Lubrication

During manufacture Hornby locomotive mechanisms are treated with special lubricants and should perform well for a considerable period. Eventually, as with any other mechanical device, lubricants can dry out and then wear will take place on moving parts. This will be minimised and a good performance maintained if the model is carefully lubricated from time to time.

Use a light machine oil such as "3 in 1", strictly according to these instructions. Mineral oils of this type, while excellent for lubricating, can cause deterioration to certain plastics including polystyrene from which locomotive and tender bodies are made. Therefore, if any oil should get onto a body, wipe it off gently with a cotton rag. The plastics used for gear wheels and underframes are not adversely affected by this oil.

The art of successful lubrication is to get a small amount of oil in ***exactly*** the right place. The best method of doing this is to pour a little oil into a metal screw-top bottle lid or a small glass bottle and to transfer one drop only to each oiling point *(marked O on the diagrams overleaf)* on the end of a piece of wire *(Diag. 6)* or the point of a pin. Do not use the nozzle on the oil can as it will dispense far too much oil at a time. When a drop of oil has been applied to each oiling point wipe off any visible oil with the cotton rag. Run the locomotive reasonably fast for about two minutes, then wipe off any more surplus oil that may have appeared.

An oiling "tool" can be made by fixing a piece of stiff wire, about 2" *(50 mm)* long, into a cork *(Diag. 7)*. The cork is easy to hold and makes it a simple matter to place the oil in exactly the correct position.

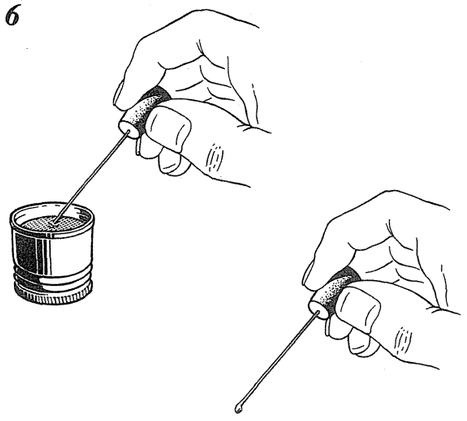
Do not get oil on the commutator, it will soften the carbon brushes and impair the efficiency of the motor.

Ensure that the track and locomotive wheel rims are entirely free from oil.

Never handle any equipment with oily hands.

Remember—oil is only required where two moving parts are actually in contact. If you can see oil there is usually too much.

6



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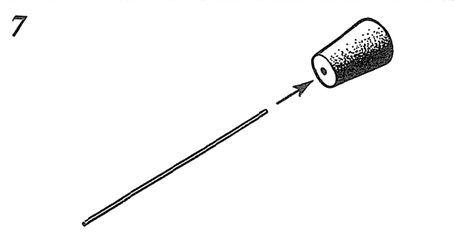

General Information

0-6-0 Diesel Shunter Locomotive

The action of the coupling hook at the cab end of this model is influenced by an internal counterweight. With normal operation, coupling and uncoupling is effected in the same way as on other vehicles. The additional feature enables the locomotive to be uncoupled solely by the operation of the Controller.

To uncouple from a train it is hauling forwards, the locomotive should be stopped with a slightly abnormal jerk. This action causes the counterweight to move forward, thus lifting the coupling hook out of engagement. The locomotive should then resume movement smoothly.

To recouple, the locomotive is backed smoothly up to the train. It then gives a slight reverse jerk, causing the counterweight to fall backwards. This releases the coupling hook which will re-engage with the adjacent vehicle. A little practice will enable you to carry out this operation readily.

(British Patent No. 1490630)

R.052, R.058, & R.353 0-6-0T Locomotives

The facility for automatically uncoupling from the front of these models is limited by the action of the drive gear on the front axle depressing the uncoupling ramp. The ramp is effective for approximately 1" *(25 mm.)* relative to the approaching locomotive.

Traction Tyres

Hornby mechanisms with traction tyred wheels have been specially designed to operate on Hornby steel track. This track has a surface which ensures that the tyred wheels have a good grip thus enabling long trains to be hauled.

Service Sheets *(See front page)*

Service Sheets are normally available within a few months of the release of new models. They show the model in exploded form including wiring and are helpful if it becomes necessary to replace parts such as light bulbs.

Television

Hornby locomotives are fitted with suppressors and under normal conditions these provide adequate protection against interference with television reception. However, in some cases local circumstances will cause reception to be below standard and interference may then be experienced. In this case check all electrical connections *(Rail surfaces and joints, locomotive/tender wheel rims, wire leads, plugs, etc.)* and ensure that they are clean and making good contact. If after taking the above action, interference still persists, then write for further advice to the Rovex Service Centre at the address below.

Enquiries regarding spares and service should be addressed to:
Rovex Service Centre, Albert Street, Ramsgate, Kent, CT11 9HD.

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HORNBY RAILWAYS

In any correspondence please quote Ref. No.

PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE

Locomotive Operation and Maintenance

Hornby locomotives and their electric motors are precision built and, treated with reasonable care, will work well for a number of years. Whilst there are many varieties of locomotive whose differences are described in this leaflet, there are common points to be observed in their use and handling.

1. **NEVER CONNECT A LOCOMOTIVE DIRECT TO THE MAINS SUPPLY.** Locomotives are designed to operate from 12 volts D.C. which is obtained from A.C. Mains via a suitable Power Controller or dry batteries.
2. Current consumption varies between approx. ·2 and ·6 amps depending upon type of locomotive, load and gradient. There will be a current surge on starting.
3. Half-wave rectified current, marked ☐ on the power switch of the Hornby R.900 Power Controller, may be used to improve control at slow speeds but should not be used for prolonged periods as it tends to cause over-heating.
4. Operating current is picked up through the wheels on one side of the locomotive or tender and returned through the other side. It is therefore essential that track and wheel rims are kept clean.
5. Mechanisms should be examined from time to time and any hair or fluff *(e.g. from carpets)* removed with tweezers.
6. Where Magnadhesion *(see below)* is fitted ensure that this has not caused pins or other metal objects to cling to the chassis or wheels.
7. Locomotives are lubricated at the factory. The lubricant may dry out in storage and the lubricating instructions should always be followed *(see page 4).*

Hints on Running

If a locomotive does not respond to the control, check the following:-

a. That all connections have been made correctly and that the power supply is on.

b. That each section of track is making good connection with its adjacent sections and that the rail surfaces are clean.

c. That the power connecting clip is making good contact.

d. That instructions on Lubrication and Maintenance have been correctly carried out.

Maintenance of your Model

There are three basic classes of mechanism fitted to Hornby electric locomotives. To identify your model check the Catalogue to establish the "R" number, and pick out from the list the appropriate class. Some "R" numbers appear under two classes because changes are being, or have been made. Removal of the body will indicate which version you have. Then follow the instructions overleaf.

Class 1	Silver motor	R.041, R.077, R.099, R.156, R.165
Class 2	X.03	R.041, R.052, R.058, R.156, R.165, R.353, R.761, R.845, R.852, R.866
Class 5	Type 3 Ringfield motor	R.063, R.065, R.066, R.068, R.069, R.072, R.073, R.074, R.078, R.080, R.084, R.317, R.318, R.350, R.352, R.357, R.751, R.768, R.842

Classes 3 and 4 included locomotives that have now been updated into class 5.

Magnadhesion

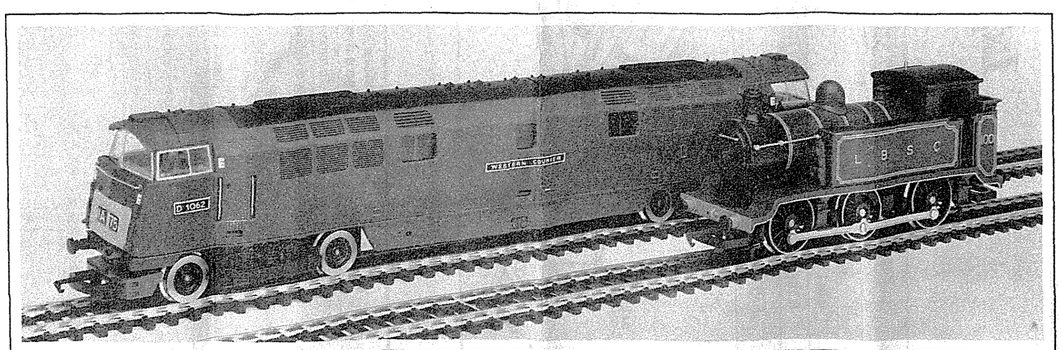
Many of the Hornby Locomotives in Classes 1 and 2 are fitted with this unique feature, consisting of a small permanent magnet mounted in the chassis block between the driving wheels. The magnet causes the wheels to adhere to Hornby rails *(which are made of steel)* thus increasing the hauling power of the Locomotive.

Spare Parts and Service

Spare carbon brushes, light bulbs, screws etc. may be purchased from Hornby Service Dealers or direct from the Rovex Service Centre. Service sheets illustrating Hornby locomotives in exploded view form are also available. An index of these will be sent on receipt of a stamped addressed envelope.
If your model is broken or disabled we recommend you to take it to your local Hornby Service Dealer *(see Service Dealer List).* If this is not practicable, send it to:-

Rovex Service Centre, Albert Street, Ramsgate, Kent CT11 9HD.

Pack securely and enclose your name and address in BLOCK CAPITALS.



The Hornby B.R. Class 52 Diesel-Hydraulic 'Western Courier' (R.352) contrasts with the old London, Brighton & South Coast Railway Class E.2 Locomotive (R.353).

For release in 1979.