

NEW ZEALAND GOVERNMENT RAILWAYS LOCOMOTIVE BRANCH	<b>ELECTRICAL INSTRUMENT  AND SPEEDOMETER REPAIRS</b>	<b>CODE No. 85</b> Page No. 1 of 1 Issue No 2      Date Issued 1/5/47
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From time to time and as circumstances dictate, central repair facilities will be provided for the repair and calibration of electrical instruments and speedometers. These places will be advised by memorandum from the Chief Mechanical Engineer's Office.

No electrical instrument or speedometer used on any vehicle and no instrument used in Workshops and Depots, fitted to switchboards, or used for tests which are under the control of the Chief Mechanical Engineer, is to be opened for any purpose whatever except by a member authorized to do so. All instruments, &c., will be sealed, and the seal is to remain intact between one repair or calibration and the next and must only be broken by a member of the staff authorized to do so. Mechanical speedometers of the "Flaman" type do not come under the direction of this Code.

[Unless it is established that only one item is at fault speedometers, wheel compensators and generators complete must be forwarded to the Test Room for repairs or recalibration.]

**(1) RESPONSIBILITY OF FORWARDING OFFICERS**

Instruments requiring repair are to be disconnected for their circuit and packed in shock-proof packing and cased. Each instrument must bear a Loco./260ET tag giving the details of the repair required or the fault noted and the case forwarded to the Instrument Repair Laboratory and Test-room, clearly addressed and marked "Fragile Electrical Instruments." A Loco./43 shall also be forwarded showing type of instrument together with its serial number.

When speedometers are forwarded for repair or recalibration, the diameter of the driving-wheel must be noted on the Loco./260ET, and if of the belt-driven type the diameter of the driving-pulley attached to the axle. If of the steel wire belt type, the diameter must be taken over the outside of the belt. The diameter of driving-wheels is to be measured 1 3/4 in. from the inside of the tire B.P. Y.7600. Serial numbers of all parts should be shown on the tag.

**(2) RESPONSIBILITIES OF TEST-ROOM OFFICERS**

Each instrument received for repair or recalibration is to be allocated a test-room serial number. This serial number will serve for all recording purposes and will be used throughout the life of the instrument.

The Officer in Charge will maintain records in order of serial numbers of each instrument showing maker's name and number, type of instrument, alternating or direct current, date in service, and subsequent dates of repair or recalibration.

A record must also be kept showing the nature of defects, type of repair effected, the calibration before and after repairs, and the date when instruments were received from and returned to the forwarding officer.

A copy of the calibration data will be available to the forwarding officer on request. When the calibration error of any instrument is found to exceed 10 per cent., a copy of the calibration data must be returned to the forwarding officer with instrument after repair.

~~An accurate record must be kept of all speedometer tests carried out, whether on the test bench or on a vehicle. Speedometers having an error greater than 1.5 per cent. of full-scale deflection must not be installed in vehicles, and speedometers having an error greater than 4 [5] per cent. must not remain in service.~~

[An accurate record must be kept of all speedometer tests carried out. Speedometers having an error greater than 1.5 per cent of full scale deflection must not be installed in vehicles.]