

SERVICING THE A2 PEPPERCORN

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The instructions on the right are from the manufacturer's instruction sheet, as supplied by Bala Model Railways in 1991. I have written these additional notes which I hope are helpful:

- Lubrication should be carried out to spindles and bearings using suitable loco oil e.g. TTRCA SA1. Gears should be lubricated with soft grease such as TTRCA SA3.
- Lubricate sparingly. One drop of oil should be applied to each bearing using a wire dropper or syringe. Grease should be applied using a small flat screwdriver or wooden spatula. NEVER apply oil to the motor commutator.
- There is a lot of gearing in a Peppercorn loco, so remove the body as per the factory instructions.
- Most A2 locos have a Trix 3-pole Perma motor in the cab. This just needs a drop of oil at each end of the armature shaft and a spot of grease on the motor gear. Also apply a spot of grease to the brass idler gear and the gear at the rear end of the axle drive shaft.
- The simplest way to grease the two worm gears on the drive shaft is to unscrew and remove the driving axle keeper plate. Do this with the chassis upside down to avoid the axle worm wheels disengaging from the worms on the drive shaft. Grease the worm wheels. As they rotate, the grease will transfer onto the worms on the drive shaft. If the driving axle worm wheels do slip out of position, you will need to re-engage the gears so as to line up all the crank bosses and so prevent the valvegear from locking up. Oil the axle bearings sparingly at the same time.
- If you prefer to access the drive shaft above the chassis, it is necessary to remove the two M2 countersunk screws that retain the die cast covers at the front and rear of the drive shaft (on right hand side of chassis). In order to remove the covers you may also need to lower the driving wheels by removing the axle keeper plate as described above. You can now see the whole shaft with its two worm gears which drive the first and third driving wheel axles. Lightly grease these and then oil the bearings at each end of the shaft. Replace the retaining covers. Re-engage the driving axle gears and replace the axle keeper plate.
- Apply a drop of oil to the chassis bearings either side of the driving axles. Sparingly oil the leading bogie, trailing bogie and tender axles.
- Carbon brushes (TTRCA MP4) are available for the motor but the originals are very long-lasting and should not be disturbed unless really necessary. Many other spares are available on request. If you are not confident, repair services are listed in the TTRCA Gazette for more difficult jobs, including valve-gear.
- Sometimes the lead weight in the tender comes adrift when the glue joint fails. The tender body can be released by undoing the self tapping screw under the front of the tender chassis. Lift the tender top up and backwards over the plastic lug at the rear of the chassis. It may be possible to secure the weight with self tapping screws and fresh adhesive. Note that some adhesives contain solvent that attacks the ABS plastic. Another solution is to position a thin piece of foam plastic between the weight and the inside of the tender top.
- Some A2 Peppercorns were made with tender drive, similar to the A3 and A4. The chassis lubrication procedure would still be similar except for the motor which is then in the tender.

Instructions for 4-6-2 steam locomotive and tender, A2 A.H. Peppercorn Loco drive version; ref. No. 1060 LNER, 1061 BR and 1064 black livery.

Operation from 12 volt D.C., two rail only. Diecast locomotive chassis, three-pole motor with transmission to first and third drivers. For additional adhesion two or four traction tyres are fitted. Current supply via tender wheels with additional return through wheels on the leading and trailing bogies (certain assemblies only).

The locomotive was fully tested prior to dispatch. However and because of the many gears used in the assembly a considerable amount of running in is required to achieve a smooth performance for gears, brushes and the traction tyres to 'settle'.

The locomotive was greased and oiled and no further attention in this respect is necessary for a long time. But please ensure that the wheels are being kept clean and that pickups are in constant contact with the inner wheel surfaces on the tender.

Oil if and when necessary, valve-gear, all adjoining parts, axle bearings on locomotive and tender. Grease transmission gears on locomotive chassis.

To remove the locomotive superstructure release chimney screw and the two self-tapping screws below cab, then lift body carefully but please note that this lifting is restricted by the wires from the tender.

To remove the tender body release screw holding the said body and the tender to loco coupling.

Should a short occur please check if the leading bogie is not the wrong way round i.e. the small self-tapping screw on the wheel retainer plate of the leading bogie should be in a forward position. Also check if wires are still firmly attached to the motor assembly or pickups on the tender.

The model is somewhat noisy at full speed or in the initial period due to the motor and transmission system employed. Whilst thus extremely powerful the noise level can be reduced considerably by removing the securing screws from the chimney and also from below the cab. The superstructure will still be held firmly against the chassis by the double sided tape strips fitted. However it is then advisable not to lift the locomotive by the body only but also by holding the chassis proper in order not to strain the adhesive of the double sided tape.

In the event of a short circuit please check position of the leading bogie.