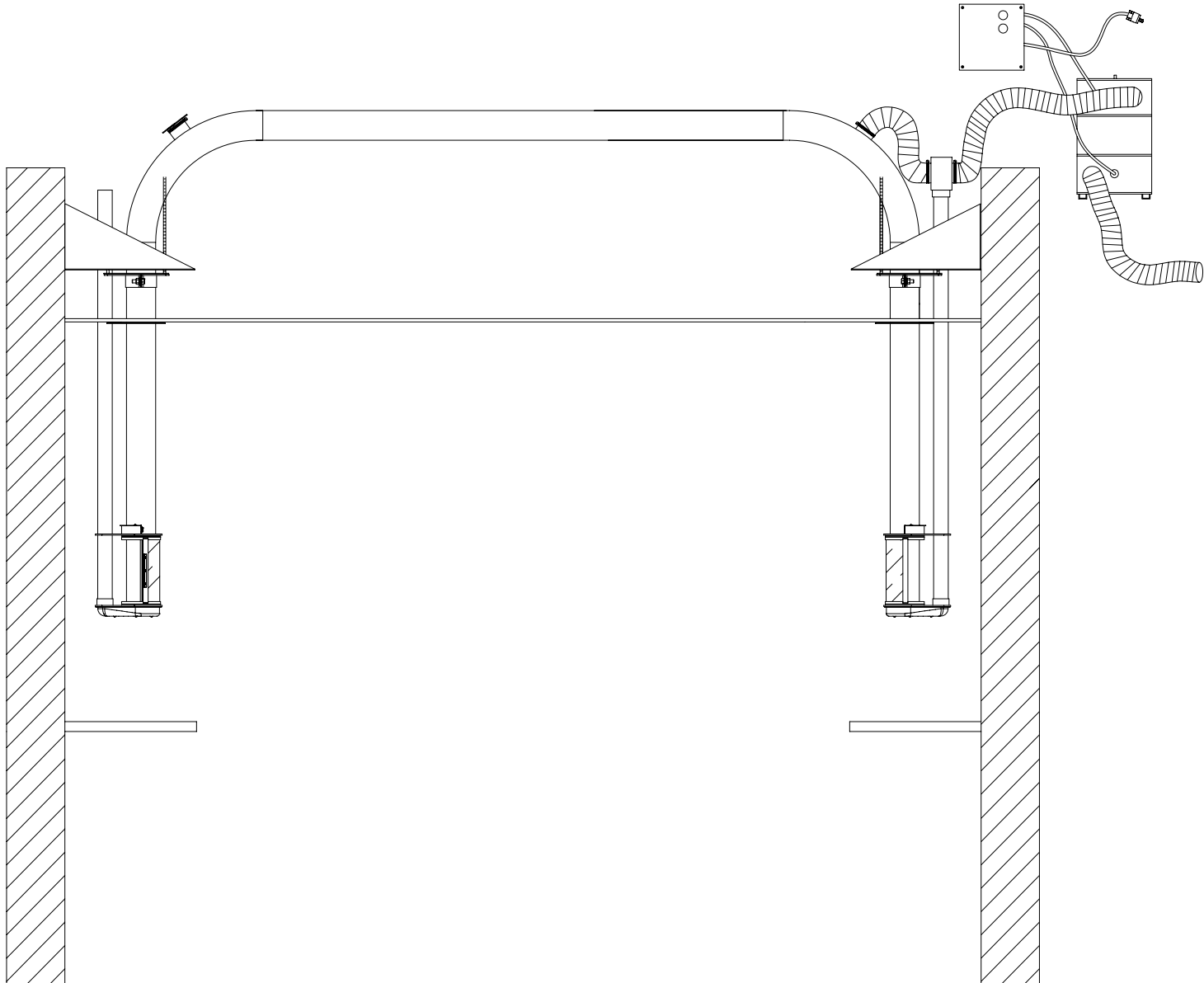


HAMILTON AIR

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HT-19 Pneumatic Transport System



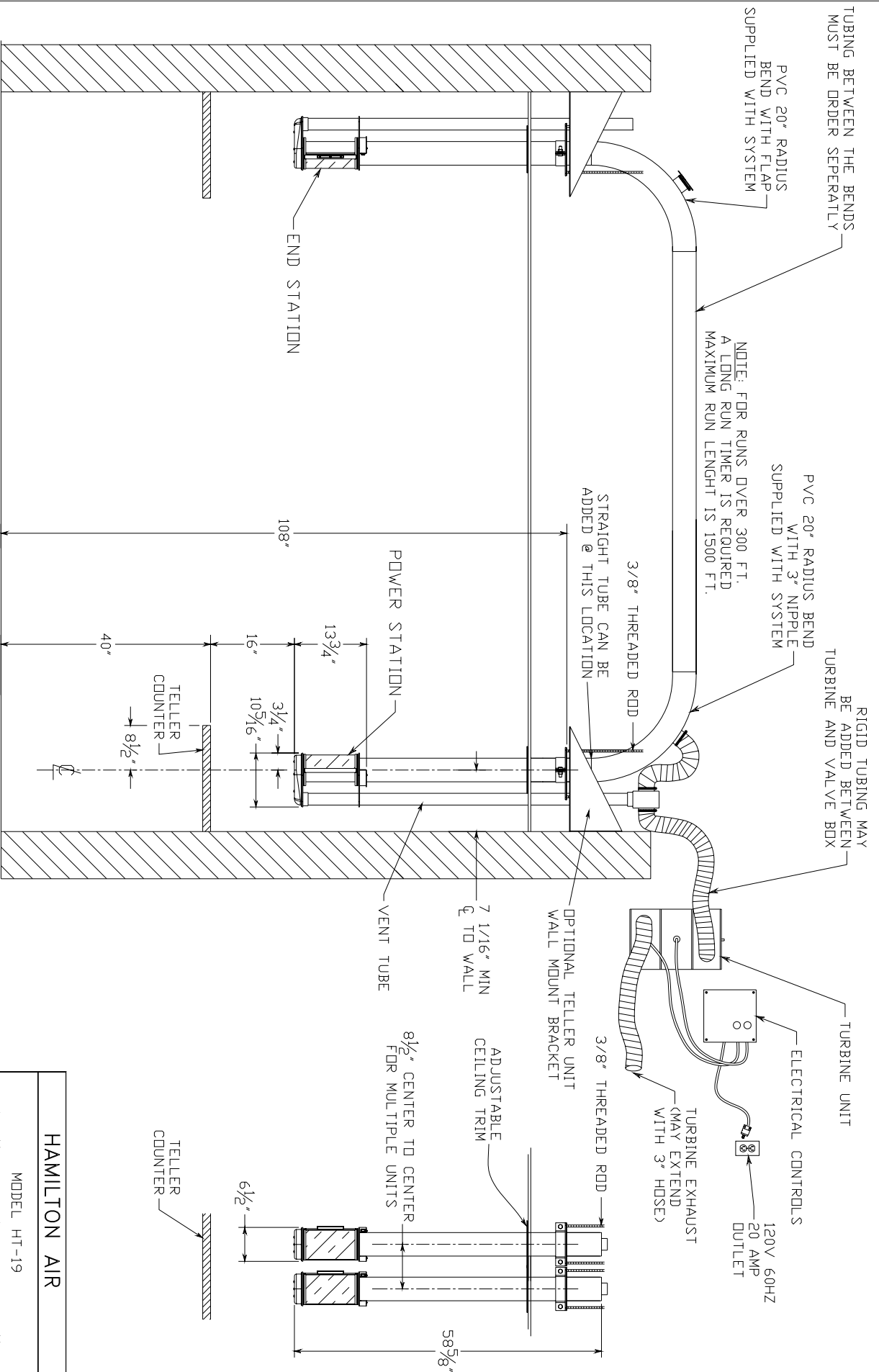
HT-19 Pneumatic Transport System

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NOTE: TURBINE AND CONTROL BOX MAY BE REMOTELY LOCATED IN UTILITY CLOSET, MECHANICAL ROOM, ETC.

Rev - 1	--
Rev - 2	--



HAMILTON AIR	
MODEL HT-19	
PNEUMATIC TRANSPORT SYSTEM	
Drawing Number : 99-875	Date : 3/24/04

HT-19 Pneumatic Transport System

Description:

The HT-19 Pneumatic Transport System is a “point-to-point” type of tube system utilizing remote mounted turbine motors for quiet operation at both end stations. There is also a remote mounted electrical control unit for all connections between end stations and turbine motors. All electrical requirements are also located at this electrical control box. The unit is capable of transporting goods, weighing up to 5 lbs., very quickly, for up to 300 feet standard, and 1500 feet, with optional long run timers. With built in safety, the unit will only operate if both doors are closed and will shut off if either door is opened while in operation. With the HT-19’s quiet operation, it is a good choice for replacing an existing “Point-to-Point” system with motors mounted at the end station. We can also supply Hamilton’s “Double Sided Teller” unit for use on the non-powered end as an option.



Standard “End Station”



Optional “Double Sided Teller”

Uses:

The HT-19 Pneumatic Transport System has many types of applications. We have put together just a few of its possibilities for reference only.

- Pharmacy applications – Transport prescriptions
- IRT Systems – Remote Teller stations in bank lobbies
- ATM Kiosk – Load money into remote ATM Kiosk safely
- Factory paperwork – Shipping papers to dock or drawings to shop floor
- Office building – Paper work between offices

Operation:

The HT-19 Pneumatic Transport System will only operate if **BOTH** station doors are closed. Placing the carrier inside the station, closing the door, and pressing the black send button on the top-left of the unit will send the carrier to the other end station. If either door is open the unit will not send the carrier. If a door is opened while the unit is running, the unit will shut off and the carrier will stop. To continue the operation, you must close the door and re-send the carrier.

HT-19 Pneumatic Transport System

Bill of Materials: As Shown in Figure #1

Quantity	Description	Part Number
2	Standard Teller Units Complete	99-881
Optional	Double Sided Teller	99-849
2	PVC 20" Radius Bends with 3" Nipple	T9608
2	PVC to Steel Tube Adapters	T9705
2	PVC Tube Sleeves	T9602
1	Flap Valve Kit	T9715
1	HT-19 Turbine Unit	B5470
1	HT-19 Electrical Control Unit	99-876
1	HT-19 Air Flow Control Valve	B5471
96	Inches of 3" Diameter Hose	B2948
4	Hose Clamps 3"	H1074

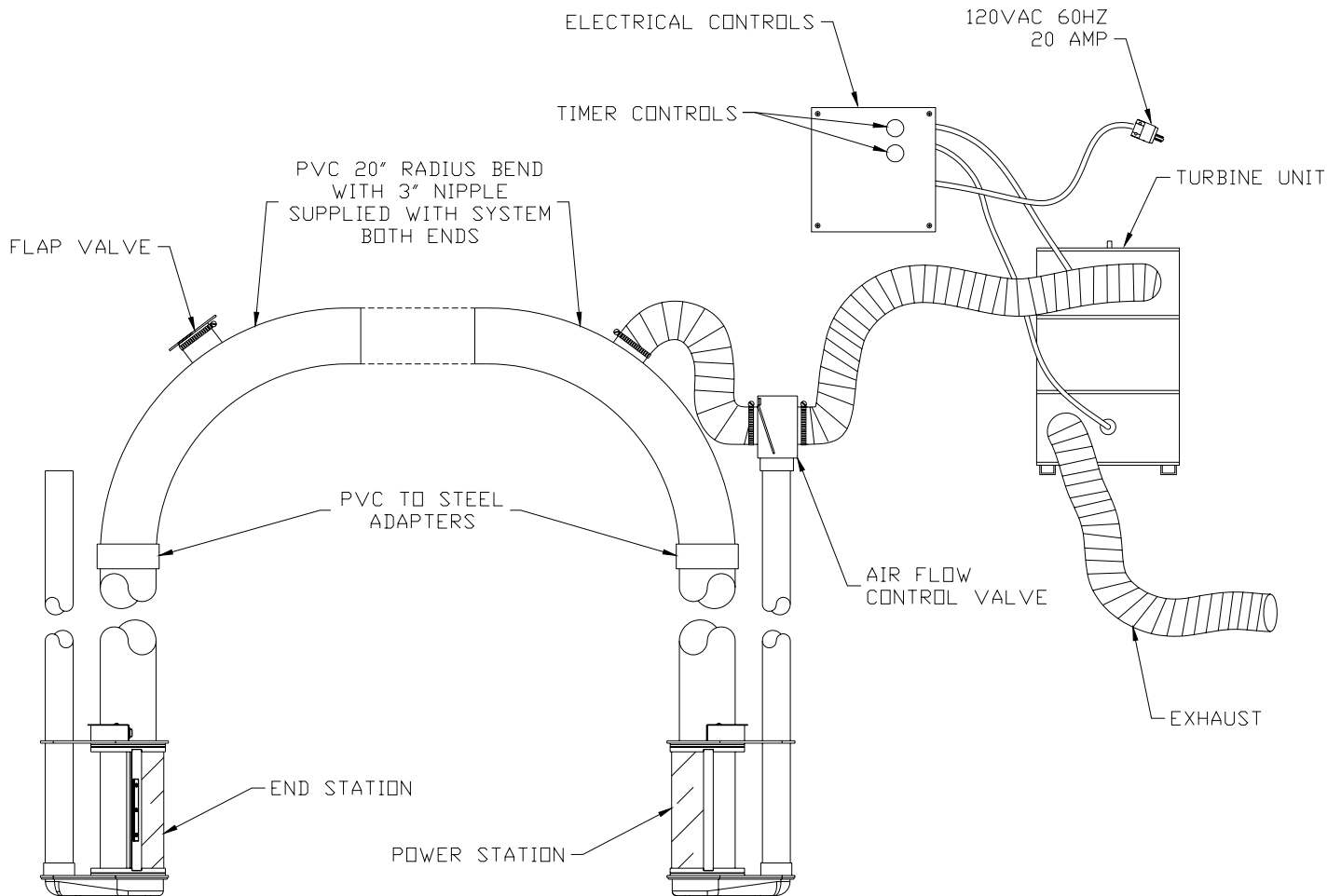


Figure 1

HT-19 Pneumatic Transport System

Installation:

Location:

The Turbine Unit and Electrical Control Unit should be mounted in close proximity to each other to accommodate connecting the turbine power cables to the electrical control unit. **Extending the cables between the Turbine Unit and Electrical Control Unit is NOT recommended.** The Turbine Unit and Electrical Control Unit should be mounted in a location that noise from the turbine motors will not offend the users. This can be in a remote location such as a machine room, utility closet, above ceiling, etc. The three inch (3") hose, between the Turbine Unit and the Air Flow Control Valve, can be lengthened, with rigid pipe, to accommodate this remote location. The exhaust can also be ducted to a remote location, with three inch (3") hose and/or rigid pipe, to reduce noise. Size requirements are shown in figure #2.

Electrical:

The power, for the HT-19 Pneumatic Transport System, is provided through the Electrical Control Unit. The Electrical Control Unit requires a 120 volt AC, 60 Hz, 20 amp outlet. A power cord, with fixed 20 amp plug, is factory wired to the electrical control unit. The turbine motors will be field wired to the electrical control unit. This is explained in the "Field Electrical Connections" section of this manual. The interconnect cables from the terminals is also field wired to the electrical control unit and explained in the "Field Electrical Connections" section.

Air Flow Control Valve:

The Air Flow Control Valve will be located on top of the black exhaust tube from the back of one of the teller terminals. This terminal will now be considered the "Power Station" and the other the "End Station". **If a "Double Sided Teller" terminal is used, it is required to be the "End Station" and connection of the Airflow Control Valve will be on the standard terminal.** Using silicone adhesive, seal the two and a quarter inch (2-1/4") I.D. coupler, on the Airflow Control Valve, over the black exhaust tube. Confirm that the black exhaust tube is sealed to the teller terminal also. Attach the Airflow Control Valve so to have sufficient clearance for the connection of the three inch (3") hoses to the other couplers. Connect a length of three inch (3") hose to the top fitting of the turbine unit and the other end to the air flow control valve fitting marked "To Turbine" (**This is the fitting opposite of the rubber flap inside the Airflow Control Valve.** Example: When turbine creates pressure, this rubber flap closes off the 3" hose connected to the elbow, forcing the air down the 2-1/4" exhaust tube and into the teller terminal lifting the carrier) as shown in Figure 5. Then connect the fitting with the flap, on the air flow control valve, to the three inch (3") fitting, on the tube elbow, located above the power station.

HT-19 Pneumatic Transport System

Size Requirements:

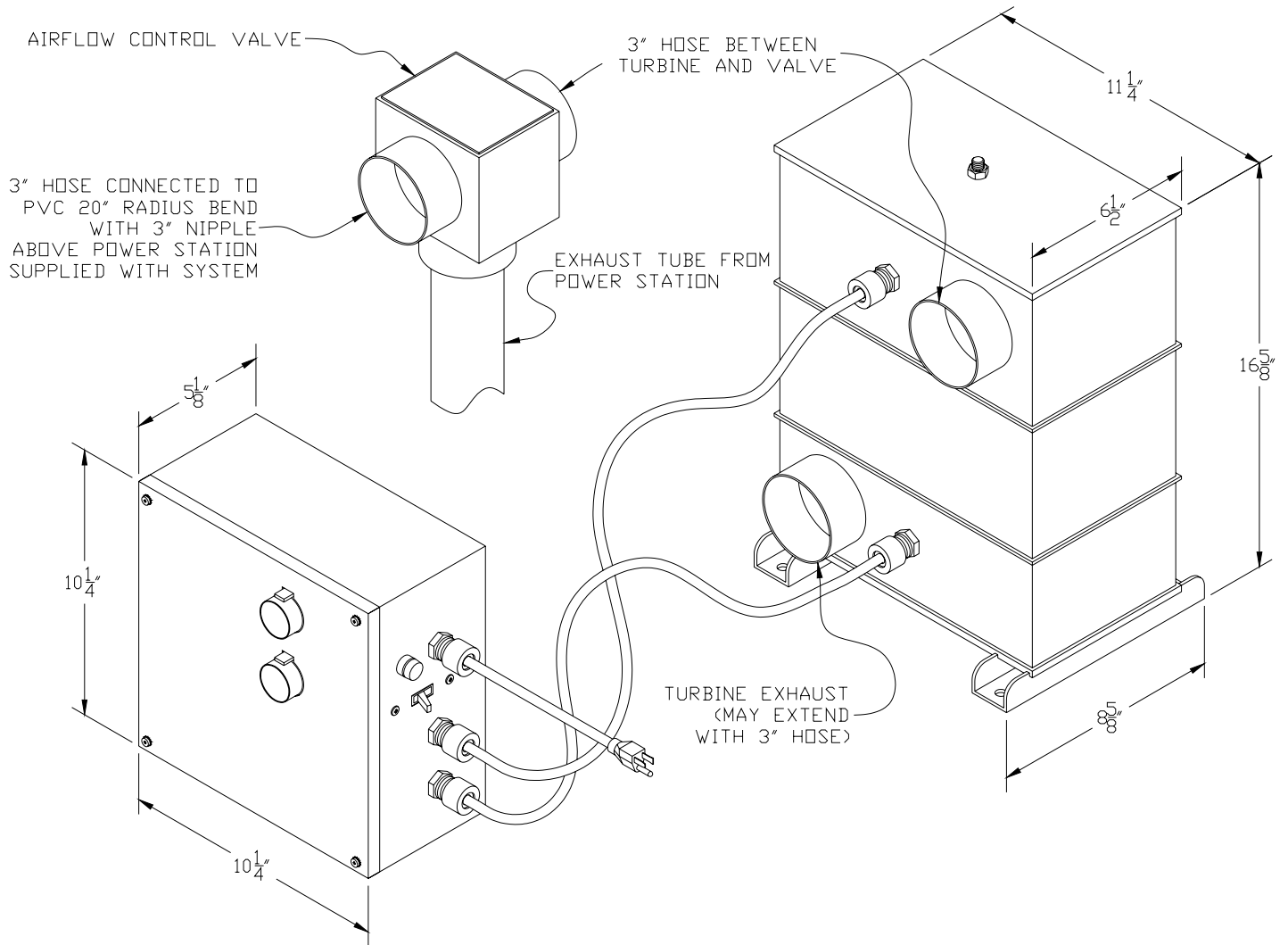


Figure 2

HT-19 Pneumatic Transport System

Field Electrical Connections:

Note: Make all connections with main power disconnected.

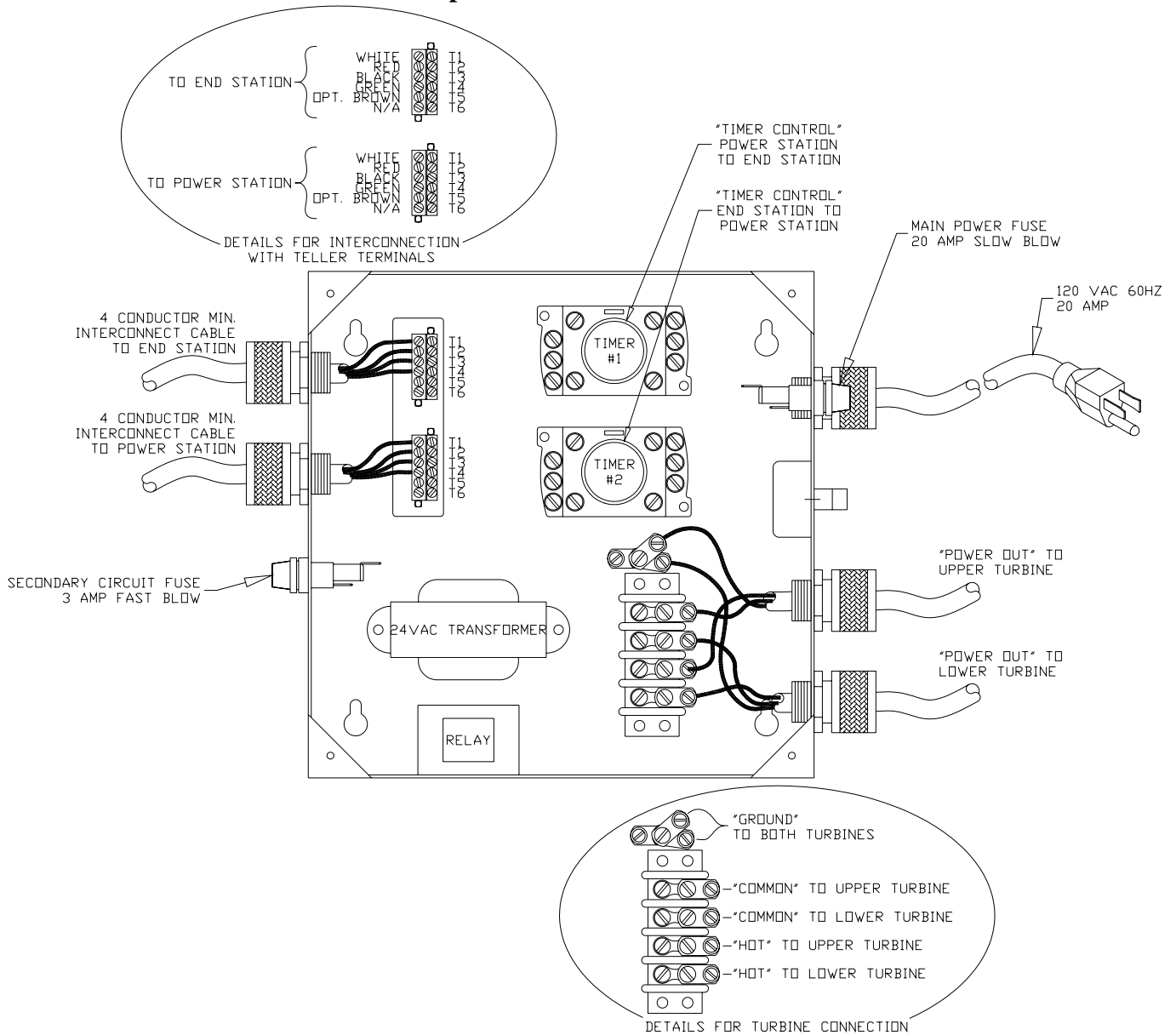


Figure 3

Optional: For use when replacing an existing “Xpress Courier” unit and using existing end station.

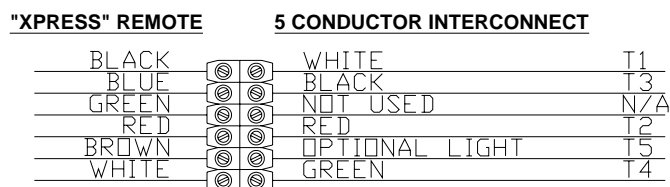


Figure 4

HT-19 Pneumatic Transport System

Turbine Unit and Air Flow Control Valve Details:

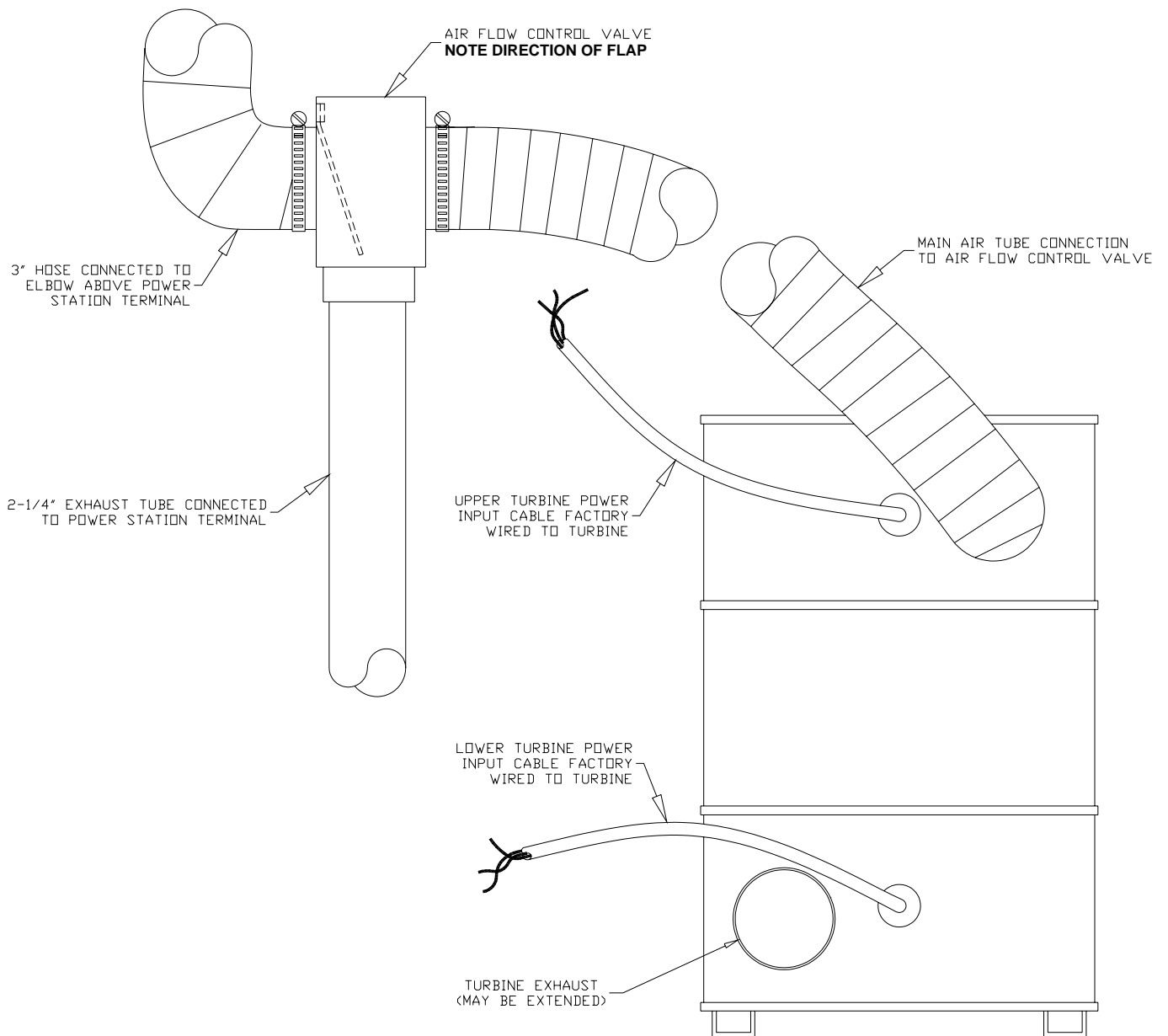


Figure 5

HT-19 Pneumatic Transport System

Electrical:

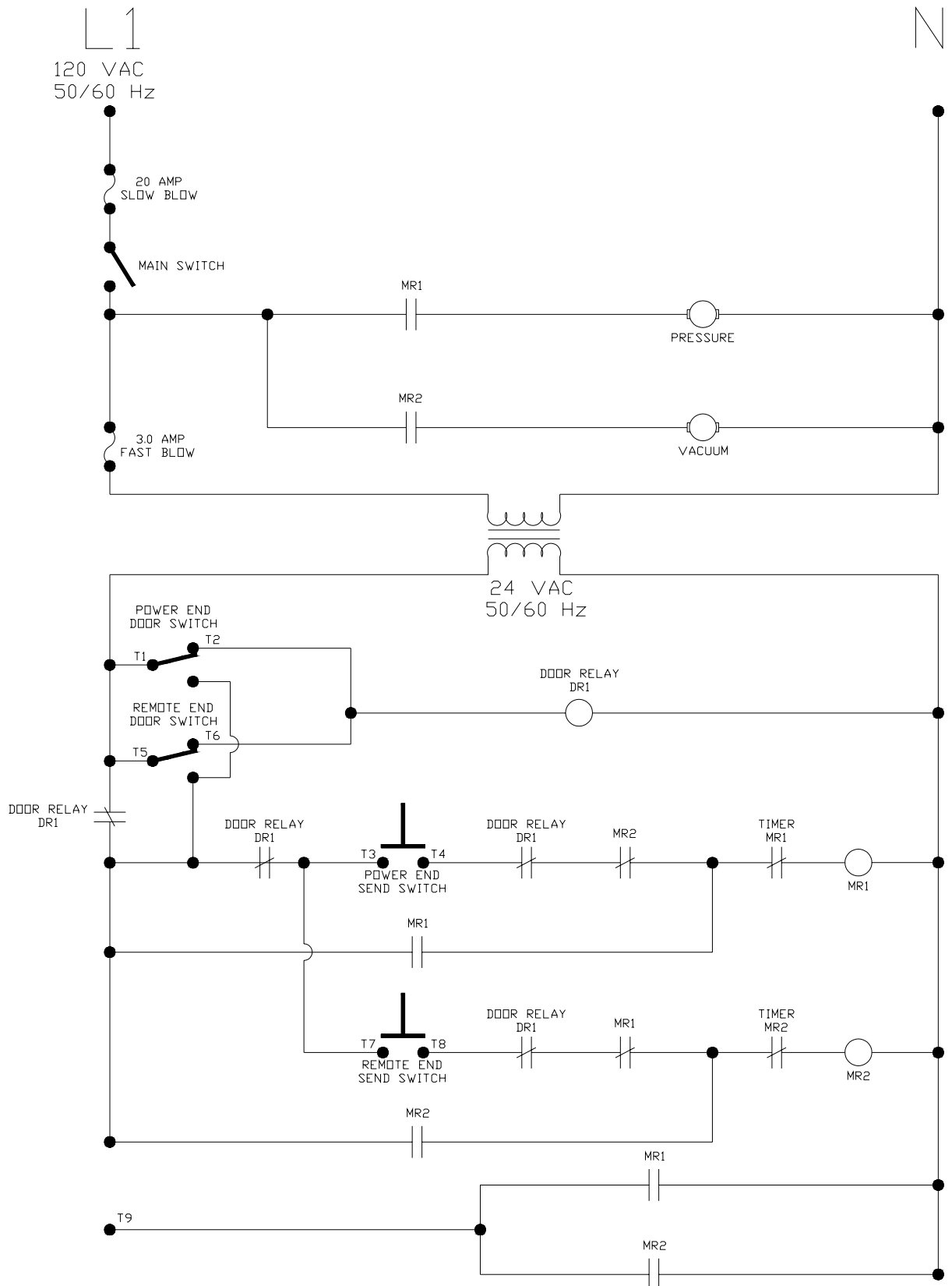
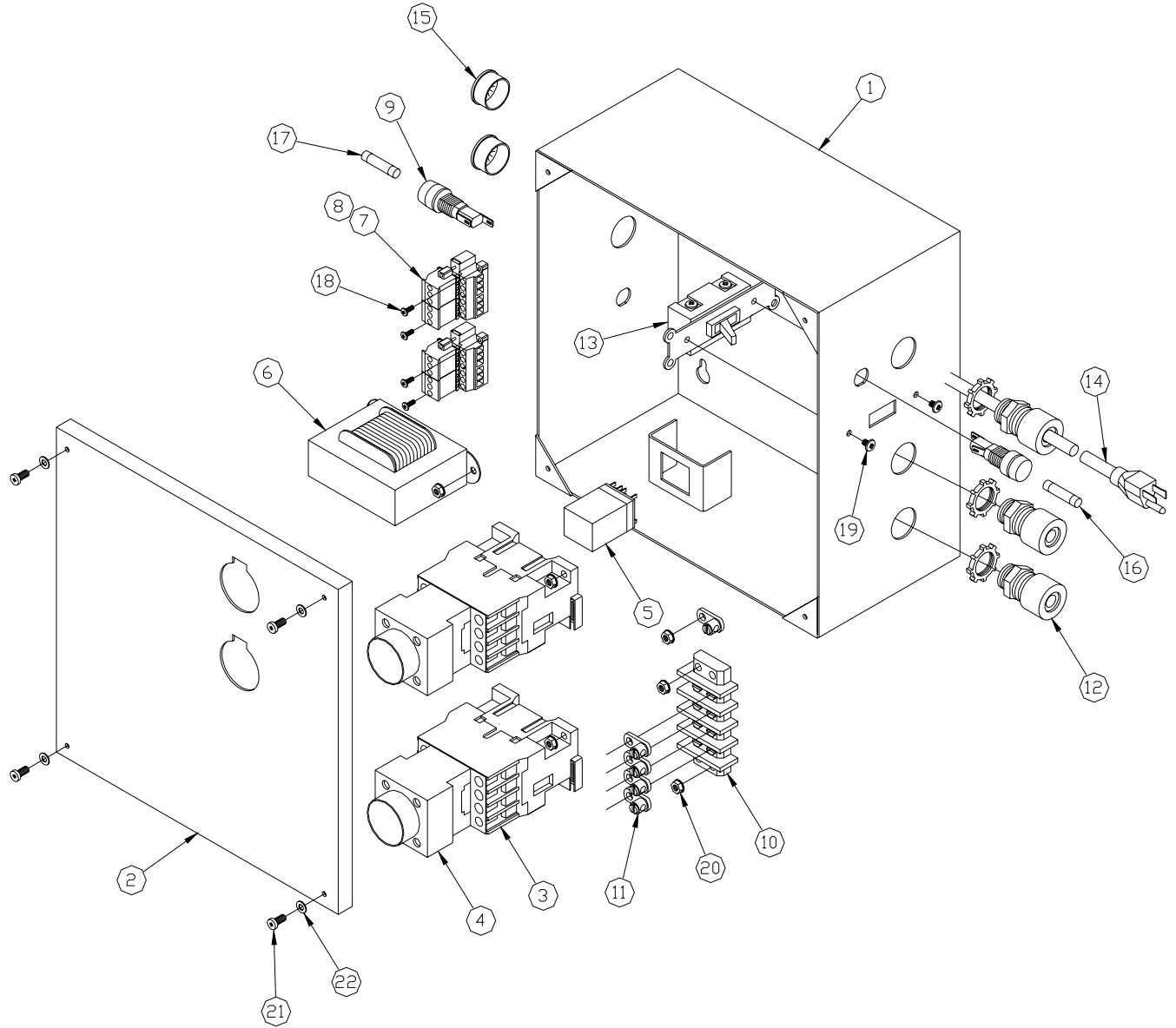


Figure 6

HT-19 Pneumatic Transport System

Electrical Control Cabinet Exploded Parts Detail:



REF.#	P/N	DESCRIPTION	QUANT.
1	B5472	MAIN BODY PANEL	1
2	B5473	COVER PANEL	1
3	E0362	CONTACTOR <TELEMECANIQUE #LC1D18B7>	2
4	E0510	TIME DELAY <TELEMECANIQUE #LADT2>	2
	E0370	LONG RUN TIME DELAY<TELEMECANIQUE#LA2DT4>	OPT.
5	E0124	RELAY, 24VAC 4PDT <TYCO #KHAU-17A11-24>	1
6	E0504	24VAC TRANSFORMER <HOBART #P-1372>	1
7	E0363	PLUG, TERMINAL BLOCK <PHOENIX #1835135>	2
8	E0364	HEADER, TERMINAL BLOCK <PHOENIX #1788389>	2
9	E0263	FUSE HOLDER <LITTELFUSE #H342858>	2
10	E0365	4 POSITION TERMINAL STRIP <CINCH #4-142>	1
11	E0625	CONNECTION LUG <T&B #71003>	7

REF.#	P/N	DESCRIPTION	QUANT.
12	E0366	CORD GRIP <T&B #2522>	3
13	E0628	SINGLE POLE SWITCH <LEVITON #3031-2>	1
14	E0367	POWER CORD 14/3, 8' LONG <20amp>	1
15	E0368	BUSHING <HEYCO #2119>	2
16	E0267	20 AMP SLOW BLOW FUSE <MDA-20>	1
17	E0369	3 AMP FAST BLOW FUSE <AGC-3>	1
18	H0588	4-40 x 3/8 PHILLIPS MACHINE SCREW	4
19	H0137	6-32 x 3/8 PHILLIPS MACHINE SCREW	2
20	H0155	6-32 HEX NYLON LOCK NUT	9
21	H0392	8-32 x 3/8 PHILLIPS MACHINE SCREW	4
22	H0589	#8 EXTERNAL TOOTH LOCK WASHER	4