

# MISSENDEN ABBEY RAILWAY MODELLERS WEEKEND

## Recommended tool and equipment lists

### Locomotive Kit Construction

#### Essential

- 12"/300mm rule - **engraved scale** rather than etched in either inches and millimetres or wholly millimetres, stainless if possible. Fluxes and acids in the skin will corrode the surface and make it less easy to read if it is not stainless. Buy the best.
- 3" Engineers square
- Scriber - Engineers double ended.
- Files.
- 6" Flat hand file fine cut + handle. Used to clean up etched edges.
- 6" Half round hand file fine cut + handle. Used to clean up etched edges.
- Swiss files
- Flat parallel - medium cut - cutting faces on sides and edges.
- Flat taper - medium cut - cutting faces on sides and edges
- Three square (triangular) - medium cut.
- Half round - medium cut.
- Round - rough and fine cut.
- Drills
- Microbox - Metric or Number set.
- Pin vice to hold drills - 4 way. Or English pattern 4 piece set.
- As an alternative to drills:
- 6 piece Cutting Broach set 0.7 - 2.0 mm. Ideal for opening up holes in etched brass components.
- Pliers
- Flat nose - check that when shut the jaws close together along their whole length. Hold up to the light to check.
- Long nose - same check as above.
- Side cutters - Xuron are ideal for all cutting purposes, wire and nipping through etched component attachments.
- Scalpel
- No.3 Handle with blades 6(curved) and 10A(straight)
- or No.4 with Sabre B/23 blade
- A small clamp-on vice, 3-inch wide jaws.
- Check the jaws come together parallel. They usually have a cross cut gripping surface rather than smooth. If you need to grip something without marking it shield the jaws with some lead sheet.
- Soldering iron and stand
- Antex 25 Watt **OR** Weller 25 Watt - suitable for electrical soldering
- Weller 40 Watt - suitable for 7mm etched kits smaller work
- Weller 75 Watt - suitable for 7mm etched kits most work.
  
- **OR** A temperature controlled iron. Useful as it can be used for soldering both whitemetal and brass/nickel silver by dialling the appropriate temperatures.  
See <http://www.blundell.co.uk/> for the Ersa 2000A or similar.  
Choose a bit with a chisel shaped end.

- Solders.
- Carrs 100° C for whitemetal-will also solder brass and nickel silver.
- 145° - for brass and nickel silver.
- Flux
- 10 -12% Phosphoric acid for brass, nickel silver and especially for whitemetal.
- **OR** - PowerFlo plumbers flux for lead free solder for brass and nickel silver.
- Also needed a Workspace – a piece of mdf 9mm thick 24” wide x 18” wide with a ½”square stripwood edge around three sides and on the front underneath to provide a stop against the edge of the table it is placed on. Give it a coat of varnish all over. This provides a cheap work surface that will protect a table and can double up as tray so items may be left on it when it is put away at the end of the day.
- Finally, either an Anglepoise lamp or a small halogen bulb desktop lamp.

### Nice to have

- Electric drill-minicraft Model 1012 100W with speed control is best.Dremels are too fast.
- Fretsaw/ piercing saw and V- table, selection of blades. High number of teeth on a blade for thin metal, fewer for thicker.
- Hammer – 2oz. Miniature ball pein- used to set small rivets.
- Taps and Dies – 6, 8, 10, 12BA. 14BA.
- Stanley knife – with a metal handle!
- Jewellers pattern Tinmans shears
- 3” Engineers dividers
- Butane gas Pencil Torch.
- Straight reamer: 1/8” diameter for 4mm and 4.8mm diameter for cleaning out 3/16” axle bushes for 7mm Locos
- Taper reamer
- 3mm to 12mm

### For Chassis Construction

- A chassis jig such as that supplied by Avonside Works (Eileens) or Hobby Holidays
- See: <http://www.avonsideworks.com/index.html> or <http://www.hobbyholidays.co.uk/>
- This will suit both rigid and sprung/compensated chassis construction.
- An alternative is the Jury Axles with tapers on the ends that pick up coupling rod centre and transfer them to align the bearings in the chassis.(with compression springs to hold the hornblocks against the chassis side.)
- See: <http://www.meteormodels.com/> or <http://www.metalsmith.co.uk..>