



**Australian Government**  

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**National Measurement  
Institute**

12 Lyonpark Road, North Ryde NSW 2113

**Cancellation  
Certificate of  
Approval No LM 6/9C/257**

Issued by the Chief Metrologist under Regulation 60  
of the  
National Measurement Regulations 1999

This is to certify that the approval for use as a legal measuring instrument granted in  
Approval No LM 6/9C/257 in respect of the

Lodec Model Road Guardian 9500WLW Weighing Instrument

submitted by W W Wedderburn Pty Ltd  
90 Parramatta Road  
SUMMER HILL NSW 2130

has been cancelled in respect of new instruments as from 1 April 2005.

Signed by a person authorised by the Chief Metrologist  
to exercise his powers under Regulation 60 of the  
National Measurement Regulations 1999.

A handwritten signature in black ink, appearing to be 'J. G. T.', written in a cursive style.



# National Standards Commission

## Certificate of Approval

**No LM 6/9C/257**

Issued under Regulation 9  
of the  
National Measurement (Patterns of Measuring Instruments) Regulations

This is to certify that an approval for use as a legal measuring instrument has been granted in respect of the

Lodec Model Road Guardian 9500WLW Weighing Instrument

submitted by W W Wedderburn Pty Ltd  
90 Parramatta Road  
Summer Hill NSW 2130.

This Certificate does NOT grant approval for use for trade.

**NOTE:** This Certificate relates to the suitability of the pattern of the instrument for use as a legal measuring instrument only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

## CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 June 2003, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No LM 6/9C/257 and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

### **Special:**

This Certificate relates to the suitability of the instrument as a class 4 non-automatic weighing instrument. Instruments complying with this approval and verified as complying with the requirements for a class 4 non-automatic weighing instrument may be used for determining the wheel (or axle) loads of a vehicle for enforcement of legal limits for roads.

This approval shall NOT be used in conjunction with General Certificate of Approval No 6B/0.

## DESCRIPTIVE ADVICE

**Pattern:** approved 4 May 1998

- A Lodec model Road Guardian 9500WLW self-indicating class 4 platform weighing instrument of 10 000 kg maximum capacity.

**Variant:** approved 4 May 1998

1. Constructed of magnesium alloy.

**Variant:** approved 14 July 1998

2. For use in a network.

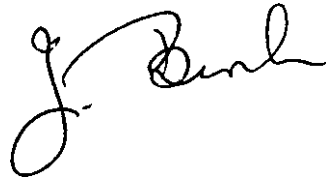
Technical Schedule No LM 6/9C/257 describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No LM 6/9C/257 dated 28 July 1998  
Technical Schedule No LM 6/9C/257 dated 28 July 1998 (incl. Test  
Procedure)  
Figures 1 and 2 dated 28 July 1998

Signed and sealed by a person authorised under  
Regulation 9 of the National Measurement  
(Patterns of Measuring Instruments) Regulations  
to exercise the powers and functions of the  
Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Bush', written in a cursive style.

## TECHNICAL SCHEDULE No LM 6/9C/257

**Pattern:** Lodec Model Road Guardian 9500WLW Weighing Instrument.

**Submittor:** W W Wedderburn Pty Ltd  
90 Parramatta Road  
Summer Hill NSW 2130

### 1. Description of Pattern

A Lodec model Road Guardian 9500WLW self-indicating class 4 platform weighing instrument (Figure 1) of 10 000 kg maximum capacity with a verification scale interval of 50 kg. An auxiliary or peripheral device may be fitted using the recharging socket.

#### 1.1 Platform

The instrument is constructed of aluminium alloy and the platform has the weighing area supported by four low-profile load cells between the top and base plates.

#### 1.2 Indicator

The integral electronic digital indicator is approved for a maximum of 200 scale intervals.

#### 1.3 Zero

Zero is automatically corrected to within  $\pm 0.25e$  whenever power is applied and whenever the instrument comes to rest within  $0.5e$  of zero.

The initial zero-setting device has a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

#### 1.4 Display Check

A display check is initiated whenever power is applied.

#### 1.5 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructible label over a calibration coverplate mounting screw (Figure 2).

## 1.6 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

## 1.7 Markings

Instruments carry the following markings, in the form shown at right:

Manufacturer's mark, or name written in full

Indication of accuracy class

Maximum capacity

*Max* ..... kg \*

Minimum capacity

*Min* ..... kg \*

Verification scale interval

*e* = ..... kg \*

Serial number of the instrument

Pattern approval mark for the instrument

NSC No LM 6/9C/257

\* These markings are also shown near the display of the result if they are not already located there.

## 2. Description of Variants

### 2.1 Variant 1

Constructed of magnesium alloy.

### 2.2 Variant 2

Two instruments of the pattern and/or variant 1 may be connected directly, or up to 18 instruments of the pattern and/or variant 1 may be connected via a Lodec model WLW junction box/recharger, to enable totalising of the mass displayed on all instruments. Depending on the configuration of the network, the total mass indication will be either an axle, an axle group or the total vehicle.

Use of the TOTAL/LOCAL button on each instrument enables the total mass indication for all instruments in the network to be displayed on that instrument.

The use of a printer is not permitted with this variant.

## TEST PROCEDURE

Instruments should be tested in conjunction with any relevant tests specified in the Inspector's Handbook.

### Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads on initial verification/certification for loads,  $m$ , expressed in verification scale intervals,  $e$ , are:

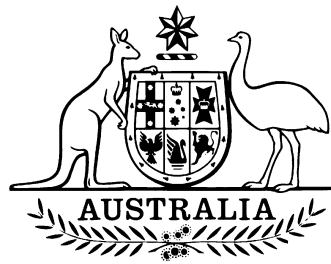
$\pm 0.5 e$  for loads  $0 \leq m \leq 50$ ; and  
 $\pm 1.0 e$  for loads  $50 < m \leq 200$ .

- (a) Apply a test load of not less than half the capacity of the instrument to the load receptor at least three times to exercise the instrument.
- (b) Zero the instrument.
- (c) Apply an appropriate zero test using test loads of  $0.25 e$  and  $0.75 e$ .
- (d) Apply an appropriate discrimination test.
- (e) Apply a repeatability test.
- (f) Where practical, apply an eccentricity test.
- (g) With the zero indication correct, apply test loads to the centre of the load receptor in not less than five approximately-equal steps increasing to the maximum capacity.

Ensure that the indications are within the maximum permissible error for the load applied.

Each test load is to be applied at least twice and, where test masses are used and the test load consists of more than one test mass, the test load is to be applied as one mass.

Ensure that after the load test, the zero indication is within  $\pm 0.25 e$ .



## **National Standards Commission**

12 Lyonpark Road, North Ryde NSW

### **Notification of Change**

#### **Certificate of Approval No LM 6/9C/257**

#### **Change No 1**

The following changes are made to the approval documentation for the

Lodec Model Road Guardian 9500WLW Weighing Instrument

submitted by W W Wedderburn Pty Ltd  
90 Parramatta Road  
Summer Hill NSW 2130.

In Certificate of Approval No LM 6/9C/257 dated 28 July 1998, the Special Conditions of Approval should be amended as follows;

1. The first paragraph should be amended by deleting the words "(or axle)".
2. The following should be added after the second paragraph:

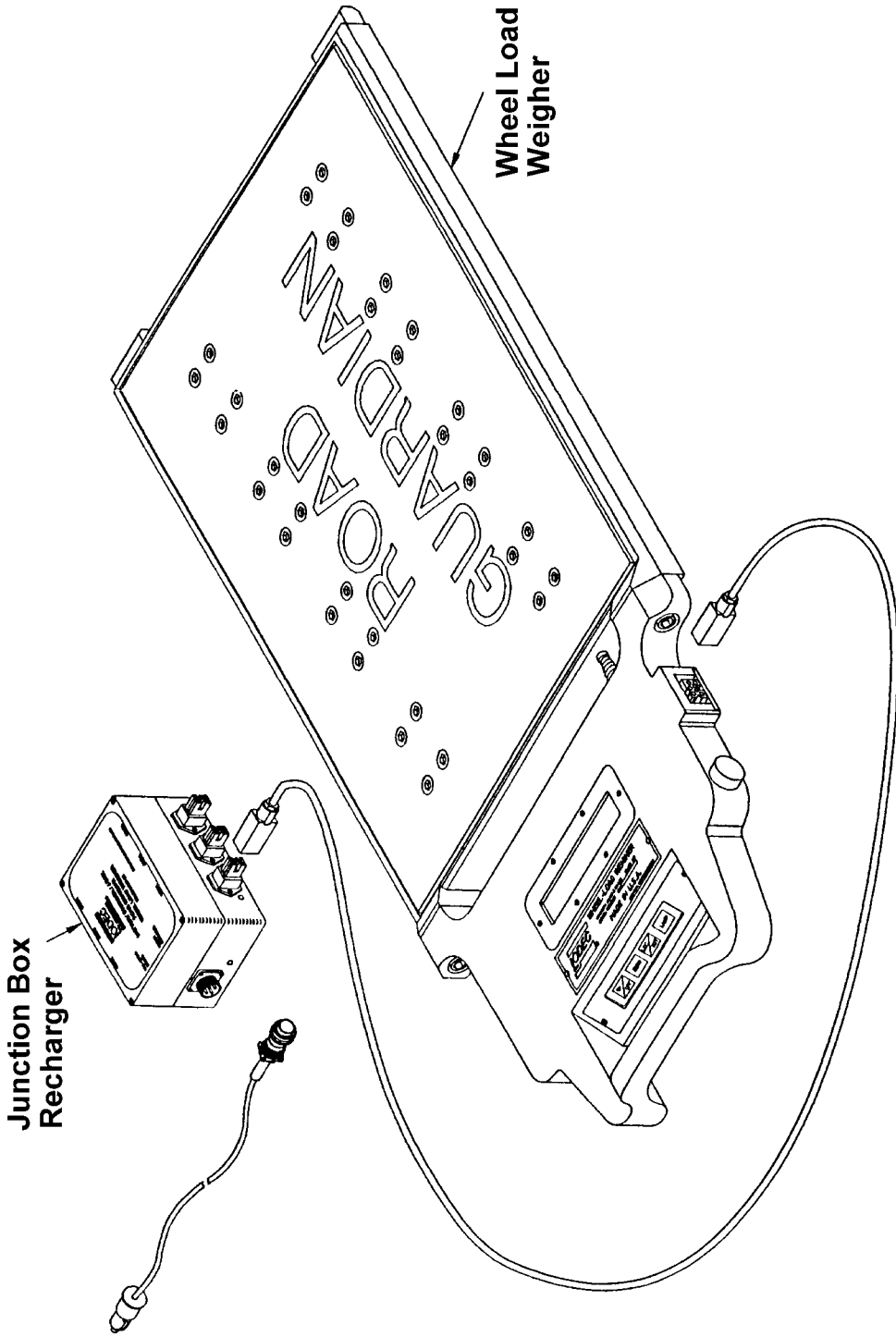
"Multiple instruments may be used with their indications being summed to provide the mass of an individual axle, an axle group or a total vehicle. When multiple instruments are used, caution should be exercised as the uncertainty of the values obtained by the summation of readings could exceed the maximum permissible errors for class 4 weighing instruments. Use of a single instrument is not permitted for any of these mass determinations."

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'Jim Bennett', written in a cursive style.

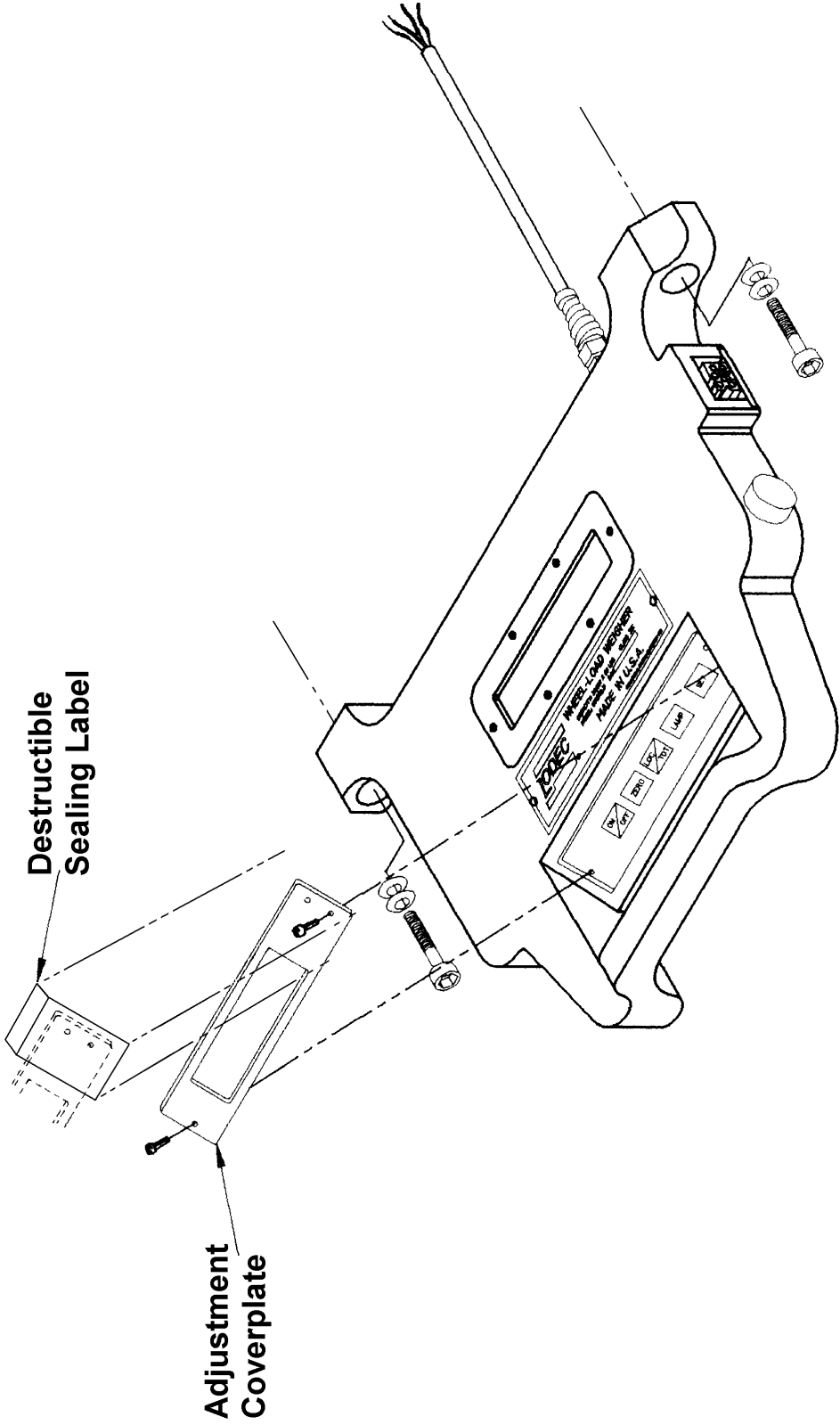


FIGURE LM 6/9C/257 - 1



Lodec Model Road Guardian 9500WLW Weighing Instrument

FIGURE LM 6/9C/257 - 2



Showing Sealing Method