

To navigate on the Environment Agency Anglian Waterways you will certainly come across locks. Locks allow boats to navigate through stretches of water of different levels on our waterways.

Locks and how to use them safely

There's no mystery to using locks – just a series of step-by-step tasks. Understand the procedure, take your time and you'll be on your way with no problem. A lock is simply a chamber with gates at either end. By emptying or filling that chamber with water, your boat can move up or down onto a new section of the waterway.

Although there are many different kinds of locks, they all work on the same basic principle. With the lock gates closed, you open sluices or paddles to let the water in or out. When the water level under your boat is the same as the level you're moving to, you'll be able to open the gates to move in or out of the lock.

Some locks you operate yourself and others are operated by staff or volunteer lock-keepers. Check your particular waterway for details. Always obey specific lock instructions and local information.

There are 67 Environment Agency locks on our Anglian Waterways. Boaters should make sure they know how to operate and use locks correctly. Children should not be allowed to operate any lock and should be supervised at all times.

This is an overview on basic lock operation and is taken from the CRT and EA Boaters Handbook. For a full copy please visit the CRT website <https://canalrivertrust.org.uk/media/library/141.pdf>



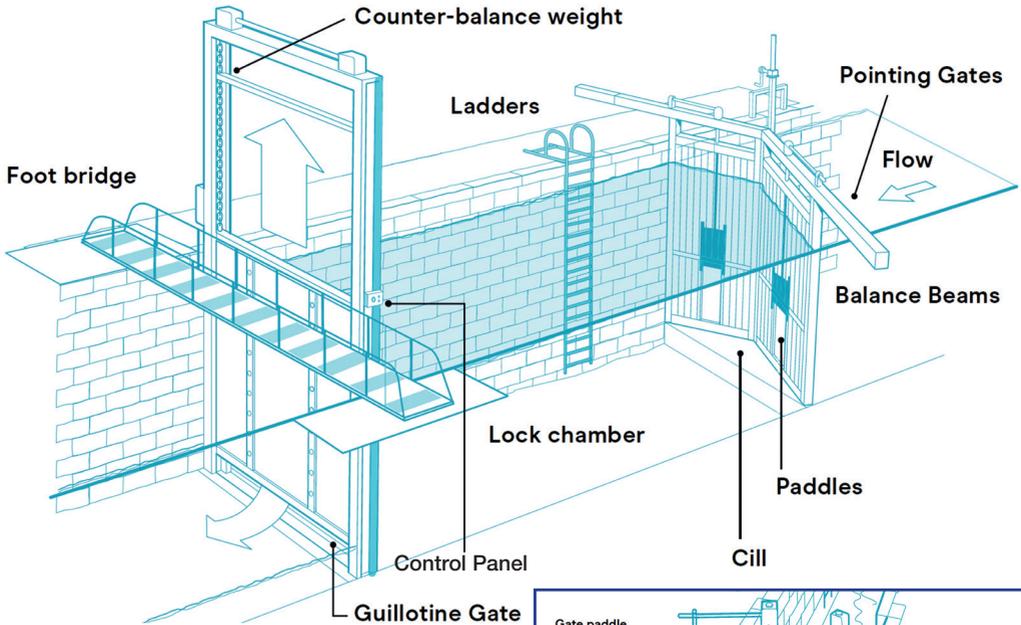
The majority of locks on our Waterways have steel or wooden pointing gates (often known as V doors) and guillotine gates also known as vertical steel gates or lifting gate (either electrically operated or require manual winding).

Navigation Keys and Windlasses

Navigation Keys are required to access the control panels on the vertical steel gates on the Rivers Nene, Great Ouse and Ancholme. Keys can be purchased from some marinas, our manned lock sites, Northampton Marina, our Waterways Agents, River Inspectors and our National Customer Contact Centre by calling **03708 506506** (Please ask for the Anglian Boat Registration Department). A windlass (sometimes also referred to as a lock key) is also required to operate the paddles in the pointing gates. Windlasses are available from boat yards and chandlers.

Unpowered craft such as canoes and kayaks should not use locks and should portage around if possible.

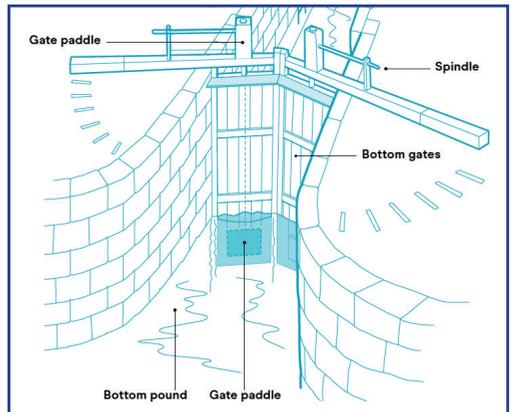
Diagram of a generic lock



NOTE: Several locks have pointing gates at both ends

Arriving at a Lock

- As you approach the lock, you may be able to see if the gates are open. If they are open, enter the lock slowly and check no other boats are arriving. Moor up, ensuring an adult has control of the head and stern mooring lines.
- If not, drop a crew member onto the lock landing stage to check whether it's full of water or empty.
- Check to see if there are any other boats approaching the lock.
- Going Up- If the lock is full of water, waiting for an approaching boat to come down first will save water.



- Going Down- Likewise if the lock is empty, waiting for a boat about to come up will fill the lock and leave it ready for you to use to descend.
- If there is boat in sight, travelling in the same direction as you, wait for them to enter the lock before closing the gates.

	Going up river	Going down river
Lock empty of water	<p>If it's empty, the crew member on land can open the guillotine gate or pointing gates and you can steer the boat straight in.</p> <p>Enter lock slowly and moor up, ensuring an adult has control of the head and stern mooring lines.</p>	<p>If the lock is empty and no boat is in sight, lower the guillotine gate or close bottom gates and paddles and then fill the lock by opening the paddles at the end nearest to your boat. When the lock is full, open the gate and steer in. Close the gates and lower the paddles.</p>
Lock full of water	<p>If it's full, moor up below the lock, on the lock landing stage to avoid the currents while the lock is emptying.</p> <p>If there's no boat in sight check that the paddles at the top of the lock are fully closed down, then empty the lock by raising the guillotine gate (a time delay stop will prevent the gate being raised too quickly) or the bottom gate paddles. Open the gates and steer in.</p>	<p>If it's already full the crew member can open the gates and you can steer the boat straight in.</p> <p>Enter lock slowly and moor up, ensuring an adult has control of the head and stern mooring lines.</p>
Preparing to fill a Lock	<p>Make sure that the lifting gate, pointing doors and paddles (if present) are closed. Should these be left open, the flow through the lock chamber when in operation will be greatly increased making it difficult to maintain control of your craft.</p> <p>In wide river locks keep your boat steady using front and back ropes looped round the bollards – take an extra turn around the bollard to stop the boat pulling you, but don't tie up.</p>	
	<p>Open top gate paddles very slowly, and a little at a time, especially if the paddles are above the low water level.</p>	<p>Open the paddles in front of the boat (at the bottom gate) to empty the lock or raise the vertical gate until the time delay stop applies. Once the time delay stop is released raise the guillotine gate fully. Use ropes to keep the boat as still as possible. Use ropes to keep your boat parallel to the lock side in wide and river locks.</p>
Filling a Lock	<p>According to the direction of travel, open the paddles in the pointing doors or lift the guillotine gate a few centimetres slowly. Take into consideration other boats. Great care should be taken when opening the guillotine gate, and if water flows into or out of the lock pen too quickly close the gate and start again. Take particular care to fill the lock pen at a slow rate.</p> <p>Whoever is controlling the boat mooring lines should maintain a taut line, as water levels change. Make sure that the boat does not snag on the lock during emptying and that the boat does not drift close to the lock doors. Several locks, particularly on the Nene, can have water flowing over the pointing gates, which could be a hazard to a boat that is not properly controlled during mooring.</p> <p>When water levels have equalised open the pointing gates / guillotine gate fully in the direction of travel.</p> <p>If the gates don't open or close easily, wait till the water level's absolutely equal.</p> <p>Make sure that any paddles (if present) are closed ready for the next user before leaving the lock chamber slowly and safely.</p> <p>It is recommended and common practise for narrow boaters to lift fenders when negotiating locks so that fenders do not catch on chains, ladders and lock obstructions. However, your boat may already be fitted with fenders.</p>	
Leaving the lock	<p>When the lock is full, open the gates and move your boat out. Lower the paddles – and close the gates behind you unless a boat coming towards you wants to use the lock.</p>	<p>Close the gates and lower the paddles before you move on, unless a boat coming from the opposite direction wants to use the lock.</p>
<p>When you've finished using the lock close the paddles in the doors. When boating on the River Nene always leave the pointing doors closed and the vertical gate raised, secured and locked, unless directed otherwise.</p>		

Accessing Lock Controls

On the Anglian Waterways many of the locks are electrically operated. These are usually the vertical steel guillotine gates. Some of these larger locks are operated by lock keepers. Others can be operated by boaters and need a navigation key (Abloy).

Lock security – Guillotine (vertical) gate

On electrically operated gates use the Abloy key to open the control box and press the appropriate buttons, ensuring that the pointing ('V') gates are properly closed before lifting the gate and that the gate is fully raised and the control box relocked when passage is complete.

At certain lock sites on the River Nene lock, winding wheels have been fitted to improve the safety for users. Should you encounter any difficulties call us on **0800 80 70 60**.

To unlock the wheel

- Insert the Abloy key turn clockwise and release the lock barrel. The spring loaded sliding bolt will release and the wheel may be operated.
- When the gate is either fully raised or lowered re-lock the winding gear by lining up the indent on the inside of the wheel and relocating the slide bolt. Remove the key.

To lock the wheel

- Whilst holding in the slide bolt push in and re-lock the Abloy lock barrel.



EA Volunteers assisting lock passage at Houghton Lock. ©Ian Bliss

Useful Contacts and Information

Environment Agency Boat Registration

03708 506 506 boatreg@environment-agency.gov.uk

Canal and River Trust

www.canalrivertrust.org.uk/enjoy-the-waterways/boating/getting-afloat



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www.visitanglianwaterways.org