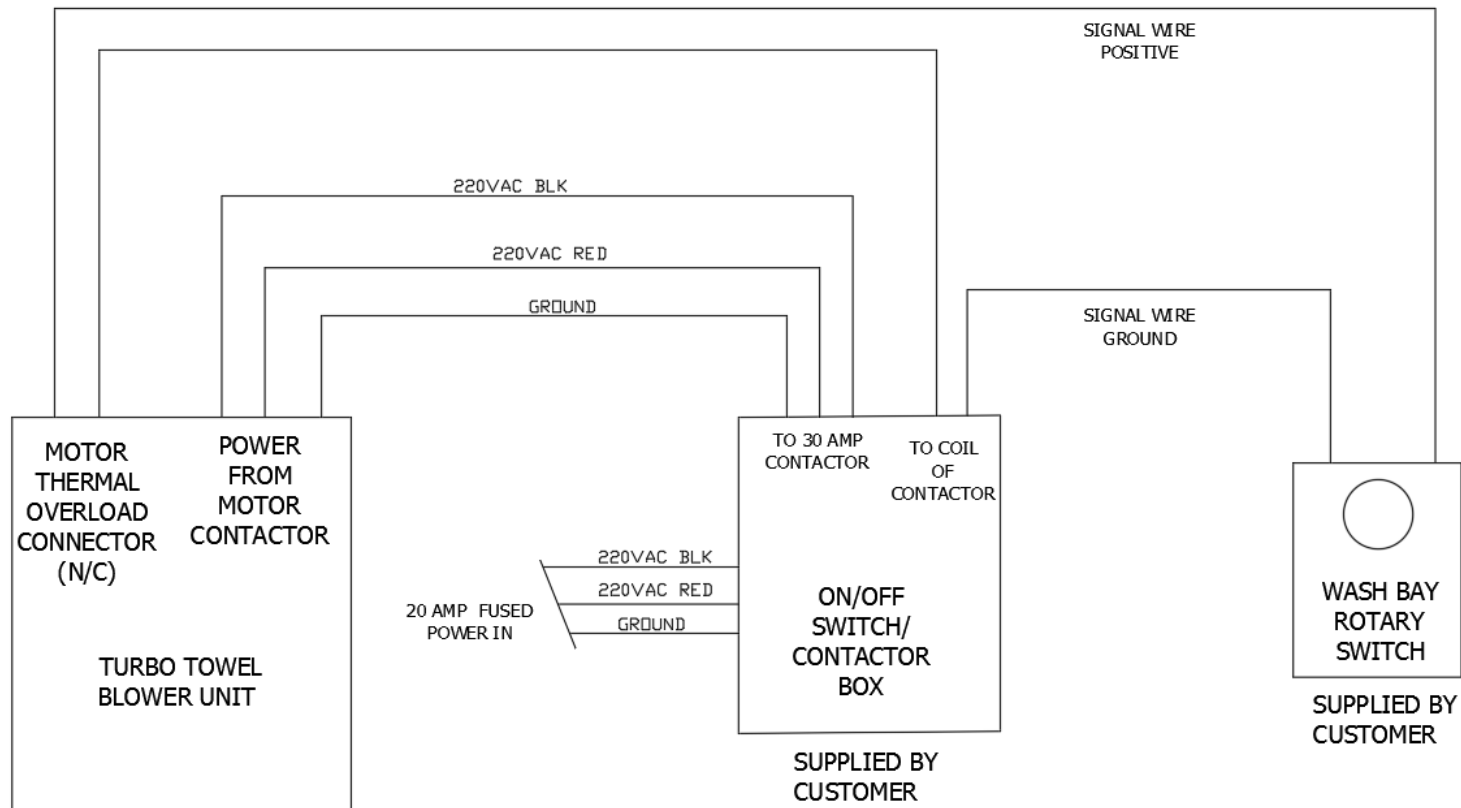


EXTERNAL BLOWER CONTROL WIRING SCHEME

When wiring direct to the rotary switch in a carwash bay, below is a typical 220V scenario showing a shut off box with motor contactor. **NOTE: TURBO TOWEL SHOULD BE INSTALLED AND SET UP PER LOCAL ELECTRICAL CODES BY QUALIFIED ELECTRICIAN.**

220VAC
Example

Signal wire coming from wash bay's equipment selector switch could be many voltages and AC or DC. Determine signal attributes and purchase compatible motor contactor.



INSTALLATION / SAFETY INSTRUCTIONS:

- 1) Always use qualified electrical and mechanical personnel for installation and maintenance of equipment.
- 2) Disconnect electrical power before working on the system.
- 3) Make sure the motor is electrically grounded, the mounting bolts are properly secured, and all guards are in place during operation.
- 4) Wear safety glasses and earplugs when working on blower.
- 5) Do not operate blower motor with the outlet open to the atmosphere. Connect system exhaust hose to prevent overloading the motor and damage to the heating element. Check the final installation for proper amp load.
- 6) **Keep all tools, loose clothing, and hands away from motor air intake.**
- 7) Inspect the blower at regular intervals for damage or worn parts. Replace parts immediately – never operate a unit with damaged parts.
- 8) Use only genuine OEM replacement parts.

END USER OPERATING / SAFETY INSTRUCTIONS:

- 1) Use only for vehicle detailing.
- 2) Do not permit children to operate this unit.
- 3) Close supervision is necessary when using near children or those who need assistance.
- 4) Always hold onto nozzle tightly while in use.
- 5) Never leave unattended while in use.
- 6) Do not allow nozzle to come in contact with skin.
- 7) Never point air stream at others or self.
- 8) Allow a six inch minimum between nozzle and object to dry.
- 9) Use caution when directing air stream into tight crevices such as headlight assemblies, mirrors, dashboard, carpeting, etc.
- 10) Never blow debris in the direction of others.

INSTALL INBAY INSTRUCTION SIGN NEAR HOSE OR END USER AREA!



Machine Operating Instructions:

- 1) Read safety instructions on previous pages.
- 2) Hold nozzle in hand.
- 3) Insert coins or bills to start.
- 4) Machine will start and air will begin to blow.
- 5) For best results, start at the top of the car and blow water downward.
- 6) Hang hose up when finished.

Maintenance:

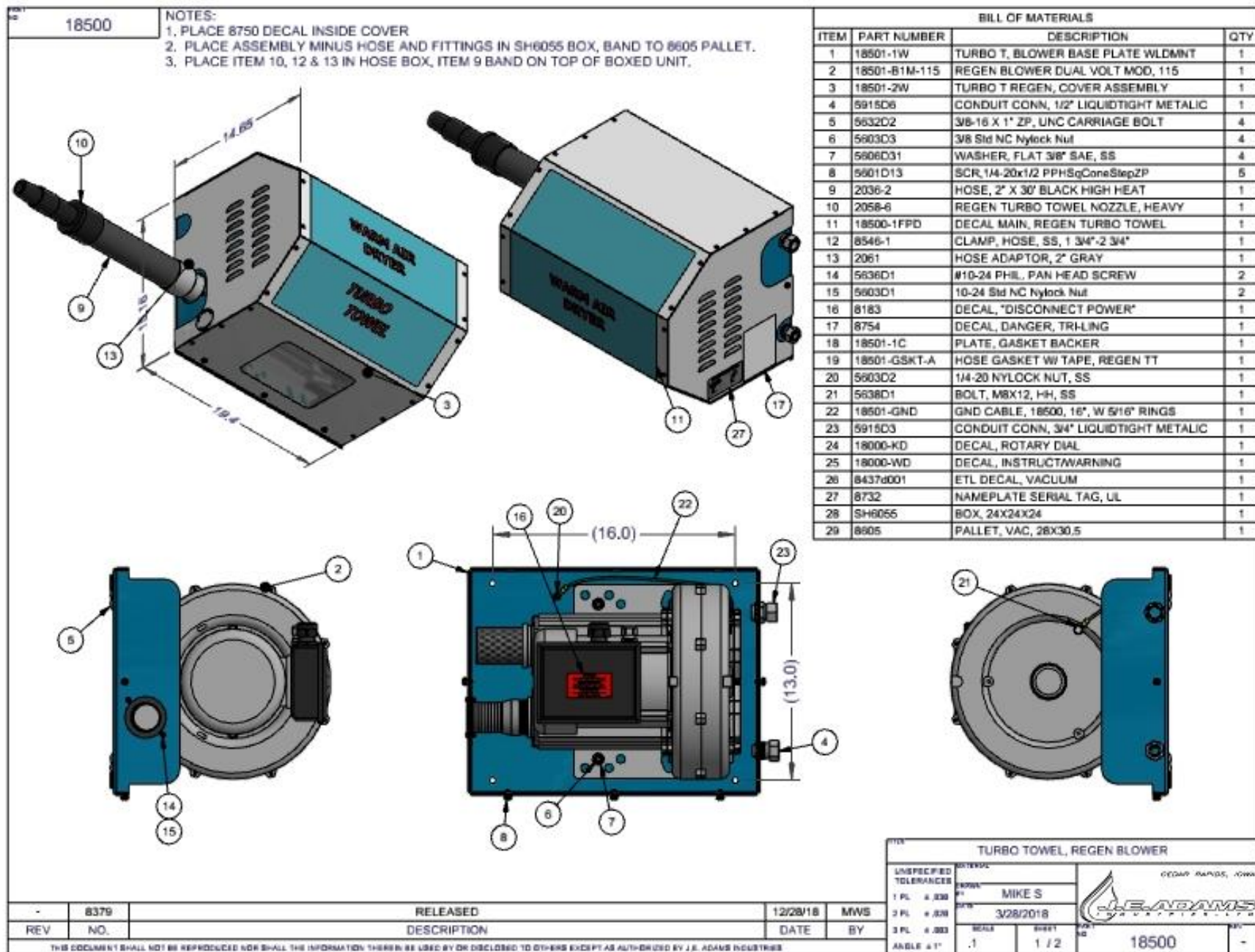
- **All servicing of machine should be conducted by an authorized service representative!**
- **Inlet screens on cover and on blower should be inspected weekly to ensure clear of debris and unrestricted.**
- Periodically inspect electrical wires and connections for wear or fatigue.
- Inspect hoses and blower nozzle for wear once a week.
- Clean housing with a stainless steel cleaner as needed.
- Decals can be cleaned with mild soap and water.
- Once per month the stainless steel cabinet should be removed and the inside components should be wiped down. Look for any wear items or damage.
- Parts can be ordered through JE Adams or your nearest distributor.

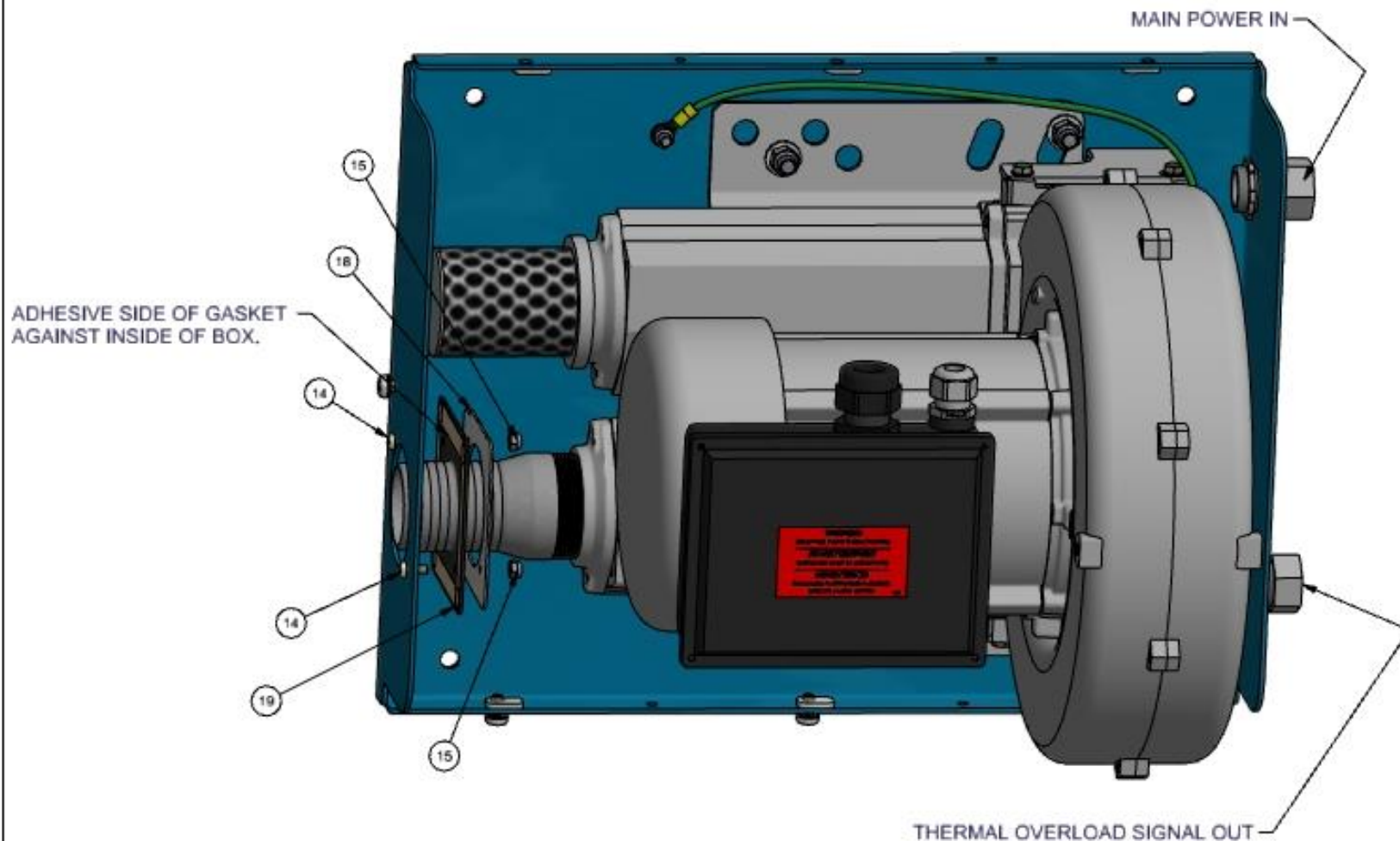
WHEN PERFORMING MAINTENANCE OR TROUBLE-SHOOTING, TURN POWER OFF! QUALIFIED PERSONNEL ONLY!



Troubleshooting (120V example):

Problem	Possible cause	Solution
Unit is not powered.	Bay control switch is not closing motor contactor.	Confirm voltage across relay.
	No power to machine.	Check incoming power.
	Circuit breaker is tripped.	Reset breaker
	Loose connection.	Check incoming power connection.
Blower not running.	Verify motor contactor is energized	Replace if necessary.
Breaker keeps tripping.	Motor brushes may be too far worn.	Service motor if necessary.





TURBO TOWEL, REGEN BLOWER			
UNSPECIFIED TOLERANCES	DATE	DESIGN	CCOAR, RAYDOS, JOWA
1 PL ± .008	DATE	MIKE S	
2 PL ± .008	DATE	3/28/2018	
3 PL ± .003	SCALE	2 / 2	
ANGLE ± 1°	SCALE	2 / 2	18500

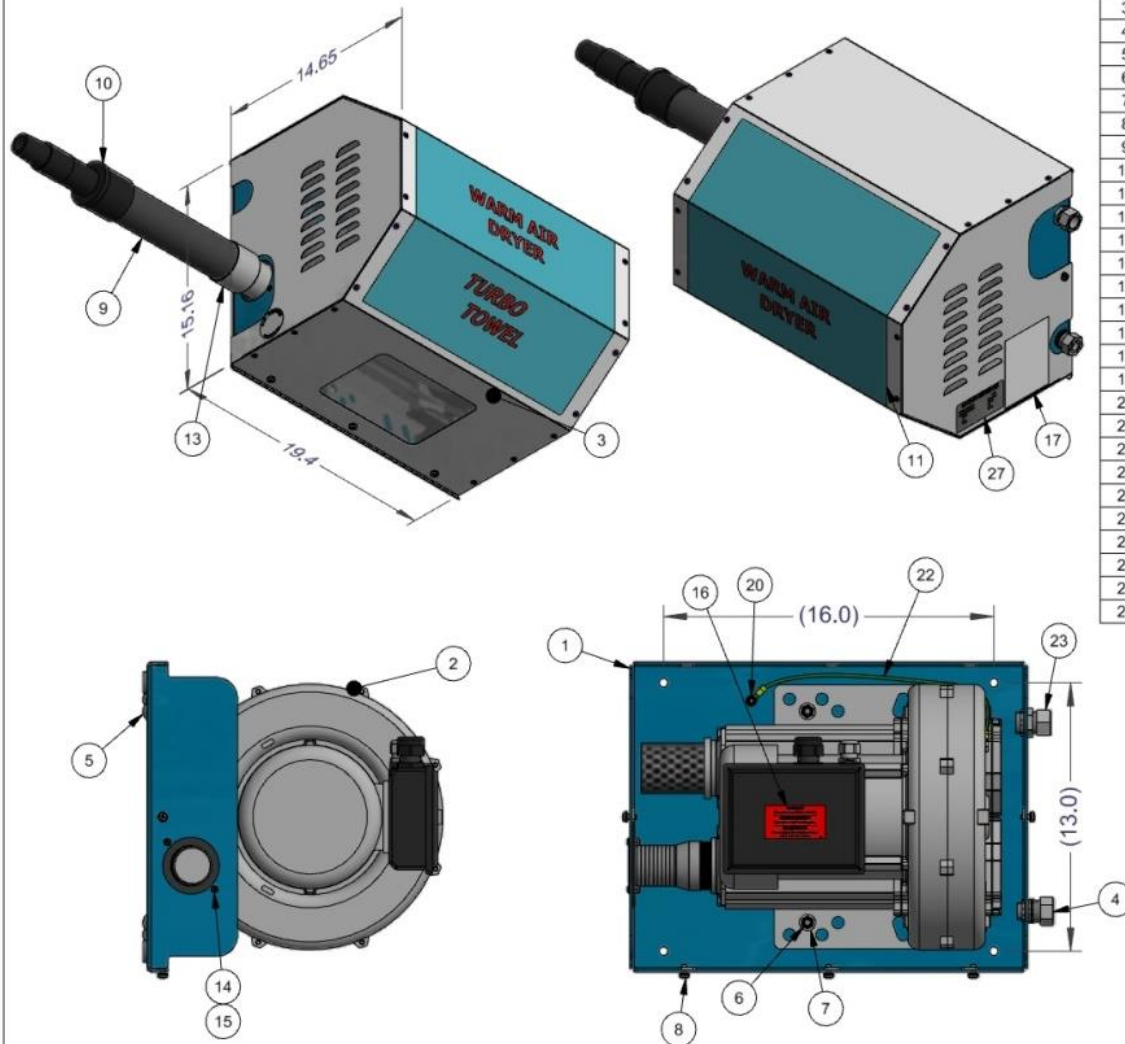
REV	NO.	DESCRIPTION	DATE	BY
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES				

PART
NO.

18500-220V

NOTES:

1. PLACE 8750 DECAL INSIDE COVER
2. PLACE ASSEMBLY MINUS HOSE AND FITTINGS IN SH6055 BOX, BAND TO 8605 PALLET.
3. PLACE ITEM 10, 12 & 13 IN HOSE BOX, ITEM 9 BAND ON TOP OF BOXED UNIT.



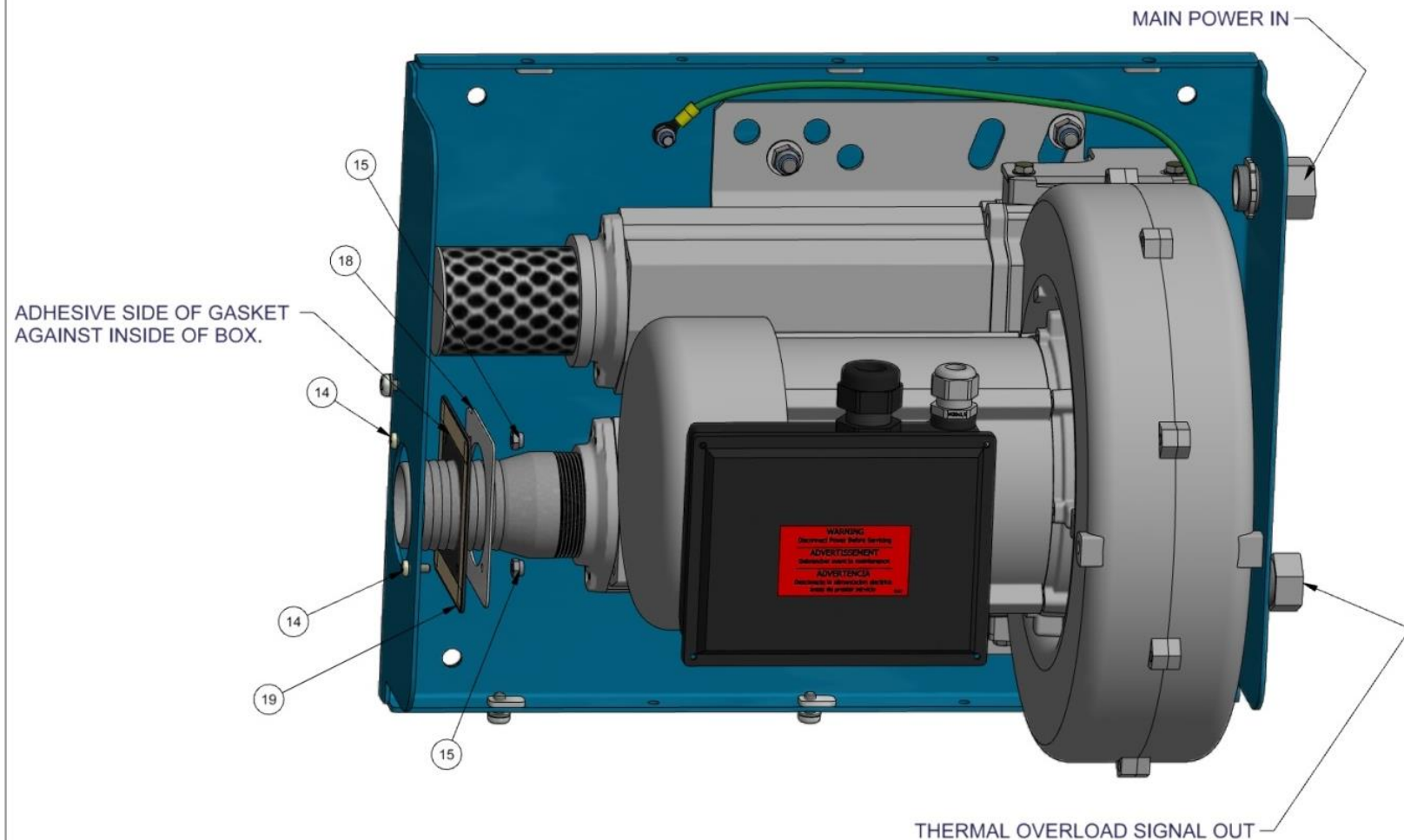
BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	18501-1W	TURBO T, BLOWER BASE PLATE WLDMNT	1
2	18501-B1M-220	REGEN BLOWER DUAL VOLT MOD, 220V	1
3	18501-2W	TURBO T REGEN, COVER ASSEMBLY	1
4	5915D6	CONDUIT CONN, 1/2" LIQUIDTIGHT METALIC	1
5	5632D2	3/8-16 X 1" ZP, UNC CARRIAGE BOLT	4
6	5603D3	3/8 Std NC Nylock Nut	4
7	5606D31	WASHER, FLAT 3/8" SAE, SS	4
8	5601D13	SCR, 1/4-20x1/2 PPHSqConeStepZP	5
9	2036-2	HOSE, 2" X 30' BLACK HIGH HEAT	1
10	2058-6	REGEN TURBO TOWEL NOZZLE, HEAVY	1
11	18500-1FPD	DECAL MAIN, REGEN TURBO TOWEL	1
12	8546-1	CLAMP, HOSE, SS, 1 3/4"-2 3/4"	1
13	2061	HOSE ADAPTOR, 2" GRAY	1
14	5636D1	#10-24 PHIL. PAN HEAD SCREW	2
15	5603D1	10-24 Std NC Nylock Nut	2
16	8183	DECAL, "DISCONNECT POWER"	1
17	8754	DECAL, DANGER, TRI-LING	1
18	18501-1C	PLATE, GASKET BACKER	1
19	18501-GSKT-A	HOSE GASKET W/ TAPE, REGEN TT	1
20	5603D2	1/4-20 NYLOCK NUT, SS	1
21	5638D1	BOLT, M8X12, HH, SS	1
22	18501-GND	GND CABLE, 18500, 16", W 5/16" RINGS	1
23	5915D3	CONDUIT CONN, 3/4" LIQUIDTIGHT METALIC	1
24	18000-KD	DECAL, ROTARY DIAL	1
25	18000-WD	DECAL, INSTRUCT/WARNING	1
26	8437d001	ETL DECAL, VACUUM	1
27	8732	NAMEPLATE SERIAL TAG, UL	1
28	SH6055	BOX, 24X24X24	1
29	8605	PALLET, VAC, 28X30.5	1

-	8379	RELEASED	12/28/18	MWS
REV	NO.	DESCRIPTION	DATE	BY

THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES

TITLE TURBO TOWEL, REGEN BLOWER, 220V			
UNSPECIFIED TOLERANCES 1 PL ± .030 2 PL ± .020 3 PL ± .003 ANGLE ± 1°	MATERIAL		 CEDAR RAPIDS, IOWA
	DRAWN BY MIKE S		
	DATE 3/28/2018		
	SCALE .1	SHEET 1 / 2	
		PART NO 18500-220V	REV. -



REV		NO.	DESCRIPTION	DATE	BY	TITLE			
						TURBO TOWEL, REGEN BLOWER, 220V			
						UNSPECIFIED TOLERANCES		MATERIAL	
						1 PL ±.030	DRAWN BY MIKE S DATE 3/28/2018		
						2 PL ±.020			
						3 PL ±.003			
						ANGLE ± 1°	SCALE .1	SHEET 2 / 2	PART NO. 18500-220V
						REV. -			

THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES



BILL OF MATERIALS			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	18501-B1	REGEN BLOWER, DUAL VOLTAGE, 156 CFM	1
2	5918D4	STRAIN RELIEF FITTING, 3/4"	1
3	18501-P6	BLOWER STRAINER, 2" NPT THREAD	1
4	18501-HB	2" HOSE BARB X 2" NPT, STEEL	1
5	5907D2	LOCKNUT, 3/4" CONDUIT TRADE SIZE	1

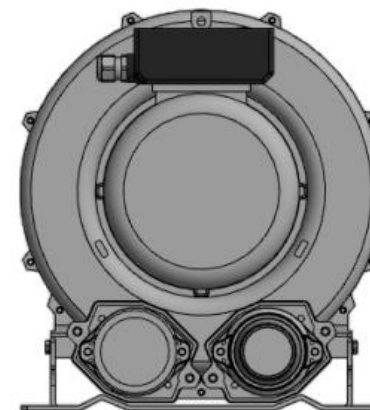
TOP LEVEL MODIFIED BLOWER PART #		
PART #	DESCRIPTION	INPUT VOLTAGE
18501-B1M-115	BLOWER ASY, 115 VAC	115 VAC
18501-B1M-220	BLOWER ASY, 220 VAC	220 VAC



1. DRILL (1) 1-1/16" (1.0625") HOLE AT LOCATION INDICATED
2. **CRITICAL**- CARE MUST BE TAKEN TO PREVENT ANY CHIPS FROM FALLING INTO MOTOR OR CUTTING ANY WIRES WITH BIT.
3. BLOWER IS RECEIVED WITH JUMPERS IN 220VAC CONFIGURATION. IMPORTANT THAT THE ASSIGNMENT OF WHICH VOLTAGE UNIT WILL BE IS DONE PRIOR TO NEXT ASSEMBLY LEVEL.




DETAIL A
SCALE 0.34 : 1

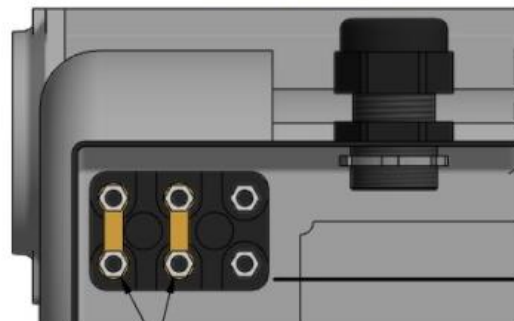


-	8379	RELEASED	12/28/18	MWS
REV	NO.	DESCRIPTION	DATE	BY

THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES

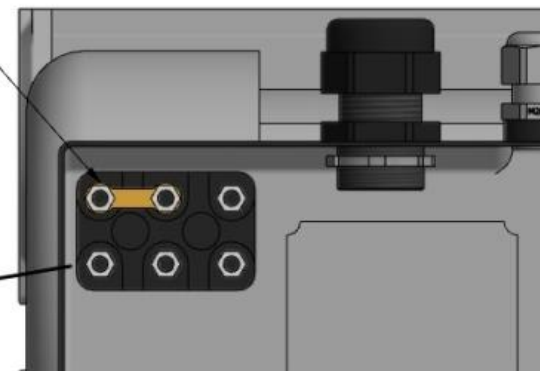
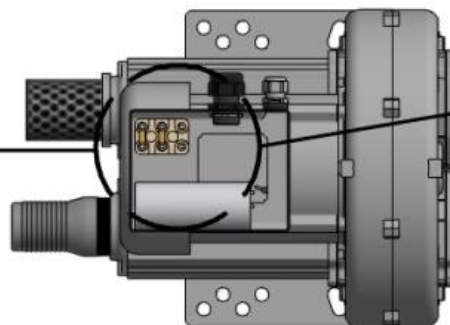
TITLE: REGEN BLOWER DUAL VOLTAGE MODIFIED	
UNSPECIFIED TOLERANCES 1 PL ±.030 2 PL ±.020 3 PL ±.003 ANGLE ±1°	MATERIAL: DESIGNED BY: MIKE S DATE: 12/6/2016 SCALE: 0.17 : 1 SHEET: 1 / 2 PART NO: 18501-B1M- REV:
 CEDAR RAPIDS, IOWA JEADAMS MACHINISTS, INC.	

18501-B1M-115



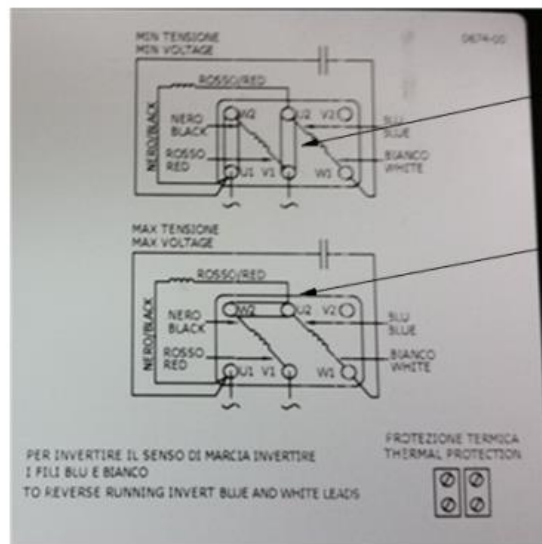
115 VAC VERSION
(2) JUMPERS VERTICAL

220VAC VERSION
JUMPERS STACKED
(DEFAULT FROM SUPPLIER)



TOP LEVEL MODIFIED BLOWER PART #

PART #	DESCRIPTION	INPUT VOLTAGE
18501-B1M-115	BLOWER ASY, 115 VAC	115 VAC
18501-B1M-220	BLOWER ASY, 220 VAC	220 VAC



115 VAC CONFIGURATION

230VAC CONFIGURATION

THERMAL PROTECTION.
WIRE IN SERIES TO INTERRUPT
MOTOR CONTACTOR SIGNAL



TITLE: REGEN BLOWER DUAL VOLTAGE MODIFIED			
UNSPECIFIED TOLERANCES	BY: MIKE S	DATE: 12/6/2016	
1 PL ±.030	SCALE: 0.17 : 1		
2 PL ±.020	SHEET: 2 / 2		
3 PL ±.003	PART NO. 18501-B1M-____		
ANGLE ±1°	REV: -		

THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES