
Autoveyor™ 2000 Series

Troubleshooting

P/N 00654011

E. F. Bavis & Associates, Inc.

201 Grandin Road
Maineville, Ohio 45039
(513) 677-0500

Troubleshooting the 2000 Series Autoveyors™

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

Nothing works:

Check the 110vac power coming into the machine. Do this by placing the meter leads on pins J32 and J28. You should measure 110vac. No 110vac, you need to check the circuit breaker in the building or have an electrician restore power to the unit. If 110vac is present, check the 24vac and board fuses, replace if either, or both, are blown. If they blow again, check the section titled "Fuse Documentation" in the technical manual for further information as to what they power, what size they should be and what could be causing additional problems.

Carrier will not run out:

This presumes that the carrier will run in. Check the LED marked customer stop, D16. It should be on. If it is not, replace the CUSTOMER STOP SWITCH. If it is on, raise a carrier into the teller opening. The teller start LED, D13, should come on and then the power out, D21, and direction out D23, LEDs should come on. If D13 does not come on, replace the TELLER START SWITCH. If LEDs D13, D21, and D23 come on and the motor fails to start, remove the cover on K3 and check for metallic dust between the pole piece and wiper arm. Clean as required. Test again. If the motor fails to start, check for 120vac by placing leads on J27 and J32 when D21 and D23 LEDs are on. If there is no 110vac, replace the CONTROL BOARD. If there is 110vac, replace the MOTOR.

Carrier will not run in:

This presumes that the carrier will run out. Check the LED marked teller stop, D14. It should be on. If it is not, replace the TELLER STOP SWITCH. If it is on, raise a carrier into the customer opening. The customer start LED, D15, should come on and then the power in, D20, and direction in D22, LEDs should come on. If D15 does not come on, replace the CUSTOMER START SWITCH. If LEDs D15, D20, and D22 come on and the motor fails to start, remove the cover on K4 and check for metallic dust between the pole piece and wiper arm. Clean as required. Test again. If the motor fails to start, check for 120vac by placing leads on J26 and J32 when D20 and D22 LEDs are on. If there is no 120vac, replace the CONTROL BOARD. If there is 120vac, replace the MOTOR.

Carrier will not run in either direction:

This presumes that the audio and door work properly. If they do not, go to the paragraph on "Nothing works". First, check the motor fuse on the control board. Replace it only with a MDL15 or MDA15. These are U.L. listed slow blow fuses. Others may work for a while but will eventually fatigue and fail. If the motor still fails to run, proceed to the paragraphs on "Carrier will not run out" and "Carrier will not run in".

Carrier stops before completing run:

The MOTOR RUN TIMER is set for too short an amount of time. Set some more of the switches of S1 on the control board to the "on" position and retest. Run the carrier from the inside to the outside and time the transaction. As general rule, the timer should be set for a

minimum of 15 seconds additional time. Test the timer by inserting the carrier far enough to trip the start switch, but then withdrawing the carrier. Measure the time it takes for the machine to stop itself. It should be very close to the programmed amount.

Door will not open:

This section presumes that the audio is working. If it is not, go to the paragraph on “Nothing works”. Check to see if LED D24 comes on when the “power on/off switch” is turned on. If it does not, replace the POWER SWITCH. When LED D24 comes on LED D18 should come on for 15 seconds indicating that the door should have power to open. If D18 does not come on, replace the CONTROL BOARD. If D18 comes on and the door does not open, check for 24vac power out. Place one meter lead on J17 and the other on J16. If no power is present when D18 is on, remove the cover on K6 and check for metallic dust between the pole piece and wiper arm. Clean as required. Retest. If no power, replace the CONTROL BOARD. If power is present and the door does not open check the lower door limit switch. If its contacts do not read 0ohms when not activated, replace the lower DOOR LIMIT SWITCH. If the door still does not open, replace the DOOR MOTOR and CAPACITOR.

Door will not Close:

This section presumes that the audio is working. If it is not, go to the paragraph on “Nothing works”. Check to see if LED D24 goes off when the “power on/off switch” is turned off. If it does not, replace the POWER SWITCH. When LED D24 goes off LED D17 should come on for 15 seconds indicating that the door should have power to close. If D17 does not come on, replace the CONTROL BOARD. If D17 comes on and the door does not close, check for 24vac power out. Place one meter lead on J17 and the other on J15. If no power is present when D17 is on, remove the cover on K7 and check for metallic dust between the pole piece and wiper arm. Clean as required. Retest. If no power, replace the CONTROL BOARD. If power is present and the door does not close check the upper door limit switch. If its contacts do not read 0ohms when not activated, replace the upper DOOR LIMIT SWITCH. If the door still does not open, replace the DOOR MOTOR and CAPACITOR.

Door will not close when recall is depressed:

Check the value of the door motor capacitor. If it is an 88-106mfd replace it with a 130-156mfd.

Fan will not run:

When the power switch is on, LED D24 should be on along with D19 for the fan. If D24 is on and D19 is not, replace the CONTROL BOARD. If D19 is on and the fan is not running, check the fuse marked FAN. If it is blown replace it with an AGC 1. If the fuse is good and the fan does not run check for 110vac out. Place one of the meter leads on J30 and the other on J29. If no power is present when D19 is on remove the cover on K5 and check for metallic dust between the pole piece and the wiper arm. Clean as required. Retest. If no power, replace the CONTROL BOARD. If power is present and the fan does not run, replace the FAN.

Fan will not run with power off when cold:

It is presumed that the fan does run when the power is turned on. If not, refer to the paragraph “Fan will not run”. It must be below freezing at the temperature probe that is located below the red station in the customer vertical. If it is, disconnect the wire from J1. LED D19 should come

on. If it does, replace the TEMPERATURE PROBE. If it does not, replace the CONTROL BOARD.

Fan will not shut off when the power is turned off:

It is presumed that the outside temperature is not below freezing. With the power switch turned off, D24 off, place a jumper between J1 and J2. If the fan turns off, replace the TEMPERATURE PROBE. If it does not, replace the CONTROL BOARD.

Audio will not work:

It is presumed that the machine and door run. If not refer to the paragraph “Nothing works”. Temporarily disconnect the brown 4 position connector. With a jumper, short the brown wires on the end connected to the audio board. If the audio works, replace the AUDIO SWITCH. If the audio does not work, replace the AUDIO BOARD.

Audio will not work incoming:

Perform the audio adjustment as outlined in the Technical Manual. This presumes that there is outgoing audio. If no incoming audio, temporarily disconnect the black lead of the shielded pair where the field wires connect to the pigtail. With the audio on, touch the lead with your finger. If a 60 cycle hum is heard in the inside speaker, replace the OUTSIDE MICROPHONE. If no hum is heard, temporarily replace the INSIDE SPEAKER. If there is incoming audio, then install the new speaker. If no hum is heard, replace the AUDIO BOARD.

Audio will not work outgoing:

Perform the audio adjustment as outlined in the Technical Manual. This presumes that there is incoming audio. If no outgoing audio, temporarily disconnect the black lead of the shielded pair where the inside microphone wires connect to the pigtail. With the audio on, touch the lead with your finger. If a 60 cycle hum is heard in the outside speaker, replace the INSIDE MICROPHONE. If no hum is heard, temporarily replace the OUTSIDE SPEAKER. If there is outgoing audio, then install the new speaker. If no hum is heard, replace the AUDIO BOARD.

Call tone will not work:

This presumes that there is incoming and outgoing audio. Temporarily disconnect the brown 4 position connector. Short the two yellow wires together. If the call tone comes on, replace the CALL BUTTON. If the call tone does not sound, replace the AUDIO BOARD.

Cancel will not work:

Insert a carrier into the system. Before it completes the transaction, press the cancel switch. LED D26 should come on. If it does not, replace the CANCEL SWITCH. If D26 does come on and the machine does not cancel, replace the CONTROL BOARD.

Recall will not work:

Press the recall switch. LED D25 should come on. If it does not, replace the RECALL SWITCH. If D25 does come on and the machine does not recall, replace the CONTROL BOARD.