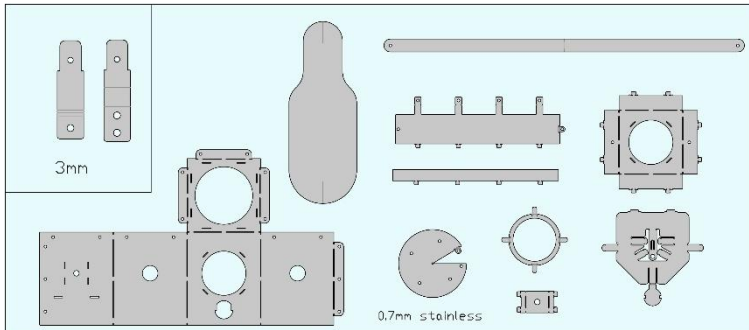


Lamp assembly instructions July 2026.

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Although the lamp is not in any way intended to be a scale model, I hope that it captures the feel of the real thing. It stands 275mm from base to the top of the handle, and the body is 85mm square. The lens is 60mm diameter. The lamp is surprisingly effective, and takes a tea light or a rechargeable cycle lamp. With the tea light in use enough air is drawn in through the base and out at the top to stop it getting too hot, but I would advise that care should be taken. The kit includes the laser cut stainless steel parts, enough pop rivets and the glass lenses.



The laser cut parts



You will find the job of bending the tabs a lot easier if you use a pair of these parallel action pliers.

The Handle



You can either bend the handle with a simple curve and fit it facing front to back as a hand lamp, or with the necked shape designed for hanging on a wagon coupling hook and fitted side to side.

Take the handle and carefully curve it to follow the outline of the jig. The centreline of the handle is marked and lines up with the mark on the jig.

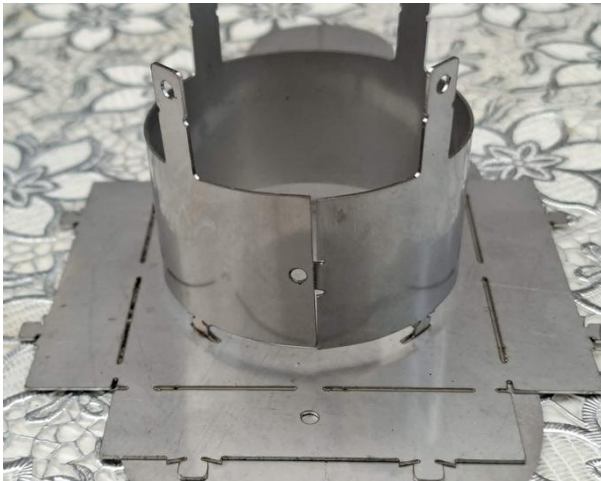
The 'coolie hat'

Now for the 'coolie hat' that goes on the top. Put a joggle in the little bracket so it will sit flush with the underside when folded, the bend lines are marked. Take a length of round timber, such as the top of a broom handle, and clamp it in the vice with about 75mm projecting. The coolie hat is gradually curved down over the wood with your fingers, rotated a little, curved down, and rotated again until it forms the right conical shape and the holes line up. A little help from a rubber hammer may be needed close to the joint

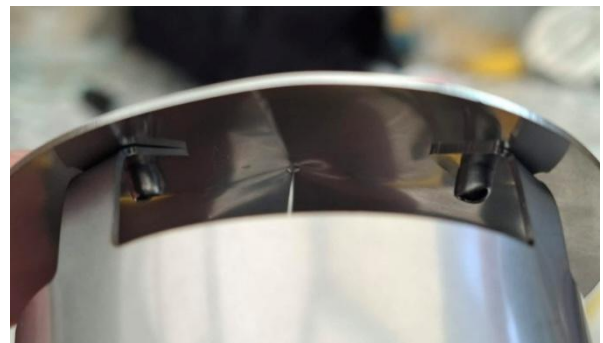
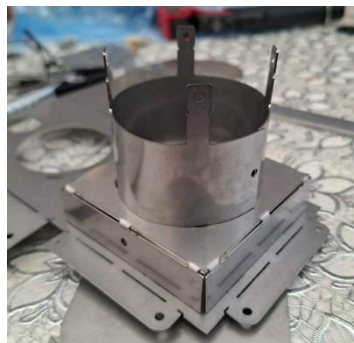
Add a pop rivet. Place the 'coolie hat' on a flat surface and smack it a few times with the rubber hammer until it's bottom edge is flat. Generally tweak it until the shape looks even and sits right.



The top assembly

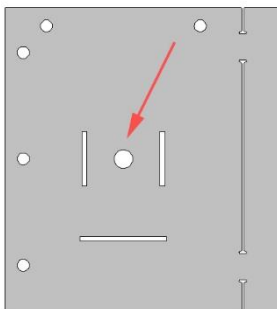


Put a joggle in the tab as you did for the coolie hat and roll the top cylinder round something like a tube of mastic with your fingers until the edges line up nicely, a little help from a rubber hammer will be needed near the join. Add the pop rivet and tweak the tube until the tabs line up with the slots in the body top. The aim is to have the pop rivet at the back, you can see left above that the hole for mounting the handle is also at the back so this would be correct for a round topped handle used as a hand lamp. Centre below shows the holes positioned at the sides for the necked handle.



The four edges of the top are folded by simply pressing them against a flat surface. Once folded check that the tabs fit the slots in the body top and then take a fine file and round off all the sharp edges. You can now assemble the cylinder to the top by pushing the tabs fully home and twisting them slightly to secure it in place. Bend the tops of the brackets at the marked lines to match the slope of the 'coolie hat' and pop rivet it in place with the join at the back.

The body



You may wish to tack weld an M6 nut to the inside of the back where shown by the arrow. This will allow you to pass a bolt through the mounting bracket to stop light fingers just lifting the lamp off and spiriting it away. Pass a bolt through the hole, tighten the nut on it, tack weld and remove the bolt.

Time to fold the main body, which should be self-explanatory. The folding is done by hand by pressing the flanges against a flat surface.



First fold the three flanges on the body top and fit the top and cylinder assembly, slightly twisting the tabs as shown to lock it in place. There are two holes in the sides of the top section to fit the handle, locate them at the sides for the necked handle or front and back for the round topped handle.



Fold the flanges on the mounting bracket and fit it to the outside of the back, twisting the tabs slightly to lock it in place.

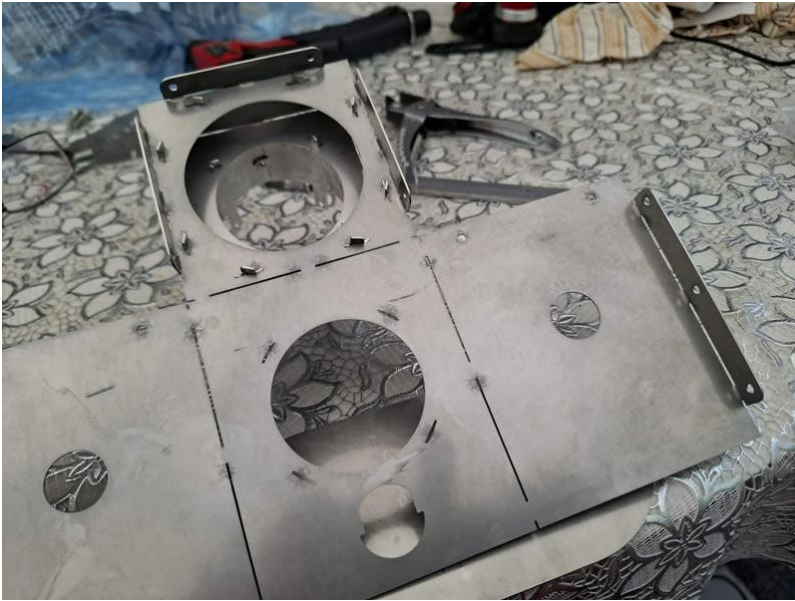


Roll the lens ring round the mastic tube until the ends meet neatly as you did for the top cylinder, using the 60mm lens as a guide, the slight gap should be even all round. Check that the tabs fit the slots in the body front with the join at the bottom and pop the lens in to see how well it fits. Finally fit by pushing the tabs fully home and twisting them to lock the ring in place.

(The tab with the pop rivet hole seen in the photos has since been deleted as unnecessary.)



Hold the lens mounting ring as shown and fold down the four tabs using another pair of pliers, then fold the tips in slightly so that it will slide smoothly, but tightly, into the lens tube. The flat back of the lens is carefully glued to the ring with clear silicone sealer, removing any excess.



Fold the flange on the right of the photo, then fold the body sides and top until the pop rivet holes line up nicely. Pop-rivet the 9 holes and you have a body ready for filing the corners smooth and then filling the slots with body filler or decorators mastic.

Fixing the handle is probably best left until after painting, the pop rivet is pushed through with a washer added between the handle and the body top.



The lamp holder



Bend up the five tabs in the middle, and bend out the tops of the four smaller tabs as shown left above. These will hold a tea light, so adjust them until they hold it securely. In the middle of the long tab is a smaller tab, fold it out then back in on itself as shown in middle above. Bend the two outer tabs down and then slightly back in at the ends so that they will lightly grip the inside faces of the body when the lamp holder is pushed up inside. These two tabs will centre the lamp holder in the body and stop it rattling.



Bend the handle tab down to about the angle shown left above, gripping it so that the fold is made between the marked lines. Try the lamp holder in the body, slide the back edge up inside the body until the two tabs engage in the slots in the back, then push it up until the round button engages in the round hole as shown right above. This may take a bit of tweaking, but when its right it will lock the lamp holder securely in place whilst allowing quick removal by pushing it in and down.



Two different LED lights can be used, both can be set for a constant light or a flashing light to meet modern requirements. The rechargeable ones on the left just need the straps pulling off then they fit as shown middle above, bend the tabs as needed to grip the lamp tightly. The one on the right is not rechargeable and simply fits with an M5 screw.



If you are going to use a tea light in your lamp you will need to make a red filter to pop behind the lens, I used 3mm translucent red acrylic marked to 57mm diameter with a set of compasses. You may also choose to add a diffuser to stop the LED or tea light being quite so visible from outside, I cut mine from an old light fitting but you could use clear perspex and a frosted sticky backed film.



Left, LED without diffuser.
Right, LED with diffuser.



Painting

I put decorator's paintable mastic into all the slotted folds and smoothed it with a wet finger as I went along. I cleaned the outside of the body with panel wipe then sprayed the outside with a coat of etch primer, trying to get into all the nooks and crannies, then a couple of coats of automotive white. Don't forget that the round button on the lamp holder will be visible and also needs to be painted.

After painting the small glass lenses are placed into the holes in the sides from the inside and held in place with superglue and the main lens and any filters fitted are pushed into place.

The kit includes;

all the laser cut parts in 0.7mm stainless steel,

Main lens 60mm flat backed glass cabochon 1 off

Side lenses 20mm flat backed glass cabochon 2 off

3mm dia x 4mm long blind pop rivets 20 off

M3 washer 2 off