NATIONAL STANDARDS COMMISSION

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S108

This is to certify that the pattern and variants of the

Ultra Indicator Model 9000

submitted by Ultra Scale Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020,

have been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade when replacing the Ultra Minipond II indicator in any Commission approved weighing instrument specified in the attached Technical Schedule.

Pattern: approved 26/9/80

Ultra Indicator Model 9000 with a maximum of 3 072 scale intervals.

Variants: approved 26/9/80

1. Without tare function.

2. Without automatic zero-correction.

3. Without NET/GROSS button.

4. Without output facility.

5. With more than one load cell.

6. With load cell and extension cable junction boxes.

7. With the indicator in various housings.

The pattern and variants are described in Technical Schedule No S108 issued on 24/10/80, and in drawings and specifications lodged with the Commission.

The pattern and variants are subject to review on or after 1/10/85.

24/10/80 ...../2

Conditions of Approval

1. The instrument when fitted with an Ultra Indicator Model 9000 shall have a maximum number of scale intervals of 3 072.

2. The number of scale intervals applicable to the weighing instrument in which this indicator is used will be no greater than the smallest of the number of allowed scale intervals of the baseworks, the load cell or the headworks used.

All instruments modified in accordance with this Certificate shall be marked with the Approval Number NSC No S108, in addition to the approval number of the unmodified pattern.

Signed

Raymond Mack

ACTING Executive Director

24/10/80

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S108

Pattern: Ultra Indicator Model 9000

Submittor: Ultra Scales Pty Ltd,
33-35 Judge Street,
Sunshine, Victoria, 3020.

1. Description of Pattern

A digital mass indicator displaying up to 3 072 scale intervals (Figure 1). It may be substituted for any Ultra Minipond II indicator used in accordance with Certificate of Approval No 6/10B/32.

1.1 Zero

(a) By adjusting the tool operated zero the instrument can be re-zeroed within $\pm$0,25 e. The zero light marked 'CENTER OF ZERO' illuminates when zero is obtained within $\pm$0,25 e.

(b) An automatic zero-correction device resets zero within $\pm$0,25 e, whenever the mass indicator indicates zero.

1.2 Tare

(a) A semi-automatic subtractive taring device allows a mass on the load receptor of up to 3 072 e to be tared within 0,25 e.

(b) When in gross mode the NET indicator illuminates on pressing the TARE button.

(c) When in net mode the NET indicator remains illuminated on pressing the TARE button.

1.3 NET/GROSS button

On pressing the NET/GROSS button:

(i) The NET indicator illuminates with the indicator displaying the net mass (gross mass minus the tare mass),

or

(ii) The GROSS indicator illuminates with the indicator displaying the gross mass (total mass on the load receptor).

1.4 Output Facility

This function is provided for peripheral devices.

1.5 Check Button

Pressing the button marked CHECK causes the display to blank; all 8's are displayed on releasing the button.

1.6 Markings

Instruments which incorporate this headwork are to be marked on the indicator with the following data:

Manufacturer's name:	
Accuracy class in the form:	(III)
Serial number of instrument:	
Maximum capacity in the form:	Max .....*
Minimum capacity in the form:	Min .....*
Verification scale interval in the form:	d_d=e= .....*
Maximum subtractive tare in the form:	T= -.....
NSC approval numbers in the form:	Headwork:NSC No ...
	NSC No S108
	Basework:NSC No

Load cell serial number:

1.7 Sealing

1.7.1 A lead and wire seal passes through a retaining screw and a lug on the indicator (Figure 2).

1.7.2 The output socket is sealed with a lead and wire seal (Figure 2).

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*These markings are repeated in the vicinity of each reading face.

2. Description of Variants

1. Without the tare facility.
2. Without automatic zero-correction.
3. Without the NET/GROSS button.
4. Without the output facility.
5. With more than one load cell attached in combination.
6. With load cell and extension cable junction box (Figures 3 and 4).
7. With the indicator in various housings to suit the installation.

3. Special Tests

(a) Tests as per original Certificate including

(b) Taring

Tare a mass above maximum capacity. On removal of the mass no tare should have been entered and the indicator should display all zeroes.

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NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No S108

CHANGE No 1

The following change is made to the description of the Ultra Indicator Model 9000 given in Technical Schedule No S108 dated 24/10/80:

On page 3, paragraph 2.7 is altered to read:

7. With the indicator in various housings to suit the installation, in which case the alternate housing is sealed in a similar manner to the original housing, that is, with a lead and wire seal through two adjacent cover retaining screws.

Signed

Acting Executive Director

2/3/81

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S108

CHANGE No 2

The following change is made to the description of the Ultra Model 9000 Indicator given in Technical Schedule No S108 dated 24/10/89.

To Description of Pattern, add the following sentence to the first paragraph:

"The indicator is approved for connection with up to four 350 Ω load cells".

Signed

Executive Director

30/5/83

CANCELLED 0/3 31-12-90

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S108

CHANGE No 3

The following changes are made to the description of the Ultra Model 9000 Indicator.

1. In Supplementary Certificate of Approval No S108 dated 24/10/80,

   Insert, "The approval may be withdrawn if used other than as described in the drawings and specifications lodged with the Commission."

2. In Technical Schedule No S108 dated 24/10/89,

   from Description of Pattern, delete the following sentence from the first paragraph:

   "The indicator is approved for connection with up to four 350 Ω load cells".

Signed

Executive Director

30/9/83

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

Supplementary Certificates of Approval Nos S102
S104
S106
S108
S113
S116

The changes given below are made to the descriptions of the following Supplementary Certificates:

Certificate No.	Title
S102	Toledo Digital Indicator Model 8132
S104	Toledo Digital Indicator Model 8134
S106	Avery Digital Indicator Model 8652
S108	Ultra Indicator Model 9000
S113	Avery Digital Indicator Model 8653
S116	Toledo Digital Indicator Model 8136

1. Certificate

Add to end of first paragraph:

.... or when replacing the indicator in any other Commission-approved weighing instrument.

2. Technical Schedule

Add to end of paragraph 1:

.... or for the indicator in any other Commission-approved weighing instrument.

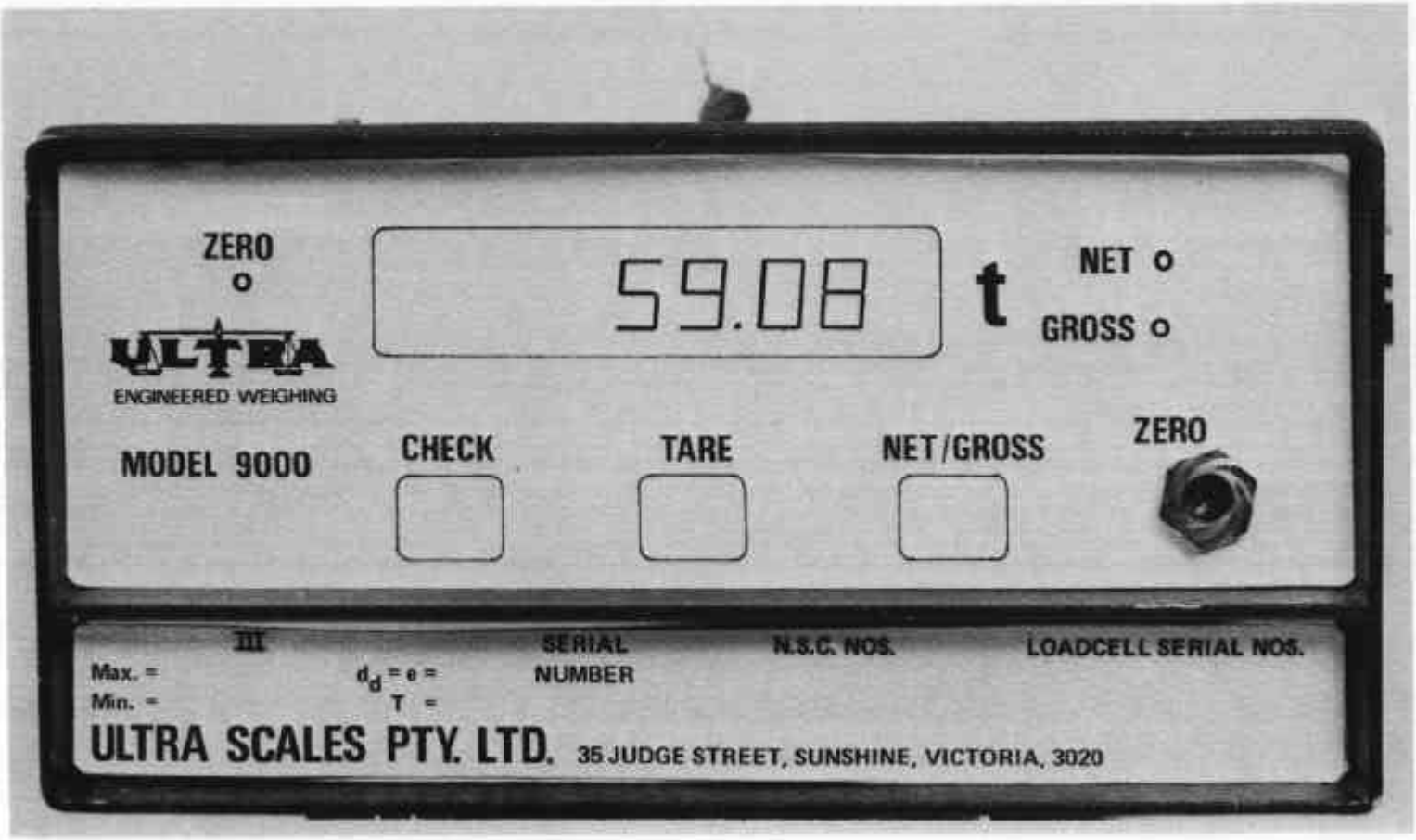
Signed

Executive Director

Note: These changes have been made as a result of increased confidence in the performance of the indicators in conjunction with widely varying makes and capacities of load cells.

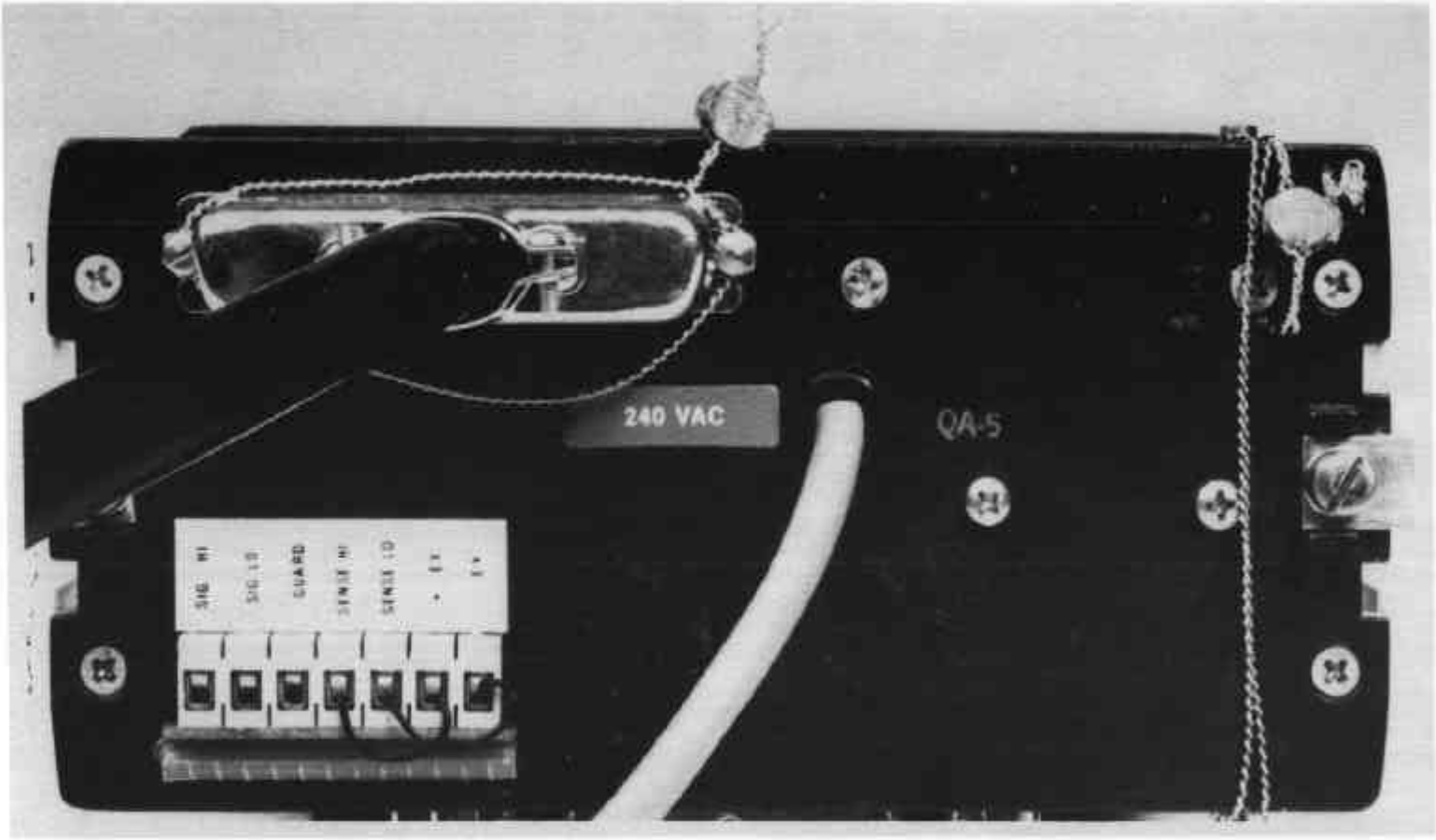
27/4/81

FIGURE S108 - 1



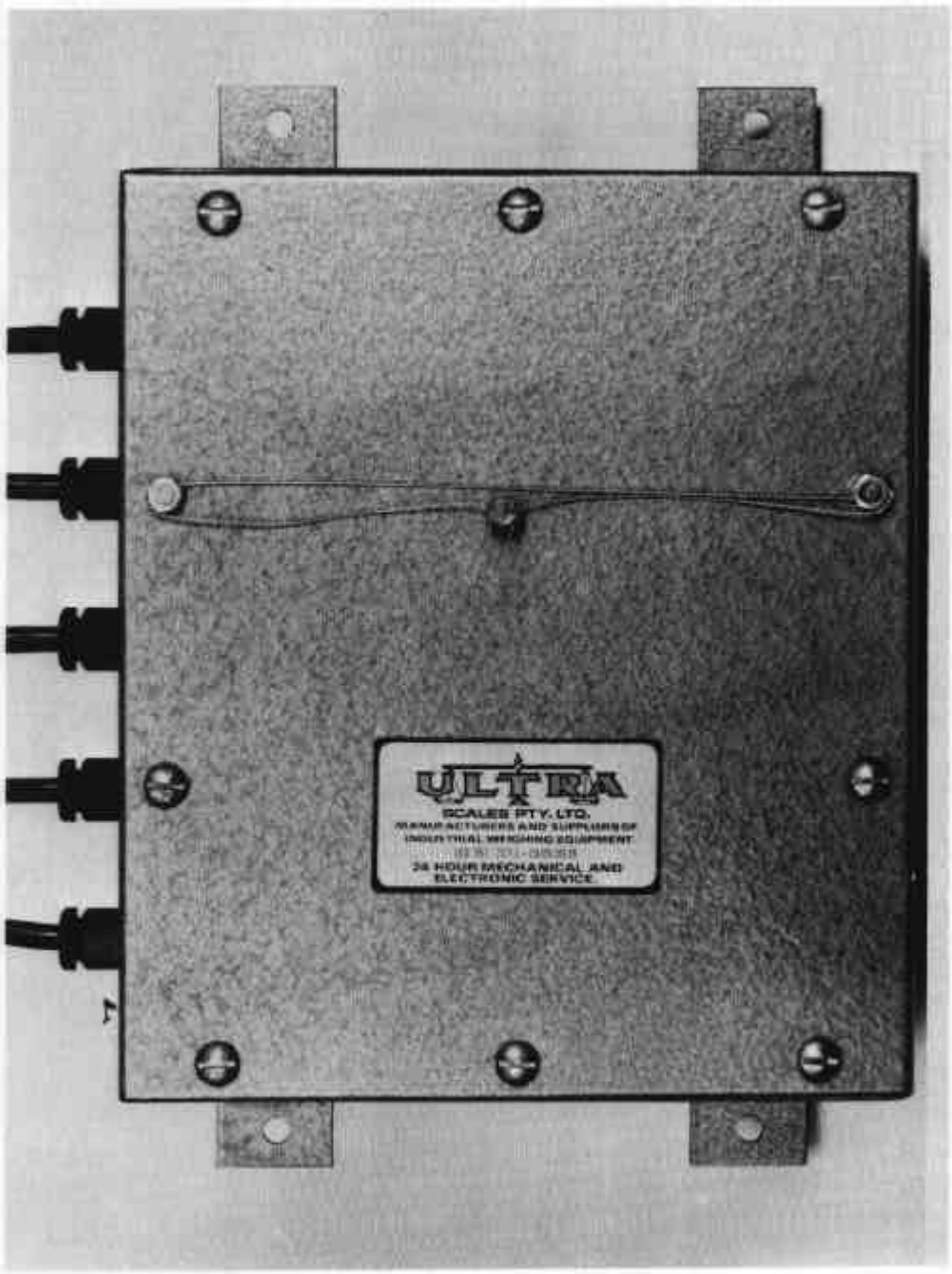
Ultra Indicator Model 9000

FIGURE S108 - 2



Indicator - Rear View Showing Sealing

FIGURE S108 - 3

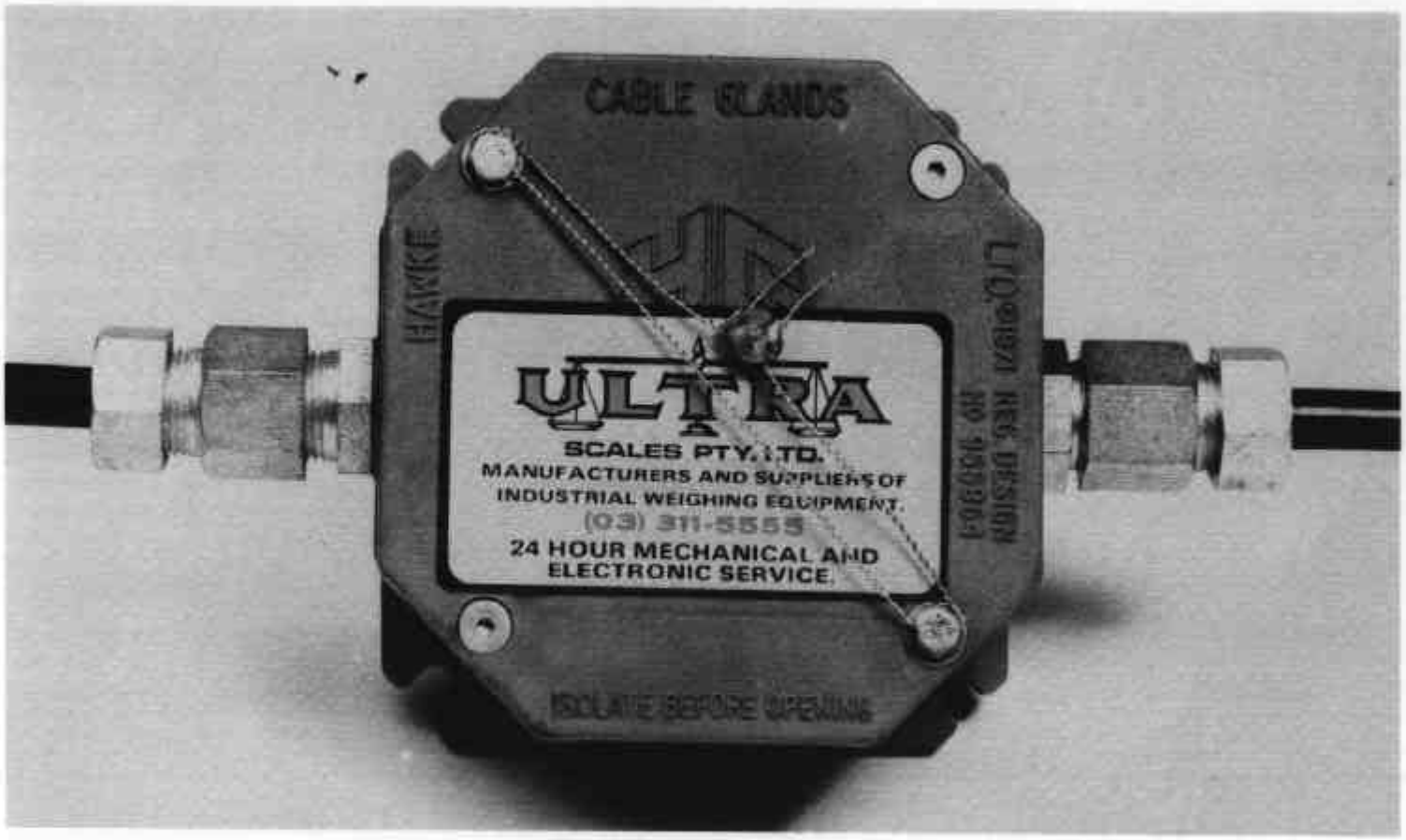


Junction Box

24/10/80

FIGURE S108 - 4

24/10/80



Junction Box