Automatic Sliding Door Operator
Common Faults & Troubleshooting Guide

English edition, restructured for quick lookup. Symptom descriptions are given as reported by customers; each entry lists the likely root causes, a step-by-step diagnosis procedure and the recommended resolution. Original fault numbers 1–20 are preserved throughout.

Quick Symptom Index

#	Symptom (as reported)	#	Symptom (as reported)
1	Unit completely dead; no indicator light	11	Door slams into the open / close limit with loud impact
2	Indicator on, door slides freely by hand, sensor will not open it	12	Card reader / touch button works only occasionally
3	Door rebounds halfway when closing; will not close (top service ticket)	13	No rebound when the safety edge is pressed
4	Ghost operation — door cycles by itself with nobody there	14	Door stays permanently open and will not close
5	Jerky running, abnormal noise, uneven speed	15	Door slows down and feels weak after running a while
6	Door only opens halfway	16	All settings lost after power-off or parameter changes
7	Closing impact too strong; exceeds EN 16005 force limit	17	Double-leaf door: uneven seam, leaves scrape each other
8	Intermittent fault — fine during inspection, fails after you leave	18	Electric lock won't engage / stays engaged; lock output burns the board
9	Backup battery fails after a power cut	19	Door locks during a fire alarm instead of opening for escape
10	Door drifts to one side when the belt is released	20	Door runs backwards when given the open command

Power Supply & Battery

Fault 1 — Unit completely dead; no indicator light

Customer symptom	The unit is completely unresponsive and the main controller's indicator light is off.
Likely root causes	Power supply circuit fault; Blown fuse; An externally connected accessory shorting and dragging down the supply.
Step-by-step diagnosis	1. Measure the incoming AC voltage and check whether the circuit breaker has tripped. 2. Disconnect all external sensors, locks and batteries, and power the main controller on its own. 3. Inspect the mainboard fuse and transformer for damage.
Resolution	1. Restore the mains supply; replace the blown fuse / transformer. 2. Reconnect the accessories one by one to locate the shorting accessory, then replace it. 3. Give the door operator a dedicated power circuit; never share a circuit with high-power loads.

Fault 9 — Backup battery fails after a power cut

Customer symptom	After a power failure the door does not respond: the backup battery has failed.
Likely root causes	Battery aging (rising internal resistance) or charging-circuit fault; Loose battery wiring; Polarity reversed; Battery protection board latched off.
Step-by-step diagnosis	1. With mains power present, measure the battery's no-load voltage. 2. Measure the battery's on-load voltage at the instant power is cut. 3. Check the battery terminals for oxidation.
Resolution	1. Tighten the terminals and clean off oxidation; apply anti-corrosion grease in salty, humid environments. 2. Replace the battery pack if it is damaged. 3. Wire strictly according to the silkscreen markings — never reverse the polarity.

Fault 15 — Door slows down and feels weak after running a while

Customer symptom	After running for a while the door slows down and feels weak; it recovers after the unit cools down and stops.
Likely root causes	Motor overheat protection; poor heat dissipation; Large voltage drop on long supply cables; Worn motor carbon brushes.
Step-by-step diagnosis	1. After a period of running, feel the motor housing temperature. 2. While the door runs, monitor the mainboard's DC supply voltage. 3. Disassemble and check the carbon brush wear.
Resolution	1. Improve the ventilation space around the motor head. 2. Fit thicker supply cables to reduce the line voltage drop. 3. Replace the brushes / motor once the wear limit is exceeded.

Fault 16 — All settings lost after power-off or parameter changes

Customer symptom	After a power cycle or after modifying parameters, all settings are lost.
Likely root causes	Mainboard EEPROM fault; Dead onboard coin-cell backup battery.
Step-by-step diagnosis	1. Re-enter the parameters, then power-cycle and verify. 2. Measure the mainboard's coin-cell battery voltage.
Resolution	1. Replace the mainboard's coin-cell backup battery. 2. If the EEPROM is damaged, replace the main control board.

Activation, Sensors & Access Control

Fault 2 — Indicator on, door slides freely by hand, sensor will not open it

Customer symptom	Power indicator is on and the door leaf slides smoothly by hand, but sensor activation does not open the door.
Likely root causes	Trigger signal wiring fault; Radar / access controller produces no output; Unit left in a locked operating mode.
Step-by-step diagnosis	1. Confirm the unit's operating mode: Automatic / Lock / Exit Only. 2. Jumper the controller's NO open-trigger terminal as an isolation test: if the door opens, the fault lies in the front-end sensor / access-control wiring; if it does not move, the fault lies in the main controller or the motor drive.
Resolution	1. Correct the radar and access-control NO/NC wiring and repair any loose connections. 2. Switch the unit to Automatic mode. 3. Replace the radar if it is defective.

Fault 12 — Card reader / touch button works only occasionally

Customer symptom	Card swipes or the touch button open the door only occasionally and frequently fail.
Likely root causes	Loose dry-contact terminals; Wireless receiver signal blocked by the aluminium profile; Unstable output signal from the access controller.
Step-by-step diagnosis	1. Jumper the controller's open terminal directly and compare the behaviour. 2. Check the position of the wireless receiver's antenna.
Resolution	1. Re-crimp the dry-contact terminals. 2. Route the antenna outside the aluminium profile; replace it with an external antenna if necessary. 3. Troubleshoot the access-control host's output.

Fault 14 — Door stays permanently open and will not close

Customer symptom	The door stays permanently open and will not close automatically.
Likely root causes	Radar continuously outputting an open signal; Access-control dry contact permanently conducting; Hold-open time set to infinity; Safety circuit persistently open.
Step-by-step diagnosis	1. Unplug the radar signal wire and see whether the door closes by itself. 2. Check the hold-open (open dwell) time parameter. 3. Check the safety circuit status.
Resolution	1. Replace a faulty radar. 2. Find the source of the access controller's permanently-on signal. 3. Modify the auto-close delay parameter. 4. Repair the safety circuit that stays open.

Door Motion & Mechanics

Fault 3 — Door rebounds halfway when closing; will not close (top service ticket)

Customer symptom	The door opens normally, but on closing it rebounds halfway and bounces back repeatedly, failing to close (priority after-sales ticket).
Likely root causes	Safety light curtain / safety edge NC circuit open, misaligned, or dirty; Excessive track resistance; jammed hanger rollers; Obstacle-reversal torque parameter set too sensitively; Radar falsely detecting the door leaf during the closing phase.
Step-by-step diagnosis	1. Check the main controller's safety-circuit indicator light. 2. Power off, release the belt, and push the door leaf by hand to judge the mechanical resistance. 3. Temporarily disable the radar and test the closing action on its own.
Resolution	1. Clean and recalibrate the light curtain; repair the NC safety circuit. 2. Clean sand and debris from the track and adjust the roller clearance. 3. Fine-tune the obstacle-reversal force value in the controller (stay within the EN 16005 limit). 4. Enable the “ignore radar activation during closing” function.

Fault 5 — Jerky running, abnormal noise, uneven speed

Customer symptom	The door leaf jerks and makes abnormal noise while running, and its speed fluctuates between fast and slow.
Likely root causes	Worn hanger-roller bearings; Misaligned track joints; Belt slipping / incorrect tension; Poor encoder contact.
Step-by-step diagnosis	1. Power off and push the door leaf by hand to locate the source of mechanical resistance. 2. Check the belt deflection and whether the clamp blocks are slipping. 3. Unplug and re-plug the encoder connector and inspect the pins.
Resolution	1. Replace damaged hanger rollers and grind off burrs at the track joints. 2. Re-adjust the belt tension; re-check new belts after 1–2 weeks. 3. Secure the encoder connector and add protection to the harness.

Fault 6 — Door only opens halfway

Customer symptom	The door only opens halfway and cannot reach the fully open position.
Likely root causes	Travel data lost; self-learning (learning run) failed; Maximum opening width restricted by parameter; Safety sensor falsely triggering mid-travel.
Step-by-step diagnosis	1. Enter the menu and check the maximum opening width parameter. 2. Check the travel path for any obstruction. 3. Check whether the safety circuit opens intermittently.
Resolution	1. Modify the opening width parameter. 2. Remove the obstruction and recalibrate the safety light curtain. 3. Clear the faults and run the self-learning (Learning Run) again.

Fault 10 — Door drifts to one side when the belt is released

Customer symptom	When the power is off and the belt is released, the door leaf slides to one side by itself (door drift).
Likely root causes	Track tilted lengthwise; levelness out of tolerance; Uneven pre-tension across the hanger rollers.
Step-by-step diagnosis	1. Release the belt and measure the level deviation along the full length of the track with a spirit level. 2. Push the door leaf by hand and observe any tendency to slide on its own.
Resolution	1. Adjust the track mounting shims so the level deviation stays within 1 mm per metre. 2. Re-adjust the hanger-roller pre-tension so the load is even.

Fault 11 — Door slams into the open / close limit with loud impact

Customer symptom	The door leaf hits the closing / opening limit hard, with a loud impact noise.
Likely root causes	Travel data lost; Encoder signal lost; Deceleration zone parameter set too short.
Step-by-step diagnosis	1. Check whether the controller reports an encoder fault. 2. Inspect the encoder plug and harness. 3. Check the deceleration distance parameter.
Resolution	1. Re-secure the encoder connector and repair the damaged harness. 2. Increase the deceleration zone parameter. 3. Clear the old travel data and run the self-learning routine again.

Fault 17 — Double-leaf door: uneven seam, leaves scrape each other

Customer symptom	On a double-leaf door the closing seam is uneven between top and bottom, and the two leaves scrape against each other.
Likely root causes	Unbalanced hanging heights of the two leaves; Misaligned anti-lift (anti-sway) devices; Drift in the learned travel.
Step-by-step diagnosis	1. With the door fully closed, measure the seam width at the top and at the bottom. 2. Observe whether the two leaves' motion paths interfere.
Resolution	1. Adjust each leaf's hanging screws individually to level the leaves. 2. Adjust the anti-sway device position and clearance (1.5–3 mm). 3. Run the self-learning routine again and fine-tune the travel offset parameter.

Safety & Compliance

Fault 7 — Closing impact too strong; exceeds EN 16005 force limit

Customer symptom	The closing impact is very strong and the door slams shut hard, raising pinch concerns; force values exceed EN 16005.
Likely root causes	Closing speed set too high; Closing torque parameter too high for a light door leaf; Reversal trigger threshold too insensitive.
Step-by-step diagnosis	1. Measure the maximum closing impact force with a force test gauge. 2. Check the controller's closing speed and closing torque parameters.
Resolution	1. Reduce the closing speed and the closing torque. 2. After adjusting, re-test the impact force to meet the compliance requirement of 67 N maximum.

Fault 13 — No rebound when the safety edge is pressed

Customer symptom	Pressing the safety edge does not make the door rebound to protect the user.
Likely root causes	Safety edge wired NO/NC the wrong way round; Broken wire inside the edge; Edge's Test self-check wire not connected.
Step-by-step diagnosis	1. On the multimeter's continuity mode: the NC circuit conducts when not pressed and opens when pressed. 2. Inspect the cable at the bend near the root of the edge.
Resolution	1. Rewire it as an NC, normally-closed, fail-safe circuit. 2. Replace aged rubber edges with internal wire breaks. 3. Add the Test wire for systems that require self-checking.

Interference & Intermittent Faults

Fault 4 — Ghost operation — door cycles by itself with nobody there

Customer symptom	With nobody present, the door opens and closes repeatedly by itself (ghost operation).
Likely root causes	EMI (electromagnetic interference); Signal wires run in the same conduit as power wires; Intermittently loose terminals; Radar sensitivity set too high; Interference from LED drivers / variable-frequency drives.
Step-by-step diagnosis	1. Inspect the wiring: are the low-voltage signal wires bundled with, or sharing a trunking with, the motor power wires? 2. Wiggle the low-voltage harness while watching the controller's trigger-signal indicator light. 3. Lower the radar sensitivity as a test.
Resolution	1. Replace the signal wires with shielded cable run in its own metal conduit, with the shield grounded at one end only. 2. Tighten every terminal and deal with stray strands causing loose contact. 3. Adjust the radar angle to avoid air currents, hot-air curtains and reflective flooring.

Fault 8 — Intermittent fault — fine during inspection, fails after you leave

Customer symptom	Intermittent fault: everything works normally during an on-site inspection, but the door fails unpredictably afterwards.
Likely root causes	Harness wires broken internally by repeated flexing; Terminals working loose under vibration; Poor grounding; shielding interference; Aged battery with high internal resistance.
Step-by-step diagnosis	1. Set the multimeter to continuity mode and wiggle the harness while watching the reading. 2. Re-measure the PE (protective earth) resistance. 3. Load-test the battery voltage and compare it with the no-load voltage.
Resolution	1. Replace damaged flexing harnesses and fit corrugated tubing for protection. 2. Re-crimp the terminals and eliminate loose strands. 3. Improve the grounding of the metal header and sensor housings. 4. Replace the battery once it has aged.

Electric Locks & Fire Alarm

Fault 18 — Electric lock won't engage / stays engaged; lock output burns the board

Customer symptom	The electric lock does not engage / stays engaged permanently; powering up burns out the mainboard's lock output.
Likely root causes	Lock type (fail-safe / fail-secure) mismatched with the controller mode; Lock current exceeds the mainboard output rating; Shorted lock wiring.
Step-by-step diagnosis	1. Check the lock's nameplate type and operating current. 2. Test the lock itself from a separate external supply.
Resolution	1. Switch the lock output mode inside the controller, or replace the lock with a matching type. 2. For high-current magnetic locks, add an independent DC power supply plus an interposing relay instead of using the mainboard's lock output.

Fault 19 — Door locks during a fire alarm instead of opening for escape

Customer symptom	When the fire alarm signal triggers, the door locks instead of opening for emergency egress.
Likely root causes	Fire-alarm linkage dry contact polarity or trigger logic wired in reverse.
Step-by-step diagnosis	1. Simulate the fire-alarm signal input and observe the door's behaviour. 2. Verify the fire panel's output type (dry contact / voltage signal).
Resolution	1. Swap the fire-alarm linkage terminal wiring. 2. Before handover, repeatedly simulate fire-escape tests to comply with NFPA / local fire codes.

Motor & Drive

Fault 20 — Door runs backwards when given the open command

Customer symptom	On powered jog, the door leaf runs in the opposite direction of the open command (opening becomes closing).
Likely root causes	Three-phase motor power lines wired in reversed phase sequence.
Step-by-step diagnosis	1. Jumper the open terminal and observe the direction of travel. 2. Power off and label the three U/V/W power lines.
Resolution	1. Swap any two of the three phase lines. 2. After reversing, run the self-learning routine again.