

Restarting Mechanical Tower Clocks

Help and advice
when re-starting
your clock



You may need help and advice to re-start your clock if it has stopped due to lack of attention during the COVID-19 interruption. We hope this guide will help.



**Mechanical clock movements
can be dangerous if not
handled correctly and carefully.**

If you are unsure - please do not attempt to 'have a go'. Please contact **Smith of Derby** for advice over the telephone.

Our helpdesk team can be reached on:

email
service@smithofderby.com

telephone
07800 689 410
07800 689 428

Before you enter the tower or building

If you can take someone with you it will be safer. If you do not have someone with you it is very important that you inform someone that you are going into the tower, and the time you have done so. You should also inform them when you have left the tower safely.

You may wish to wear a mask, gloves and overalls (PPE) for this task. It is not just 'social distancing' that is our concern. The tower may have been dormant for many weeks and you may find you have new animal visitors that have taken residence! Pigeons and other vermin can carry disease, but in any case, these can be dusty and dangerous places.

How to check and start your clock

There are many types and styles of mechanical tower clocks. In principle, this simple guide should assist you to review your clock status and re-start your clock.

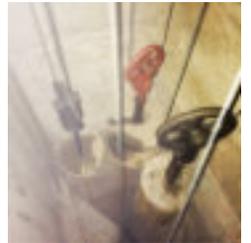
1. **CHECK** the external dial(s), what time does it say? (you will need this before entering the clock room and after winding the clock to set the clock to the correct time)



2. **CHECK** access is safe enough to climb the tower, checking all steps/ ladders and lighting is adequate



3. Before climbing the tower, check that the weights are fully on the ground and not resting somewhere precariously? If the weights are off the ground, you must make sure the weight line is long enough to allow the weights to rest on the ground (when there is no weight line left on the barrel).



If the weight line does not allow the weight to reach the ground, contact us immediately,

DO NOT ATTEMPT TO WIND THE CLOCK.

If you stopped the clock before COVID-19 lockdown then the weights should be where you left them.

4. **CHECK** all weight lines are correctly located around the pulleys, checking from the weight end to the clock. Look especially at the line running through the guide pulleys. The pulley may have tilted over, and the line jumped off the pulley wheel.



DO NOT TRY TO WIND THE CLOCK IF THIS IS THE CASE, CALL US.



5. **CHECK** the clock mechanism. Is there anything obvious - such as broken and cracked wheels that cause you concern? A bird may have decided to nest in your movement or an infestation of bees or ladybirds? Look closely and check this before starting to wind the clock. If you notice something strange, take a photo, **STOP** and contact us.
6. Insert the winding handle and very slowly take the weight up. If you feel or hear anything unusual - **STOP** and call us. Once you are comfortable that the weight is lifting correctly, continue to wind the clock until the usual height for your clock is reached. **REMEMBER** the weights were all the way to the bottom, so your usual method (possibly counting winding turns) will be different.

7. TAKE BREAKS

Especially if the weights are heavy, wind the clock slowly and smoothly. If you have a strike or quarters to your movement, you will have more weights to lift. This will need more time in the tower. So perhaps take someone with you to help and remember to let someone know you are in the tower.

8. If you have strike/chime/carillon that require winding, you **MUST** carry out the same checks as winding the 'going' side as previously described. You must check all the pulleys etc.
9. Once all weights have been wound, do not swing the pendulum until the actual time matches the clock external time. (if you know how to set the clock via the mechanism you can proceed to set the time correct. Make sure the strike and chimes are also set in the correct sequence.
10. Finally, switch the clock room lights off, descend the clock tower and check the time on the external dial(s) is correct. If you have someone with you, send them down the tower and ask them to shout up if the clock is correct. You may not get the time perfectly accurate to start with, however leave the clock running and the next time you need to wind the clock you can make small adjustments. Be patient.

Remember that if the clock has been stopped for a while it may take some time to stabilise the clock's rate again

Finally: If you are not confident that you are able to carry out any of the procedures described in this leaflet, please call us.



We will do our best to help you.

Our skilled clockmakers may need to visit your site, and this would be agreed with you.

Good luck and take care.

We are here to help. Please talk to us.

**Thank you
Smith of Derby**

Our thanks to the following team members who have compiled this short guide for you.

- Tony Charlesworth, Help Desk & Team Manager, Smith of Derby Limited.
- Andy Burdon, Non-Executive Director, Smith of Derby Limited; Turret clock researcher and restorer and Member of the Clocks Conservation Committee at Church Buildings Council.



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