

Kent & East Sussex Railway

Operating Department Mutual Improvement Class

Andyh@kesr.org.uk

www.kesr-operating.co.uk



Locomotive Cleaning



Created by: Jasper Pryer

Authorised by: Andy Hardy

Version: 2 Date:03/03/2015

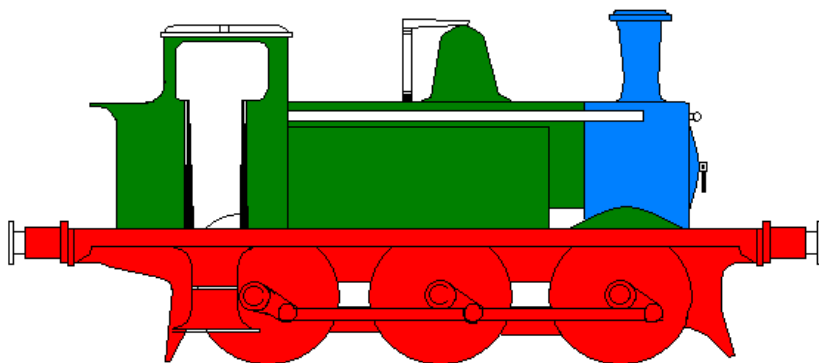
The cleaners job is an important one. Every passenger that travels on our trains will look at the locomotive hauling it. A clean locomotive is not only important to our customers but also to the staff who work on or maintain the locomotives.

The locomotive cleaner's job is to assist the steam raiser with his duties and to also ensure the locomotive fleet is kept clean whilst learning about the basics of steam locomotive preparation and maintenance. Cleaners should take the opportunity whilst working in the depot to ask questions to develop their knowledge and experiences and actively seek out opportunities to carry out new work to develop themselves. Work may also be assigned to cleaners by the locomotive driver or fireman whilst they are preparing their engines.

Before you begin to clean make sure that you have protected yourself with a "not to be moved" board and chocks as necessary. If a "not to be moved" board is already present on a locomotive you must find out whose board it is and ask them for permission to work under their protection.

When using a cleaning tower please ensure you only use it when all the brakes are on and it is secure. When work on it is complete they must be moved to a position of safety and left secure so as not to foul any train movements or walkways.

Whenever you are working at height it is important that three points of contact are maintained at all times.

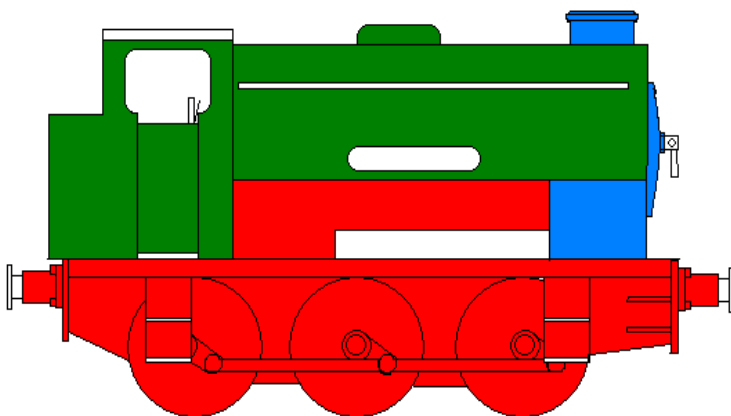


GREEN: These areas should be cleaned with a mixture of 220 oil and paraffin.

RED: These areas may be cleaned with mixture containing mostly paraffin with a dash of oil

BLUE: These areas may be cleaned down and covered with a small amount of 680 steam oil to bring up to a shine.

For further instructions please refer to the notes below.



Personal protective equipment should also be worn when cleaning locomotives. Overalls and similar should be worn along with steel toe cap boots whilst working on the depot. Disposable gloves are available around the site and should be worn when handling cleaning materials.

For cleaning painted platework a mixture of paraffin and 220 grade oil is used. These should be mixed at an approximate ratio of 1 part paraffin and 4 parts oil. If the mixed cleaning oil feels silky between your fingers then it is correct. If it feels grainy there is too much paraffin in the consistency and or if it feels slippery it contains too much oil.

First put a little of the cleaning mixture onto a clean dry rag before wringing it out to leave only a small amount of mixture present. Then apply it to the locomotive in small areas at a time using a small circular motion to ensure ensure all areas are cleaned and that the dirt is lifted. Next remove it using a soft dry clean rag buffing it again in a circular motion, if you see any spots that have been missed a general buffing should spread the remaining oil over the area to clean it. When cleaning bodywork it is advisable to leave cleaning the saddletanks or the top of boilers until the engine is in steam and the blower on to avoid smuts being deposited over your already clean paintwork. Likewise it is often beneficial to wait until the locomotive has been coaled before cleaning the bunker and rear bufferbeam. Locomotive frames, wheels and motion can be cleaned with a mixture of paraffin with a small dash of oil but applied with a brush before removing with a rag.

Some Locomotives have burnished bare metal rods. To clean these rods some fine emery tape should be used. This can be acquired from the Steam Raiser or Running Foreman. When using emery tape it is important to only rub in one direction, either up and down or left and right as this will give the best results. Once all the surface tarnishing has been removed you can cover the rods with waxoil to help preserve them. To apply waxoil pour a little onto a clean rag and buff it into the rods until they have an even shine.

Brass and copper items should be cleaned using either Brasso or Peek. Apply both sparingly following the instructions on the tin using a clean dry rag before buffing up to create a shine. When using Brasso make sure it is allowed to dry before removing. Peek needs to be removed before it dries. If supplies of either run low in the running store inform the Steamraiser or Running Forman so supplies can be replenished. Smokeboxes may also be cleaned down with a small hand brush. Once clean some 680 steam oil may be applied sparingly until a shine is produced. Smokebox door darts and handrails must not be covered in oil in this way.

Some locomotives such as visiting engines may have specific cleaning requirements. Instructions for these will be placed on the Rolvenden noticeboard.

It is also important to know what parts must not be cleaned. When cleaning the motion on a locomotive you must not clean the inside faces of the slidebars as you may wash away the film of lubrication that is required for operation. Running boards, steps, handrails and the tops of tanks should not be cleaned with oil as this may cause a slipping hazard to crews during the day. They may be swept and washed with a damp rag to help keep them clean. It is also important to avoid breaking motion corks. Should one be broken or damaged during cleaning or any other defect it noticed it should be reported to the driver of the locomotive or the Person In Charge at Rolvenden.

Once work on the locomotives is complete and the engines have gone off shed and into service the locomotive cleaners and steamraiser are required to carry out a small amount of work around the

depot. Firstly the locomotive ash pit needs emptying and the sieves under the covers require emptying and cleaning ready for the next day's use. Any loose coal in the yard should be swept up and any equipment and ladders stored away. The woodstore should also be tidied up and more firewood broken up ready for the next operating day.