

Auto Opener and Piston Troubleshooting:

How does the auto opener and piston work?

The black piston cylinder is filled with a mix of oils that naturally expand around 73 degrees. As the oil expands, it will begin to push out the rod of the piston and open your window. The springs and the weight of the window will pull it shut when the temperature drops. Please note that if the piston is not in the opener assembly, it will not retract on its own (it is the pressure of the springs which cause the retraction).

Here's a few things to check for on the pistons:

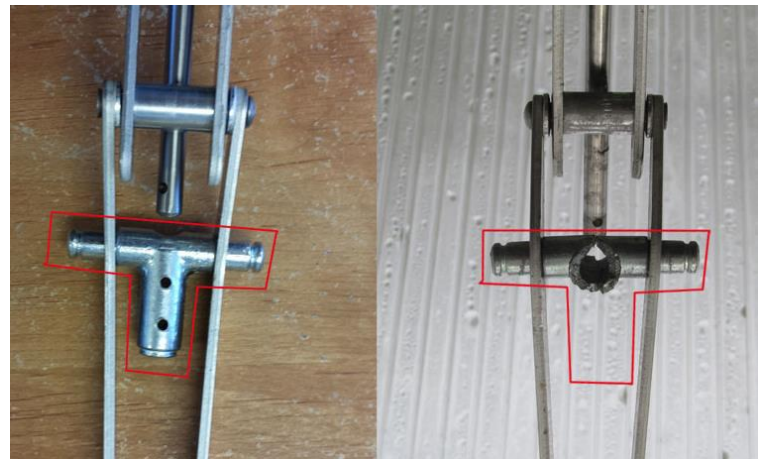
Is the piston moving at all? To test, remove the piston and place in ice water for 15 minutes, push the rod in and measure the length. Place in hot water for 15 minutes (above 90 degrees). Measure the distance – did the rod push out? If so, your piston is working.

Does the piston rod move in and out smoothly? The manufacturer recommends oiling them regularly (2 to 3 times/year) with a light oil such as olive oil or WD40. Sometimes oiling them will help get them moving if they are stuck.

Were the pistons ever under pressure? If the opener and piston are attached while there was a weight or lock/sash lock holding the window shut, the piston can burst open and release the paraffin oil inside. This can also happen if they are stored in a tight container that doesn't have enough room for them to expand. If a piston has burst, this is usually evident by visible oil, a gash in the side of the piston – or the rubber stopper in the end might have popped out.

Does everything look intact on your opener?

- There is a cast metal T piece that occasionally breaks – see pictures to the right.
- Sometimes the arms of the opener are “torn” or twisted. This can happen when a huge wind gusts pulls the window further than the opener can handle (can be prevented with wind cables) OR someone thought the opener was a handle to open the window and has pulled on the piston to try to open the window.



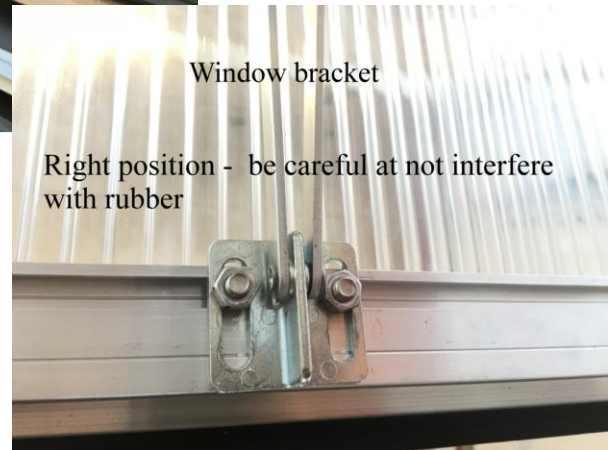
If you are installing in a Riga greenhouse, please check the angle at which the actual opener is installed. See the next page regarding the opener installation in a Riga greenhouse. If installed incorrectly, pressure builds in the piston and can make it difficult to open the vent. This can also make pressure build up in the piston until the window suddenly “pops” open – or if you slightly push the window it opens suddenly.

If you are unsure of any of the above, a photo can help us diagnose the issue. Please send us photos of your opener installed with the piston threaded into the holder. Also include a photos of the imprint near the end of piston, which will have the manufacturer's name and a date stamped into the black sleeve. We need this to file a warranty claim with the manufacturer and replace your piston.

Riga Greenhouse Window Auto Opener Correct Installation



In the correct position, the opener is sitting parallel to the window, which means that it will not demand a lot of pressure from the cylinder when the opening starts. Before fitting a new cylinder to the openers, you must check that the window can open freely right from the start. If not you must change the position of the aluminum profiles.



How does the Cylinder warranty work?

1) Coverage

Your cylinder is covered for 3 years from the year that is stamped on the cylinder.

2) How to test if your cylinder is defective or not?

- 1) Prepare a bucket of hot water and a bucket of cold water.
 - 2) Put the cylinder in the bucket of cold water for around 10 minutes and then push the piston pin in as far as it will go.
 - 3) Then put the cylinder in the bucket of warm water. Observe if the piston pin comes out (it can take around 10 minutes before something will happen). If the piston pin doesn't come out by approximately 8 cm then it means that the cylinder is defective and you can take advantage of your warranty.
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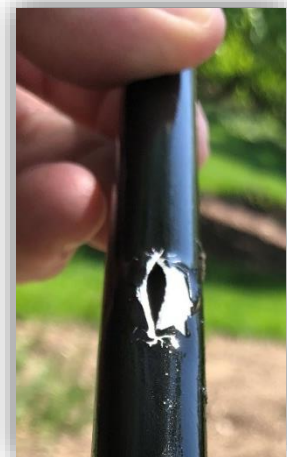
3) Leaking cylinder?

Is covered during the warranty period.

4) Cracked cylinder?

An overloaded cylinder as a result of a window that is too heavy is normally not covered by the warranty. Individual treatment each time. See example to the right.

NB the cylinder can also be overloaded due to incorrect installation. See our installation videos on www.orbesenteknik.com for the correct installation procedure.



5) Should you send the damaged cylinder back to us?



No, we only need you to send us a picture, of the cylinder where we can see the mark "ORBESEN TEKNIK and YEAR" on the cylinder, along with the damage and an explanation of occurred. Please include your customer's address so that in a case of warranty coverage we can send a new cylinder. www.orbesenteknik.com