

Unit 11 Vale Park Colomendy Industrial Estate Denbigh. North Wales. LL16 5TD Tel No: +44 (0) 1745 815 222 Fax No: +44 (0) 1745 815 333 www.steammodels.com e-mail mss@steammodels.com

WARNING

Due to the use of fire, this locomotive is for out door use only.

Instructions

Boiler Cleaning: The boiler must be thoroughly washed out before running a new engine. Remove safety valve, half fill boiler with hot water and add a few drops of washing up liquid. Replace valve and shake vigorously for 30 seconds. Remove valve and empty contents (depress whistle lever to allow water to escape freely). Repeat several times, using hot water only, until all trace of soldering deposits are removed.

Handling: Please note that most parts of the loco will be too hot to touch with bare hands while raising steam and soon after running. It is advisable to place the loco on track for filling and lighting, to avoid excess handling. If handling the loco while hot, it must be held by the cab roof at the rear and with the coupling ring at the front.

Boiler Filling: Remove cab back by depressing catch and withdrawing to the rear, to allow access to the burner and boiler sight glass. Remove safety valve and using the funnel, fill boiler with hot water to MAX on the sight glass. (120 ml). Approximately half a normal cup full.

Firing: Use only MSS solid fuel with this engine. Remove burner tray by lifting and withdrawing to the rear. Break or cut one tablet and place both halves into the burner tray. Light tablet from the front end and hold burner at an angle, to allow the rear half to ignite. Slide burner tray under the boiler by guiding front tags into slots and clip rear end, into the cab floor. The cab back must be securely replaced before running.

Starting: Allow about 2 minutes to raise steam. Water will appear around the cylinders and steam will issue from the chimney (control lever open). A gentle push in the required direction will set the loco in motion. Water consumption may be excessive during initial running, due to priming. The water level must be checked carefully and if the water level falls to the 'MIN' mark on the sight glass, the burner must be removed immediately. It is recommended that distilled water be used for the boiler in hard water areas.

Running In: As with any engine, the best performance will only be achieved after a period of running in. While the loco is new, performance may be sluggish and several runs will be required before full power is achieved. Water loss around the cylinders and reverse valve (priming) will only cease when the unit is fully run in.

Priming: This is characteristic of most steam engines. This is water loss through the cylinder or reversing face. It is quite normal during early runs and varies with each unit. This will gradually reduce as the unit settles in. Careful observation of the instructions, lubrication in particular is essential. **Lubrication:** Axles, crankpins, cylinder faces, piston rods and valve face must be well oiled, before each

run. The piston rods and cylinder faces should be oiled occasionally, during each run. MSS steam oil is recommended.

Control: Excessive speed will result in derailment and careful use of the speed control is essential to avoid this. Speed and direction is controlled by the lever at the front of the loco. With the lever in a vertical position (off) no steam is admitted to the cylinders. Moving the lever to the right (as seen from the front) gives forward direction and to the left, backwards. Movement of this lever gives progressively more steam to the cylinders and thus more speed. Due to the many variables of load and conditions, familiarization with the control lever setting is required to give the steadiest performance.

Boiler Specification: Volume: 120cc. Maximum operating pressure:0.7 bar. The above operating instructions must be followed, if you are to obtain the best performance, from your locomotive.

Safety:

DO NOT hold down the safety valve or tamper with it in any way.

<u>DO NOT</u> remove the safety valve while there may still be pressure in the boiler.

DO NOT overfill the burner or boiler.

DO NOT allow the loco to run at excessive speed, which may cause derailment.

This model is designed for adults and outdoor use and because fire and boiling water is in use

due care must be taken at all times.

<u>DO</u> ensure that a suitable metal container is at hand to place the burner tray that may have unspent burning fuel.

Remember to oil your loco before and after use.

