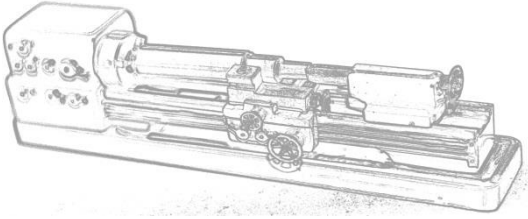


Horizontal Lathes

Kit number – HO/PN/HR Small, HO/PN/HR Medium, HO/PN/HR Large, O/PN/OM



Assembly Instructions

There are 7 parts that need to be assembled to make this machine. The colour of choice is at your discretion. We recommend acrylic paints, as this allows for added detailing with enamel paints afterwards. Colour suggestion – light greys, a dark blue grey or a Lister green. These need to be mixed to make up these colours. This model can be permanently glued with superglue, or it can be assembled to be animated in different static displays.

1. **Drilling** of all holes and spacers supplied for attachment of wheels and feed shafts to be done according to instruction manual on this. N.B. This needs to be done before any actual assembly and any main colour painting begins. (**NOTE** – The large and O-scale lathes have an extra wheel on the saddle for a specialised screw-cutting attachment or tapering attachment)

2. **Cleaning and preparing** – once the holes have been drilled and spacers added for the attaching of the wheels, the machines can be cleaned and

surfaces filled (if necessary) and prepared for painting.

3. **Assembly** - Remember that the styrene rods and spacers need to have been prepared and in place prior to assembly. Main colour painting needs to have been done.

4. **Main body detailing** (all in colour of choice) – back cover plate door, drill hole through spindle if you like, levers, speed and feed adjustments, lead screw lengths, end plate with bearing housing and bolts, bedway and swarf channels. (NOTE – the swarf channel and the inner part of the base plate of these lathes are usually painted cream or red)

Base of lathe to be painted the same colour or colour of choice. (NOTE - O-scale base plate – levelling feet on front and back, cover plate on the front and back head stock side of the base, as well as the hinges at the back of the base for access to the swarf tray and the coolant pump cover plate need to be highlighted.

Chuck with jaws, bed ways and lead screws – painted in a steel colour.

Saddle which sits across the bed way- painted in the same colour you choose to paint the lathe with. The top bed way on the saddle, however, to be painted in steel colour.

Tailstock to be painted the same colour as the main body of the lathe. The adjustment shaft on this component is to be painted in steel. Levers and locks need to be highlighted.

The roller provided must be painted with steel as it is still being machined. Actual sizes of these rollers are as follows – Small lathe 17"/460mm by 8ft/2.6m, Medium lathe 26"/660mm by 10ft/3m, Large Lathe 39"/1m by 14ft/4.3m.

All fine feed and adjustment brass-etched wheels – painted in red generally (suggestion only)

These can now be glued in place before final assembly takes place.

Excess shafts sticking out of the end of the brass-etched wheels can be nipped off and touched up with colour of choice.

Assembly

5. You are now ready to assemble the machine with either Prestik or superglue depending on your layout/choice as mentioned before.

6. Place main body (1) on base plate (2) either by way of glue or screwing on with small recessed self-tapping screws.

7. Assemble chuck (3) into main spindle shaft on headstock.

8. Assemble saddle (4) onto main bedway with levers and wheels facing you. Mount steel roller (5) into chuck and line roller up with tailstock shaft (6) and it's centralised hole already drilled with a 0.8mm drill and the provided piece of styrene rod.

9. Place the cross slide and toolpost holder (7) onto the top bedway of the saddle. The toolpost holder must be facing the chuck.

10. Your model is now fully assembled.

11. Suggested paints – Humbrol Metal cote colours (Polished Steel no. 27003 or Gunmetal no 27004)) especially for the bedways and chuck. These two colours are exact simulations of steel, one being hardened steel and the other normal free-machining steel. This needs to be polished with a soft cloth after drying and will look like the real thing once dried and polished. I recommend that you try this on scrap styrene card stock first and then polish to suit. You will see what I mean!

Parts list - HO large

Item	Description	Quantity
1.	Main body	1
2.	Base plate	1
3.	Chuck	1
4.	Saddle	1
5.	Steel Roller	1
6.	Tail stock	1
7.	Tool post holder and cross slide	1
8.	2.2mm x 1mm thick shaft spacers	2
9.	Brass-etched wheels	2 x 5.4mm 2 x 3.4mm
10.	Styrene rod 210 (.030"/0.75mm) x 30	2 lengths

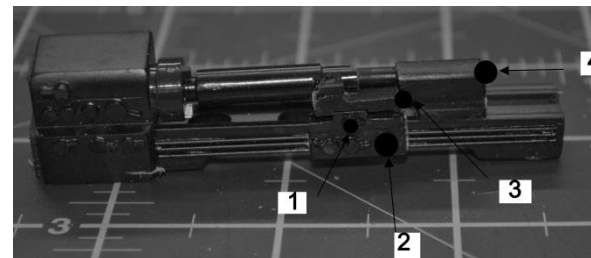
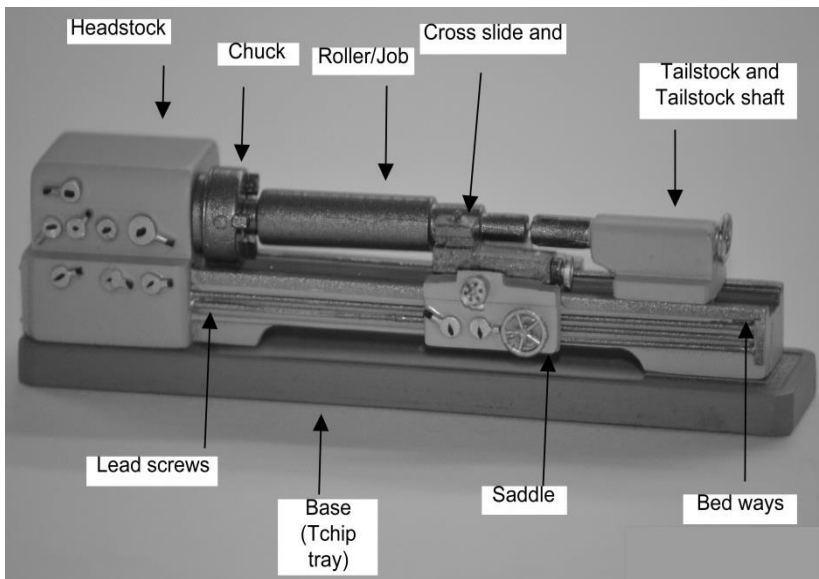
	mm long	
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When ordering replacement parts, please specify kit number, item number and description.

Parts list for O-scale lathe with different base -rest of parts as for HO Large lathe

Item	Description	Quantity
1.	Brass-etched wheels	2 x 5.4mm, 2 x 7.4 mm
2.	Base plate	1
3.	Chuck (Large HO 4-jaw and 8-jaw)	2

Picture showing parts of the machine



Pictures showing positioning of adjustment wheels/brass-etched wheels. Note – No 5 is an added wheel to the Large HO scale lathe and No 2 has a 7.4mm first and then inside has a 5.4mm wheel

