

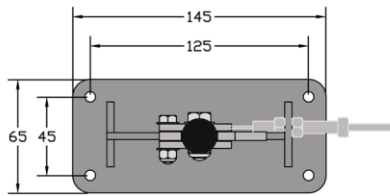
Instructions for vertical handbrake

Colin Edmondson July 2025

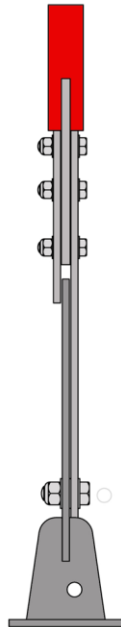
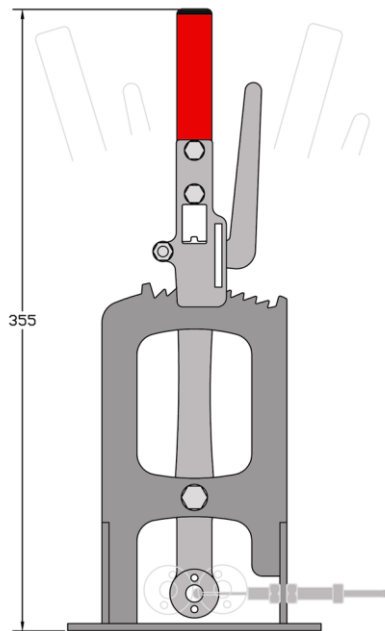
Before painting the laser cut parts need all the cut edges cleaned up on to remove any black residue, a simple wire brushing is sufficient. Most parts will have a tiny tab where the cutting begins and ends, this isn't normally a problem but occasionally it occurs where two parts will mate together or a bearing is fitted and needs to be filed flush.

The handbrake cable is led out from the rear of the lever as shown below, the lever is pulled to the rear to apply the handbrake.

The handbrake lever should be fitted to the footplate with M6 screws and nyloc nuts.



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Welding.

If you have an unwelded lever base then slot the 'A' frame into the base, fit the two brackets and clamp across the brackets. From underneath weld through the slots in the base along the bottom of the tabs, then turn over and weld the brackets to the 'A' frame then clean up with an angle grinder.

If not supplied with your kit cut a 100mm length of the 20mm by 2mm wall mild steel tubing and clean up the ends, then drive it onto the end of the handle with a rubber mallet or a hammer and a block of wood, then fit the push in cap, again with the aid of the rubber mallet. If the tube is a loose fit on the lever then first squeeze the tube slightly in the vice and try it again.

Assembly

> File a 45 degree chamfer on one side of the pawl as shown, ending with a slightly rounded nose.



Round off the sharp edges on the latch lever and assemble the parts of the lever top as shown with M6 x 25 screws. The side of the pawl that you filed a taper on is away from the camera in these photos. Loosely assemble the lever and handle with M6 x 25 screws and nyloc nuts. Once you are sure that the parts are the right way round and the cable will line up with the holes in the rear bracket you can align the parts so that the two slots are perfectly parallel and the latch slides freely up and down and tighten the screws, the one used as a pivot only wants to be tightened enough to stop it rattling. Add the return spring.



The moulded end of the heavy duty handbrake cable is trapped into one of the two slots in the lever by the two discs which are fixed either side of the lever with two M4 screws. Fit the lever with an M8 x 20 screw as a pivot, with thin (form B) washers both sides and between the lever and the quadrant, and a nyloc nut. The tightness of the nut controls the stiffness of the brake lever, so don't over tighten it. Leave the oiling of the moving parts until after painting.

The brake cable is routed as shown in light grey in the diagram above, with a second M8 plain nut to lock the adjuster in place. The cable outer is cut to length with either an angle grinder or a pair of sharp side cutters. (Don't forget to take the inner out first!).



Clean up the end with the grinder so that the inner passes through smoothly. The outer cable may need it's plastic coating removing for 6mm or so to allow it to enter the adjuster, which is fitted as shown. The adjuster comes with a single nut, the extra nut is a plain M8 one to lock the adjuster in place. (This photo is from a Scamp loco, the principle is identical).

After painting I finish my handbrake levers by sliding a length of red heatshrink tubing over the lever and use a heat gun to shrink it in place.



Shopping list

Vintage motorcycle heavy duty universal cable set 1 off
for brakes as per photo

Heatshrink tubing for brake levers, 25mm red, 100mm

