



RANEBROOK
windows

SPIRAL BALANCE SASH WINDOW GUIDE



- 3 SPIRAL BALANCE MECHANISM AND MAINTENANCE
- 4 HOW TO ADJUST A SPIRAL BALANCE
- 5 REPLACING A SPIRAL BALANCE MECHANISM
- 6 CONTACT US

SPIRAL BALANCE MECHANISM AND MAINTENANCE

Spiral Balance Sash windows are a modern version of the traditional weight and pulley range. A Sash balance mechanism (spring balance) is a spring-loaded device used to counter-balance a Sash in a box sash window. Sash balances eliminate the need for weight pockets and can be installed in smaller openings and allow for larger window sizes and consequently a larger glass area.

These balances are not terribly complicated, but they can be troublesome to work with if you're not familiar with them. The advantages of these balances are that they are a relatively simple design and can be tensioned to meet the weight of the sash in question. There are different size balances to meet the needs of differing height and weight sashes.

Ranebrook Windows Ltd Sash windows with spring balances are supplied with factory fitted powerful pre-tensioned torque-free balances for which no adjustment is required. Our sash balance units are lubricated during the production process and are designed to be self-lubricating during the operation of the window sashes. Therefore, the balances should only require minimal maintenance, but just like any delicate mechanical item, they can rust, dent, bend or otherwise break. So, we would recommend the following checks are made annually:

- Check that the balance fixing screw is secure (do not over-tighten).
- Check that the bottom fixing bracket is secured to the sash and not damaged or distorted in any way.
- Is the balance tube damaged?
- If dirt and debris have built up at the bottom end of the balance it can be cleaned with a cloth and re-greased.
- Check that the travel stops are in place, and that the sash moves to contact the stops without any undue force. This will ensure the balances are not being over extended or crushed. Finally, check for smooth running of the sashes.
- If in any doubt, please contact us for advice and guidance.

Do not decorate balance tubes.



HOW TO ADJUST A SPIRAL BALANCE

- Slide the sash up to the upper most position and hold it there while you tension.
- Use an appropriate adjusting tool, insert hooked end in hole in spiral rod. A firm grip of the tensioning tool is required at all times when in use. Do not let the balance rod rotate as this will result in a loss of tension.
- During tensioning, position the end of the rod approx. 50mm down from the bottom of the aluminium tube, as it is likely to be bent if pulled out further, this will ruin the balance. Once tensioned, land the pins into the hook on the sash bracket.
- To apply tension, it is necessary to apply the appropriate number of turns in a clockwise direction and then push the cross pin up into the latch in bracket and remove tool.
- Apply equal tension to each balance until sash is correctly balanced.
- Rotating balance rod anticlockwise will result in loss of tension. One full rotation equals 1.1 lbs.

Caution:

- To avoid damaging the balance, it is essential that it is not distorted whenever fitting, connecting or tensioning balances. No side loading should be applied as this will permanently affect the balance
- Do not apply more tension than necessary to balance the sash. The same number of turns should be applied to each balance.
- Be sure balances are centred exactly in sash run.
- Be sure metal bracket is mounted in far enough to prevent it from rubbing on the side jamb of window.



REPLACING A SPIRAL BALANCE MECHANISM

- Slide the sash up to the upper most position and hold it there. To do that you need to remove the sash stops. Relieve the tension of the balance and unscrew the bracket / hook from the bottom of the sash.
- While supporting the window, slowly close the window as it will be heavy.
- Remove the screws from the top of the balance and remove the balance. Repeat this process on the other side of the window.
- You will now install the new balance. Insert the balance into the recess of the frame.
- Mount the balance into the outer frame using No.10 wood screws for timber windows or to fabricators recommendation. Ensure that the balances are mounted directly underneath the top frame. (Unless otherwise agreed.)
- The spiral rod or balance tube should not be distorted in any way during this operation.
- Do not over tighten the top screw as this will distort the balance tube & reduce its efficiency.
- Lift the window up to the highest position and hold it there. Then, push the balance with your fingers until it stops.
- Attach the bracket to the bottom of the sash. Use the appropriate adjusting tool to set the tension (as explained earlier).
- Fit travel stops before you move the sash
- If in doubt contact Ranebrook Windows team, do get in touch.

Notes:

- These steps are the same for the top sash and bottom sash.
- Our balances are manufactured for a specific window size & sash weight, ensure that they are not mixed up or fitted into different windows.

Caution: Different window sizes and sash weights require different balances. A balance of the right length does not mean that it'll work as expected, if it does not match the weight. If you are unsure which balance is best for your window, you can always get assistance from an experienced consultant.



CONTACT US

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Your Ranebrook Windows product is covered under our standard warranty unless otherwise stated. This is summarised in your separate warranty document.





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