LM 6/9C/78B
31 May 2002

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Cancellation

Certificate of Approval

No LM 6/9C/78B

Issued 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 respect of the

Haenni Model WL-101 Weighing Instrument

submitted by Haenni Australia
2/10 Keller Crescent
Carrara QLD 4211

has been cancelled in respect of new instruments as from 1 July 2002.

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.

National Standards Commission

Certificate of Approval

No LM 6/9C/78B

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

Haenni Model WL-101 Weighing Instrument

submitted by Haenni Australia
2/10 Keller Crescent
Carrara QLD 4211.

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.

This Certificate is issued upon completion of a review of NSC approval No 6/9C/78A.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 March 2002, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No LM 6/9C/78B and only by persons authorised by the submittor.

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It is the submittor'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.

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 21 February 1997

- A Haenni model WL-101 self-indicating class 4 platform weighing instrument of 10 000 kg maximum capacity with a verification scale interval of 50 kg.

Technical Schedule No LM 6/9C/78B describes the pattern.

FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No LM 6/9C/78B dated 3 July 1997
Technical Schedule No LM 6/9C/78B dated 3 July 1997 (incl. Test Procedure)
Figures 1 and 2 dated 3 July 1997

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.

National Standards Commission

TECHNICAL SCHEDULE No LM 6/9C/78B

Pattern: Haenni Model WL 101 Weighing Instrument.

Submittor: Haenni Australia
2/10 Keller Crescent
Carrara QLD 4211.

1. Description of Pattern

A Haenni model WL-101 self-indicating class 4 platform weighing instrument (Figure 1) of 10 000 kg maximum capacity with a verification scale interval of 50 kg.

1.1 Platform

The platform has the weighing area supported by an elastic liquid-filled bourdon tube grid. When a load is applied, liquid expressed from the bourdon tubes produces a deflection in the bellows of the analogue indicating device.

1.2 Indicator

The analogue indicating device has a maximum of 200 scale intervals.

1.3 Zero Adjustment

Zero is set by means of a knob on the side of the indicator.

1.4 Level Indicator

Adjacent to the level indicator is a notice stating INSTRUMENT MUST BE LEVEL WHEN IN USE, or similar wording.

1.5 Verification/Certification Provision

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

1.6 Sealing Provision

Provision is made for the calibration adjustments to be sealed as shown in Figure 2.

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1.7 Markings

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

Manufacturer's mark, or name written in full	
Indication of accuracy class	(III)
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/78B

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

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 $0.25e$ and $0.75e$.

(d) Apply an appropriate discrimination test.

(e) Apply a repeatability test.

(f) Where practical, apply an eccentricity test.

(g) Apply a sensitivity test for the level indicating device.

(h) 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.

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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 removal of each test load, the zero indication is within $\pm 0.25e$.

LM 6/9C/78B
22 January 2001

National Standards Commission

12 Lyonpark Road, North Ryde NSW

Notification of Change

Certificate of Approval No LM 6/9C/78B

Change No 1

The following changes are made to the approval documentation for the

Haenni Model WL-101 Weighing Instrument

submitted by Haenni Australia
2/10 Keller Crescent
Carrara QLD 4211.

In Certificate of Approval No LM 6/9C/78B dated 3 July 1997, the Special Conditions of Approval should be amended as follows;

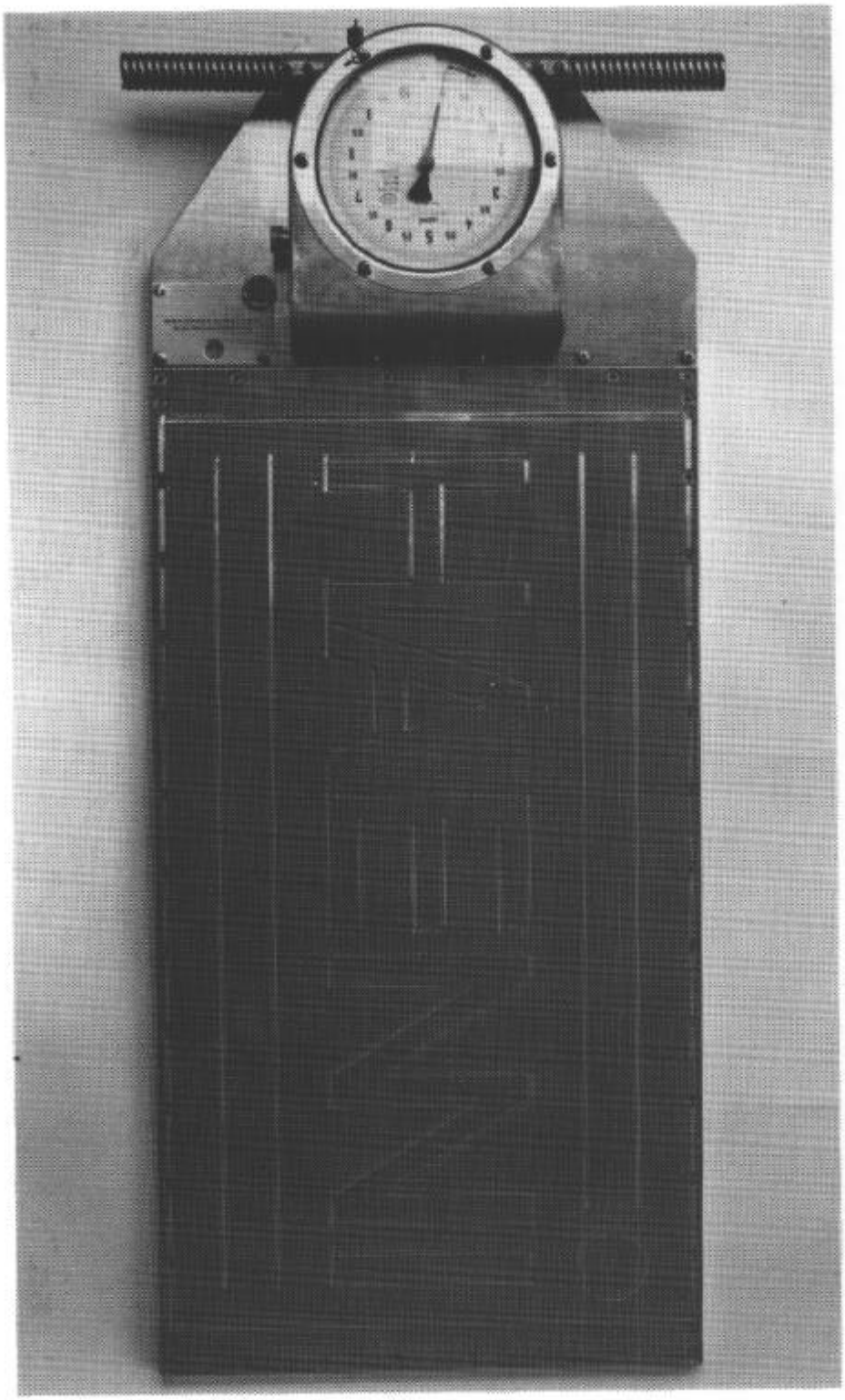
1. The first paragraph should be amended by deleting the words "(or axle)".

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."

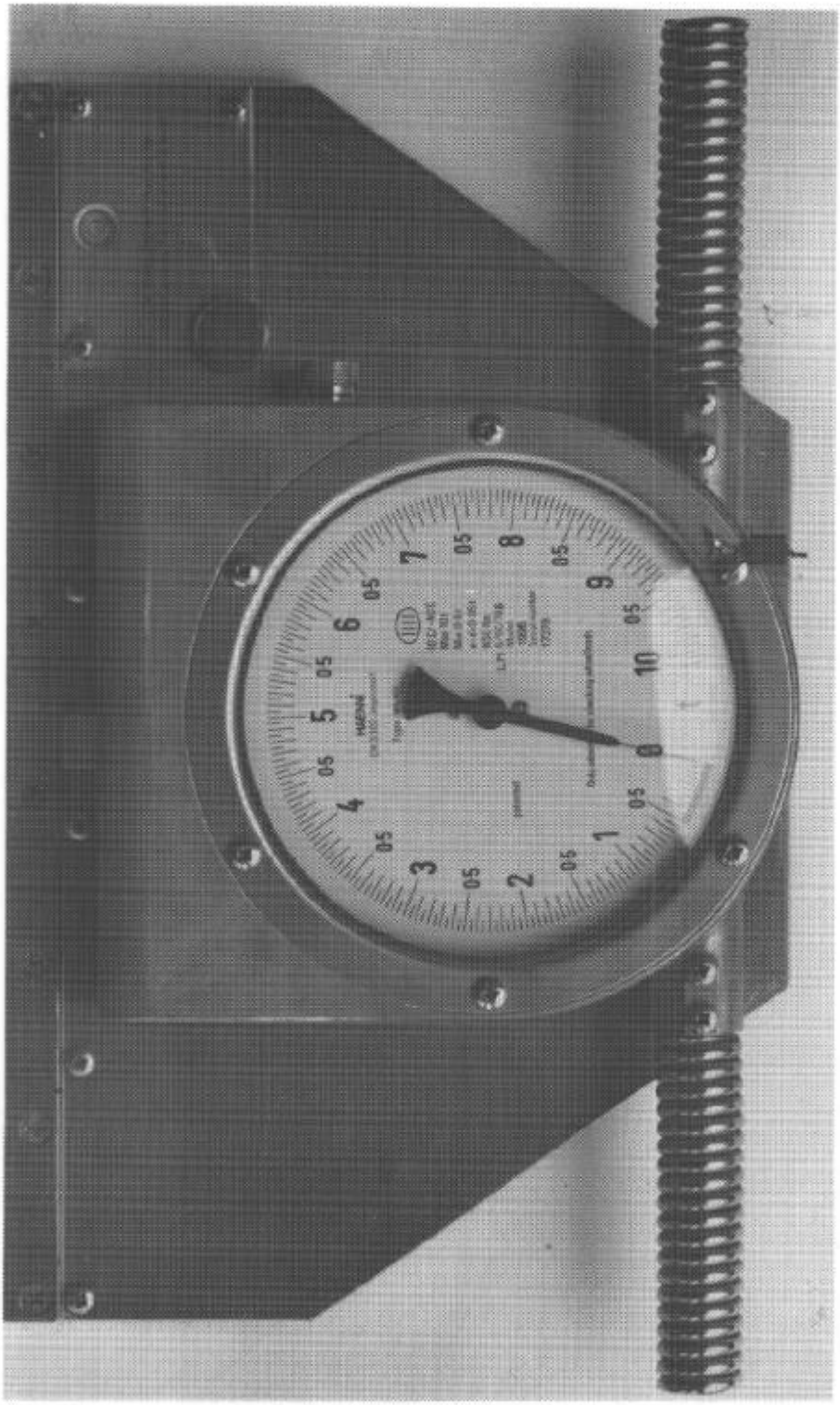
Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

FIGURE LM 6/9C/78B – 1



Haenni Model WL-101 Weighing Instrument

FIGURE LM 6/9C/78B – 2



Showing Indicator and Sealing