

Maintenance Chart for Steam Locomotives

| Locomotives (Steam) Area of Attention | Maintenance Operation | Remarks |
|---------------------------------------|---|---|
| Wheels | Clean wheels noting that there can be a build up of dirt on the "flanged tyre" | Clean with paraffin and dry. Lubricate bearings using a good quality machine oil. |
| | Check back to back dimensions of wheels and ensure that all sets of wheels are all inline. (Generally only applicable where adjustments are available such as those that can be converted between 32 and 45mm gauge.) | Back to back dimensions for 32mm = 28 ±0.5mm and 45mm = 40 +.5 -0mm |
| Valve Gear | Clean and check that all parts are secure and fixings are tight, ideally in mid gear to facilitate easy movement of the assembly. | Clean with paraffin and dry. Lubricate with steam oil. Do not attempt to alter the position of the valve gear unless you are competent to do so. |
| Cylinders | Clean and check that all parts are secure and fixings are tight. Check that gland nuts are secure and screwed in sufficiently. Do not over tighten | Loose gland nuts can lock up the drive as well as waste steam |
| Boiler | Examine all pipe work to boiler and ensure that it is secure and functional. If the locomotive has been subjected to hard water use it is advisable to consider descaling with a propriety kettle cleaner. | The water should have been drained from the boiler after the last run if it envisaged that it will not be run for some time. |
| Gas Tank | Check that all pipework associated with the gas tank is in sound condition. | Our insurer does not require a pressure test if its volume is below 250ml. |
| Gas Regulator | Check that the operation of the regulator is smooth and does not bind. | Ideally a gas tank should not be left with gas inside nor should the regulator be left closed for long periods of time. |
| Gas Jet | If you suspect that the gas jet is blocked remove it and look through the small hole for any obstruction. | It is not good practise to clear obstructions in a gas jet with a piece of wire as this can damage the bore of the jet. Ideally an ultrasonic cleaner cellulose thinners should be used to clean a gas jet. |
| Safety Valve | Remove the safety valve and with a suitable blunt implement push the sealing ball away from its seat to ensure that it is free to operate. Spray with WD40 ensuring that non enters the boiler. | Do not adjust the valve setting as this could compromise safety unless you have the equipment to reset it.. |
| Regulator | Check that the regulator operates smoothly and that the gland nut is secure. Note that radio control servos should be checked for correct operation. | Ideally this should be left in the open position after each run. |
| Steam Test | Prepare locomotive for running and monitor pressure gauge as steam is raised. Note at what pressure the safety valve lifts. This should coincide with the set point on the gauge indicated with a red line. | This is a recommendation of our insurance cover and mandatory for all locomotives above the 3bar/litre limit. It is a good idea to check this each time you "fire" your locomotive. |
| Smoke Box and Plate Work | Check that the smoke box and plate work are secure on the locomotive and that all items are clean. Any touching up of paint should be done at this point. | It makes a visible difference if all brass and copper work is polished. |
| Couplings | Check that the couplings are secured to the buffer beams. | There are many different style of couplings available, each functioning in a different way. Check as appropriate. |
| Radio Control Equipment | Check that all rechargeable batteries are fully charged. Replace alkaline batteries as required. Check operation of all servos. | It is good practise to remove the batteries from a model or transmitter if they are not going to used for any length of time. |
| Rolling Stock | As per wheels and couplings as described above. | It also a good time to check over the body work and make good any defective parts. |