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ATM-Trax[®]

Technical Reference Manual

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ATM-Trax[®]

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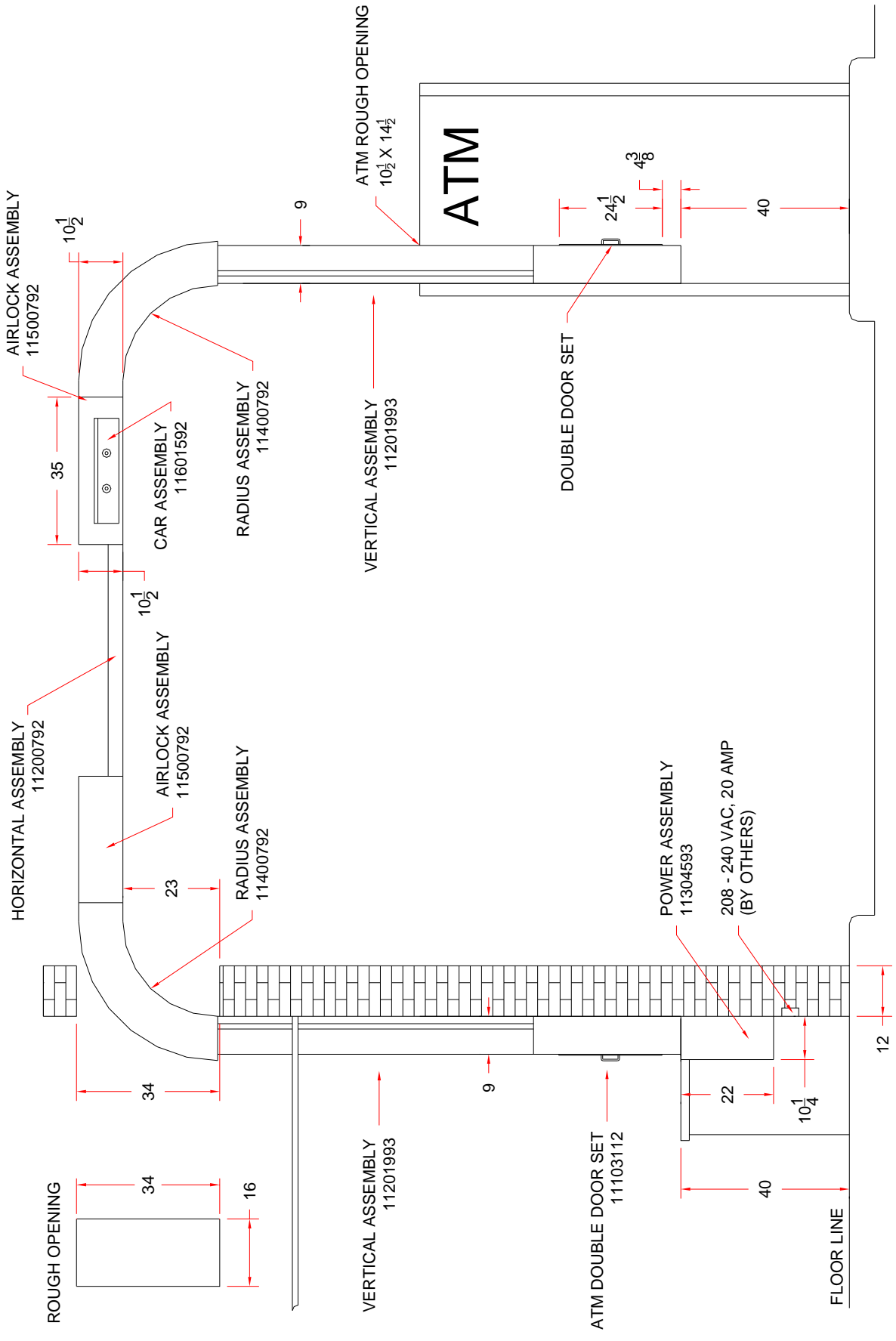
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Important Safety Instructions

1. READ THESE INSTRUCTIONS.
2. KEEP THESE INSTRUCTIONS.
3. HEED ALL WARNINGS.
4. FOLLOW ALL INSTRUCTIONS.
5. DO NOT CLEAN THIS APPARATUS WITH A WATER SPRAY OR THE LIKE.
6. DO NOT BLOCK ANY VENTILATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES OR OTHER APPARATUS THAT PRODUCES HEAT.
8. ONLY USE ATTACHMENTS / ACCESSORIES SPECIFIED BY THE MANUFACTURER.
9. TURN THE POWER SWITCH TO THE "OFF" POSITION WHEN THE APPARATUS IS NOT IN USE AND BEFORE SERVICING.
10. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL. SERVICING IS REQUIRED WHEN THE APPARATUS HAS BEEN DAMAGED IN ANY WAY, SUCH AS LIQUID HAS BEEN SPILLED OR OBJECTS FALLEN INTO THE APPARATUS, THE APPRATUS DOES NOT OPERATE NORMALLY.

Grounding Instructions

1. THIS MACHINE 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 CONVEYOR.
2. DANGER-CHECK WITH A QUALIFIED ELECTRICIAN OR SERVICEMAN IF THE GROUNDING INSTRUCTIONS ARE NOT COMPLETELY UNDERSTOOD, OR IF IN THE DOUBT AS TO WHETHER THE APPARATUS IS PROPERLY GROUNDED.



ATM-Trax[®] Installation Overview

The goal is to get a continuous system installed from the ATM building into the bank. The path must be in-line with each end; the system cannot bow sideways to clear an obstacle. The path should also be level. The maximum length of an ATM-Trax[®] 64' centerline to centerline. The maximum weight the unit can carry is 25 lbs.

NOTE: Use caution when installing the self-drilling sheet metal screws that you do not run the screws into any wiring or tape track grooves.

The vertical and horizontal tracks will have to be cut and spliced to the proper length for each installation. The preferred method is to begin at one end by attaching the vertical track with the power module securely to the wall. Next attach the radius to the vertical track. Then the horizontal track is attached to the radius. Connect the second radius to the horizontal track. Connect the vertical track without the power module to the radius. The airlocks are then attached from each radius to the horizontal track.

The electrician then provides 208-240VAC, 20 Amp, single-phase power to the bottom of the power module. These connections should conform to the standards as set by the National Electrical Commission and or local authority having jurisdiction.

The tapes and car are then inserted into the system, tested for proper operation, adjustment of the motor run timer, and finally instructions on the operation to the end user.

Special Tools and Items

| |
|-------------------------------------|
| File-Fine Tooth (Mill Bastard) |
| Saber Saw with Metal Cutting Blades |
| Square |
| Roll of Duct Tape |
| Razor Knife |
| #7 Drill Bit |
| 1/4" Drill Bit |
| Drill |

Cutting Tracks

Mark a straight cut line on both sides and the bottom. Include the top also is a vertical TRACK. Cut with a saber saw equipped with a metal cutting blade. Protect the powder-coated surfaces from marring with duct tape when cutting.

Prepare the cut ends by removing all the burrs from the galvanized pans and the plastic Tape Track, including slots. Chamfer the ends of all slots in the plastic tape track with a razor knife (page 13). Drill holes for the pins (page 13). Begin by inserting the four pins of the TAPE TRACK DRILL GUIDE (page 13) into the slots of the plastic TAPE TRACK. Apply masking tape onto a #7 drill bit $1\frac{3}{8}$ " – $1\frac{1}{4}$ " from the end of the drill bit. Using this drill bit, drill two holes for the $\frac{3}{16}$ " roll pins through the TAPE TRACK DRILL GUIDE into the plastic TAPE TRACK. Drill into the TAPE TRACK until the masking tape just begins to touch the TAPE TRACK DRILL GUIDE. This will assure that the holes are at the proper depth.

Splicing Tracks

Insert a $\frac{3}{16}$ " roll pin into each of the two holes in both of the plastic tape tracks. Butt the ends of the TRACK PANS together insuring that the roll pins engage in the mating holes in the plastic track (page 13). Place a splice plate around the bottom of the TRACK PAN. Fasten with the #8 self-drilling screws provided.

Attaching a Vertical Track Pan to a Radius

Insert a $\frac{3}{16}$ " roll pin into each of the two holes in both of the plastic tape tracks. Insert the bottom end of the TRACK PAN into the RADIUS insuring that the roll pins engage in the mating holes in the plastic track (page 13). Using the SPLICE PLATE provided, fasten with the #8 self-drilling screws provided, going through the SPLICE PLATE, TRACK PAN, and RADIUS.

Seal the area from the surface of the VERTICAL TRACK SKIN to the RADIUS with the SKIN TO RADIUS ADAPTERS provided. Fasten with the #8 self-drilling screws provided. Note: It is easier if the screw holes are predrilled with $\frac{1}{8}$ " – $\frac{9}{64}$ " bit.

Attaching Horizontal Track Pans to Radius

Insert a $\frac{3}{16}$ " roll pin into each of the two holes in both of the plastic tape tracks. Insert the bottom end of the TRACK PAN into the RADIUS insuring that the roll pins engage in the mating holes in the plastic track (page 13). Using the SPLICE PLATE provided, fasten with the #8 self-drilling screws provided, going through the SPLICE PLATE, TRACK PAN, and RADIUS.

Air Locks

Secure the AIR LOCKS to the RADIUS and the HORIZONTAL TRACK with the #8 self-drilling pan head sheet metal screws.

1. Place the AIR LOCKS over the HORIZONTAL TRACK. The end of the AIR LOCK with the inward rolled edges should overlap and interlock the outward rolled edges of the RADIUS.
2. Secure the sides of the AIRLOCK to the HORIZONTAL TRACK with the self-drilling sheet metal screws provided. Pilot holes have been provided in the AIRLOCK.
CAUTION: Insure that none of the screws go into any wiring or TAPE TRACK.
3. Insure that the connections are airtight by applying a layer of duct tape.
4. Check the operation of both of the flaps to insure that they do not hang or rub against the radius, horizontal pan, airlock housing, tape track, or wiring.

Electrical Connections to the Power Module

(Refer to diagram on page 16)

The low voltage wiring is connectorized. Each VERTICAL connects to a connector on the top of the POWER MODULE. A 60' cable is provided for the connection of the NON-POWER END VERTICAL to the POWER MODULE. (NOTE: This cable has identical ends and cannot be installed incorrectly.)

It is necessary to secure the wiring out of the running path of the CAR. WIRE TIES and WIRE TIE MOUNTS are provided for this purpose. To attach the WIRE TIE MOUNTS, you simply drill a 1/4" hole where you need the mount and push the round end into the hole. The mount is then secure and you can attach the WIRE TIE through the rectangular hole.

Throughout the unit, the cable should be secured so that it cannot get out from under the tape track or it could wedge under the CAR.

Tape Blocks and Car

Insert the tapes with "cleaning end" (page 13) into completed tape track to clear the plastic tape track of any chips. Push both tapes from the Non-Power End to the Power End until they contact the sprocket. Crank the ratchet to start the tapes around the sprocket. Both tapes must start at the same time. Crank the ratchet 20 revolutions to be sure that the Tape is all the way around the sprocket and feeding into the return slot of the TAPE TRACK. Ratchet details are on page 15. Cut the tapes 2' longer than the bottom of the vertical track. After cleaning all four TAPE TRACK slots, re-cut tape edge as shown on page 13. Polish or deburr cut edge with a fine file so it will freely go through TAPE TRACK slots and pass over the joints in the TAPE TRACK without catching.

Attach the TAPE BLOCKS as shown on page 14 with the same number of empty tape holes as shown on the drawing.

Attach the CAR to TAPE by placing the four posts on the sides of the CAR into the holes in the TAPE BLOCKS. Insure that the CAR is level. If the CAR is not level correct this by loosening the screws, which attach the aluminum post to the CAR, leveling it, and then tightening the screws back up. Run the CAR all the way through and back to be sure it moves freely using the Jog Switch. Run with regular switches several cycles to insure proper travel.

In the event that a CAR does not stop centered in the opening of the skin, it will be necessary to adjust the STOP SWITCH MAGNET BLOCKS. There are two MAGNET BLOCKS, one

on each side of the CAR. The MAGNET BLOCK on the right side adjusts the stop height for that end. The MAGNET BLOCK is secured to the CAR via two screws in a slot on the inside of the CAR. If the CAR is topping low, simply loosen the screws on the right hand side MAGNET BLOCK, slide it up the amount you need to lower its stopping height by and tighten the screw back down and test.

Adjusting Run Limit Timer

After insuring that the machine runs smoothly and reliably, the RUN LIMIT TIMER needs to be set. The RUN LIMIT TIMER is a safety feature that will simply shut the machine off if the CAR is obstructed during its travel and is unable to activate the stop switch in a predetermined period of time.

Simply run a loaded CAR from the Bank to ATM, ATM to Bank a few times while timing the run. Take the longest amount of time required and add fifteen (15) seconds. Run the CAR to the motor or non- motor, then detach the motor connector from the motor (this will prevent the motor from running) and press the Send Button. Note that the LED marked Run (page8) illuminates on the Master Control Board. The adjusting pot under the Run LED controls the length of the time. Measure the length of the time the LED stays on after depressing the Send Button. You may press the Send Button as many times as necessary adjusting the pot until the LED stays on the length of time computed as necessary per previous testing. After this is complete, reattach the motor connector to the motor. Press the Send Button and the machine should run normally.

Manual Operation of the Machine In the Event of a Power Failure

(Refer to page 15)

1. Place the $\frac{7}{16}$ " socket over the $\frac{7}{16}$ " $\frac{1}{4}$ -20 bolt head on the end of the Motor Shaft.
2. Rotate the ratchet clockwise to move the Car towards the POWER-END. Rotate the ratchet counter clockwise to move the Car towards the NON-POWER-END.
3. Replace the ratchet when you are finished.

Design Parameters

This Conveyor is of a Positive Drive, Captive Car style. The control is solid state with Digital Logic and Analogues Timers. The Drive is a proprietary solid state, single speed version with Electronic Style Braking (patent pending).

Operating Parameters

The switches are of a momentary design. The power switch toggles the power alternately on and off indicated by an LED. When the power switch is turned off, this disables the send and recall switches leaving the control in a standby state.

The logic of the machine causes a cycle to be canceled by toggling the power switch. The control will then accept a move in either direction.

Safety Features

Interlocked doors are provided. All four doors must be closed for the machine to run.

The push/pull power of the machine is electronically limited to a maximum of 90 lbs.

Should the machine encounter a jam during its cycle and fail to travel the distance to a stop switch, it will shut off automatically after a prescribed amount of time.

Should the machine need to be stopped before completing its cycle, simply depress the Power On/Off switch; the machine will stop.

Depressing the power On/Off switch again will turn the machine back on. The machine will then accept a move in either direction.

Power-up Procedure

The car should be at the non-power end before powering-up.

Upon power-up, the control board logic puts the power switch in the off position and activates the non-power end stop switch.

By depressing the power switch momentarily, the power indicator LED should illuminate indicating that the ATM-Trax[®] is ready to operate. Depressing the send switch on the non-power end will send the car to the power end.

Depressing the send switch on the power end will return the car to the non-power end.

The ATM-Trax[®] machine is now ready for a normal operation.

Control Board LED Indicators

| Designation | Condition | Indicates |
|--------------------|------------------|--|
| SND | OFF | NORMAL |
| | ON | SEND SWITCH ACTIVATED |
| RCL | OFF | NORMAL |
| | ON | RECALL SWITCH ACTIVATED |
| C-L | OFF | NORMAL |
| | ON | STOP SWITCH ACTIVATED NON-MOTOR END |
| T-L | OFF | NORMAL |
| | ON | STOP SWITCH ACTIVATED MOTOR END |
| PWR | OFF | NORMAL |
| | ON | POWER SWITCH ACTIVATED |
| RUN | OFF | NORMAL |
| | ON | MOTOR RUNNING |
| GREEN | OFF | NORMAL, LINE POWER ON |
| | ON | FAILURE, LOSS OF LINE POWER |

Troubleshooting the ATM-Trax[®]

This section presumes that the machine in question has been inspected for loose, damaged or missing parts, tapes, wiring, etc.

Nothing Works:

Check the 220vac power coming into the machine. No 220vac, you need to check the circuit breaker in the bank or have an electrician restore power to the receptacle. If the 220vac is present, check for blown fuses on the CONTROL BOARD. Note: the ½ amp fuse is for the line voltage input into the transformer, the two 3 amp fuses are for logic and input/output power.

If the fuses are ok, check to see if the car is on one of the stop switches. If it is, refer to the drawing on page 15. Use the ratchet to move the car up off the switch, then power the unit down from the main breaker, wait 30 seconds, and then turn the power back on. Press the power switch on then try to send or recall the car.

Car will not send from the Motor End:

This presumes that the car will recall from the motor end. If it does not, please refer to car will not run in either direction. Check the LED marked C-L. It should be off. If it is on, replace the Non-Motor End STOP SWITCH. Press the start switch on the Motor End. The LED marked SND should come on. If it does not come on or is on all of the time, replace the Motor End START SWITCH. After the LED marked SND comes on, the LED marked RUN should come on. If it does not, replace the CONTROL BOARD. When the RUN LED is on, the motor should be running. If it is not, check for 180vdc at the motor drive. Do this by placing the meter leads on the ML3-1 & ML3-3. If there is no 180vdc, replace the DC DRIVE. If there is 180vdc present, check for 24vdc on coil of the door interlock relay. If there is no 24vdc, check to insure that all (4) doors are closed and switches activated. If there is 24vdc present, replace the drive motor.

Car will not send from the Non-Motor End:

This presumes that the car will recall from the Non-Motor end. If it does not, please refer to car will not run in either direction. Check the LED marked T-L. It should be off. If it is on, replace the Motor End STOP SWITCH. Press the start switch on the Non-Motor End. The LED marked RCL should come on. If it does not come on or is on all of the time, replace the Non-Motor End START SWITCH. After the LED marked RCL comes on, the LED marked RUN should come on. If it does not, replace the CONTROL BOARD. When the RUN LED is on, the motor should be running. If it is not, check for 180vdc at the motor drive. Do this by placing the meter leads on the ML3-1 & ML3-3. If there is no 180vdc, replace the DC DRIVE. If there is 180vdc present, check for 24vdc on coil of the door interlock relay. If there is no 24vdc, check to insure that all (4) doors are closed and switches activated. If there is 24vdc present, replace the drive motor.

Car will not recall when started from the Non-Motor End:

This presumes that the car will send from the Non-Motor End. If it does not, please refer to car will not run in either direction. Check the LED marked C-L. It should be off. If it is on, replace the Non-Motor End STOP SWITCH. Press the start switch on the Motor End. The LED marked SND should come on. If it does not come on or is on all of the time, replace the Motor End START SWITCH. After the LED marked SND comes on, the LED marked RUN should come on. If it does not, replace the CONTROL BOARD. When the RUN LED is on, the motor should be running. If it is not, check for 180vdc at the motor drive. Do this by placing the meter leads on the ML3-1 & ML3-3. If there is no 180vdc, replace the DC DRIVE. If there is 180vdc present, check for 24vdc on coil of the door interlock relay. If there is no 24vdc, check to insure that all (4) doors are closed and switches activated. If there is 24vdc present, replace the drive motor.

Car will not recall when started from the Motor End:

This presumes that the car will send from the motor end. If it does not, please refer to car will not run in either direction. Check the LED marked T-L. It should be off. If it is on, replace the Motor End STOP SWITCH. Press the start switch on the Non-Motor End. The LED marked RCL should come on. If it does not come on or is on all of the time, replace the Non-Motor End START SWITCH. After the LED marked RCL comes on, the LED marked RUN should come on. If it does not, replace the CONTROL BOARD. When the RUN LED is on, the motor should be running. If it is not, check for 180vdc at the motor drive. Do this by placing the meter leads on the ML3-1 & ML3-3. If there is no 180vdc, replace the DC DRIVE. If there is 180vdc present, check for 24vdc on coil of the door interlock relay. If there is no 24vdc, check to insure that all (4) doors are closed and switches activated. If there is 24vdc present, replace the drive motor.

Car will not run in either direction:

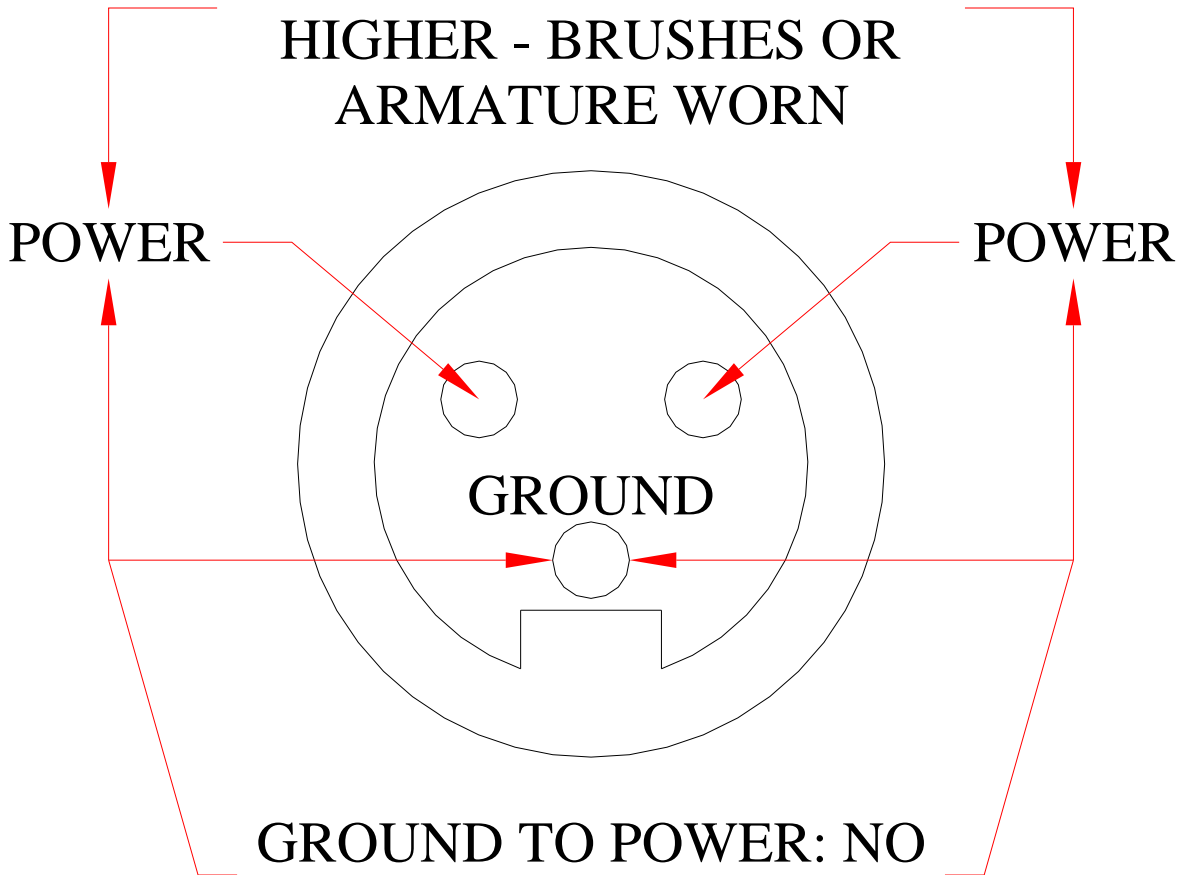
This presumes that the power on/off LED will go on and off. Be sure to check that all doors are closed. Check LED 6 on the DC DRIVE. If LED 6 is not on, replace the 10 amp FUSES on the DC DRIVE.

NOTE: If the DC DRIVE BOARD part number ends in a number 32, replace the fuses with an AGC-10 FAST BLOW FUSE. If the DC DRIVE BOARD part number ends with any other number, replace the fuses with an MDL-10 SLOW BLOW FUSE.

If LED 6 still does not come on, replace the DC DRIVE. Check the LED's on the CONTROL BOARD marked C-L and T-L. They should be off. If the LED marked C-L is on, go to *Car will not send from the Motor End*. If the LED marked T-L is on go to *Car will not send from the Non-Motor End*.

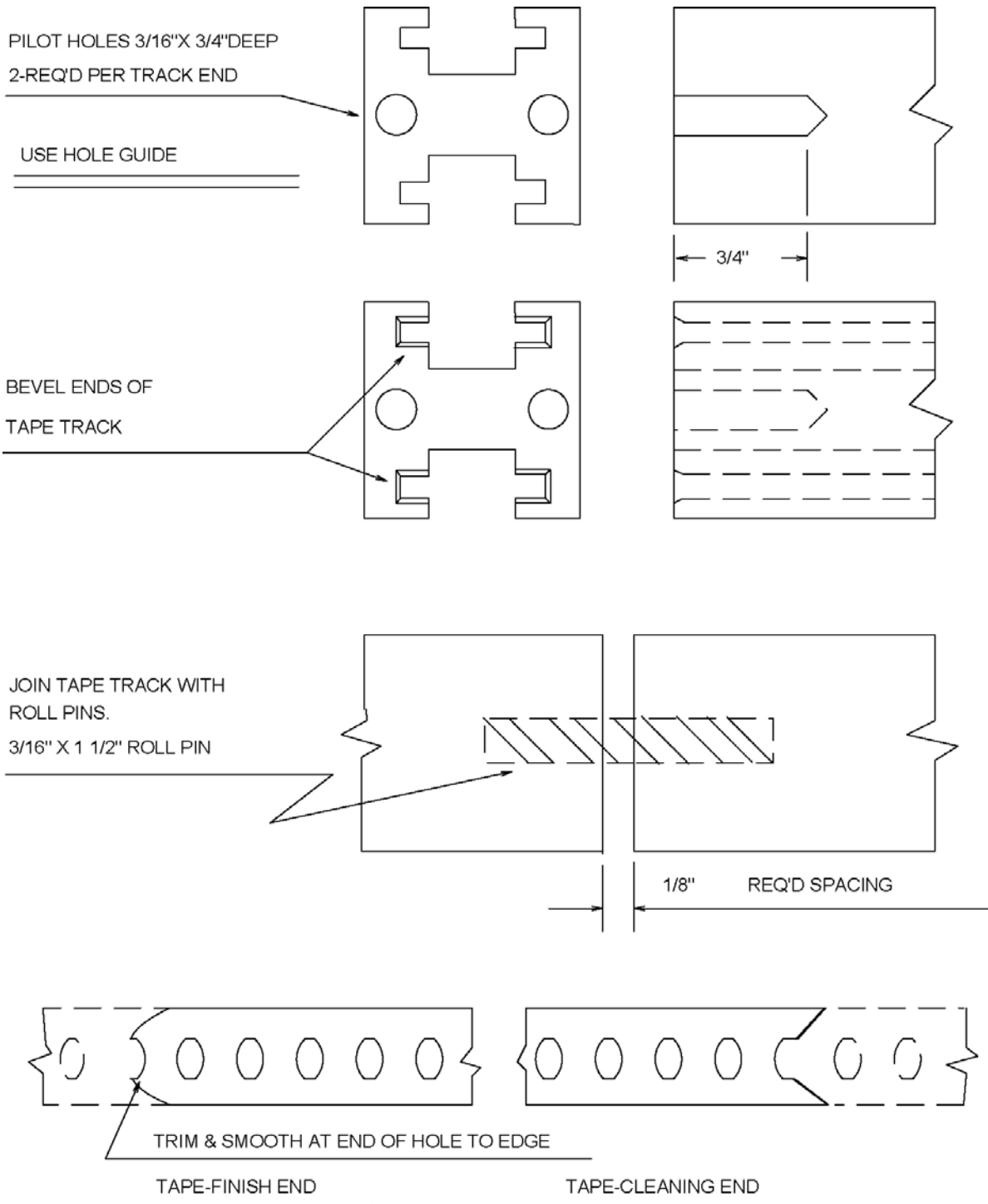
**Motor Brush and Armature Test
1/2 Hp. 180 Vdc Motor**

**POWER TO POWER:
5.5 TO 6.3 OHMS
LOWER - SHORTED
HIGHER - BRUSHES OR
ARMATURE WORN**

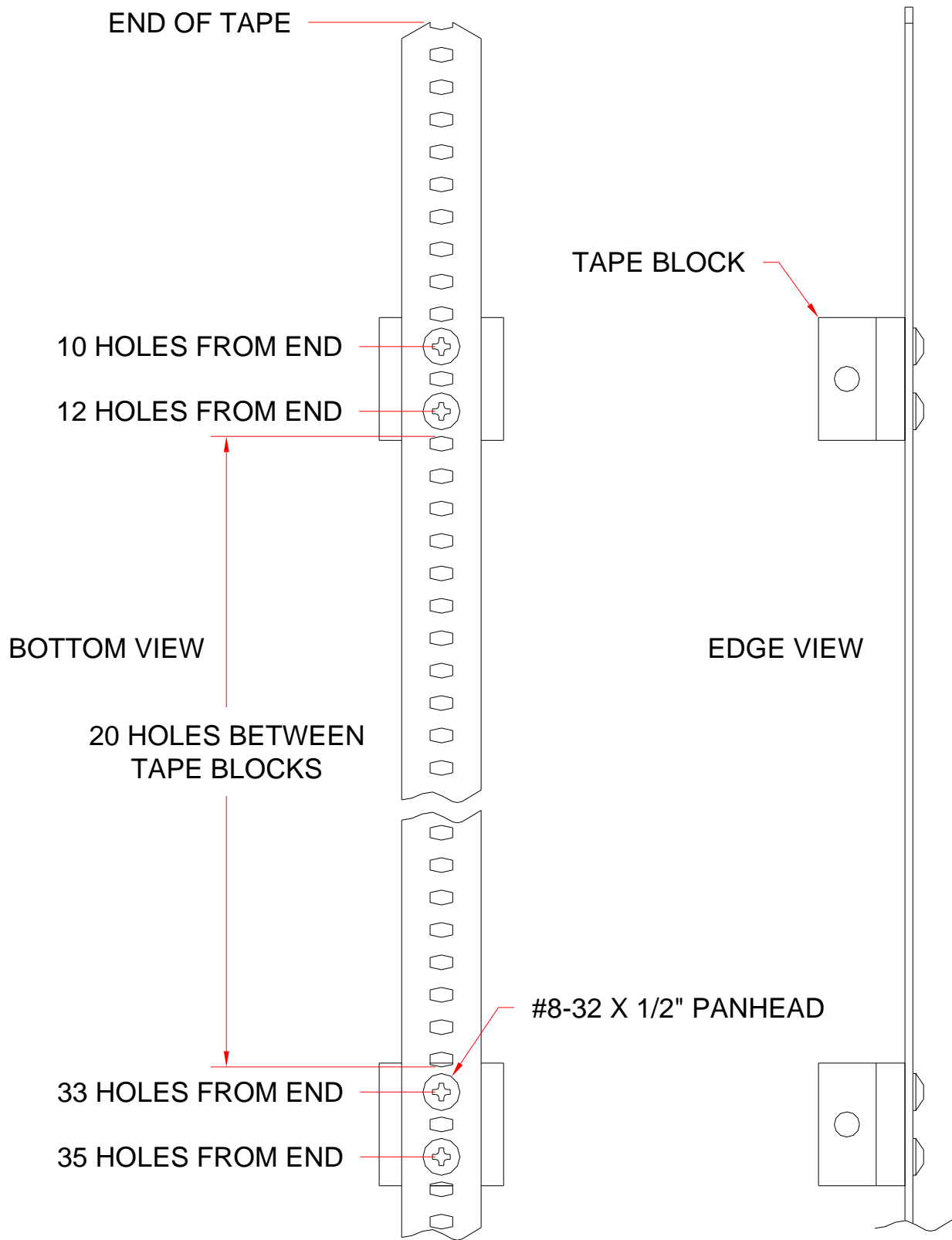


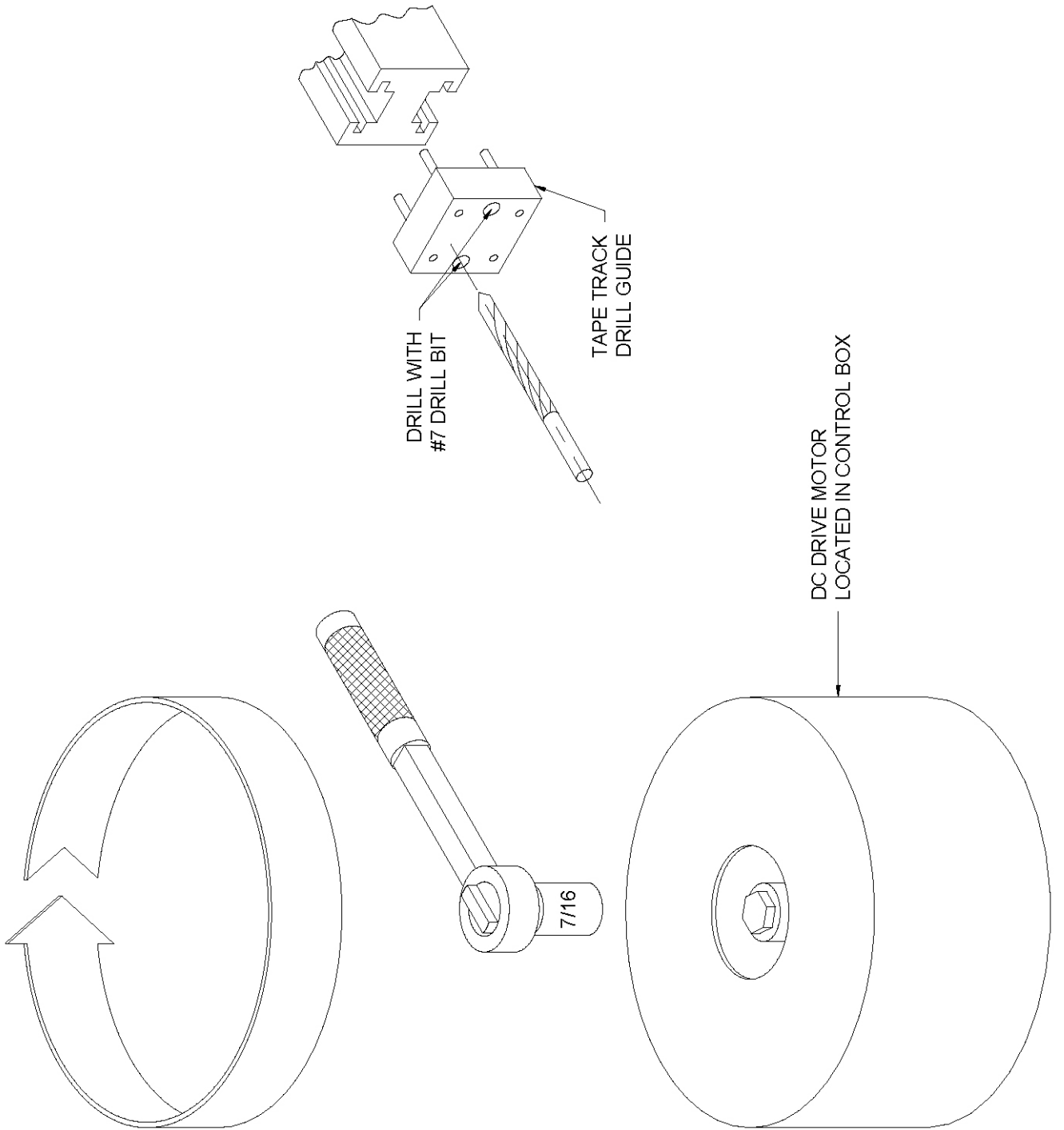
**GROUND TO POWER: NO
LESS THAN 30K OHMS**

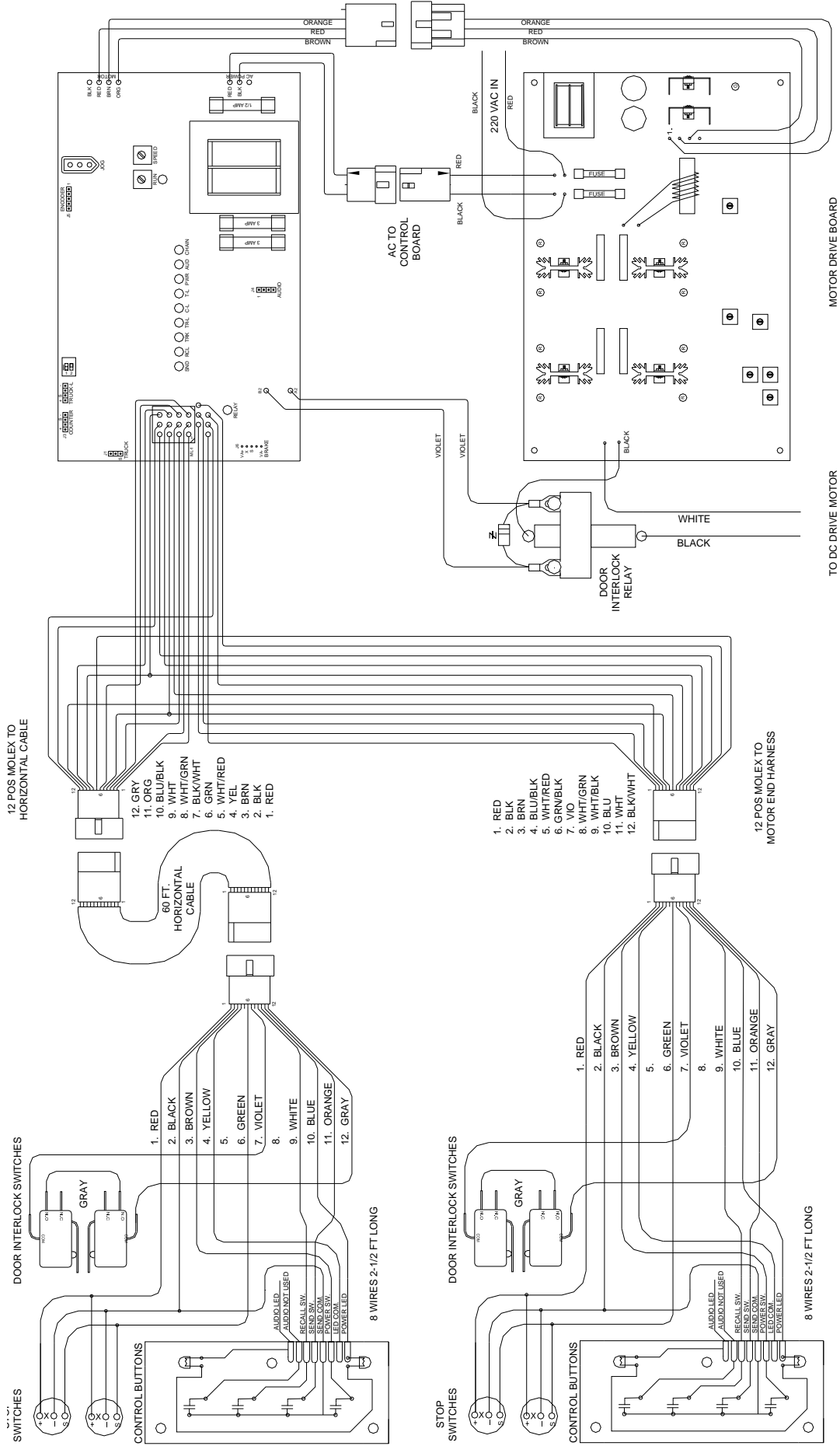
Track Preparation Diagram



TAPE BLOCK MOUNTING



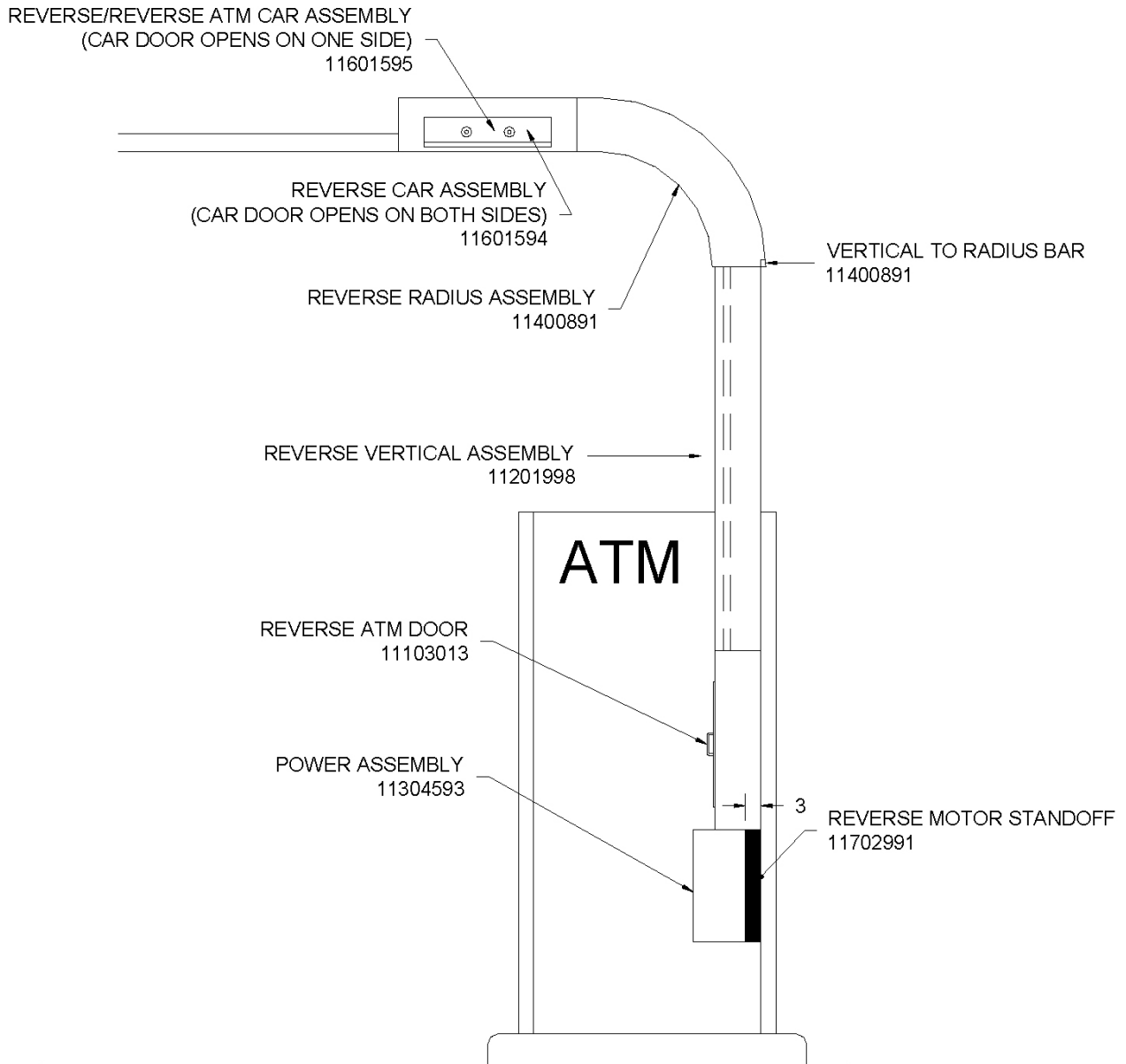




ATM/LP-Trax Reverse & Reverse/Reverse Vertical

Reverse ATM – The drive vertical is reverse and the non-drive vertical is standard. The radius is reversed on the drive end.

Reverse/Reverse ATM – The drive and non-drive verticals are reverse. The radius on both ends is reversed also.

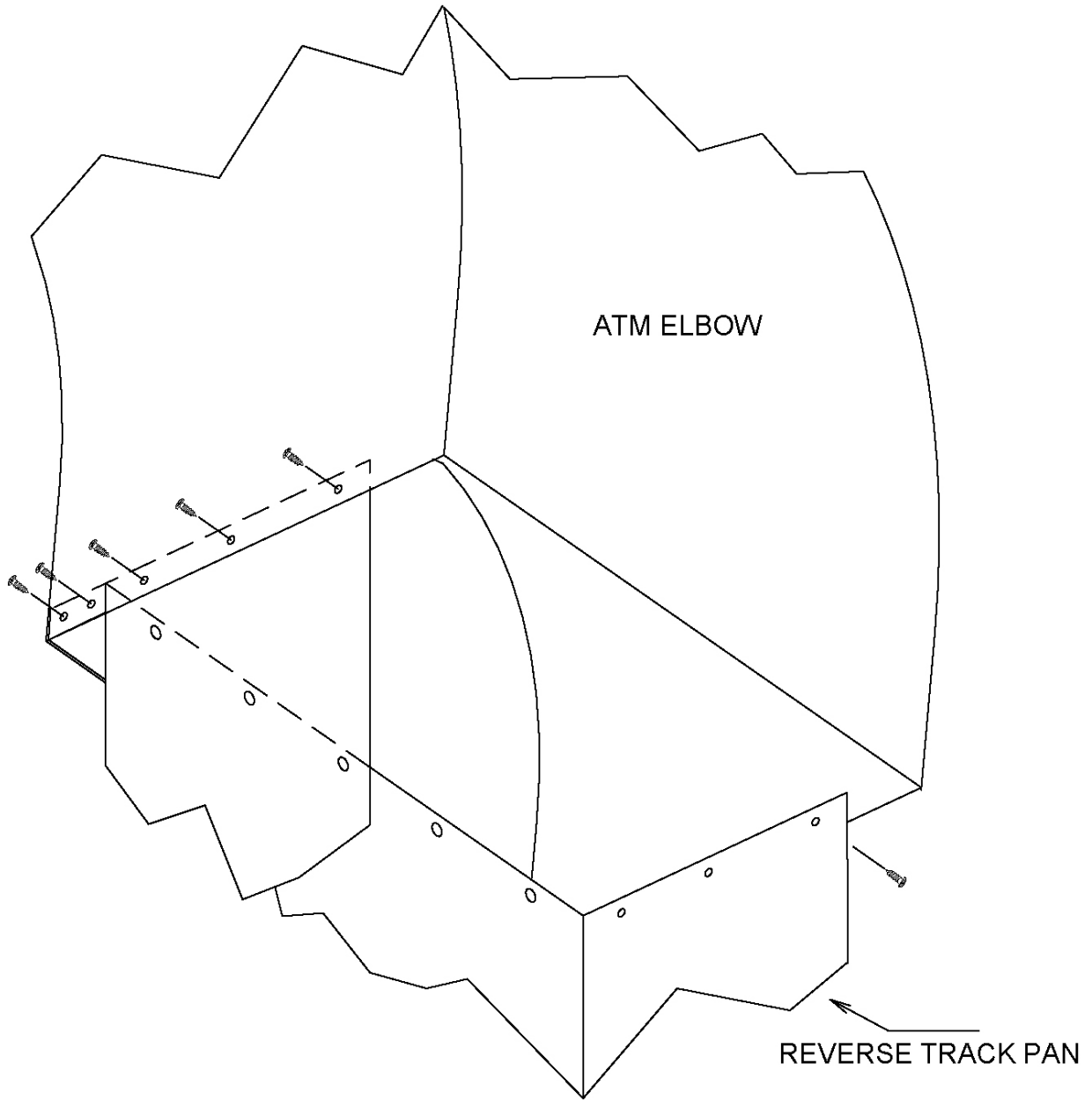


Special Instructions for ATM Reverse & Reverse/Reverse Vertical

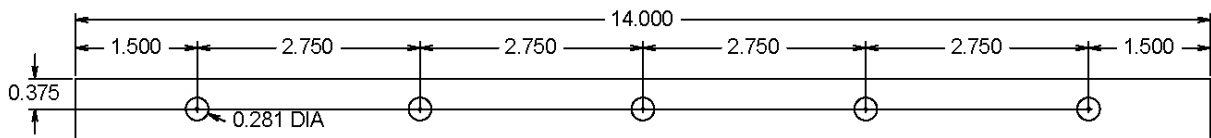
This machine has been modified for a reverse vertical installation. The differences are as follows:

1. **CAR:** The standard car has a set of doors secured with a single hasp. The reverse car has a set of doors on each side of the car. These doors are secured with two hasps, top and bottom, on each set of doors. It is necessary to insure that both hasps are fully shut before sending the car. The car has a high and low set of magnets to activate the switches. The orientation of the car is marked on it for each reverse job.
2. **DOORS:** The doors are 4" longer than the standard to allow extra room for accessing the hasps on each end of the car.
3. **ATTACHMENT OF THE REVERSE VERTICAL TO POWER MODULE:** The standard vertical attaches via three studs in the pan. The reverse vertical uses three machine screws which thread into 3/4" x 1 1/2" aluminum bar. A black laminated standoff is provided to space the power module out from the wall the proper dimension. It will be necessary to mount the standoff first, and then mount the power module to it. A black laminated standoff is sent only when the drive assembly is on the reverse send.
4. **ATTACHMENT OF THE REVERSE VERTICAL TO THE RADIUS:** A 3/4" x 1 1/2" aluminum bar is provided with the reverse vertical to position the vertical at the proper dimension. It will be necessary to drill three 9/32" clearance holes through the bar into the pan to secure the pan to the bar. 1/4"-20 truss head bolts are provided for this. Make sure that the heads are inside and do not hit the car.
5. **WIRING CONSIDERATION:** The reverse configuration makes it necessary to route the wiring from the outside of the tape track to the inside of the tape track. This is accomplished at the radius. Holes, grommet and enclosure are provided for this purpose. Insure that the wiring does not get into a position that will allow the car to hit it.

REVERSE END MOUNTING



CUT PAN TO LENGTH. DRILL HOLE PATTERN IN TOP BACK EDGE.
BOLT PAN TO ELBOW. SCREW ELBOW TO PAN.



**ATM Trax 30FT
11910993
Shipping Manifest**

| Qty. | Description | Part Number |
|-------------|------------------------|--------------------|
| 3 | Horizontal Track | 11200792 _____ |
| 2 | Vertical Assembly | 11201993 _____ |
| 1 | 60' Horizontal Harness | 11202011 _____ |
| 2 | Radius Assembly | 11400792 _____ |
| 2 | Airlock Assembly | 11500792 _____ |
| 1 | Car Assembly | 11601592 _____ |
| 120 | ATM Drive Tape | 06820011 _____ |

Installation Accessories

| | | |
|-----|-------------------------------|----------------|
| 1 | #7 Drill Bit | 00143052 _____ |
| 1 | ATM Trax Manual | 00604011 _____ |
| 20 | Medium Wire Ties | 01008002 _____ |
| 4 | Tie Blocks | 01008005 _____ |
| 10 | Cable Tie Holder | 01008024 _____ |
| 4 | Tape Blocks | 06019014 _____ |
| 4 | 5/8" Hole Plugs | 06973011 _____ |
| 6 | Splice Plates | 11204011 _____ |
| 2 | Skin to Radius Adapter | 11402011 _____ |
| 1 | Socket and Ratchet | 11701011 _____ |
| 1 | Socket | 11701021 _____ |
| 1 | Track Drill Guide Jig | 11703191 _____ |
| 10 | 8-32 X 1/2" Truss Head Screws | 93082721 _____ |
| 100 | #8 X 1/2" Self Tapping Screws | 93101621 _____ |
| 14 | Spring Steel Roll Pins | 94248800 _____ |

**Reverse ATM Trax 30FT
11000996
Shipping Manifest**

| Qty. | Description | Part Number |
|-------------|---------------------------|--------------------|
| 3 | Horizontal Assembly | 11200792 _____ |
| 1 | Vertical Assembly | 11201993 _____ |
| 1 | Reverse Vertical Assembly | 11201998 _____ |
| 1 | Horizontal Harness | 11202011 _____ |
| 1 | Radius Assembly | 11400792 _____ |
| 1 | Reverse Radius Assembly | 11400891 _____ |
| 2 | Airlock Assembly | 11500792 _____ |
| 1 | Reverse Car Assembly | 11601594 _____ |
| 120 | ATM Drive Tape | 06820011 _____ |
| 1 | Reverse Motor Standoff | 11702991 _____ |

Installation Accessories

| | | |
|-----|--------------------------------|----------------|
| 1 | #7 Drill Bit | 00143052 _____ |
| 1 | ATM Trax Manual | 00604011 _____ |
| 20 | Medium Wire Ties | 01008002 _____ |
| 4 | Tie Blocks | 01008005 _____ |
| 10 | Cable Tie Holder | 01008024 _____ |
| 4 | Tape Blocks | 06019014 _____ |
| 4 | 5/8" Hole Plugs | 06973011 _____ |
| 4 | Splice Plates | 11204011 _____ |
| 1 | Skin to Radius Adapter | 11402011 _____ |
| 1 | Ratchet | 11701011 _____ |
| 1 | Socket | 11701021 _____ |
| 1 | Track Drill Guide Jig | 11703011 _____ |
| 10 | #8-32 X 1/2" Truss Head Screws | 93082721 _____ |
| 100 | #8 X 1/2" Self Tapping Screws | 93101621 _____ |
| 14 | Spring Steel Roll Pins | 94248800 _____ |

**Reverse/Reverse ATM Trax 30FT
11960993
Shipping Manifest**

| Qty. | Description | Part Number |
|-------------|------------------------------|--------------------|
| 3 | Horizontal Assembly | 11200792 _____ |
| 2 | Reverse Vertical Assembly | 11201998 _____ |
| 1 | Horizontal Harness | 11803060 _____ |
| 2 | Reverse Radius Assembly | 11400891 _____ |
| 2 | Airlock Assembly | 11500792 _____ |
| 1 | Reverse/Reverse Car Assembly | 11601595 _____ |
| 120 | ATM Drive Tape | 06820011 _____ |
| 1 | Reverse Motor Standoff | 11702991 _____ |

Installation Accessories

| | | |
|-----|--------------------------------|----------------|
| 1 | #7 Drill Bit | 00143052 _____ |
| 1 | ATM Trax Manual | 00604011 _____ |
| 20 | Medium Wire Ties | 01008002 _____ |
| 4 | Tie Blocks | 01008005 _____ |
| 10 | Cable Tie Holder | 01008024 _____ |
| 4 | Tape Blocks | 06019014 _____ |
| 4 | 5/8" Hole Plugs | 06973011 _____ |
| 3 | Splice Plates | 11204011 _____ |
| 1 | Ratchet | 11701011 _____ |
| 1 | Socket | 11701021 _____ |
| 1 | Track Drill Guide Jig | 11703191 _____ |
| 10 | #8-32 X 1/2" Truss Head Screws | 93082723 _____ |
| 100 | #8 X 1/2" Self Tapping Screws | 93101621 _____ |
| 14 | Spring Steel Roll Pins | 94248800 _____ |

**ATM 10' Horizontal Extension
11001991
Shipping Manifest**

| Qty. | Description | Part Number |
|-------------|-------------------------|--------------------|
| 4 | Medium Wire Ties | 01008002 _____ |
| 4 | 1/4" cable tie holder | 01008024 _____ |
| 1 | ATM Horizontal Assembly | 11200792 _____ |
| 1 | Horizontal Splice Plate | 11204011 _____ |
| 20 | Extra ATM Drive Tape | 06820011 _____ |
| 1 | 10' Horizontal Harness | 11202021 _____ |
| 20 | #8 x 1/2" Phil Pan | 93101621 _____ |
| 4 | Spring Steel Roll Pins | 94248800 _____ |

Vertical ATM Special Instructions

The unit needs to be secured to the wall and requires structural support to the wall such as ½” plywood.

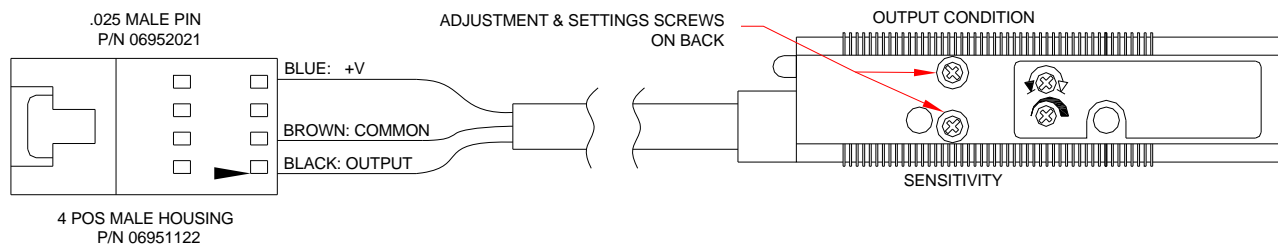
Cut the upper vertical, lower vertical, or both to provide the proper length. Use the splice plate provided to connect the upper and lower together. Use the black extrusion provided to connect the two skins together if the joint will be visible.

After cutting the unit to size, remove the counterweights and cut the same amount of drive as what you cut off the units. Remount the counterweights to the drive tape leaving five holes of drive tape hanging out the bottom.

Run the connecting cable through the raceway. Fold up any excess in the top or bottom where the four button panel switch is located.

Adjust the position where the car stops by moving the photo eye transmitter and receiver an equal distance up or down on each side.

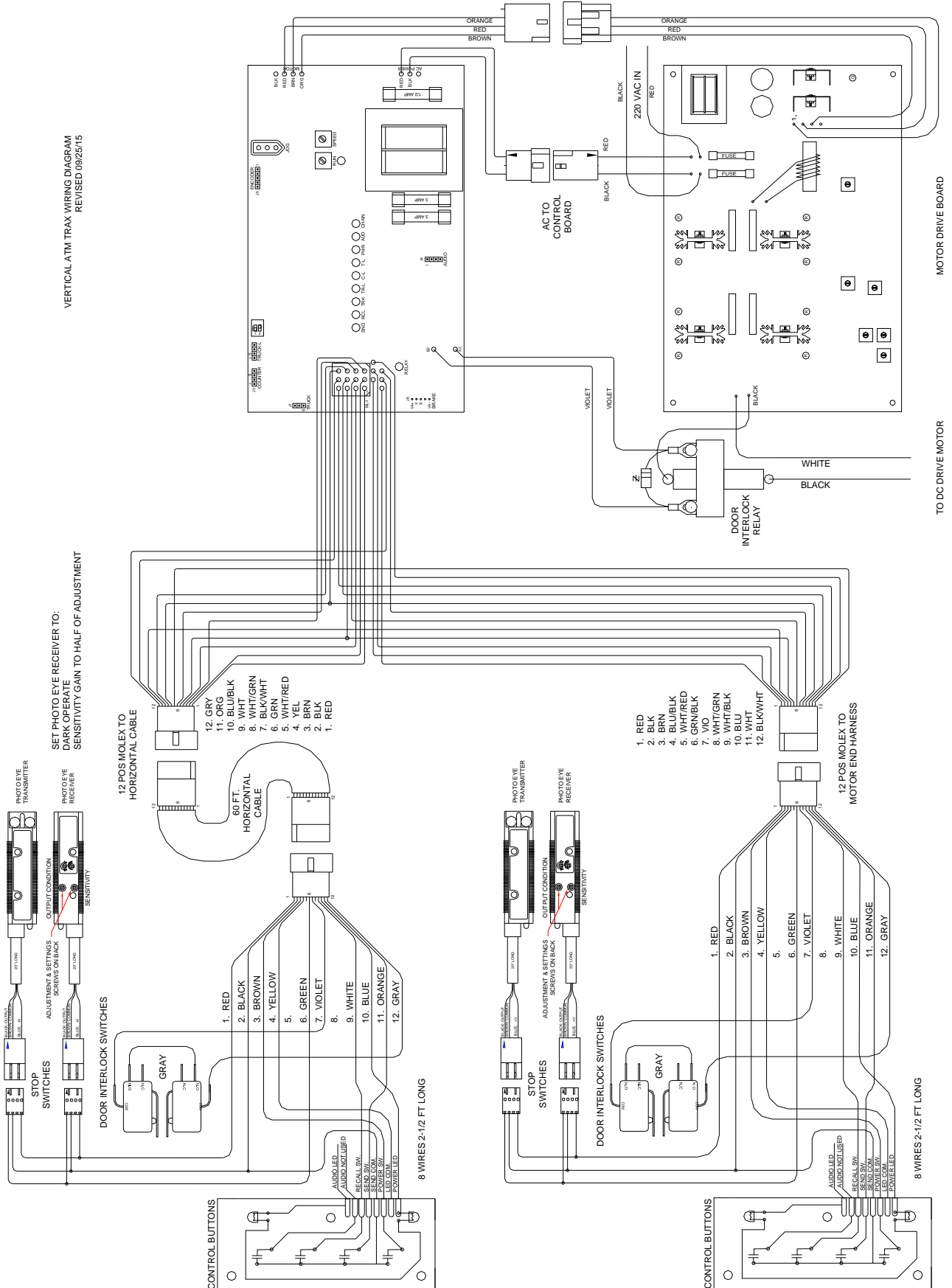
Photo Eye Adjustment



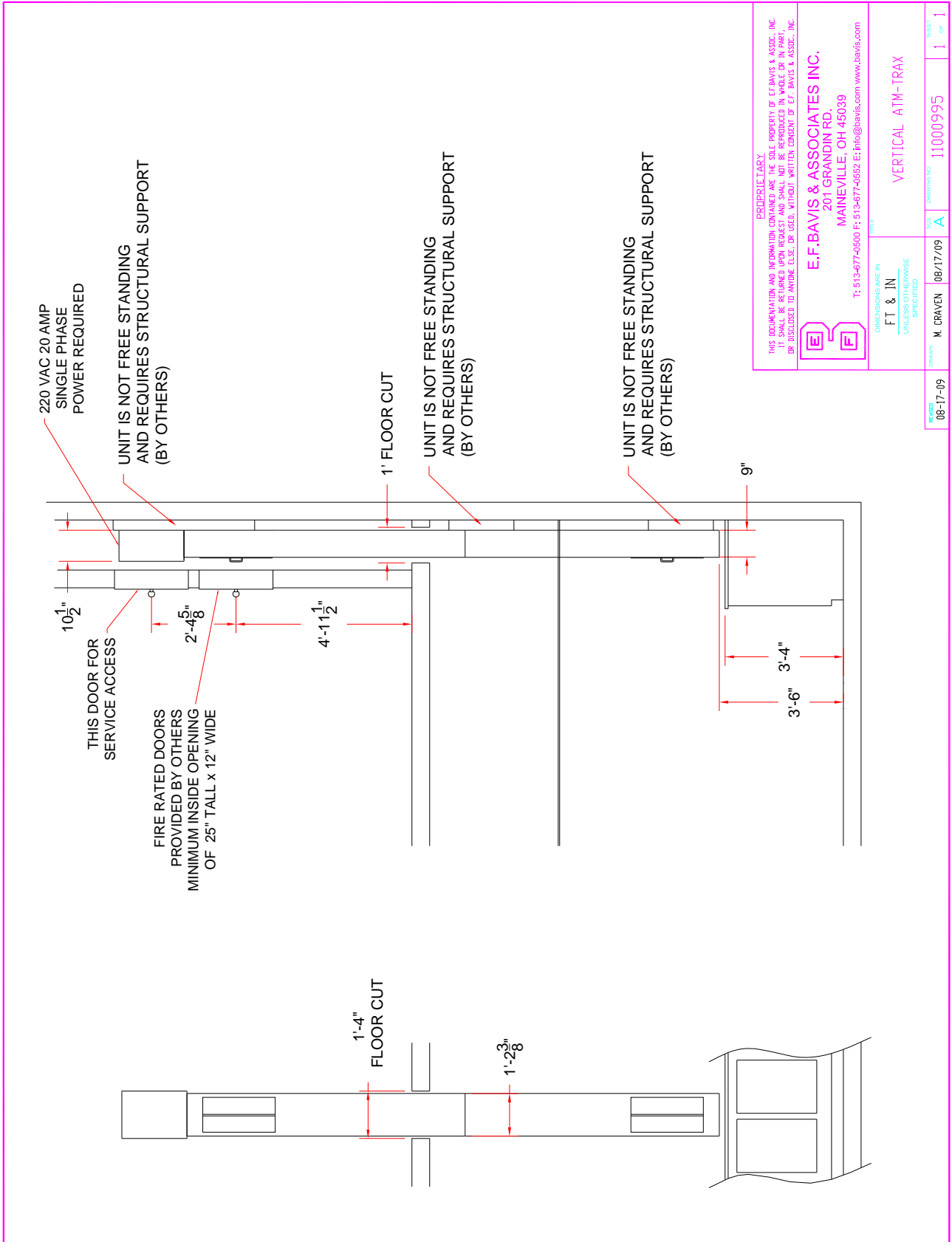
Align the transmitter and receiver directly across from each other.
Light/Dark Adjustment – Turn the adjustment all the way to the dark side
Gain Adjustment – Turn the adjustment half way

Vertical ATM Wire Diagram

VERTICAL ATM TRAX WIRING DIAGRAM
REVISED 09/25/15



Vertical ATM Specifications



Vertical ATM Trax Shipping Manifest 11000995

| Qty. | Description | Part# | |
|------|---------------------------------|----------|-------|
| 4 | Tape Block - Mounted | 06019014 | _____ |
| 52' | Drive Tape - Installed | 06820011 | _____ |
| 2 | VATM Counterweight - Installed | 11005011 | _____ |
| 1 | VATM Lower Vertical Assembly | 11201996 | _____ |
| 1 | VATM Upper Vertical Assembly | 11201997 | _____ |
| 1 | ATM Car Assembly - Mounted | 11601592 | _____ |
| 8 | 8-32 X 1/2 Phillips Truss Screw | 93082723 | _____ |

Installation Accessories

| | | | |
|----------|---------------------------------------|----------|-------|
| 1 | #7 Drill Bit | 00143052 | _____ |
| 1 | ATM Trax Manual | 00604011 | _____ |
| 10 | Medium Wire Tie | 01008002 | _____ |
| 1 | Bag of Splice Plate Screws | 04224011 | _____ |
| 3 Pieces | Black Vertical Splice Plate Extrusion | 06054003 | _____ |
| 2 | VATM Splice Plate | 11204012 | _____ |
| 1 | VATM Horizontal Wiring Harness | 11202011 | _____ |
| 1 | 1/4 Ratchet | 11701011 | _____ |
| 1 | 7/16 Socket | 11701021 | _____ |
| 1 | ATM Track Drill Guide | 11703011 | _____ |
| 12 | 8-32 X 1/2 Phillips Truss Screw | 93082723 | _____ |
| 6 | 3/16 X 1/2 Roll Pin | 94248800 | _____ |
| 20 | 1/8 Black Pop Rivet | 92048205 | _____ |

