NEW ZEALAND
GOVERNMENT RAILWAYS
MECHANICAL BRANCH

WHEEL-CENTRES

Cancelled by Issue 4, Code 15, 1/6/72

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EXISTING LOCO. CODES TO BE CANCELLED: 247, 248

(1) WHEEL-CENTRES, Branding of

Every new wheel centre is to have the following particulars stamped on the top of the boss:

N.Z.R. Manufacture

Imported

Shop symbol, Serial No. Year fitted

Shop symbol, Serial No. Year fitted, W.R. No.

[Every new wheel centre made in workshops is to be branded on the inside of the boss in accordance with the respective drawing. Where the drawing does not show the brands required drawing X27215 is to be worked to. Every new wheel centre made by outside firms will carry certain brands including the W.R. number or C.O.S. order number, as applicable. These brands must not be turned out. All centres are to be branded with the following additional particulars on the inside of the boss when the wheels are mounted on axles:-

Shop symbol Serial number Year fitted]

[C.M.E's 24/563 of 13.2.61]

(2) WHEEL-CENTRES, Examination of

Whenever convenient, and also when wheel-centres are removed from under rolling-stock, a thorough examination must be made to ensure that they are sound in every respect, and fit to run.

(3) WHEEL-CENTRES, Building up, by welding

The building-up of wheel-centres by electric or gas welding on wheel-centres is not permitted, unless approved or specified by the Chief Mechanical Engineer.

(4) WHEEL-CENTRES: Wheel Bosses strengthened by Shrinking on Steel Rings to Car and Wagon

Spoked wheel centres which have had the bosses strengthened by the shrinking on of rings are only to be fitted to $3\frac{1}{4}$ in. and $3\frac{3}{4}$ in. journals.

The practice of shrinking rings on wheel-bosses is not permitted in future.

Existing wheel-centres with ringed bosses must not be placed under car and van stock.

(5) WHEEL-CENTRES, Boring and Turning of

The bore of a wheel-boss must be machined smooth and parallel and left free from any defects.

(6) WHEEL-CENTRES: Pressure for forcing on Car and Wagon

The following table must be worked to:-

Journal Diameter	Diameter of	Pressure in Tons.		
Journal Diameter	Wheel-seat.	Minimum.	Desired.	Maximum.
Inches.	Inches.			
31/4	4	35	40	50
33/4	$4\frac{1}{2}$	40	45	50
4	$4^{7}/_{8}$	40	45	50
4	$5\frac{1}{4}$	40	45	50
$4\frac{1}{2}$	$5^{5}/_{8}$	40	45	50

(7) WHEEL-CENTRES: Pressure for forcing on Engine, Bogie, and Tender [, Railcar and Multiple Unit]

Cast-steel and wrought-steel centres must be pressed on to the axles with a pressure corresponding to 10 tons per inch diameter of the wheel-seat. An allowance of 5 tons either way of the total desired pressure is permissible.

Cast-iron centres for engine, bogie, and tender wheels must be pressed on to the axles with a pressure corresponding to 5 tons per inch diameter of the wheel-seat. An allowance of 3 tons either way of the total desired pressure is permissible.

(8) WHEEL-CENTRES, Lubrication for pressing on

No lubricant other than tallow may be used on wheel-seats when wheel-centres are being pressed on axles.

(9) WHEEL-CENTRES, Storing of

A protective coating of an approved rust preventative must be applied to all wheel-centres that require to be stored.

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(10) WHEEL-CENTRES, Shrinking Tyres on New

Before new wheel-centres are pressed on to axles, the tyres must be shrunk on.

(11) WHEEL-CENTRES, Removing serviceable Tyres from Defective

When defective wheel-centres are removed from serviceable tyres the wheel-centre rim must not be cut through with an oxy-acetylene flame.

(12) WHEEL-CENTRES, Register of Axles pressed into

A Loco./76 register must be kept for recording all axles pressed into wheel-centres.

This register must also account for the pressing-in of crank-pins, also any other work worthy of special reference.

(13) PRESSURE-RECORDING APPARATUS: Wheel Press

The pressure-recording apparatus of a wheel-press must be maintained in good working-order.

When each completed pressure chart is taken out of the recording-apparatus, it must be checked with the Register of "Axles pressed into wheel-centres" by the Foreman in Charge. The wheel and axle numbers must be inserted against each respective pressure curve on the chart, and the pressures checked with those given in the register.

The register must be ruled off, indicating the completion of each chart, and both the chart and register must be signed by the Foreman in Charge.

All records must be carefully filed for future reference.