

# **HK500**



Pressure Lamp

**User Manual** 

# **CAUTION** ①

**CAUTION!** Remove the pink packaging rings around the glass before using the lamp for the first time.



## **User Manual for Petromax Pressure Lamp HK500**

#### Read these instructions carefully and keep them in a safe place!

#### **Cautions**

- Only use the lamp outdoors. Do not use indoors!
- The lamp must not be used close to objects that are flammable or sensitive to heat!
- You must not place the lamp on delicate surfaces!
- Over time, the hood may discolor due to the high heat generated. This is no defect, but a normal process.
- Never leave the lamp unattended while it is in use!
- · Only use kerosene. Do not use scented or colored oils!
- This lamp must not be used by children! Keep out of reach of children and animals! This lamp
  is not a toy!
- You must not cover the lamp!
- Risk of fire! You must not touch the lamp above the tank during use or 1 hour after use. After use
  let it cool down entirely!
- Release the pressure completely after each use by opening the bleeder screw!
- · When stored in filled condition, the manometer and the carburetor must be turned off!
- Never add or remove fuel while the lamp is in use!
- Always use original Petromax spare parts. The warranty is void if you use other spare parts!
- · We assume no liablity for any misuse!
- You must not stare into the incandescent mantle!
- · You must not inhale the smoke emitted by the burning incandescent mantle!

## **Product description**

The Petromax is the most well-known pressure lamp in the world. It has been widely used for more than 100 years as a weather-resistant and reliable external light source. It provides an output of 500 CP (Candle Power). The brightness level cannot be adjusted. With the appropriate accessories, the lamp can be used for heating or converted in an efficient way to cook.

## Scope of delivery

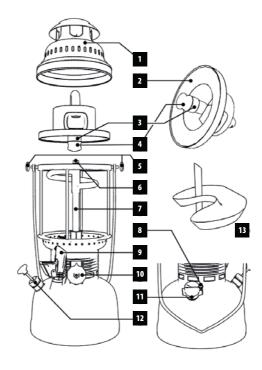
Your Petromax lamp comes with a package that contains the following items:

- 1 x funnel
- 1 x accessories and spare parts set (6 pieces)
- 1 x fuel can
- 2 x incandescent mantle

## **Parts description**

The Petromax lamp is composed of more than 200 individual parts. The figure below shows all main parts. You will find a complete overview of all parts on www.petromax.com, or contact our customer service for further information.

- 1. Hood
- 2. Inner casing
- 3. Mixing chamber
- 4. Burner
- 5. Knurled nuts
- 6. Spray nozzle + needle
- 7. Carburetor
- 8. Bleeder screw
- 9. Rapid preheater
- 10. Handwheel
- 11. Manometer
- 12. Hand pump
- 13. Preheat cup



## Using the lamp

#### Prior to starting the lamp

- · Damaged mantles must be replaced immediately.
- Make sure that needle, spray nozzle, mixing chamber, and burner are properly tightened and connected.

#### Starting the lamp

· See "Starting: Step by Step."

### After starting the lamp

 When the pressure falls below 1 bar, carefully add pressure to the tank using the hand pump (approx. 2.5 bar).

#### **Extinguishing the lamp**

- To extinguish the lamp, release the pressure via the bleeder screw.
- In the case of unpredicted flames development, open the bleeder screw immediately.
- Finish by turning the handwheel upward.

## **Troubleshooting**

#### The pump does not work properly.

Pull out the pump plunger, grease the leather seal and gently widen the leather seal (replace it if necessary!). Push the pump plunger back into the cylinder of the pump by turning the pump plunger.

#### The upper part of the lamp catches fire.

Preheat the lamp for at least 90 seconds using the rapid preheater. When pre-heating with the use of fuel (preheat cup), use at least two full cups of fuel.

### The incandescent mantle does not burn properly.

When using the rapid preheater, position the incandescent mantle in a way that it can easily catch fire via the rapid preheater.

#### The rapid preheater does not ignite/burn properly.

Ensure that there is neither too much nor too little pressure in the tank. The manometer needle should be just below the red line! If necessary, clean the nozzle of the rapid preheater with the cleaning needle included in the spare parts set.

#### The light flickers or gets darker.

Make sure that there is enough pressure and fuel in the tank. If necessary, rapidly turn the handwheel 360 degrees to free the spray nozzle of any particles via the needle.

#### The clay burner falls off.

Replace the clay burner and the mixing chamber for the thread size changes over time.

## Preheating the lamp with denaturated alcohol

The Petromax HK500 comes with a preheat cup in addition to a rapid preheater. Preheating with denaturated alcohol is more gentle on the mantle.

#### Preheating the lamp through the preheat cup

- · Preheat for at least 90 seconds.
- Sprinkle the new mantle with denaturated alcohol.
- Fill the preheat cup with denaturated alcohol using the fuel can.
- Burn the denaturated alcohol in the preheat cup and wait until the cup has burned to thepoint of being empty.
- Again, put denaturated alcohol in the preheat cup and ignite it.
- Wait until the denaturated alcohol has almost completely burned out, and then turn the handwheel (with the nose pointing down).

## Warranty

Under proper use, a warranty period of two years will apply to your Petromax pressure lamp from the date of purchase. This does not apply to normal wear and tear. If you cannot use your HK500 due to a defect in material or workmanship, you are entitled to a warranty repair. Contact your dealer for that purpose.

#### **Service**

If you have questions regarding the contents of the manual, or if you need additional information, please let us now. You can contact our customer service via e-mail at: services@petromax.com. Further technical advice is available in the service area at www.petromax.com.

## Starting the lamp: step by step

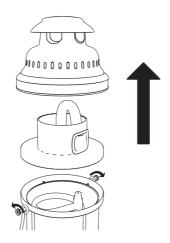
Before using your Petromax lamp, read the Cautions very carefully.

You must not inhale the smoke emitted by the lamp, its parts, and the mantle!

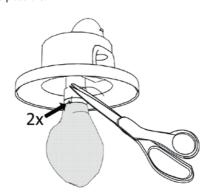
The lamp must not be used indoors!

## Step 1

- · Loosen the knurled nuts.
- · Remove the hood and the inner casing.

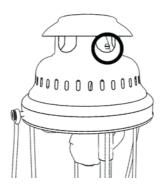


- Tie the mantle to the burner bead with a double knot. Do not tie the mantle to the mixing chamber!
- Trim loose threads as short as possible.



# Step 3

- Install the inner casing and the hood (for older models of HK500 make sure that the regulating screw at the mixing tube is visible).
- Tighten the knurled nuts by hand.

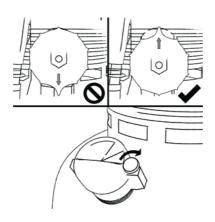


- Unscrew the manometer.
- Add fuel to the tank (see Cautions).

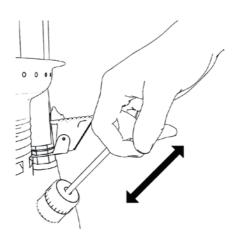


# Step 5

- Make sure that the nose is pointing upward.
- Screw the manometer onto the tank by hand.
- Make sure that the bleeder screw on the manometer is properly tightened.



- Unlock the pump by turning the pump knob.
- Repeatedly push the hand pump's plunger until 1.5 bar (red line on the manometer).



## Step 7A

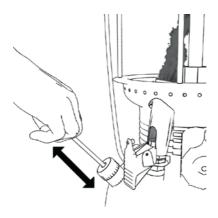
• Push the lever of the rapid preheater downward, and immediately ignite the flowing fuel with a lighter.



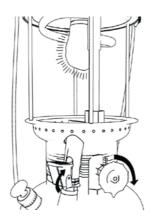
## Step 7B (with new mantle only)

- With a newly installed mantle, close the lever after approx. 10 seconds. Let the mantle burn down completely until dyed grey appears, and make sure that the mantle has no black bits.
- Finish by pushing the lever downward and immediately ignite the flowing fuel.

- Repeatedly push the hand pump's plunger to keep the pressure at 1.5 bar.
- The rapid preheater will now preheat the carburetor. It must be preheated for at least 90 seconds. The time needed depends on the outside temperature.



- After 90 seconds, turn the handwheel nose down.
- As soon as the lamp lights, close the lever of the rapid preheater.
- Bring the lamp to operating pressure (2.5 bar).





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