



Caution! Important information and safety precautions!

1. For safety reasons, no one under the age of 15 should operate the Steam Engine. While the Engine is running and until the engine has cooled, the Steam Engine must be under constant adult observation.
2. All repairs must be made by an authorized person. Please contact MiniSteam or MiniCastings for repair services.
3. Any unauthorized alteration, repair or manipulation to the standard specification will invalidate the warranty and may cause safety issues. Do not modify this engine or the FUEL source for any reason.
4. **High temperatures:** The support, candle, safety valve, engine, etc. become very hot. Steam escapes from the engine valve and the safety valve during normal operation. **Do NOT touch while hot to avoid the risk of burns!**
5. **Safety precautions:** Do not allow children to touch any part of the model while the engine is running or while the engine is still hot following running.
6. **Danger!!!** Never heat the boiler without enough water! Never let the boiler run dry! Always ensure that the Steam Engine has enough water in the boiler before running. Never heat the boiler without a properly functioning safety valve installed. Never heat the boiler with a different fuel source than a candle. All repairs should be carried out by authorized trained staff at MiniSteam or MiniCastings.
7. The boiler has been tested to a pressure of 3 bar. The operating pressure is 1.5 bar max.
8. Keep the operating instructions with your Steam Engine.
9. Place the Steam Engine on a non-sliding, heat resistant surface. Placing a ceramic tile under the engine will protect most surfaces from heat or being scratched.
10. **Caution:** Don't operate the steam model near flammable objects or on temperature-sensitive or damageable surfaces.

Operating instructions

11. Before refilling the boiler with water, check that no pressure is in the boiler by turning the flywheel. Remove the safety valve. Locate the squeeze bottle that is included with the engine (Capacity 22ml). Put one full squeeze bottle of water into the empty boiler. Use distilled water to avoid calcium and other mineral buildup. Fasten the safety valve. Never over fill the boiler.
12. Oil the piston when there is no pressure in the boiler (only 1 drop steam engine oil). Oil the steam valve (only 1 drop steam engine oil). Steam Engine oil is available at www.ministeam.com
13. Shorten the two wicks of a new candle to 6-7 mm and place it in its cavity and light both wicks. Make sure that the flame burns vertically or there won't be sufficient steam pressure in the boiler.
14. **Caution:** because of the risk of danger from an open flame, always take the necessary safety precautions. If there is not enough water in the boiler, i.e. if the engine stops after about 15 minutes extinguish the candle. During normal operation steam and condensate escapes!
15. After 10 minutes of pre-heating turn the flywheel by hand. The steam engine will start running.
16. After use, let the engine cool completely before touching. After the engine has cooled remove the boiler from its support. Remove the soot at the bottom of the boiler. The soot can build over time causing the boiler not to heat properly.
17. **Attention:** The soot can cause stains. Clean over a sink or over a surface that can be washed with soap and water. Dry the model using a clean cloth.

Guarantee:

MiniSteam Steam Engines are carefully checked before leaving the factory. If a problem arises, you can return the Steam Engine to a specialized distributor or directly to MiniSteam. Already fired or used models cannot be returned. Any non functioning engines will be repaired or replaced as needed. This Steam Engine is only meant for the above described function. Technical data can be amended without prior notice. MiniSteam wishes you many hours of fun with your steam engine.

MiniSteam

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