The following is a fuller explanation and method of that shown in the Rule Book. EXPLANATION

Electric locomotive and Wickham Trailer

The brakes on the trailer are standard air brakes. Those on the locomotive are electric; the current holds the brakes off so any disruption of the current will cause the brakes to be applied. When connected to the trailer the air pipe acts in the same way as other stock so that if the pipe is disconnected it applies the trailer brakes. The normal 50psi rule applies. Loss of pressure also reduces the pressure on a micro-switch that disconnects the current to the loco brakes end motor. This switch is set to 70psi so the loco power fails before the trailer brakes are applied. This also means that the loco cannot be started when connected to the trailer if the air pressure is below 70psi. It is therefore essential that the air reserve tank is filled before use.

The electric connection between the loco and trailer also keeps the circuit to the loco motor and brakes live.

TESTING

The locomotive should be facing uphill on a gradient.

The driver is to start the train moving down the slope then put into Coast and then sharply drop the air to about 20psi by means of the emergency brake lever. Do not use the electric transmission brake. (This allows the loco which is heavier to try and slide further than the trailer, effectively keeping the coupling compressed so that the trailer can roll away from the loco during the test.) When the train has stopped, the dump valve is re-closed and air pressure restored gradually until the trailer starts to roll. Turn the valve off as soon as the trailer rolls. Note this pressure. The driver should then press the Start button. Keep the button depressed and slowly increase pressure until the loco starts. Note this pressure. Immediately press the Stop button. If brakes release at less than 50 psi on the trailer or 60 psi on the loco it must be taken out of service immediately. It must not be used until adjustments have been made and the brake test repeated as above. Where rolling stock is left out of use overnight an entry detailing the fault must be made in the signing-in book as well as the end of service sheet.