

HAMILTON AIR

3143 Production Drive • Fairfield, Ohio 45014 • 513-874-3733

Model **HA-50**

Installation and Service Manual

Important Notice:

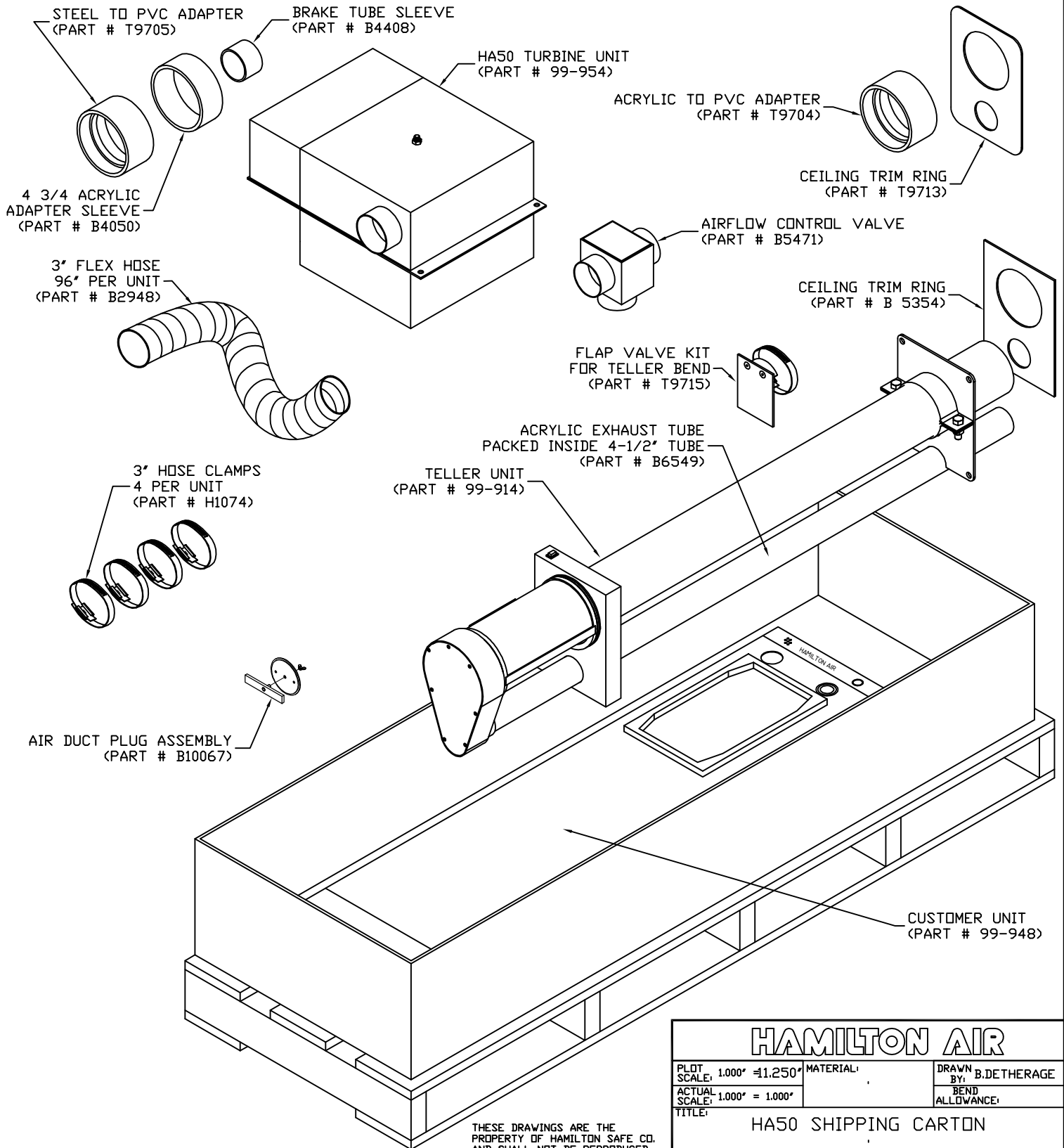
HA-50 Units

Vibrations created from shipping can cause switches to become loose. All Micro-Switches should be checked for proper adjustment and operation by manually moving the door and safety bar before operating unit. This will insure that all adjustments and operations are satisfactory.

Check the wiring details sheet for the proper field connections.

HA50 NOTICE:

CHECK CARTON CAREFULLY FOR ALL COMPONENTS SHOWN BELOW



Revision 'A' 10/29/09 (Added B10067 Air Duct Plug Assembly to Drawing)

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HAMILTON AIR			
PLOT SCALE: 1.000" = 1.250"	MATERIAL:	DRAWN BY: B. DETHERAGE	
ACTUAL SCALE: 1.000" = 1.000"		BEND ALLOWANCE:	
TITLE: HA50 SHIPPING CARTON			
DATE:	DRAWING NUMBER: HA50SC01	REVISION: A	

System Component Description and Function

Component	Function
LS1	Limit Switch 1: <u>Teller Door Closed Limit Switch.</u> Energizes “Input” LED when teller door is closed.
LS2	Limit Switch 2: <u>Customer Unit Door Closed Limit Switch.</u> Deactivates “Input” LED when customer door is closed.
LS3	Limit Switch 3: <u>Customer Door Open Limit Switch.</u> Deactivates “Input” LED when customer door is opened.
LS4	Limit Switch 4: <u>Customer Unit Door Safety Switch.</u> Deactivates “Input” LED when customer door safety switch is activated.
PB5	Pushbutton Switch 5: <u>Teller Recall Pushbutton Switch.</u> Energizes “Input” LED when teller recall button is pressed.

Control Board Component Description and Function

Component	Function
SW1	Switch 1: <u>Blower Run Time Set.</u> “Off” is normal setting. Switching “On” enables blower “Time-Set” mode. See “Blower Run Time Set” for full instructions on setting blower run times.
SW2	Switch 2: <u>Turbine Mode.</u> “Off” is normal setting. Selects turbine mode for multi-blower systems.
SW3	Switch 3: <u>Unit Selection.</u> “Off” is normal setting for board mounted in customer unit.
SW4	Switch 4: <u>Recall Switch.</u> Momentarily pressing switch recalls carrier to this end of the system.
JP1	Jumper 1: <u>Multiple Board Jumper.</u> Jumper “On” for normal operation in HA50 with Manual Teller Unit. Jumper “Off” only when used in dual control board systems.
JP2	Jumper 2: <u>Remote Input Jumper.</u> Jumper “On” for normal operation in HA50 with Manual Teller Unit. Jumper “Off” only when used in dual control board systems.
JP3	Jumper 3: <u>Door Motor Auxilary Thermal Protection Jumper.</u> Jumper “On” for normal operation in HA50. Jumper “Off” only if the door motor has auxiliary connections for thermal protection (HA33 Only).
RY1	Control Relay 1: <u>Pressure Motor Relay.</u> Energizing runs pressure motor.
RY2	Control Relay 2: <u>Vacuum Motor Relay.</u> Energizing runs vacuum motor.
RY3	Control Relay 3: <u>Door Close Relay.</u> Energizing runs door motor closed.
RY4	Control Relay 4: <u>Door Open Relay.</u> Energizing runs door motor open.
RY5	Control Relay 5: <u>Spare Relay.</u> Not Used.
RY6	Control Relay 6: <u>Spare Relay.</u> Not Used.

Blower Run Time Set

The “blower run time” is set using switch number one (SW1), which is located on the control board in the HA50 customer unit. The unit is shipped with a default time stored of about 3 seconds. This procedure will overwrite any existing times set in system. This time can be reset as often as necessary. Power failure will not affect the times stored.

To restore default blower run times:

- 1) Turn power “OFF” to unit.
- 2) Turn SW1 “ON”.
- 3) Turn power “ON” to unit.
- 4) Return SW1 to “OFF”.
- 5) Default blower run time is restored.

The blower run time can be set with both directions of carrier travel using the same time or in a three stage cycle. The three stage cycle includes individual times for the two directions of carrier travel along with a third time for the carrier to free fall in the clear acrylic tube after the blowers stop and before the customer door opens.

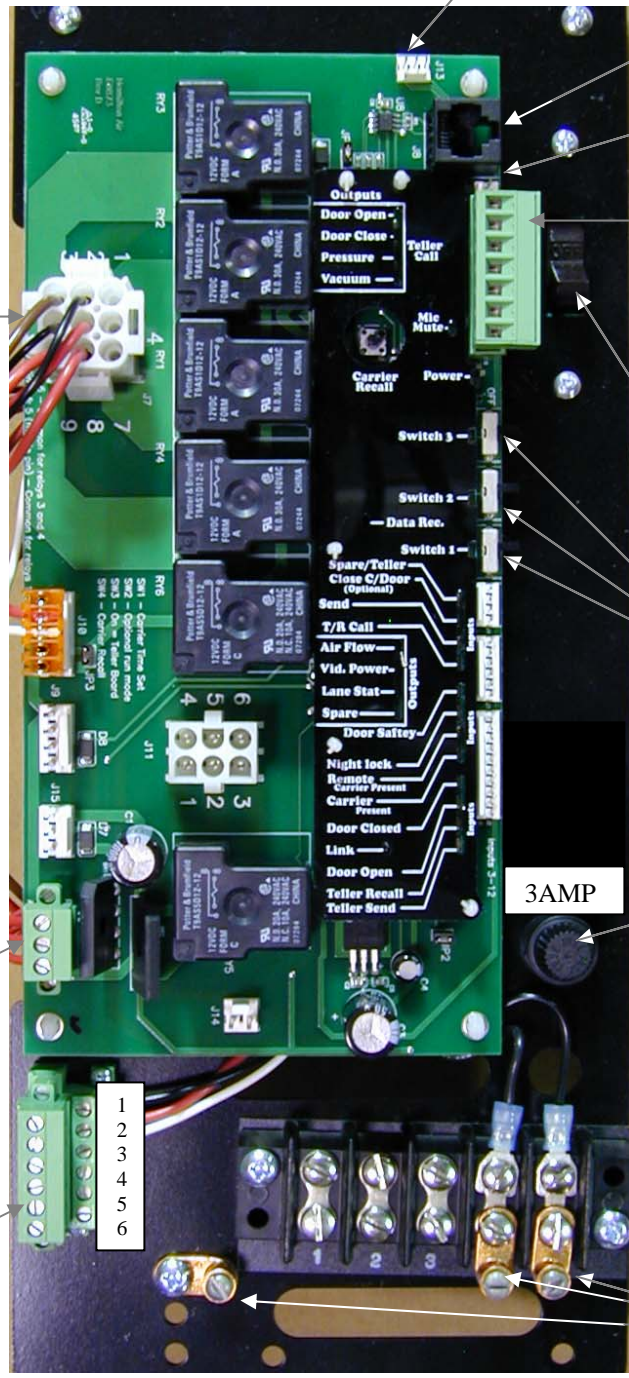
Setting procedure for blower run time. (Same time for both directions)

- 1) Restore default times as described above.
- 2) Before beginning, the carrier must be in customer unit with customer door open.
- 3) Turn SW1 to the “ON” position. (LED indicator will light)
- 4) Push and hold either “Customer Send” or “Teller Recall” button until carrier arrives in the teller unit. Releasing button stores the time for this cycle.
- 5) Turn SW1 to the “OFF” position to store the cycle time for both directions.

Setting procedure for blower run time. (Three stage cycle time)

- 1) Before beginning, the carrier must be in customer unit with customer door open.
- 2) Turn SW1 to the “ON” position. (LED indicator will light)
- 3) Push and hold either “Customer Send” or “Teller Recall” button until carrier arrives in the teller unit. Releasing button stores the time for this cycle.
- 4) Push and hold either “Teller Send” or “Teller Call” button until carrier arrives in the clear acrylic tube on the customer unit. Releasing the button stores the time held for this cycle. (Turbines will shut off, customer door stays closed)
- 5) When carrier lands in customer unit, press and release “Teller Call” button to open the door. This stores a third time for carrier free fall time in the clear acrylic tubing.
- 6) Turn SW1 to the “Off” position for normal operation.

HA50 Customer Unit Control Board



Microphone J13

CAT5 Interconnect

Speaker J12

Audio Connection:
 Speaker -
 Speaker +
 Teller Call -
 Teller Call +
 Microphone -
 Microphone +
 Shield

Main Power Switch

Mode Switches

Fuse: 3AMP

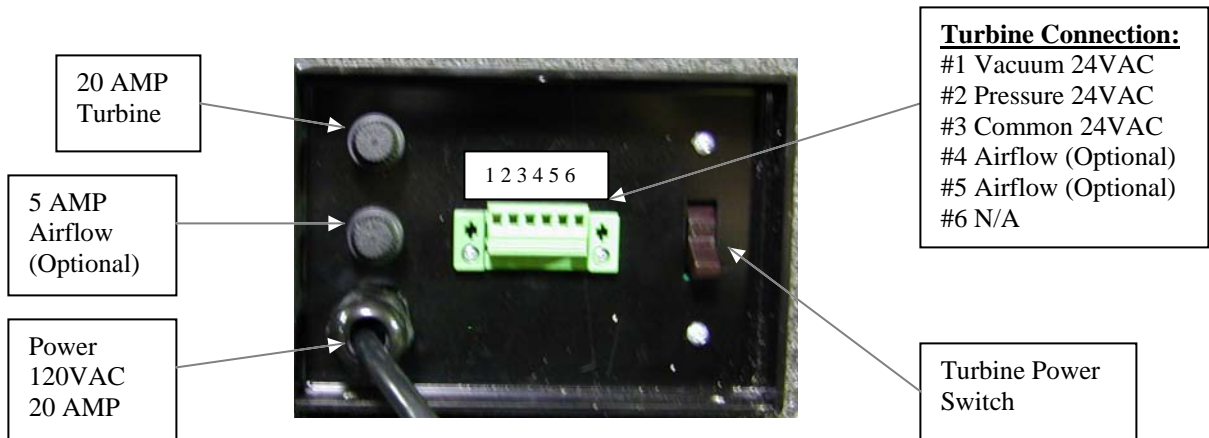
Service Power 120VAC
 #4 = Neutral
 #5 = HOT
 Ground

Relay Outputs:
 1) N/A
 2) Vacuum 24VAC
 3) Close Door 120V
 4) N/A
 5) 24VAC
 6) 120VAC
 7) N/A
 8) Pressure 24VAC
 9) Open Door 120V

24VAC Connection:
 24VAC
 Center Tap
 24VAC

Turbine Connection:
 #1 Vacuum 24VAC
 #2 Pressure 24VAC
 #3 Common 24VAC
 #4 Airflow (Optional)
 #5 Airflow (Optional)
 #6 N/A

HA50 Turbine Unit Connection Panel



Additional Functions of E0873

Microphone Muting:

The E0873 control board can be set-up to mute the microphone during blower operation with certain systems that have the blowers located close to the microphone in the customer unit. The control board can also be set-up not to mute the customer microphone during blower operation for systems that are not affected by the blowers.

- 1) Recall carrier to customer unit. (Press SW4 “Recall” located on control board)
- 2) Press and hold SW4 and press the teller call button on customer unit. The output LED for microphone mute will flash.

One flash = the microphone is set to mute.

Two flashes = the microphone is set to NOT mute.

- (Note: the input LED for the teller call button will light when the button is pressed. This is NOT the output LED for microphone mute and therefore NOT the LED that will signal the setting of microphone muting.)
- 3) Repeat step #3 to toggle between settings as needed.
 - (Note: SW4 and teller call must be released to toggle setting.)
 - 4) System is now functional as normal with the new setting for muting the microphone.

Troubleshooting the E0873

Motorized Door Test (Automatic):

- 1) Disconnect the interconnection cable from the board.
- 2) If the door is open, turn SW3 “ON”, if door is closed, turn SW3 “OFF”.
- 3) Cycle power “OFF” and back “ON”.
- 4) Door should open or close depending on the setting of SW3.
- 5) Repeat test in both directions and on both tube stations if applicable.

Motorized Door Test (Manual):

- 1) Turn SW3 “ON” if not already “ON”
- 2) Turn SW1 “ON”
- 3) Send and Call or Recall activates the door manually. Releasing the button stops the door as well as tripping the limit switches.
- 4) Turn SW1 “OFF” and SW3 “OFF” for customer or “ON” for teller for normal operation.

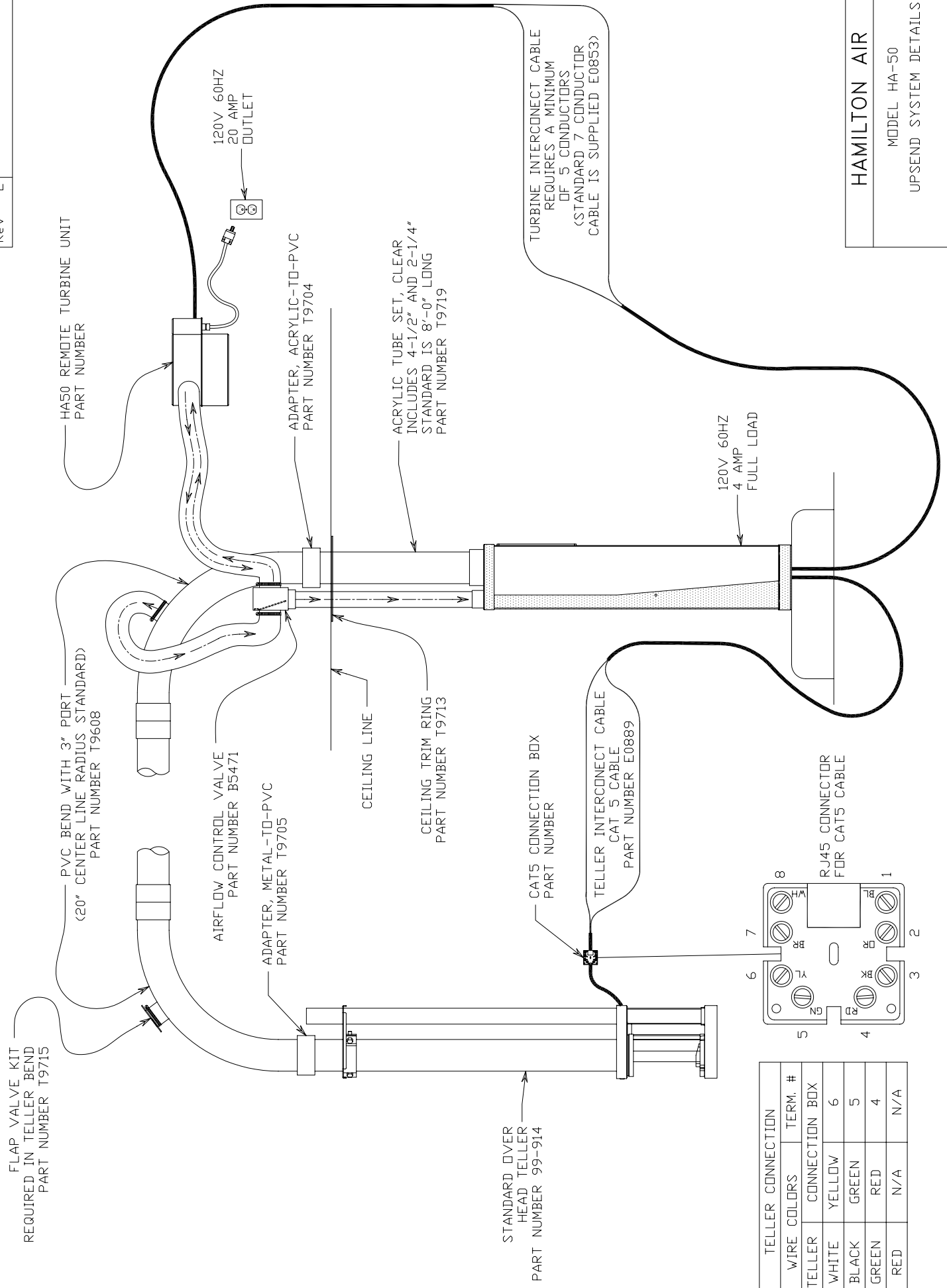
Blower Run Test:

- 1) Test is performed on terminal that turbines are controlled from. This could be on either customer or teller station on a two board system.
- 2) Recall carrier to station that has turbines connected so that door will open.
- 3) Hold SW4 while switching SW1 “ON”.
- 4) Pressing send and teller call or recall will activate the pressure and vacuum turbines.
- 5) Turn SW1 “OFF” to return to normal operation.

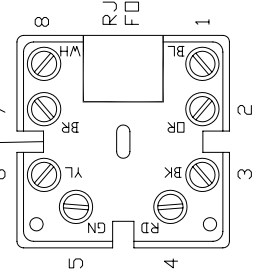
Restore Default Blower Run Times:

- 1) Turn power “OFF” to unit.
- 2) Turn SW1 “ON”.
- 3) Turn power “ON” to unit.
- 4) Return SW1 to “OFF”.
- 5) Default blower run time is restored.

Rev - 1
Rev - 2



TELLER CONNECTION	
WIRE COLORS	TERM. #
TELLER	CONNECTION BOX
WHITE	6
BLACK	5
GREEN	4
RED	N/A



HAMILTON AIR
MODEL HA-50
UPSEND SYSTEM DETAILS

Drawing Number : 99-962 Date : 10/08/07

120V 60HZ
20 AMP
OUTLET

120V 60HZ
4 AMP
FULL LOAD

HAS0 REMOTE TURBINE UNIT
PART NUMBER

ADAPTER, ACRYLIC-TO-PVC
PART NUMBER T9704

ACRYLIC TUBE SET, CLEAR
INCLUDES 4-1/2" AND 2-1/4"
STANDARD IS 8'-0" LONG
PART NUMBER T9719

PVC BEND WITH 3" PORT
(20" CENTER LINE RADIUS STANDARD)
PART NUMBER T9608

AIRFLOW CONTROL VALVE
PART NUMBER BS471

ADAPTER, METAL-TO-PVC
PART NUMBER T9705

CEILING LINE

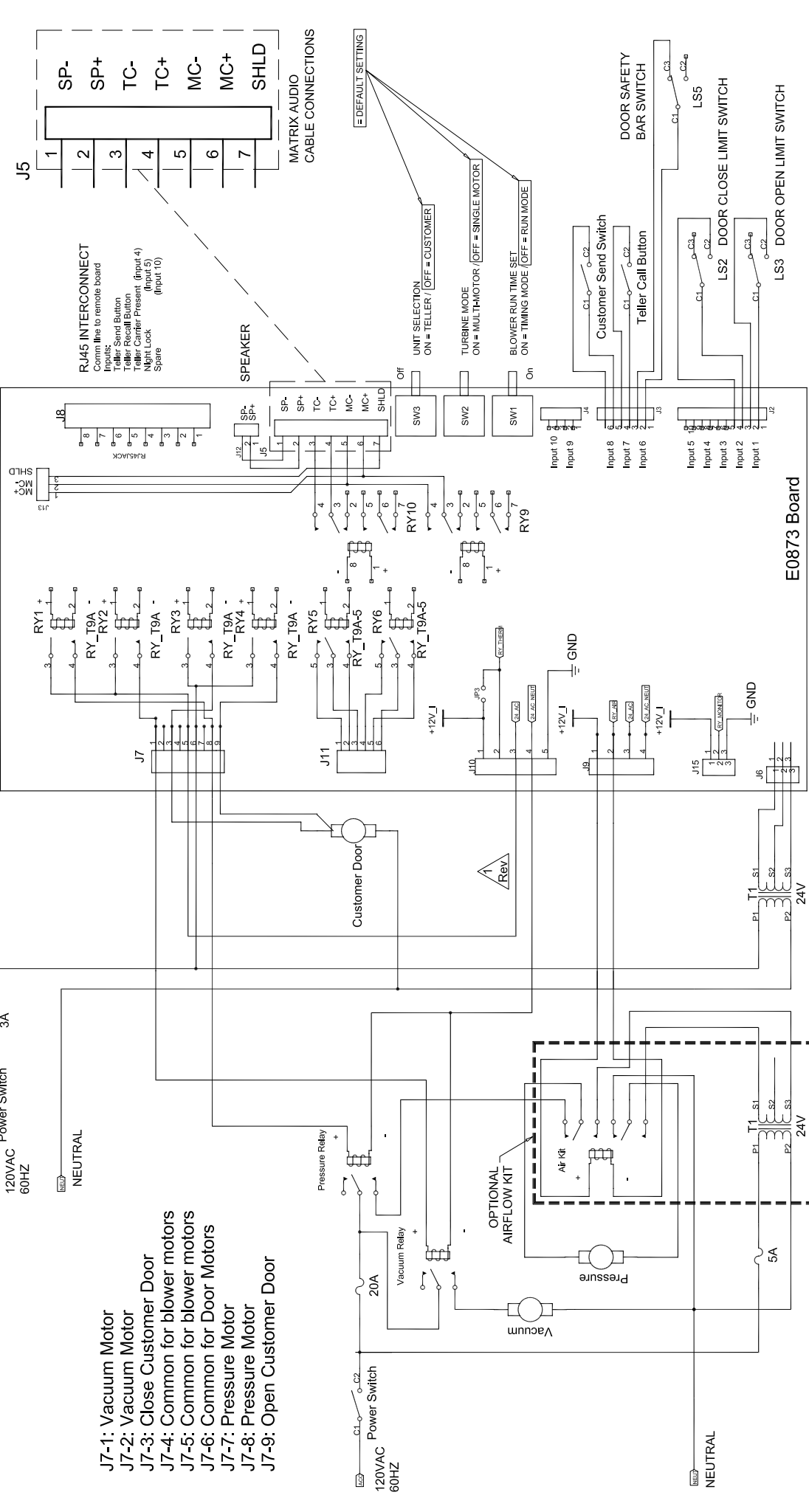
CEILING TRIM RING
PART NUMBER T9713

STANDARD OVER
HEAD TELLER
PART NUMBER 99-914

CAT5 CONNECTION BOX
PART NUMBER

TELLER INTERCONNECT CABLE
CAT 5 CABLE
PART NUMBER E0889

TURBINE INTERCONNECT CABLE
REQUIRES A MINIMUM
OF 5 CONDUCTORS
(STANDARD 7 CONDUCTOR
CABLE IS SUPPLIED E0853)



- J7-1: Vacuum Motor
- J7-2: Vacuum Motor
- J7-3: Close Customer Door
- J7-4: Common for blower motors
- J7-5: Common for blower motors
- J7-6: Common for Door Motors
- J7-7: Pressure Motor
- J7-8: Pressure Motor
- J7-9: Open Customer Door

- Input 1: Door Open
- Input 2: Door Close
- Input 3: N/A
- Input 4: N/A
- Input 5: N/A
- Input 6: Door Safety
- Input 7: Call Button
- Input 8: Send Button
- Input 9: Input for optional auto door close
- Input 10: N/A

Rev - 1

Rev - 2

GENERAL SPECIFICATIONS FOR DRIVE IN SYSTEM

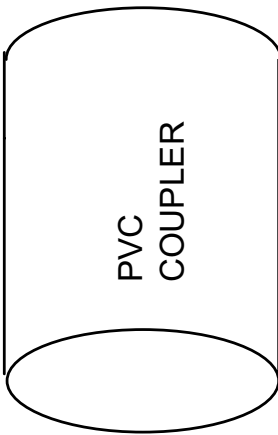
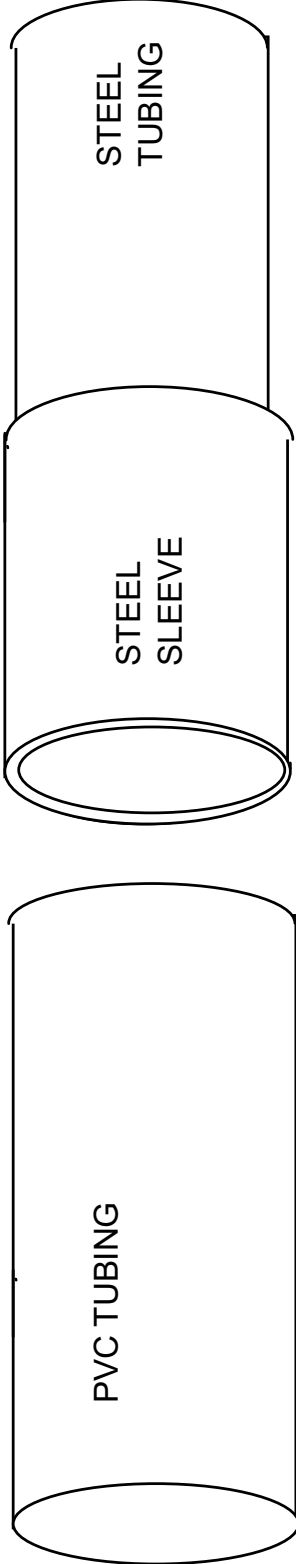
NOTES:

1. THE FOLLOWING WORK RELATED TO THE HA-50 DRIVE-UP FACILITY WILL NOT BE PERFORMED BY THE BANK EQUIPMENT SUPPLIER.
 - A. ALL CONDUITS, CONDUCTORS, PANELS, BOXES AND WIRING DEVICES.
 - B. SOURCE, DISTRIBUTION AND CONNECTION OF POWER TO OPERATE EQUIPMENT.
 - C. INTERIOR AND EXTERIOR LIGHTING AND SIGNS.
 - D. ISLAND MUST BE LEVEL AND SMOOTH AT CUSTOMER UNIT.
 - E. CANOPY, ISLANDS, FOOTINGS, DRIVEWAYS, CURBS, PLANTERS, RETAINING WALLS, WALKWAY, GUARD POSTS, ROAD SURFACES, SPACE HEATERS, AND CONVECTORS.
 - F. AFTER TUBE IS INSTALLED, FINISH ALL OPENING AROUND TUBE INCLUDING GROUTING, PATCHING, WATERPROOFING, PAINTING, SEALING AND ACOUSTICAL TREATMENT AS REQUIRED.
 - G. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND THE ELECTRICAL CONTRACTOR THAT PERTAINS DIRECTLY TO THE DRIVE-UP FACILITIES SHALL BE COORDINATED WITH THE BANK EQUIPMENT SUPPLIER.
 - H. THE BANK EQUIPMENT SUPPLIER SHALL NOT BE REQUIRED TO INSTALL THE EQUIPMENT PREMATURELY, AND NOT UNTIL CONSTRUCTION HAS PROGRESSED SUFFICIENTLY TO AFFORD REASONABLE PROTECTION AND FROM OTHER CONSTRUCTION HAZARDS. SUCH TIME SHALL BE DETERMINED BY THE BANK EQUIPMENT SUPPLIER.
2. THE FOLLOWING WORK RELATED TO THE HA-50 DRIVE-UP FACILITY WILL BE BY THE BANK EQUIPMENT SUPPLIER.
 - A. FURNISH AND INSTALL CUSTOMER AND TELLER TERMINALS.
 - B. FURNISH AND INSTALL THE PNEUMATIC TUBES FOR EACH REMOTE SYSTEM AS PER THE TERMS OF THE CONTRACT.
 - C. FURNISH AND INSTALL THE CLOSED CIRCUIT AUDIO SYSTEM FOR EACH REMOTE SYSTEM AS PER THE TERMS OF THE CONTRACT.
 - D. FURNISH AND INSTALL THE DRIVE-UP WINDOW (IF REQUIRED) AS PER THE TERMS OF THE CONTRACT.
3. WHEN THE INSTALLATION WORK IS COMPLETED THE BANK EQUIPMENT SUPPLIER SHALL BE CONSIDERED TO HAVE SATISFACTORILY INSTALLED THE PRODUCT. REGARDLESS OF WHETHER OR NOT THE PRODUCT IS IMMEDIATELY PUT TO USE. THE BANK EQUIPMENT SUPPLIER SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO EQUIPMENT CAUSED BY OTHER PARTIES. REPAIR OF DAMAGE CAUSED BY OTHERS SHALL BE DONE BY THE BANK EQUIPMENT SUPPLIER AT THE REQUEST OF THE PURCHASER AND AT HIS EXPENSE.
4. THE PURCHASER SHALL PROVIDE SUFFICIENT PROTECTED AREA FOR THE TEMPORARY ON-SITE STORAGE OF MATERIALS, TOOLS AND EQUIPMENT.
5. THE PURCHASER AGREES THAT HE WILL FURNISH AND MAINTAIN DURING THE INSTALLATION OF THIS PRODUCT AN OPENING INTO THE BUILDING OF SUFFICIENT SIZE FOR THE TAKING OF THE EQUIPMENT INTO THE BUILDING, AMPLE PASSAGE AND RIGHT OF WAY FROM SAID OPENING TO LACTION WHERE THE PRODUCT IS TO BE INSTALLED.

HAMILTON AIR

MODEL HA-50
 UPSEND CUSTOMER UNIT
 GENERAL SPECIFICATIONS

Drawing Number : 99-951 Date : 10/08/07



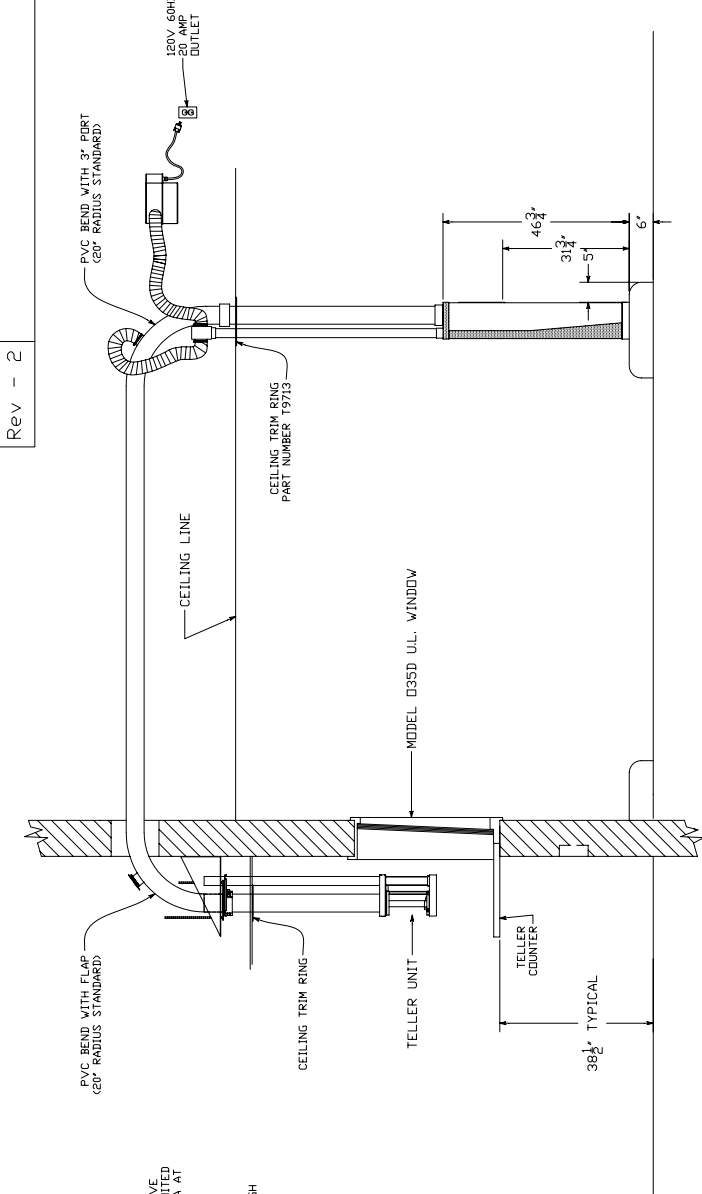
1. Slide Steel sleeve over the end of the steel tubing.

Tape joints with Duct Tape



2. Apply a liberal coating of PVC cement to the end of the PVC tubing and the inside of the PVC Coupler.
3. Butt the PVC tubing to the steel tubing
4. Slide PVC Coupler over the PVC and steel sleeve.
5. Duct Tape Joints for stability
6. The joint will cure in about an hour at 70 Degrees. Longer at colder temps.

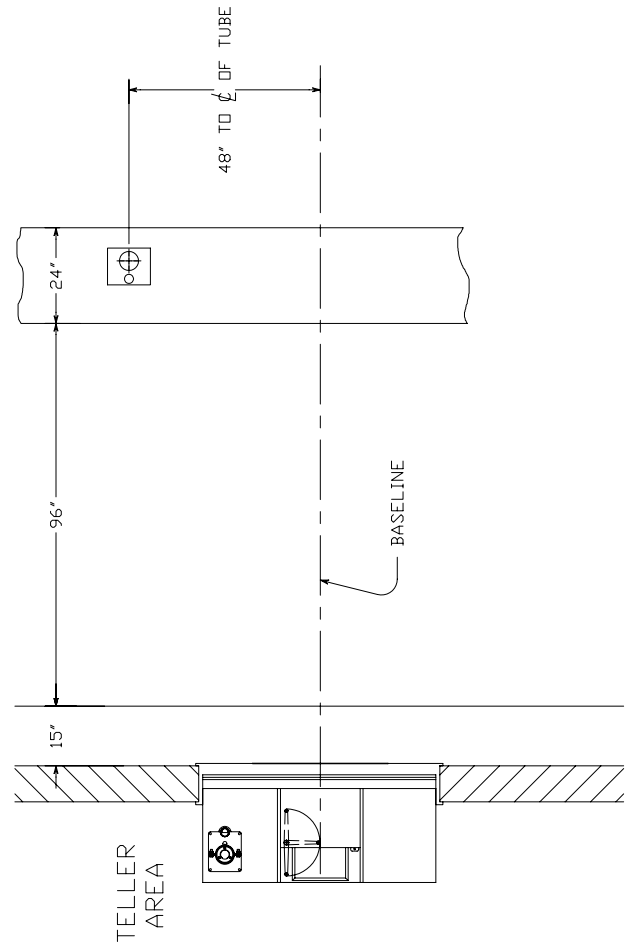
NOTE
Support this joint on each side of the couplings.



ISLAND OVER HEAD CONDUIT ENTRY
 ISLAND UNDER GROUND CONDUIT ENTRY

REFERENCE DRAWING NUMBERS:
 99-948, 99-949, AND 99-950

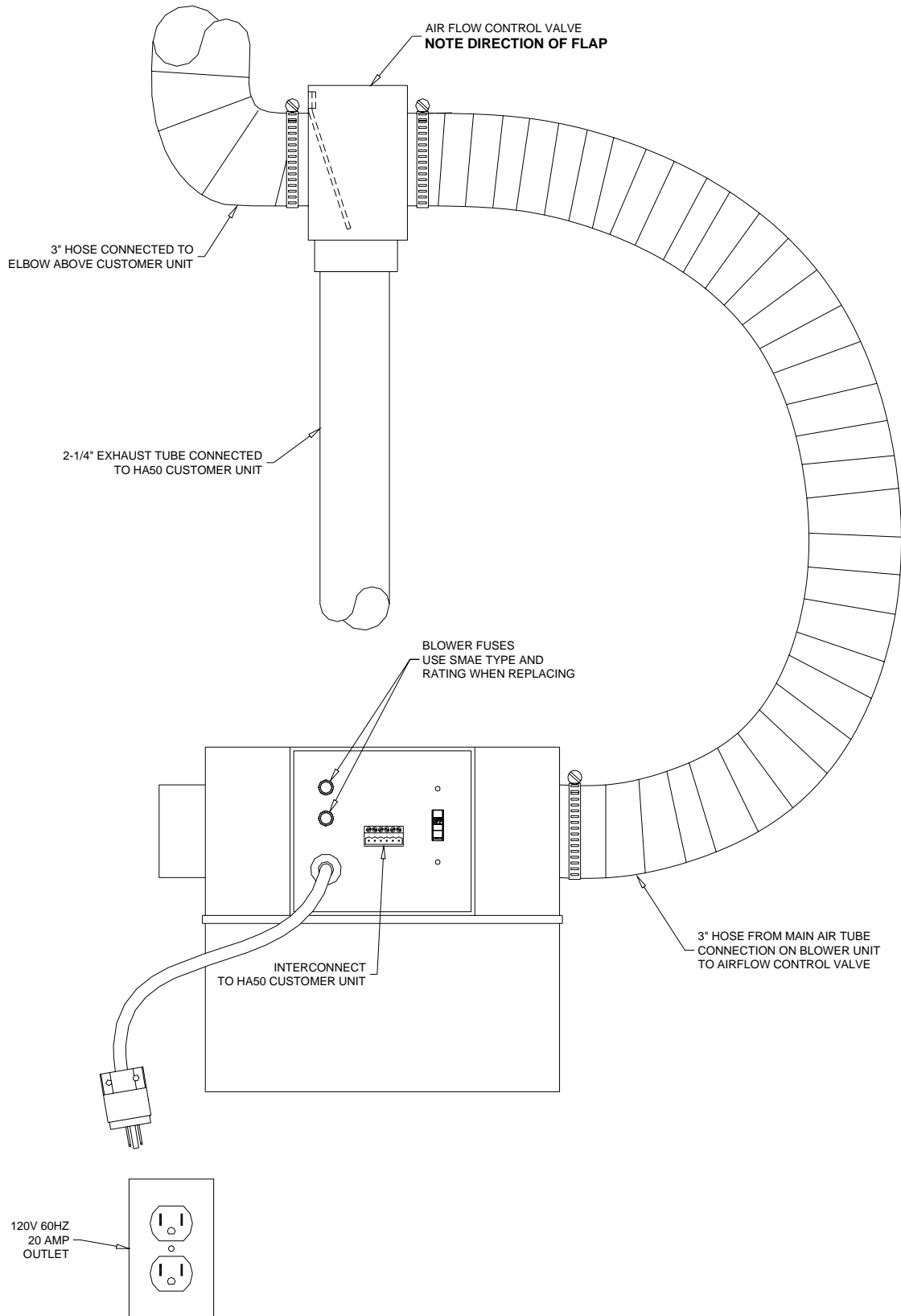
REFERENCE DRAWING NUMBERS:
 99-753, 99-948, 99-949, AND 99-950



SECTION

PLAN

Turbine Connections



Rev - 1	Electrical Requirements
Rev - 2	Unit to HA45 Style

3/4" CONDUIT FOR CUSTOMER UNIT.
120V., 60HZ 20 AMP SERVICE PER LANE
FOR EACH CUSTOMER / TURBINE UNIT.

CUSTOMER UNITS (ON ISLAND)

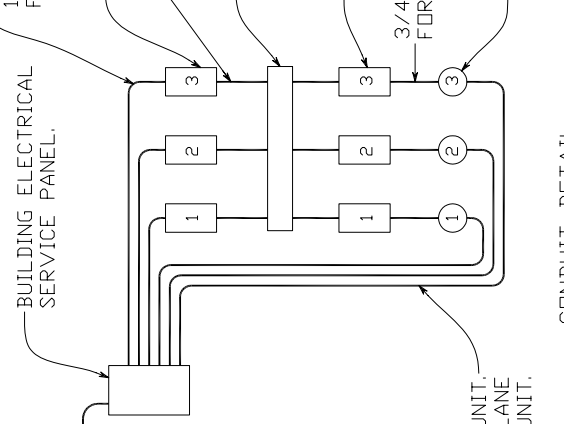
3/4" CONDUIT LOW VOLTAGE
FOR AUDIO AND CONTROL

4"x4" BOX UNDER COUNTER
FOR AUDIO CONTROL ACCESS.
(UNDER WINDOW)

TELLER UNITS AT CEILING LEVEL

3/4" CONDUIT LOW VOLTAGE
FOR REMOTE TURBINE

REMOTE TURBINE UNIT
(CAN BE MOUNTED IN CANOPY
OR INSIDE BUILDING IN
MACHINE ROOM OR CLOSET)



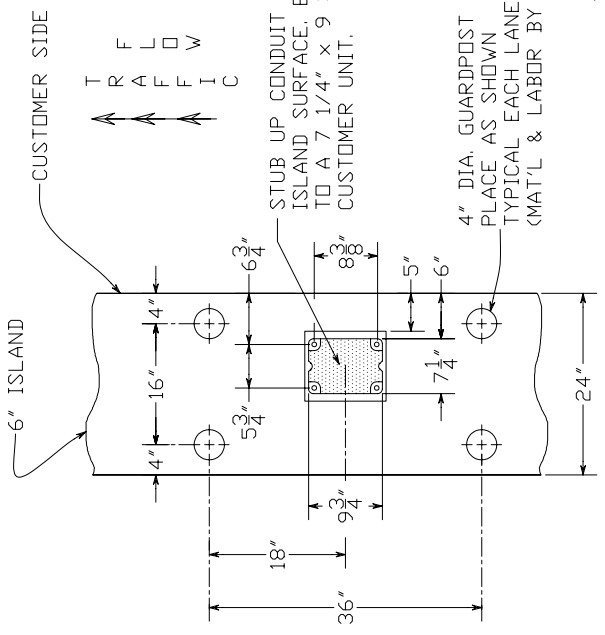
DUPLEX RECEPTICLE FOR AUDIO
AND DEAL DRAWER 120 V., 60 HZ.
20 AMP (UNDER WINDOW)

STUB UP CONDUIT 3/4" ABOVE
ISLAND SURFACE. ENTRY LIMITED
TO A 7 1/4" x 9 3/4" AREA AT
CUSTOMER UNIT.

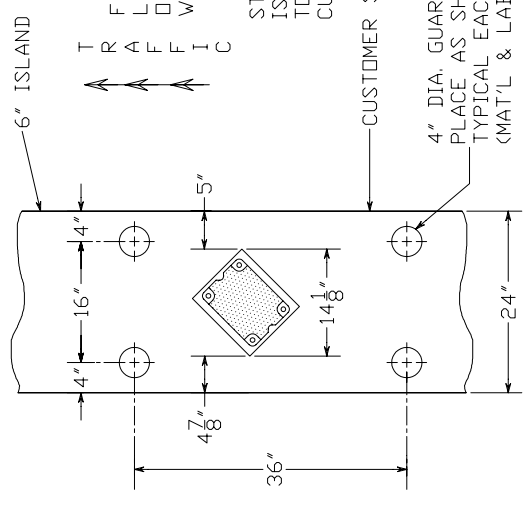
4" DIA. GUARDPOST - 24" HIGH
PLACE AS SHOWN
TYPICAL EACH LANE
(MAT'L & LABOR BY OTHERS)

3/4" CONDUIT FOR TURBINE UNIT.
120V., 60HZ, 20 AMP SERVICE PER LANE
FOR EACH CUSTOMER / TURBINE UNIT.

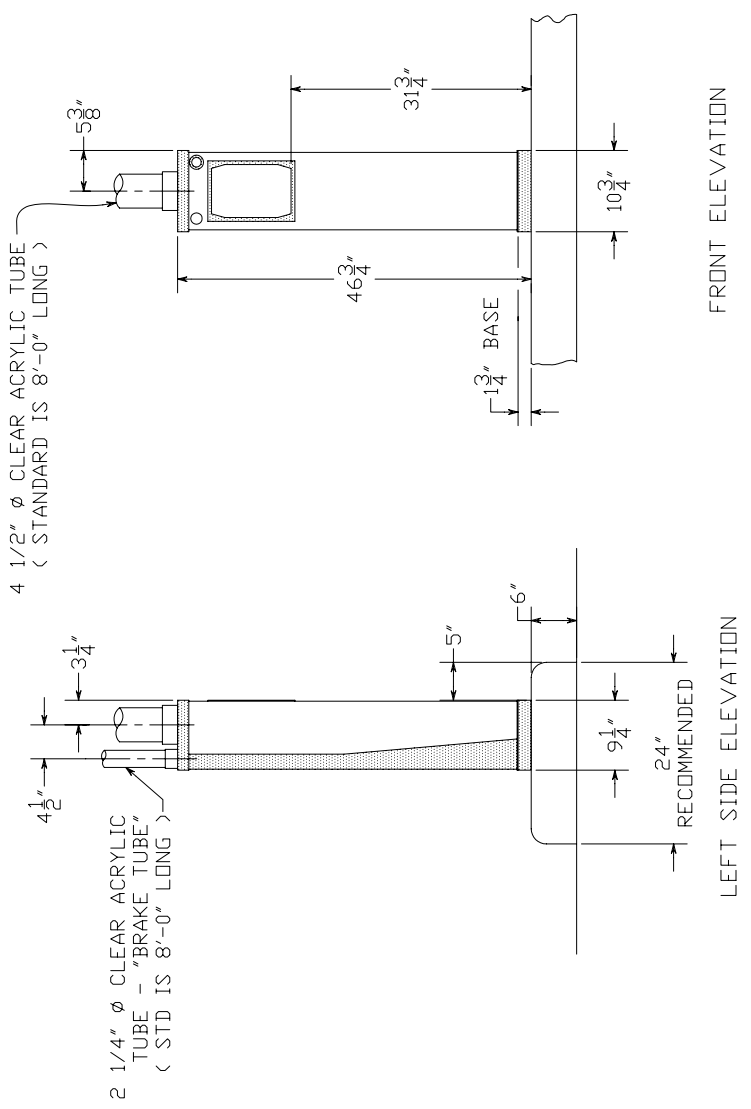
UNDERGROUND CONDUIT ENTRY



CONDUIT DETAIL
3 SYSTEMS SHOWN

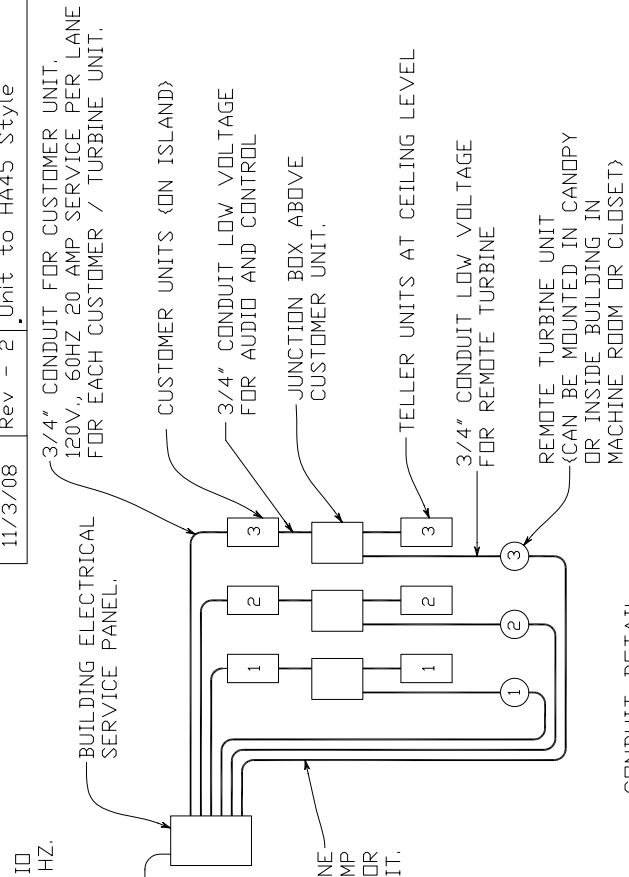


UNDERGROUND CONDUIT ENTRY
(ROTATED AT 45°)

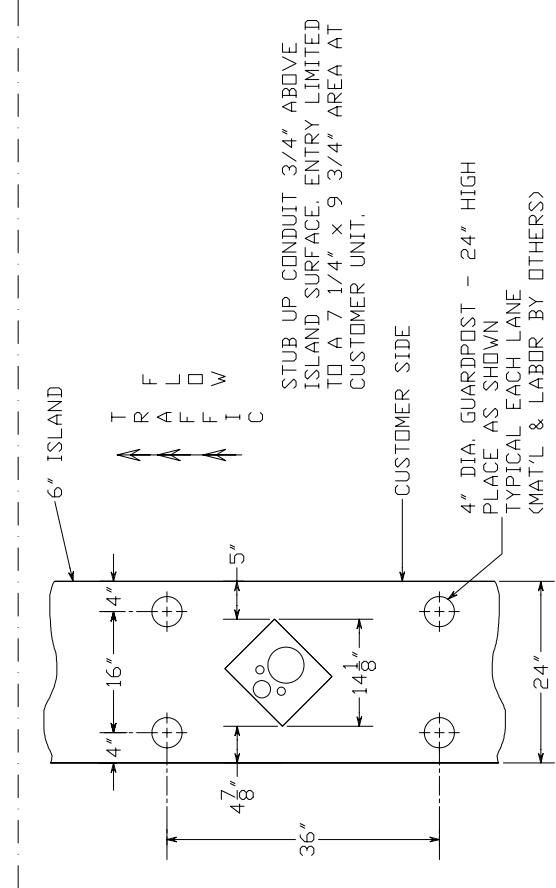


HAMILTON AIR	
MODEL HA-50	UPSEND
CUSTOMER UNIT	
Drawing Number : 99-948	Date : 10/5/07

10/25/07	Rev - 1	Electrical Requirements
11/3/08	Rev - 2	Unit to HA45 Style

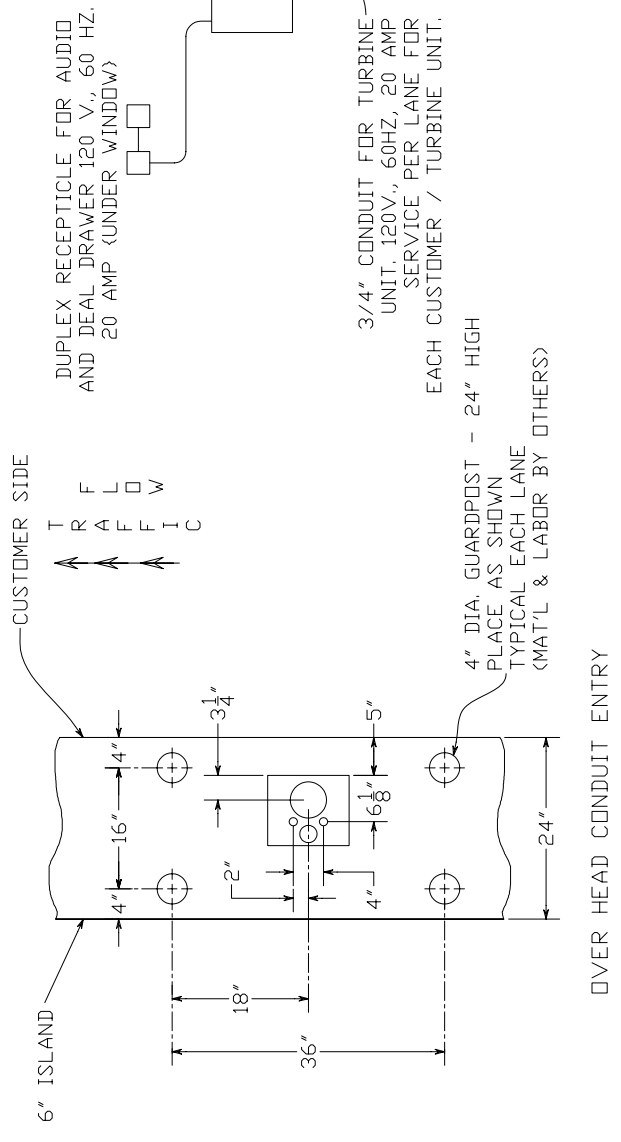


CONDUIT DETAIL
3 SYSTEMS SHOWN

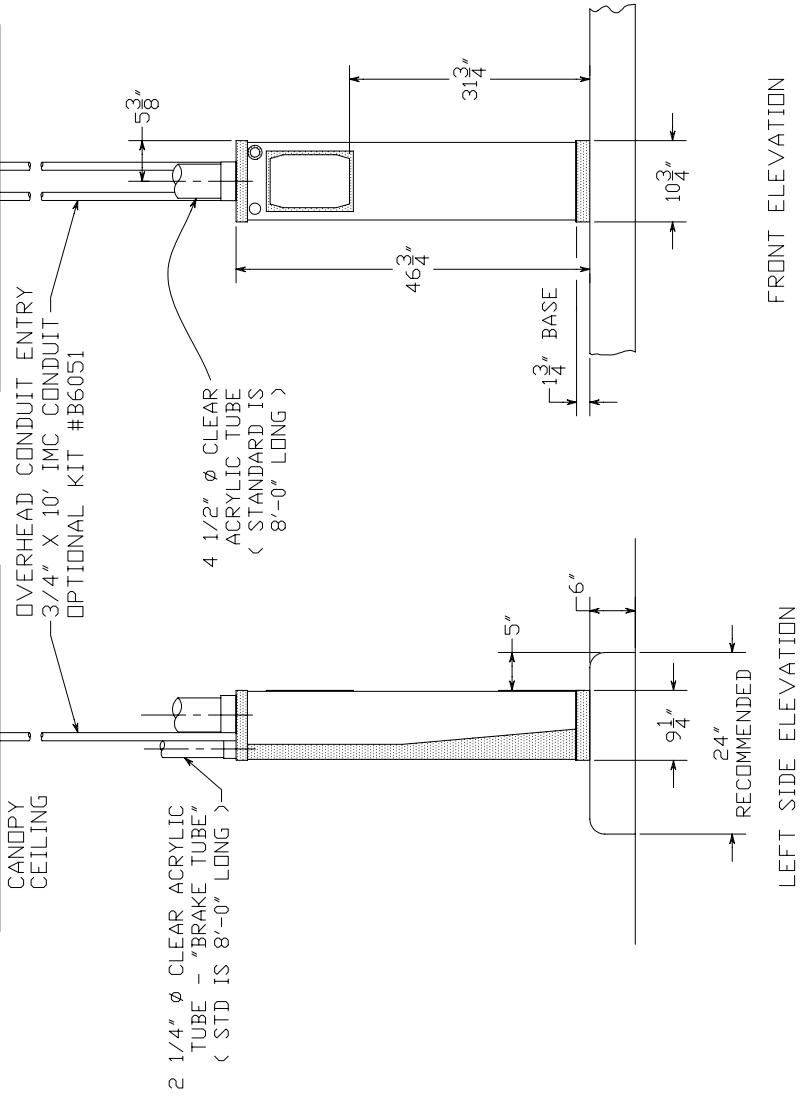


UNDERGROUND CONDUIT ENTRY
(ROTATED AT 45°)

HAMILTON AIR	
MODEL HA-50 UPSEND	CUSTOMER UNIT
with OVERHEAD ELECTRIC	
Drawing Number : 99-949	Date : 10/5/07

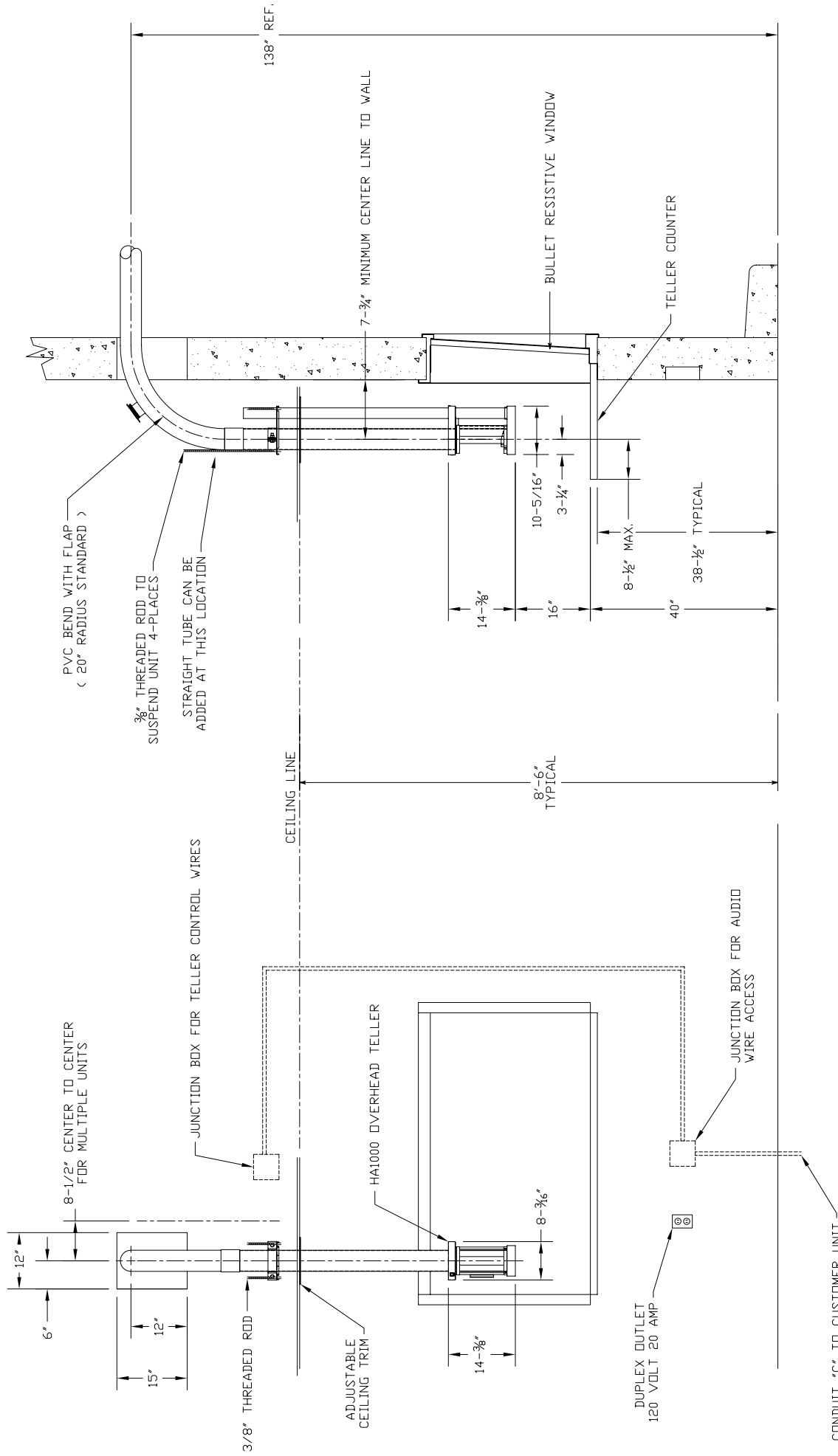


FRONT ELEVATION



LEFT SIDE ELEVATION

FRONT ELEVATION

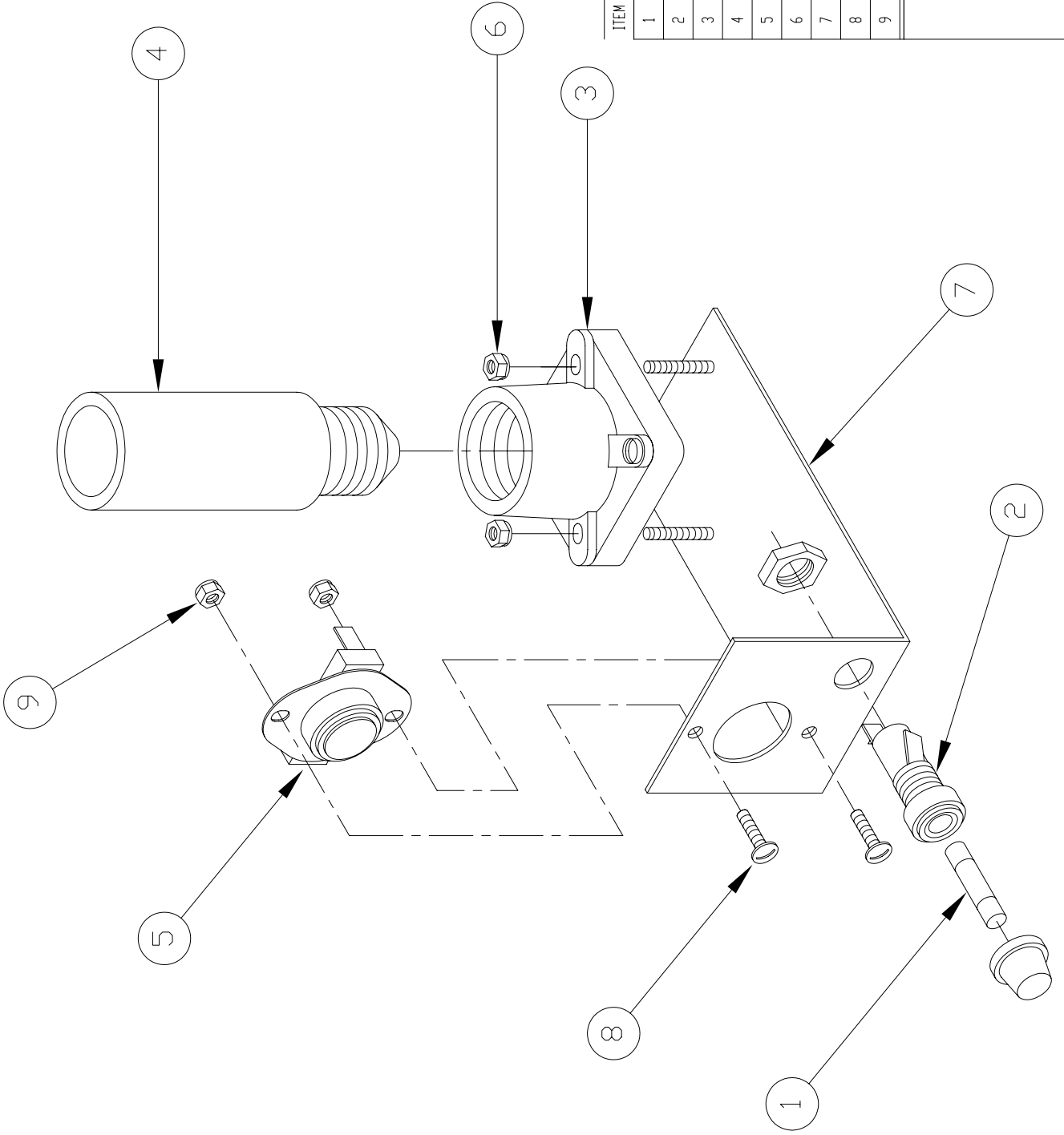


NOTE : REFER TO DRAWING 99-914
FOR GENERAL SPECIFICATIONS.

HAMILTON AIR

2006 OVERHEAD TELLER
INTERIOR DETAIL

REVISION 'A' 8/8/08 (CHANGED THERMOSTAT AND MOUNTING BRACKET TO NEW STYLE)
 REVISION 'B' 11-12-08 Part# E0701 was E0513



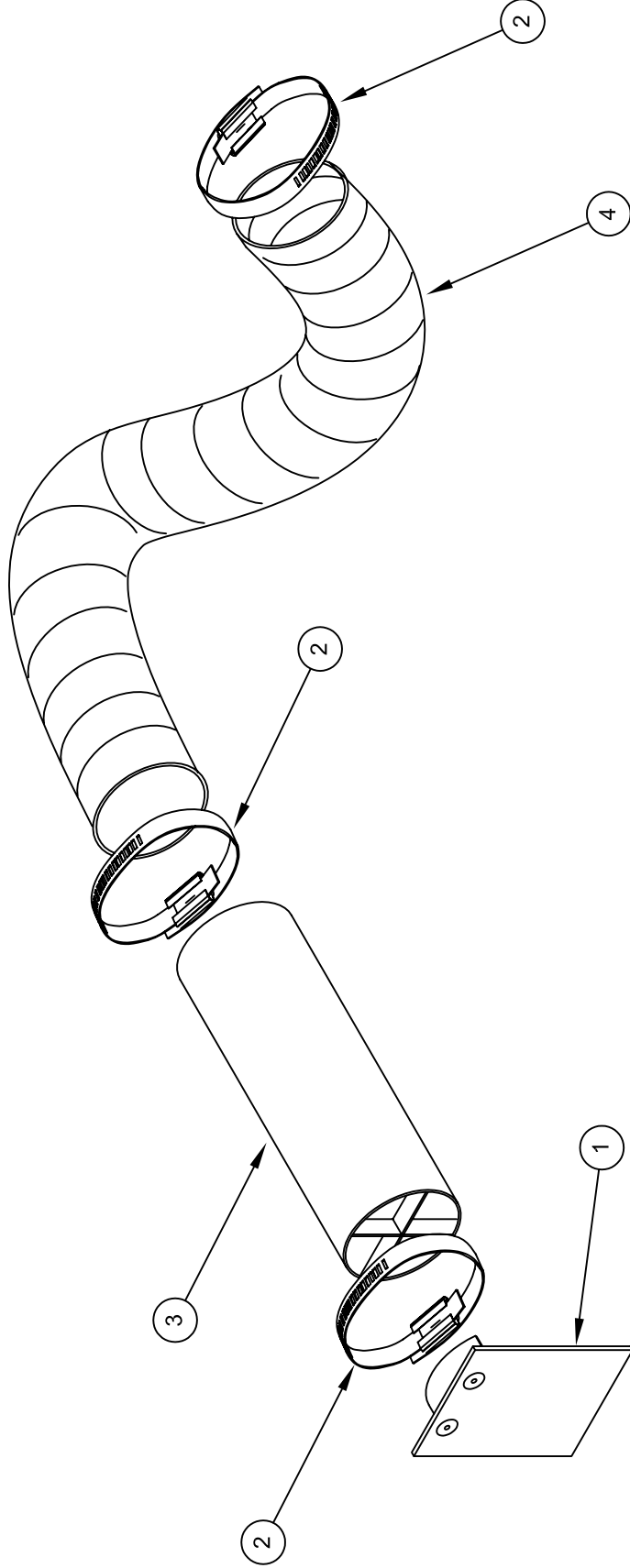
ITEM	PART NO.	DESCRIPTION	QTY.
1	E0496	FUSE (BUSS # AGC-5) 5 AMP	1
2	E0088	FUSE HOLDER (LITTLE FUSE #342858)	1
3	E0701	EAGLE PORCELAIN RECEPTACLE #0657	1
4	E0507	HEATER CORE (CHROMALDX #SCB-75)	1
5	E0961	THERMOSTAT	1
6	H0155	#6-32 ESMA STOP NUT (PLATED)	2
7	HA45HMP	HA45 HEATER MOUNTING BRACKET	1
8	H0397	8-32 x 3/8 MACHINE SCREW	2
9	H0399	8-32 HEX NUT	2

HAMILTON AIR

SCALE: 1/4" = 1" MATERIAL: DRAWN BY: T.SYDNDOR
 SCALE FACTOR: 4 REVISED BY:
 TITLE: ALLOWANCE:

HA45 HEATER EXPLODED ASSY.

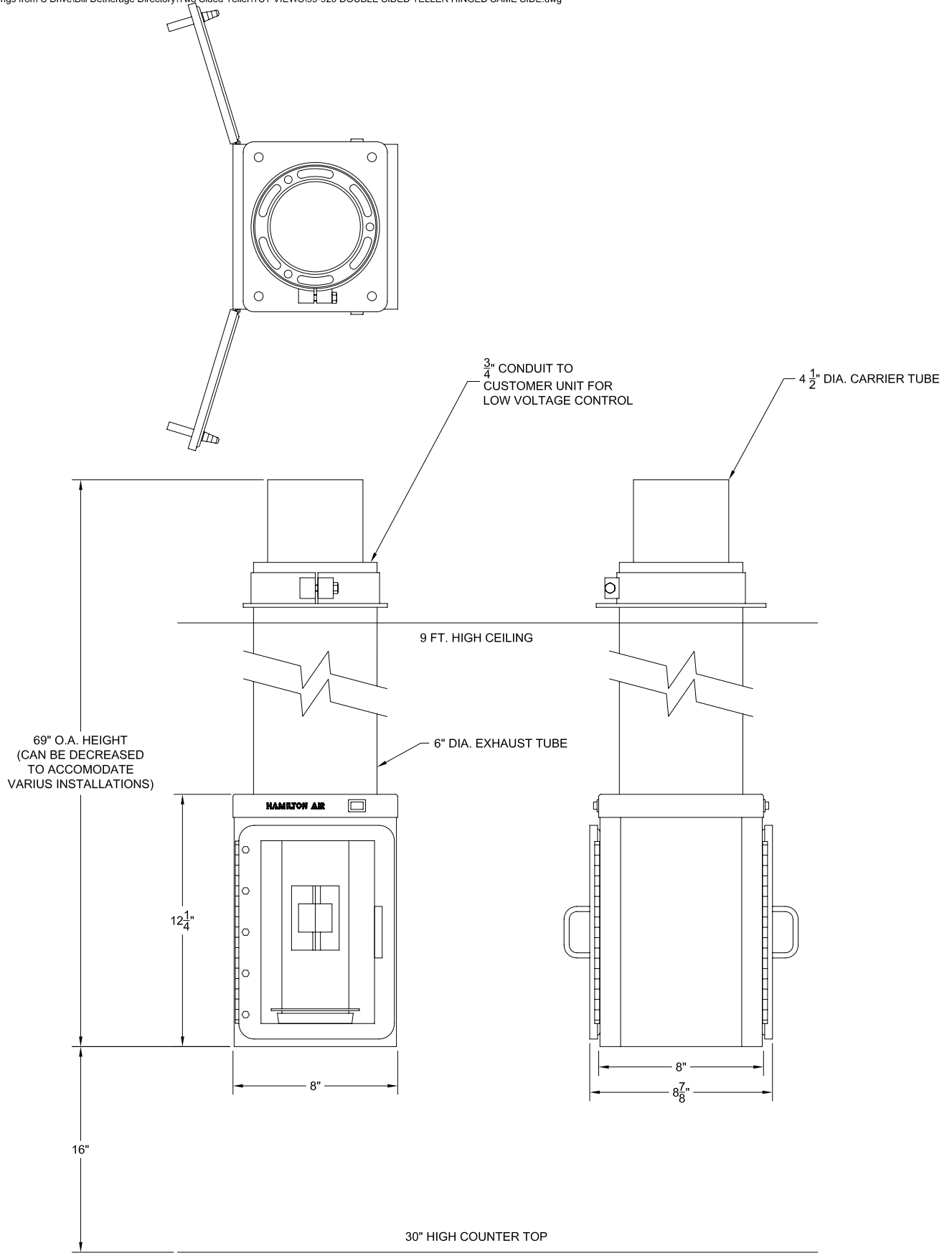
DATE: FEB. 24 1995 DRAWING NUMBER: B4507 REVISION: B



ITEM	PART NO.	DESCRIPTION	QTY.
1	T9715	FLAP VALVE, TELLER BEND, INCLUDES (1) H1074	1
2	H1074	CLAMP, 3" HOSE	3
3	T9402	3" DIA. x 10" LG STEEL TUBE WITH CROSS	1
4	B2948-30	HOSE, 3" FLEX 30" LONG	1

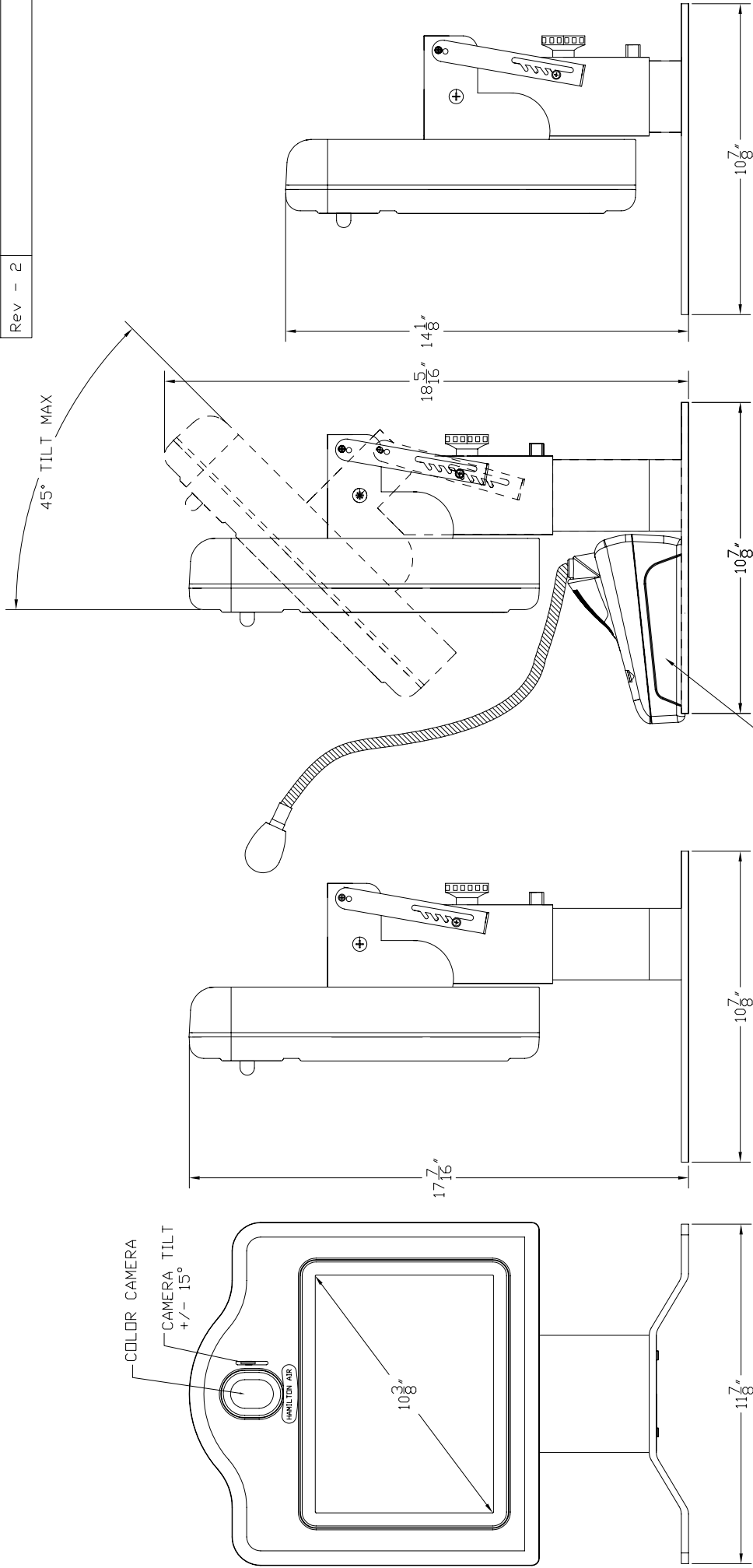
HAMILTON AIR

SCALE: ...	MATERIAL:	DRAWN BY: B.D
SCALE FACTOR: .	BEND ALLOWANCE: .	
TITLE: COLD WEATHER EXPLODED ASSY.		
DATE: SEPT. 4 2007	DRAWING NUMBER: T9605	REVISION: .



HAMILTON AIR	
DOUBLE SIDED TELLER HINGED SAME SIDE STANDARD DIMENSIONS	
Drawing Number :	99-920
Date :	3/14/07

Rev - 1
Rev - 2



FRONT

SHOWN WITH 5501 SERIES AUDIO CONSOLE

SIDE W/ MAX HEIGHT SHOWN

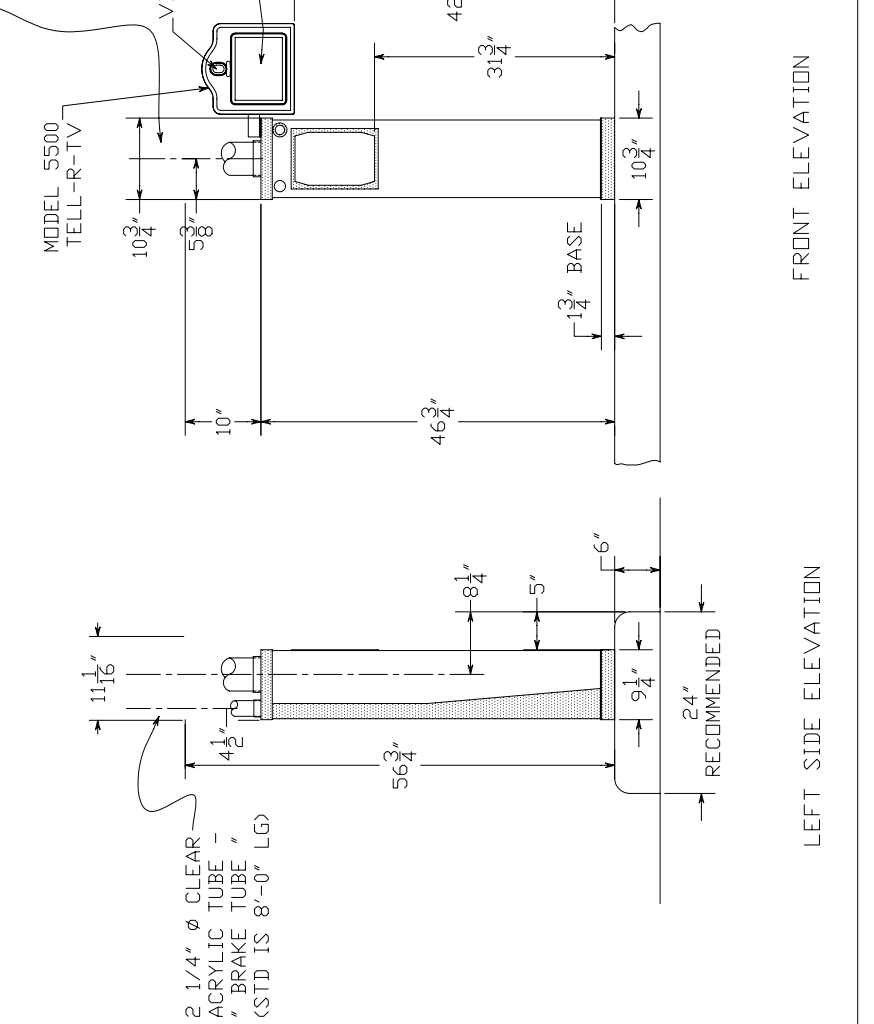
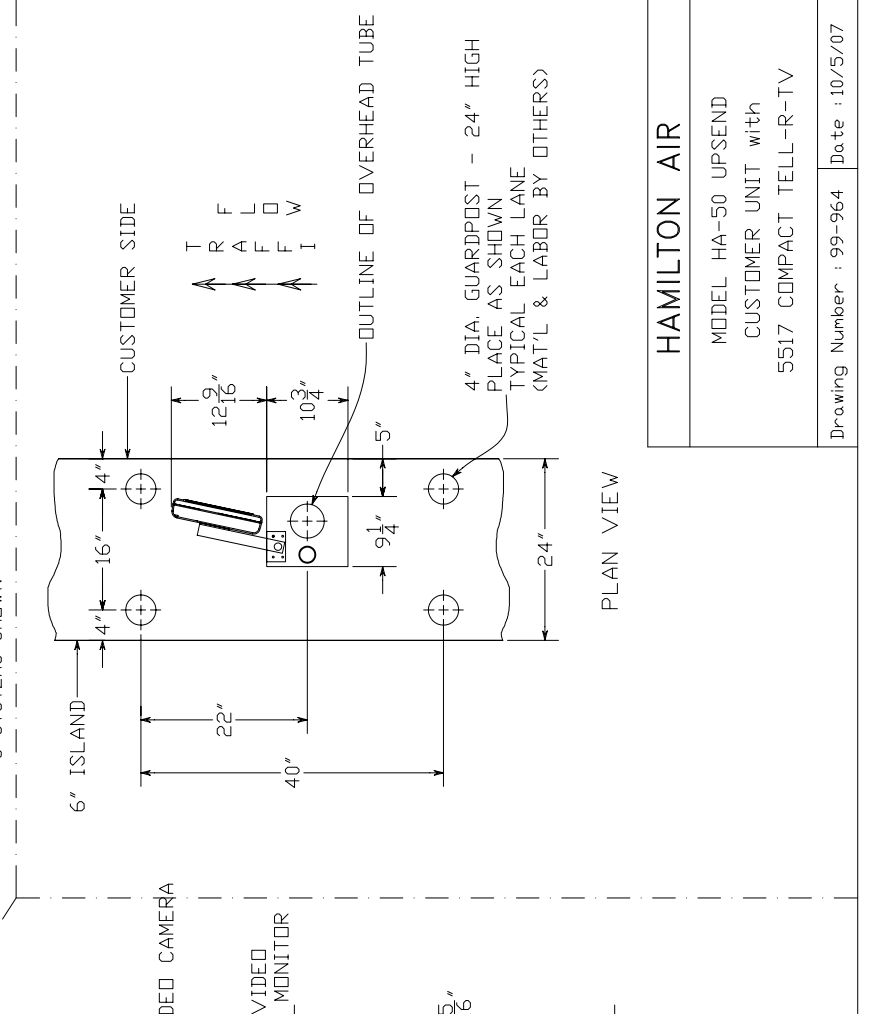
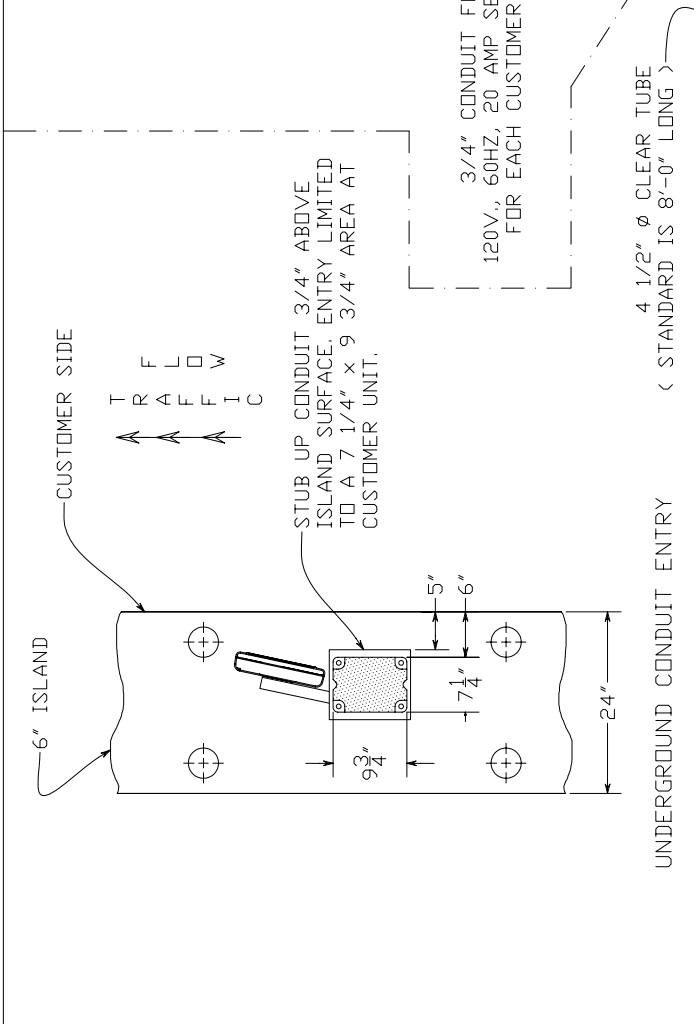
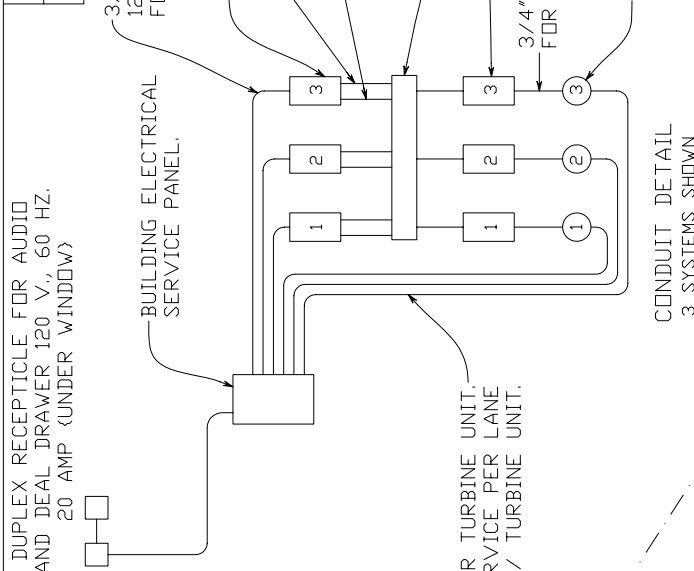
SIDE W/ ADJUSTING MOUNT (MAX SHOWN)

SIDE W/ MIN HEIGHT SHOWN

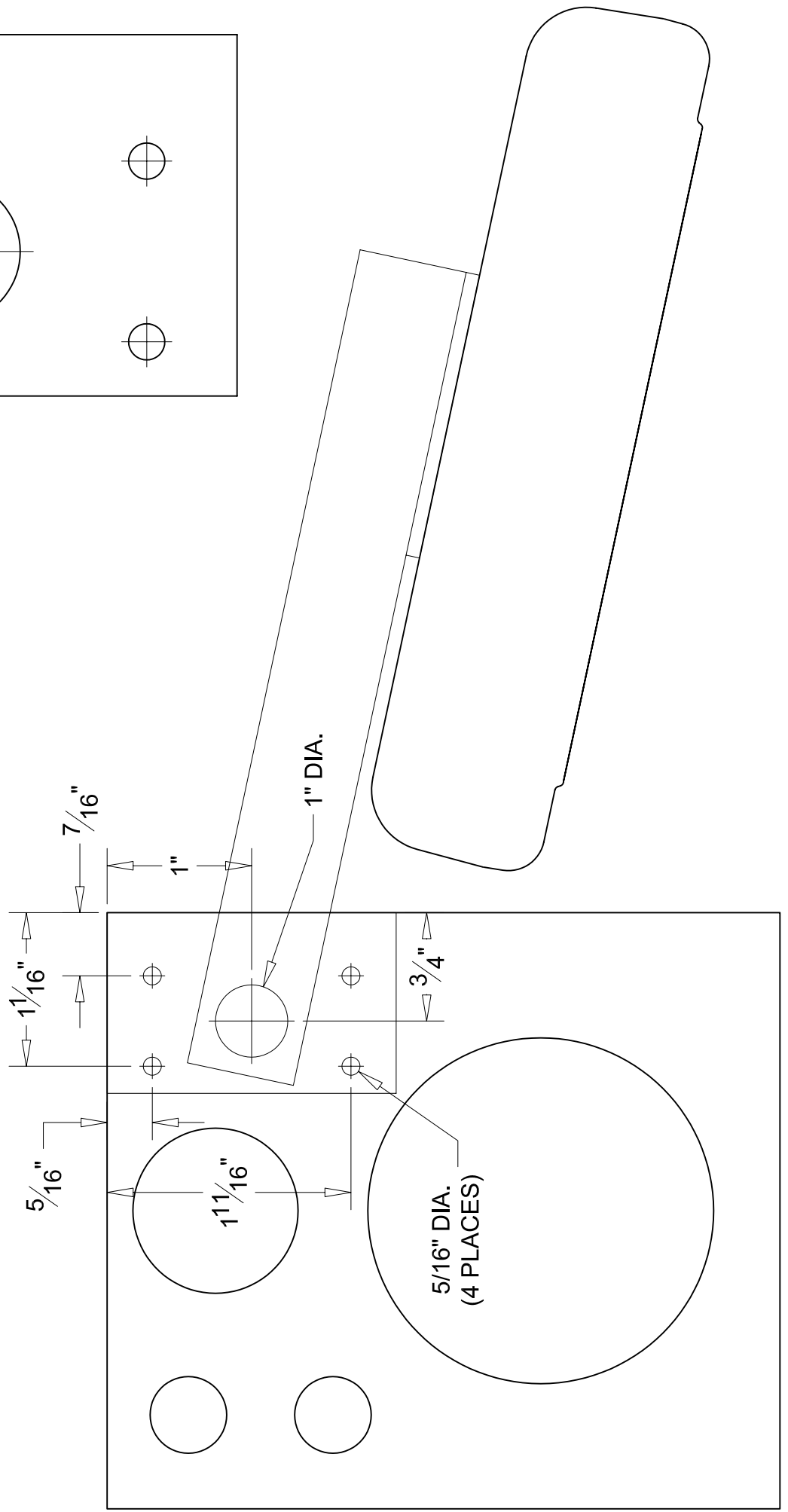
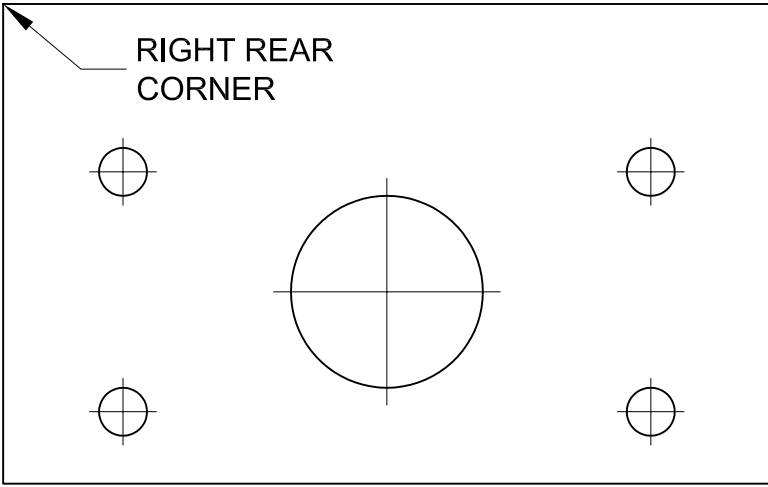
OPTIONAL NOTE:
MODEL 5550-1 IS WITHOUT CAMERA FOR I-WAY VIDEO APPLICATIONS

HAMILTON AIR	
MODEL 5550 TELL-R-TV	
10.4" LCD TELLER VIDEO CONSOLE WITH STAND	
Drawing Number : 99-933	Date : 4/25/07

Rev - 1	Electrical Requirements
Rev - 2	UNIT TO HA45 STYLE



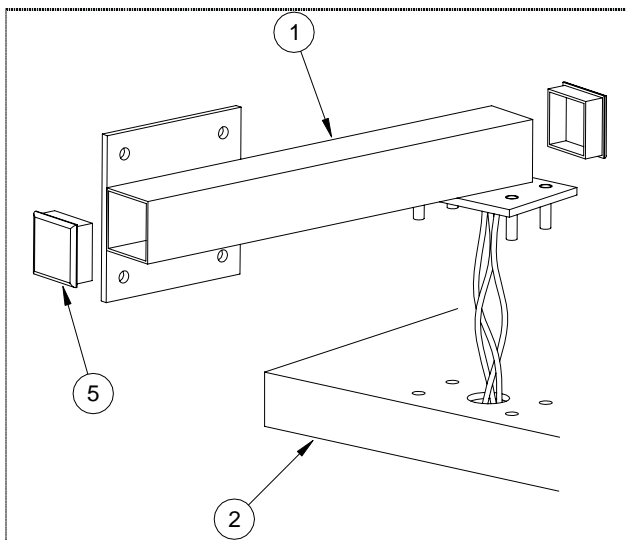
HAMILTON AIR	
MODEL HA-50 UPSEND	CUSTOMER UNIT with
5517 COMPACT TELL-R-TV	
Drawing Number : 99-964	Date : 10/5/07



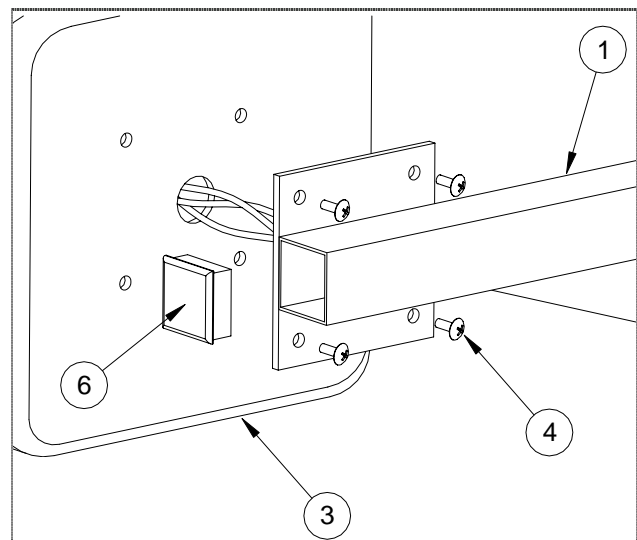
Model 5517

Tell-R-TV Customer unit Installation Instructions

Step#1 Drill mounting holes in top of customer unit, as shown on template drawing #5517-TTVM1



Step#2 Apply a small amount of silicone sealant to the bottom of the plate on the mounting arm (#1) to seal between customer unit and plate. Attach mounting arm (#1) to top of customer unit (#2) with supplied hardware.



Step#3 Apply a small amount of silicone sealant to the mounting plate on the mounting arm (#1) to seal between TTV unit (#3) and plate. Attach TTV unit (#3) to mounting arm (#1) with supplied hardware (#4).

Step#4 Chase wires through the mounting arm (#1) and into the TTV unit (#3) and connect all power and video as shown in electrical instructions. Test all video and power connections.

Note: You may want to install the cables through the arm before it is mounted.

Step#5 Apply a small amount of silicone sealant to the end caps (#5) and (#6) and insert them into the mounting arm (#1).

B5550 Teller Video Unit

The following instructions are for the B5550 that contains both a camera and monitor for two way video. The B5550-1 is the same unit without a camera installed for one way video.

Video & Power Connections

- Using 75 ohm CCTV coax (Belden 1426A or equivalent) with BNC connectors at each end, connect the camera and monitor (connections at rear of stand) to the video matrix. Make sure to match up the audio and video port numbers at the matrixes. For example if the audio console is connected to Console 2 of the audio matrix, then the video cables from that same teller position must be connected to Console 2 of the video matrix.
- Connect the supplied 12VDC power supply to the power socket on the back of the stand and plug it into a 110VAC outlet. If a different power supply must be used for some reason, it must be rated for at least 2A. The center conductor of the 2.1mm barrel connector is positive. Do not power this unit using the power distribution board which was previously used with the older B5450 unit. The B5550 requires approximately 1.5A of current per unit.

Operation

- Turn on power to the video head using the toggle switch on the lower left of the stand.
- Adjust the height of the video head as necessary by first loosening the adjustment knob on the back of the stand. Tighten the knob when the desired height is achieved. Note that there are two holes in the back of the stand for the adjustment knob. Using the top hole the height can be adjusted between approximately 14.5"-19". Using the bottom hole the height can be adjusted between approximately 14.5"-16". The bottom hole also allows for a greater upward tilt angle at the lowest height allowing the video unit to be placed under a hanging pneumatic terminal if desired.
- Tilt the video head up by grasping the sides of the unit. The tilt latch bracket will lock the video head into place in steps. Tilt the head back down by first slightly tilting further up to release pressure on the tilt latch bracket and then pulling the handle of the bracket forward allowing the video head to drop down. Note that there are two holes in the top of the tilt latch bracket. Mounting the bracket using the opposite hole will allow the tilt angle to change slightly at each latch position.
- Use the lever beside the camera opening to tilt the camera up or down.

Service Adjustments

- Service adjustments require access to the inside of the video head. Remove the 6 screws from the back side and remove the front cover.
- Place the unit in "service" mode by placing the service switch at the upper left of the video head to the rear position. This will connect the camera directly to the monitor. *Note that the service mode will result in a blank screen on the 5550-1 since no camera is present.*
- No adjustments should be necessary to the monitor but a menu board with adjustment buttons is located directly under the screen for those familiar with adjusting LCD screens.
- The camera has been focused at the factory and no adjustment should be necessary. If focusing is required, loosen the small set screw on top of the lens and then rotate the lens to the desired focus. Tighten the set screw when finished.
- Once all adjustments are satisfactory, place the unit in "normal" mode by placing the service switch to the forward position. Replace the front cover.

B5517 Remote Video Unit

The B5517 Remote Video Unit requires 12VDC at approximately 1.5A to operate properly. This requires that power be provided directly at the pneumatic unit to avoid the power drop associated with long wire runs. Each B5517 is supplied with a 12VDC, 2A power supply. An optional 5500 Video Power Control Kit (E0885), ordered separately, is used to control the relay board in each video head so the monitors, and optionally the cameras, can be turned off when desired. For larger installations it may be desirable to have more than one power control kit if some lanes are closed at times while other lanes are open.

- The video head will be positioned to the top right of the pneumatic unit as viewed by the customer. Use the enclosed template to drill holes in the top of the pneumatic unit for the bracket and cables. *(The template ensures that the video head will not stick out past the front of the pneumatic unit where it could be damaged by a vehicle.)*
- Feed the video cables, the 2A power supply cable and the relay trigger wires from the power control kit from inside the pneumatic unit through the top of the unit and through the video mounting bracket. Attach the mounting bracket to the pneumatic unit with the (4) supplied washers and nylon lock nuts.
- Remove the screws from the back of the video head and then remove the front cover. Note that not all screws for the cover are installed at the factory. The remaining screws are in the bag of accessories.
- Route the cables from the bracket through the back of the video head and up behind the monitor. *(Use care when fishing the wires behind the monitor to avoid damage to the circuit boards.)* Attach the video head to the mounting bracket with (4) screws provided in the accessory bag. Two of the screws are security type. A driver bit is included for the security screws.
- Connect the monitor cable to the top left BNC connector and the camera cable to the top right BNC connector in the video head as labeled. Connect the power supply cable and the relay trigger wires to the relay board near the top rear of the monitor per Figure 1 on the back of this document. Slide the excess cable back through the bracket and into the pneumatic unit and then install the end caps from the accessory bag into both ends of the bracket.
- Plug the power supply into a 110VAC outlet.
- Place the unit in “service” mode by placing the service switch at the upper left of the video head to the rear position. This will connect the camera video directly to the monitor. *Note: If the video power control kit in the teller area is not yet installed or turned on, it will be necessary to temporarily move the video power wires from the switched to the unswitched terminals of the relay board to test the video unit.*
- Tilt the camera vertically in its bracket to achieve the desired viewing angle. The camera has been focused at the factory and no further adjustment should be necessary. If focusing is required, loosen the small set screw on the side of the lens and then rotate the lens to the desired focus. Tighten the set screw when finished.
- No adjustments should be necessary to the monitor but a menu board with adjustment buttons is located directly under the screen for those familiar with adjusting LCD screens.
- Once all adjustments are satisfactory, place the unit in “normal” mode by placing the service switch to the forward position. Replace the front cover and secure using all the screws. Two of the screws are security type. A driver bit is included for the security screws.

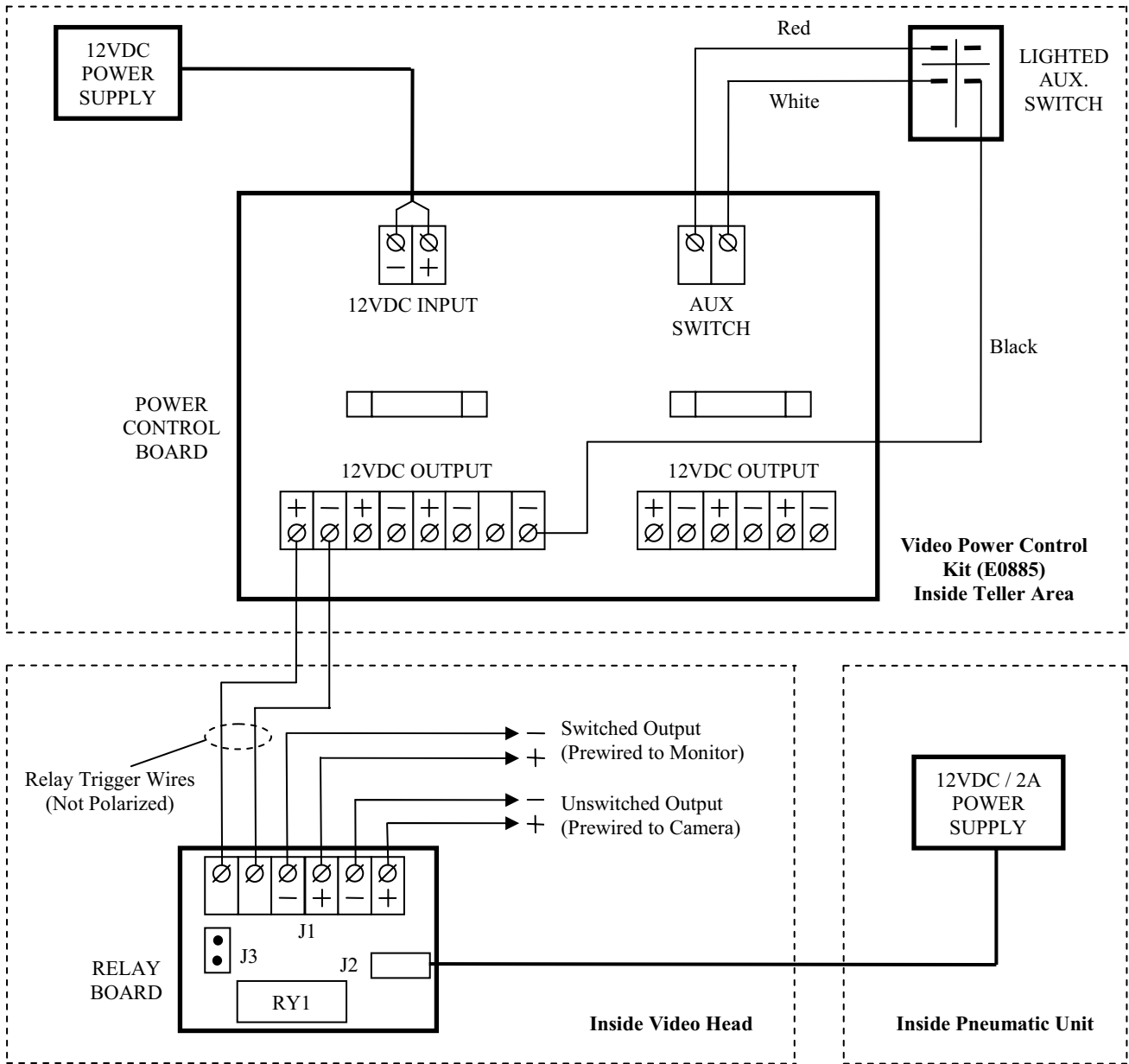


Figure 1

When using the Video Power Control Kit (E0885) shown above, be sure to follow the color code when connecting the lighted switch to the control board. The switch can be mounted in any suitable location, including the foot of one of the B5550 Teller Video Unit stands. The power control kit should only be used to control power to the relay boards in the video units as shown. **DO NOT** power video units directly with the power control kit.

The monitor power is prewired to the switched output and the camera power is prewired to the unswitched output of the relay board as shown. Move the wires as appropriate if your application is different. **(Be sure to unplug the power supply before changing any wiring on the relay board.)**

E0885 Video Power Control Kit

The B5517 Remote Video Unit requires 12VDC at approximately 1.5A to operate properly. This requires that power be provided directly at the pneumatic unit to avoid the power drop associated with long wire runs. Each B5517 is supplied with a 12VDC, 2A power supply. A Video Power Control Kit (E0885) can be used to control the relay board in each video head so the monitors, and optionally the cameras, can be turned off when desired. For larger installations it may be desirable to have more than one E0885 kit if some lanes are closed at times while other lanes are open.

Follow the wiring diagram below. Wire gauge for the relay trigger wires is not critical since the current draw for each relay coil is only 22ma. Be sure to follow the color code when connecting the lighted switch to the control board. The switch can be mounted in any suitable location, including the foot of one of the B5550 Teller Video Unit stands. The E0885 kit should only be used to control power to the relay boards in the video units as shown. **DO NOT** power video units directly with the power control kit.

