NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

PROVISIONAL CERTIFICATE OF APPROVAL No P6/10B/43

This is to certify that an approval has been granted by the Commission that the pattern and variants of the

Mercury RVB-ELP Weighbridge

submitted by Mercury Scale Co. Pty Ltd,
32 Dew Street,
Thebarton, South Australia, 5031,

are suitable for use for trade.

The approval of the pattern and variants is valid for 12 months.

All instruments purporting to comply with this approval shall be marked NSC No P6/10B/43.

Relevant drawings and specifications are lodged with the Commission.

Conditions of Approval

1. All weighbridges verified under this Certificate are to be tested at least twice within the period of validity of this Certificate.

2. This Certificate can be cancelled at any time if the pattern or variants are found to be unsatisfactory.

3. The load cells in instruments installed under this approval are to be replaced by load cells which have been certified by the Commission as soon as these become available.

Signed

Executive Director

Descriptive Advice

Pattern: approved 16/4/81

. A self-indicating weighbridge of up to 70 t maximum capacity, with six Mercury 27 t load cells and a Mercury Model 479 indicator.

Variant: approved 16/4/81

1. With subtractive tare device.

Technical Schedule No P6/10B/43 dated 11/5/81 describes the pattern and variant 1.

Variant: approved 15/5/81

2. With four load-cell basework, of capacity 30 t.

Technical Schedule No P6/10B/43 dated 20/5/81 describes variant 2.

20/5/81 ...../2

Filing Advice

Certificate of Approval No P6/10B/43 dated 11/5/81 is superseded by this Certificate and may be destroyed. Technical Schedule No P6/10B/43 dated 11/5/81 is retained as part of this approval.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No P6/10B/43

Pattern: Mercury RVB-ELP Weighbridge

Submittor: Mercury Scale Co. Pty Ltd,
32 Dew Street,
Thebarton, South Australia, 5031.

1. Description of Pattern

A self-indicating weighbridge comprising a six-point-mounting low profile basework of up to 70 t maximum capacity with six Mercury Model 60022 load cells of 27 t capacity and a Mercury Model 479 indicator.

1.1 Basework

A six load cell low profile basework, of up to 70.0 t maximum capacity (Figures 1 and 2).

1.2 Load Cells

Six Mercury Model 60022 load cells of 27 t capacity mounted as shown in Figure 2.

1.2.1 Marking

The following is the minimum of data required to be marked on the load cell:

Manufacturer's name
Model number
Serial number
Output in the form: mV/V
Maximum capacity

1.3 Indicator

Mercury Model 479 (Figures 3 and 4) capable of displaying a maximum of 3 500 scale intervals.

1.3.1 Tare

A tool-operated zero adjustment sets the instrument to within ± 0.25e of zero which is indicated by a light marked ZERO.

1.3.2 Check Switch

A three position self-cancelling switch is used to test the indications as follows:

centre position:	normal indication
up position:	all indicators illuminated
down position:	all indicators blank

1.3.3 Sealing

(a) The connecting plug is sealed as shown in Figure 5.

(b) The cable from the connecting plug is internally connected to the indicator.

(c) The indicator cover is sealed by a lead and wire seal through a retaining screw on each side of the indicator as shown in Figure 4.

1.3.4 Marking

The nameplate is marked with the following data:

Manufacturer's name	
Serial number of instrument	
NSC approval number in the form:	NSC No .....
Accuracy class in the form:	(III)
Maximum capacity in the form:	Max .....*
Minimum capacity in the form:	Min .....*
Verification scale interval in the form:	d_d = e .....*

2. Description of Variants

2.1 Variant 1

The indicator with:

(a) A semi-automatic subtractive taring device which allows a mass on the load receptor of up to 3500e to be tared to within 0.25e, and

(b) a non-automatic subtractive taring device which allows an operator to enter a tare in 1e increments up to 3500e by using four thumb-wheel switches.

In both cases, the instrument bears an additional marking in the form:

Maximum subtractive tare T = - .....

* These markings are repeated on the reading face of the instrument.

TEST PROCEDURE No P6/10B/43

1. Accuracy Requirements

The maximum permissible errors are:

± 0.5e for loads between 0 and 500e;
± 1e for loads between 501e and 2000e; and
± 1.5e for loads above 2000e.

2. Zero Range

Check that the range of the zero adjustment is not more than 4% of the maximum capacity (± 2% approximately).

3. Zero Balance

Check by means of the Commission's digital zero test (Document 104, Testing Procedure for the Elimination of Rounding Error for Weighing Instruments with Digital Indication) that, when the "zero light" is illuminated, zero is set within 0.25e of zero.

4. Range of Indication

The maximum mass indicated should not exceed by more than 10 scale intervals the maximum capacity (Max) marked on the instrument. Above this indicated mass the indicator should be blank.

5. Test Loads

Test loads are to be applied to the instrument with the first step equal to the minimum capacity, thence up to maximum capacity in not less than 5 equal steps followed by decreasing loads of not less than 5 equal steps.

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding errors as set out in Document 104.

The instrument should display these loads within the applicable tolerance as listed in 1. above.

6. Taring

Attempt to tare a mass above maximum capacity, - this should not be possible.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No P6/10B/43

VARIATION No 1

Pattern: Mercury RVB-ELP Weighbridge

Submittor: Mercury Scale Co. Pty Ltd,
32 Dew Street,
Thebarton, South Australia, 5031.

1. Description of Variant

1.1 Variant 2

Basework of 30 t capacity with four Mercury Model 60022 load cells.

20/5/81

NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No P6/10B/43

This is to certify that the approval of the

Mercury RVB-ELP Weighbridge

advised in Certificates of Approval No P6/10B/43 dated 11/5/81 and 20/5/81 was withdrawn on 11/9/81.

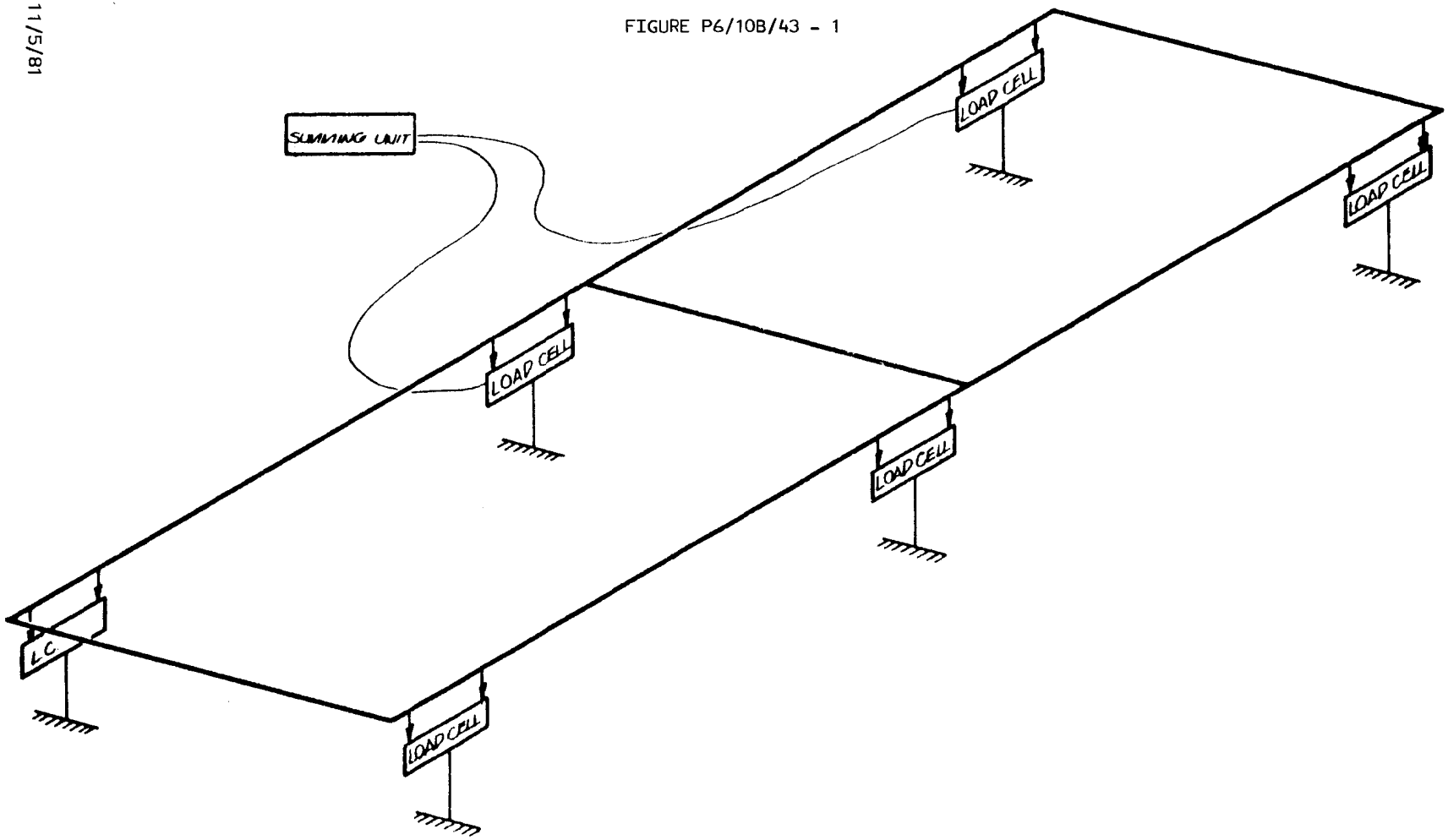
Signed

Executive Director

25/9/81

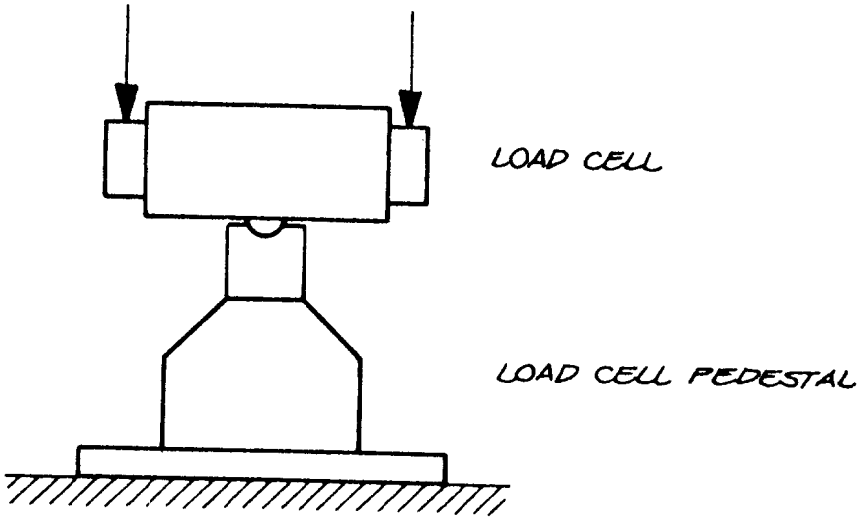
11/5/81

FIGURE P6/10B/43 - 1



Mercury Model RVB-ELP Basework - Schematic Diagram

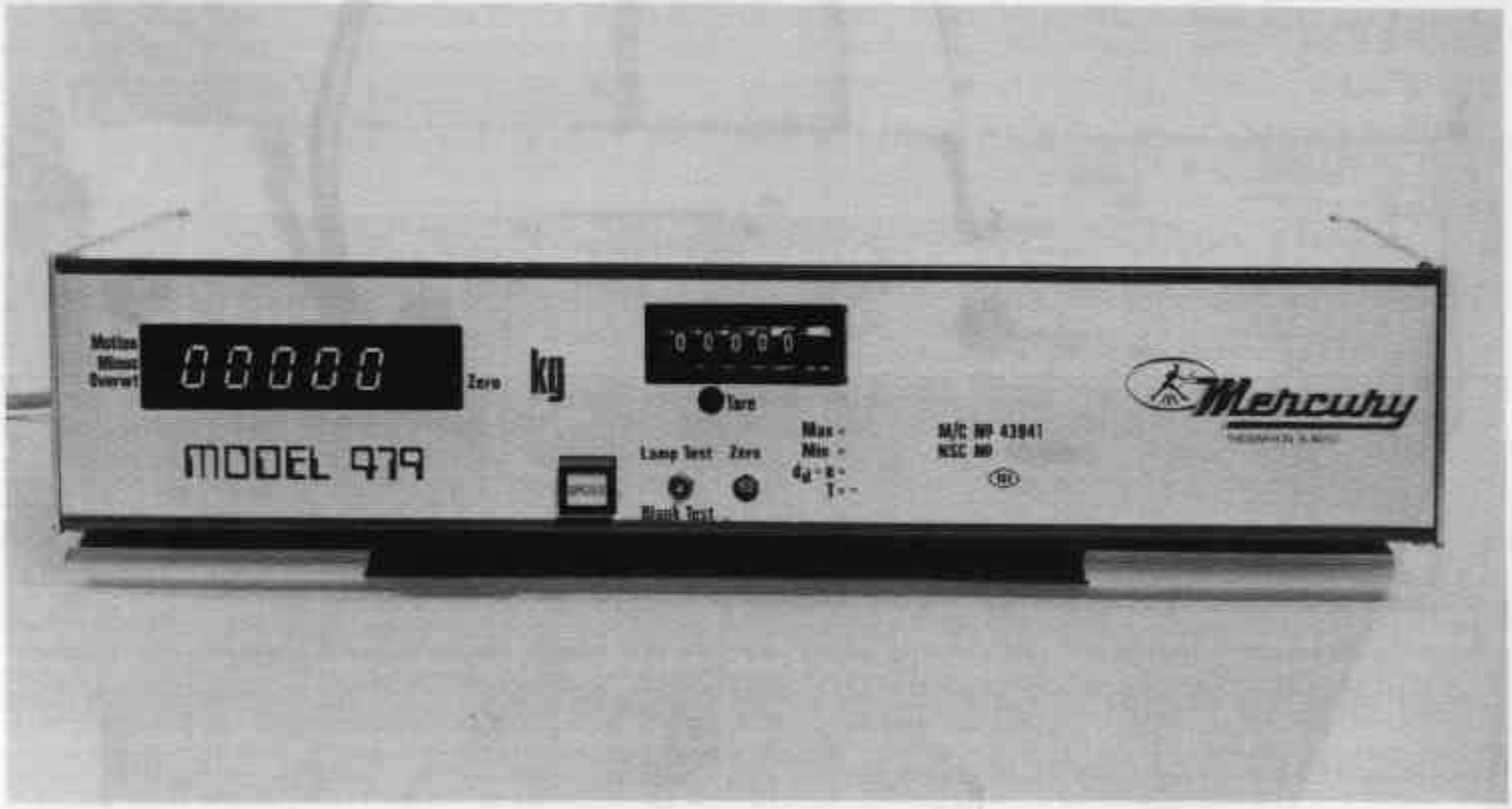
FIGURE P6/10B/43 - 2



Load Cell Mounting - Schematic Diagram

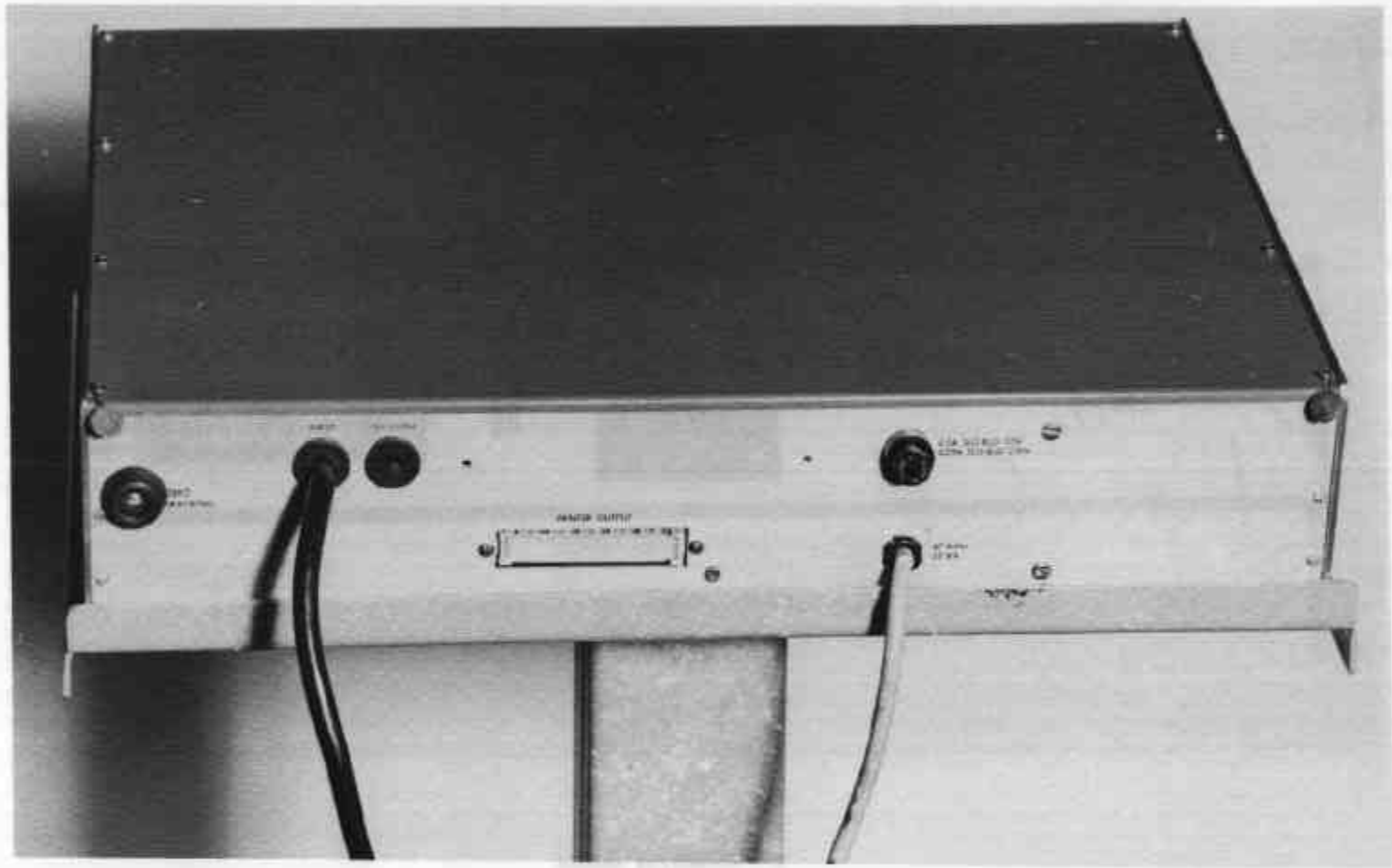
11/5/81

FIGURE P6/108/43 - 3



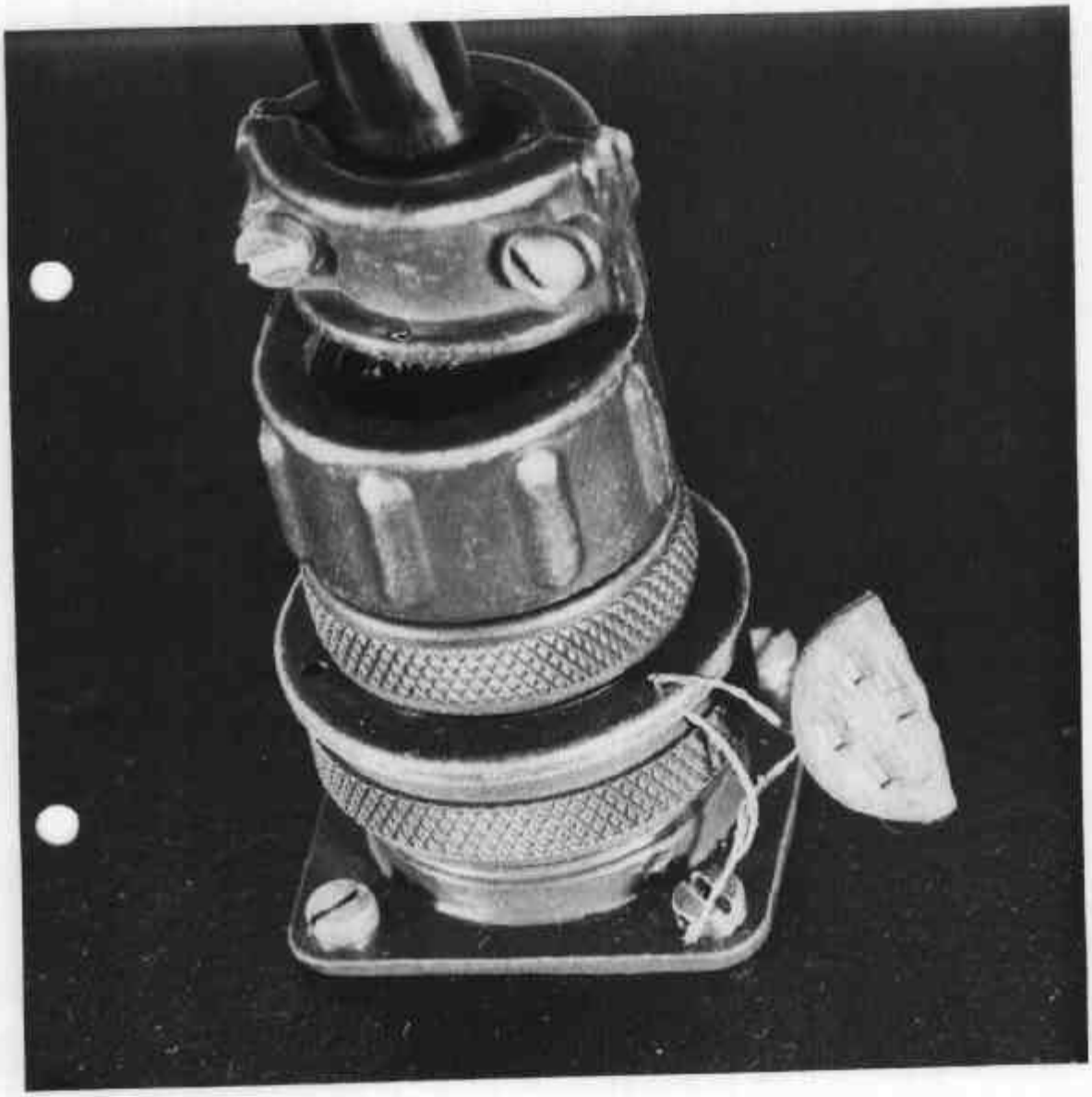
Indicator Model 479

FIGURE P6/10B/43 - 4



Model 479 Indicator - Rear View showing Sealing

FIGURE P6/10B/43 - 5



Sealing of Load Cell Output Cable

11/5/81