

NEW ZEALAND RAILWAYS	<b>WEIGHING OF LOCOMOTIVES</b>	<b>CODE No. 36</b>
<b>MECHANICAL BRANCH</b>		Page No. 1 of 1 Issue No 4      Date Issued 1/4/83

### 1. PURPOSE

The purpose of weighing locomotives is to ensure that the locomotive weight is correctly distributed on each axle and wheel.

This operation is carried out for the following reasons

- (a) to reduce wheelslip
- (b) to increase bogie stability
- (c) to obtain even wear (bearings, tyres etc.)
- (d) to ensure track stresses are even.

Any locomotive that has had an overhaul bogie change, adjustments made to the spring gear or other work carried out which will clearly make a difference in wheel loading, must be weighed before being released into service. If no weighing facilities are available, arrangements are to be made with the Chief Mechanical Engineer to arrange such weighing as necessary.

### 2. WEIGHING

During weighing operations the following conditions must be observed

- (a) the locomotive must be in full running order as described further and it must be run a short distance to ensure that there is free movement in axle boxes and compensating gear.
- (b) fuel tank filled to normal capacity
- (c) sand boxes full of sand
- (d) correct oil and water levels
- (e) all brakes fully released

### 3. ADJUSTMENTS

The spring gear of the locomotive must be adjusted to ensure that the weights conform to those specified on Locomotive Diagrams.

Tolerances are to the standard as promulgated by the Chief Mechanical Engineer.

### 4. RECORDING

Each time a locomotive is weighed the particulars must be recorded on a Loco. 135A form for steam locomotives or Loco 135E form for diesel electric and electric locomotives.