

Technical Schedule No 6/9C/70 Variation No 2 dated 18/8/81 describes variant 4.
6/5/83/2

Provisional Variant: approved 11/3/83

5. With a Teraoka model DS-90 300 kg basework replacing the basework of the pattern.

Technical Schedule No 6/9C/70 Variation No 3 dated 6/5/83 describes provisional variant 5.

Filing Advice

Certificate of Approval No 6/9C/70 dated 18/8/81 is superseded by this Certificate and may be destroyed.

The documentation of this approval now comprises:

Certificate of Approval No 6/9C/70 dated 6/5/83
Technical Schedule No 6/9C/70 dated 9/5/80 (including Test Procedures and Table 1)
Technical Schedule No 6/9C/70 Variation No 1 dated 15/9/80
Technical Schedule No 6/9C/70 Variation No 2 dated 18/8/81
Technical Schedule No 6/9C/70 Variation No 3 dated 6/5/83
Figures 1 to 5 dated 9/5/80
Figures 6 and 7 dated 15/9/80
Figures 8 and 9 dated 18/8/81
Figures 10 and 11 dated 6/5/83.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/70

Pattern: J. W. Wedderburn Weighing Instrument Model UMC 4000

Submittor: J. W. Wedderburn & Sons Pty Ltd,
90 Parramatta Road,
Summer Hill, New South Wales, 2130.

Description of Pattern:

The pattern is a platform weighing instrument of capacity ^{238.10} 238, ~~15~~ kg by 0,10 kg with a mechanical basework. The pullrod, which is of minimum length 820 mm, is connected to a Tedeia 300F 30 kg load cell (Figures 1 and 2). The output signal from the load cell is fed to a Consolidated Controls Model UMC 4000 indicator.

The instrument is approved for 2500 increments (Figure 3).

The basework is fitted with four adjustable legs and a level indicator adjacent to which is a notice advising that the instrument must be level when in use.

The indicator has the following features:

- Zero:** adjusted by screwdriver.
Automatic zero-correction device automatically resets zero within 0,25e whenever instrument comes to rest within 0,5e of zero.
Light alongside CENTRE ZERO illuminates.
- Check button:** when pressed, illuminates all segments and the MOTION, CENTRE ZERO, TARE, ZERO TRACK AND TARE RECALL indicating lights for 2 seconds.
This sequence is also followed when power is switched on.
- Tare button:** when pressed, automatically tares a container on the load receptor to within 0,25e. On removal of container, value of tare prefixed by minus sign is displayed.
Tare is subtractive and up to capacity of instrument.

Tare-recall

Button: recalls tare value when held pressed during a net weighing.

Markings: The instrument is marked with the following data:

Manufacturer's name	
Serial number of instrument	
NSC approval number in the form:	NSC No 6/9C/70
Accuracy class in the form:	III
Maximum capacity in the form:	Max*
Minimum capacity in the form:	Min*
Verification scale interval in the form:	$d_d = e = \dots*$
Maximum subtractive tare in the form:	$T = - \dots*$

Sealing of

- Indicator:
- (1) Access drawer containing adjustments and switches - sealing wire passes through hole in drawer, and hole in instrument cover (Figure 4).
 - (2) Serial numbers of basework and load cell - at the back of the indicator a sealing wire passes through one instrument retaining screw and the adjacent housing screw which also retains a plate showing serial numbers of load cell and basework (Figure 5).

Variant:

1. The instrument with a Tedea 1010 30 kg load cell.

Test Procedures:

1. **Accuracy Requirements:**

The maximum permissible errors are:

- $\pm 0,5e$ for loads between zero and 500e inclusive;
- $\pm 1e$ for loads between 501e and 2000e inclusive; and
- $\pm 1,5e$ for loads above 2000e.

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

2. Load Tests:

The application of the test loads specified in Table 1 and the display of these loads within the accuracy requirements listed above will check that the instrument operates in accordance with the approved design.

3. Zero balance:

As the automatic device resets zero when the weighing mechanism is in equilibrium within 0,5 scale interval of zero, zero should be checked as described in the Commission's Test Procedure for the Elimination of Rounding Errors for Weighing Instruments with Digital Indication (Document 104), with, say, a load equivalent to 10 scale intervals on the load receptor. The indications with 0,25e and 0,75e additional weight on the load receptor should then be 10e and 11e respectively.

4. Zero range:

The maximum range of operation of the zero device should not exceed 4% of the capacity of the instrument ($\pm 2\%$ approximately).

5. Range of indication:

The maximum weight indicated should not exceed the maximum capacity (max); above this indicated weight the indicator should be blank.

TABLE 1

Test Load in Scale Intervals *

0	10	25	60	120	250	698,5
1	12	30	70	140	300	798,5
2	14	35	80	160	350	898,5
3	16	40	90	180	400	998,5
4	18	45	100	200	450	1198,5
5	20	50			500	1398,5
6						1598,5
7						1798,5
8						1998,5
9						2498

* Test Load = Number of scale intervals x scale interval.

Note: The test load should include a test at capacity, less the tolerance and less 0,5 scale interval.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/70

VARIATION No 1

Pattern: J.W. Wedderburn Weighing Instrument Model UMC 4000

Submittor: J.W. Wedderburn & Sons Pty Ltd,
90 Parramatta Road,
Summer Hill, New South Wales, 2130.

1. Description of Variant

2. With other Commission approved baseworks.
3. With Tedea Load Cell Model 311F of 50 kg capacity mounted as shown in Figures 6 and 7 provided that:-
 - (i) the mass indicator does not display more than 2500 scale intervals or the maximum number of allowed scale intervals for the load cell, whichever is the smaller.
 - (ii) the distance from the centre of the lever connection to the link adjustment on the load cell is not less than 100 mm (Figure 7).
 - (iii) The mounting of the load cell is such that a minimum clearance of 12 mm is maintained around the rubber bellows.
 - (iv) Where possible an inspection port is provided in proximity to the load cell mounting.

15/9/80



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/70

VARIATION No 2

Pattern: J.W. Wedderburn Weighing Instrument Model UMC 4000

Submitter: J.W. Wedderburn & Sons Pty Ltd,
90 Parramatta Road,
Summer Hill, New South Wales, 2130.

1. Description of Variant

1.1 Variant 4

With HBM (GDR) Load Cell Model Z3H3 of 500 kg capacity with 3000 verification scale intervals (Figure 8).

1.1.1 Mounting

- (1) The load cell is mounted in accordance with manufacturer's recommendations (see Data sheet D21-19-0e) and Figure 9.
- (2) An inspection port is to be provided in proximity to the load cell mounting, to allow the load cell to be examined in situ.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/9C/70

VARIATION No 3

Pattern: Wedderburn Model UMC 4000 Weighing Instrument

Submittor: J.W. Wedderburn & Sons Pty Ltd
90 Parramatta Road
Summer Hill, New South Wales, 2130.

1. Description of Provisional Variant 5

With a Teraoka model DS-90 basework (Figures 10 and 11) of 300 kg capacity replacing the basework of the pattern.

This basework, which incorporates two (2) Teraoka model M300 300 kg load cells, is approved for a maximum of 3000 scale intervals.

The basework is provided with a level indicator and four (4) adjustable feet.



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NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/9C/70

CHANGE No 1

The description of the

J.W. Wedderburn Weighing Instrument Model UMC 4000

given in Technical Schedule No 6/9C/70 is altered by:

in first line of first paragraph, alter 238,15 kg
to 238,10 kg.

Signed

Executive Director

15/9/80



6/9C/70
2/12/84

NATIONAL STANDARDS COMMISSION

WITHDRAWAL OF PROVISIONAL APPROVAL

This is to certify that the provisional approval of variant 5 of the

Wedderburn Model UMC 4000 Weighing Instrument

submitted by J W Wedderburn & Sons Pty Ltd

90 Parramatta Road

Summer Hill, New South Wales, 2130,

wherein the Teraoka model DS-90 300 kg basework was approved for use with up to 3000 verification scale intervals, was withdrawn as from 2/12/84.

Instruments verified as complying with provisional variant 5 must now be removed from use for trade unless they are used with up to 1000 verification scale intervals, in which case they may comply with the approval for variant 5 given on 12/11/84.

Signed

A handwritten signature in dark ink, appearing to read 'G. Henry'.

Acting Executive Director



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/9C/70

CHANGE No 2

The following changes are made to the approval documentation for the

Wedderburn Model UMC4000 Weighing Instrument

submitted by J W Wedderburn & Sons Pty Ltd

90 Parramatta Road

Summer Hill NSW 2130.

1. In Certificate of Approval No 6/9C/70 dated 6/5/83, the Descriptive Advice is amended to read, in part;

"Variant: provisionally approved 11/3/83 - approved 12/11/84

5. With a Teraoka of the pattern.

Technical Schedule No 6/9C/70 Variation No 3 dated 6/5/83 describes variant 5."

2. In Technical Schedule No 6/9C/70 Variation No 3 dated 6/5/83;
 - (a) Delete all references to "provisional" in respect of variant 5.
 - (b) The maximum number of scale intervals for which the model DS-90 basework is approved, is now amended to read "1000".

Signed

Acting Executive Director

Figure 6/9C/70 - 1



Lever System

9/5/80

Figure 6/9C/70 - 2

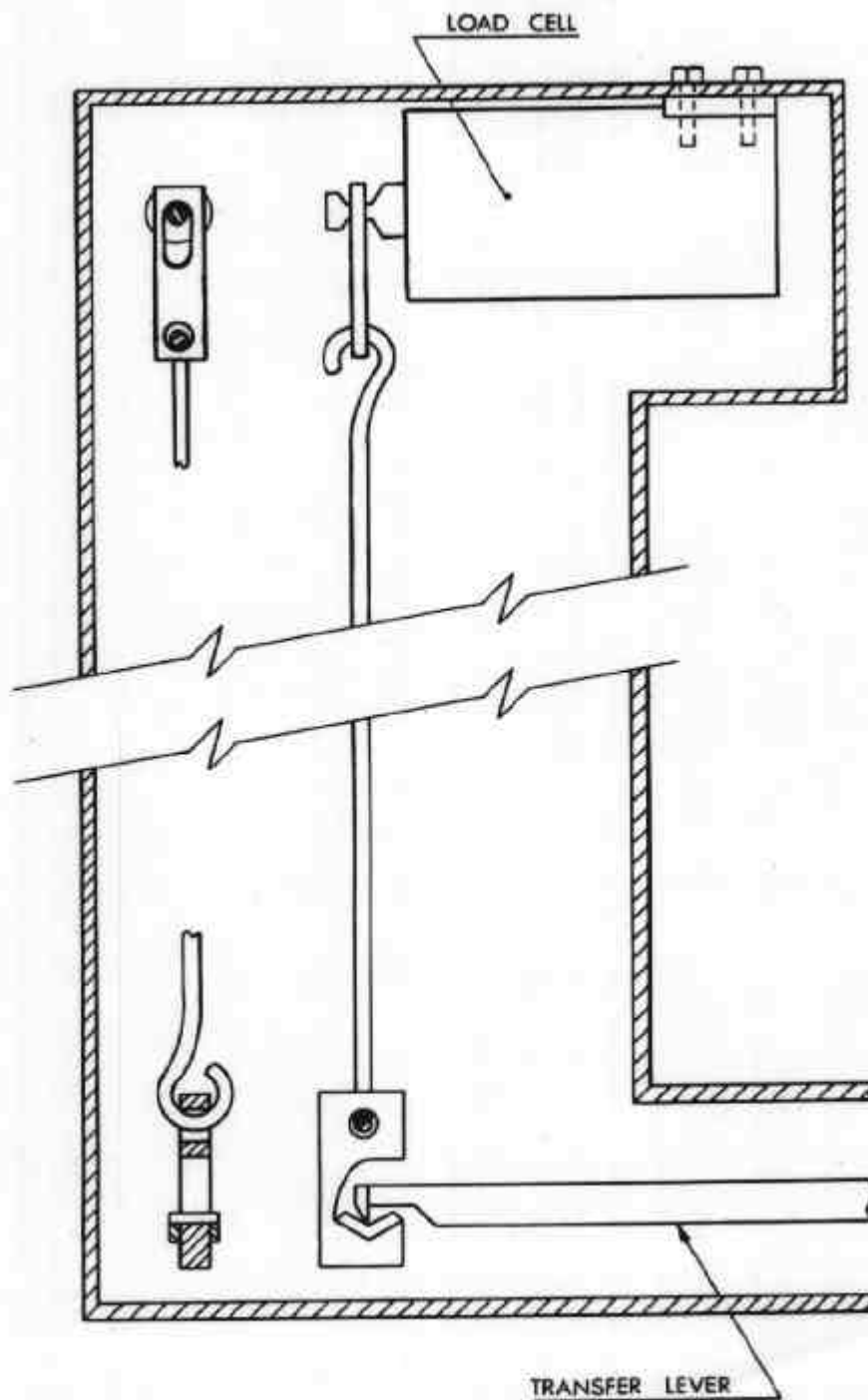


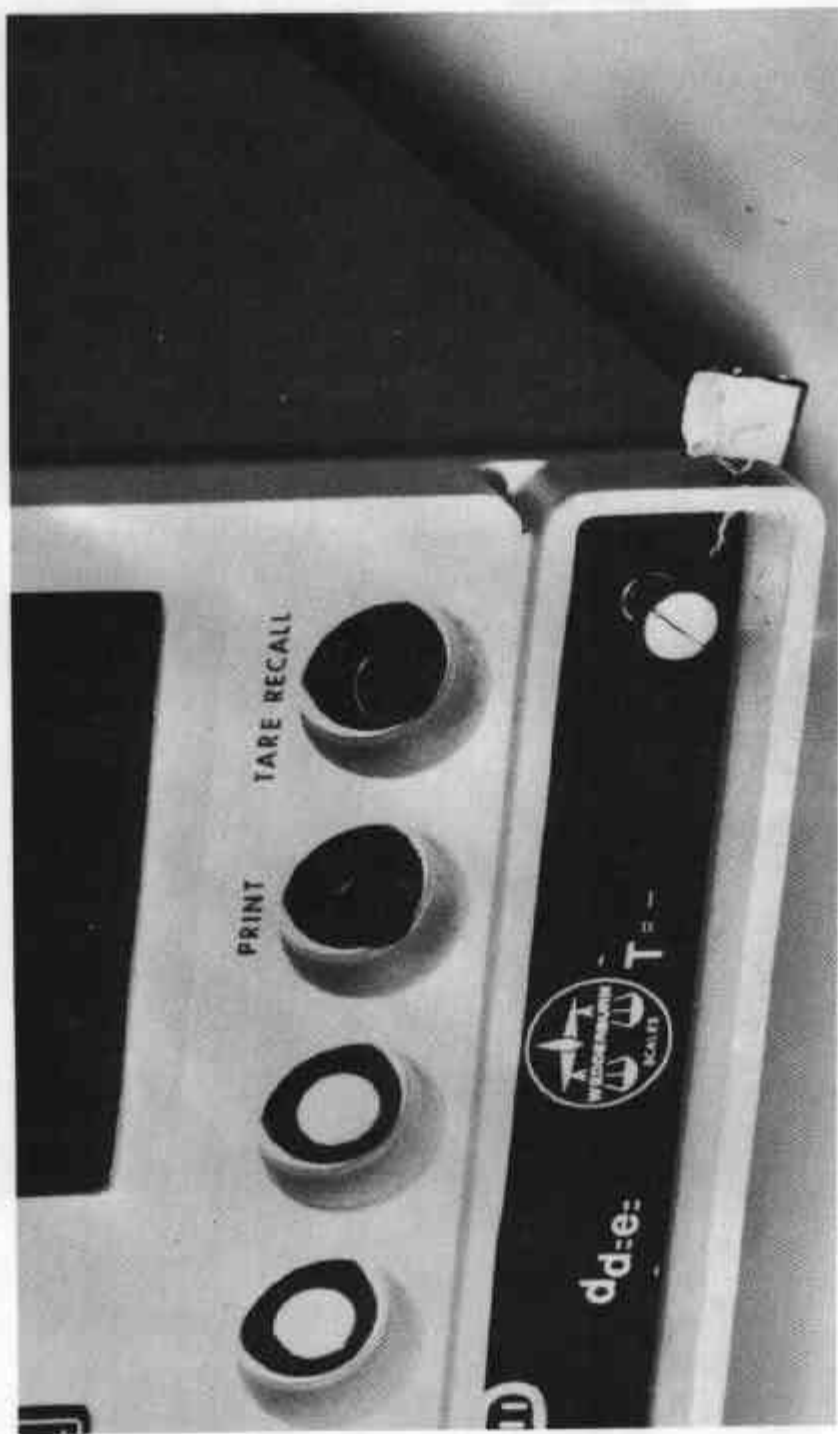
Figure 6/9C/70 - 3



Consolidated Controls Model UMC 4000 Indicator

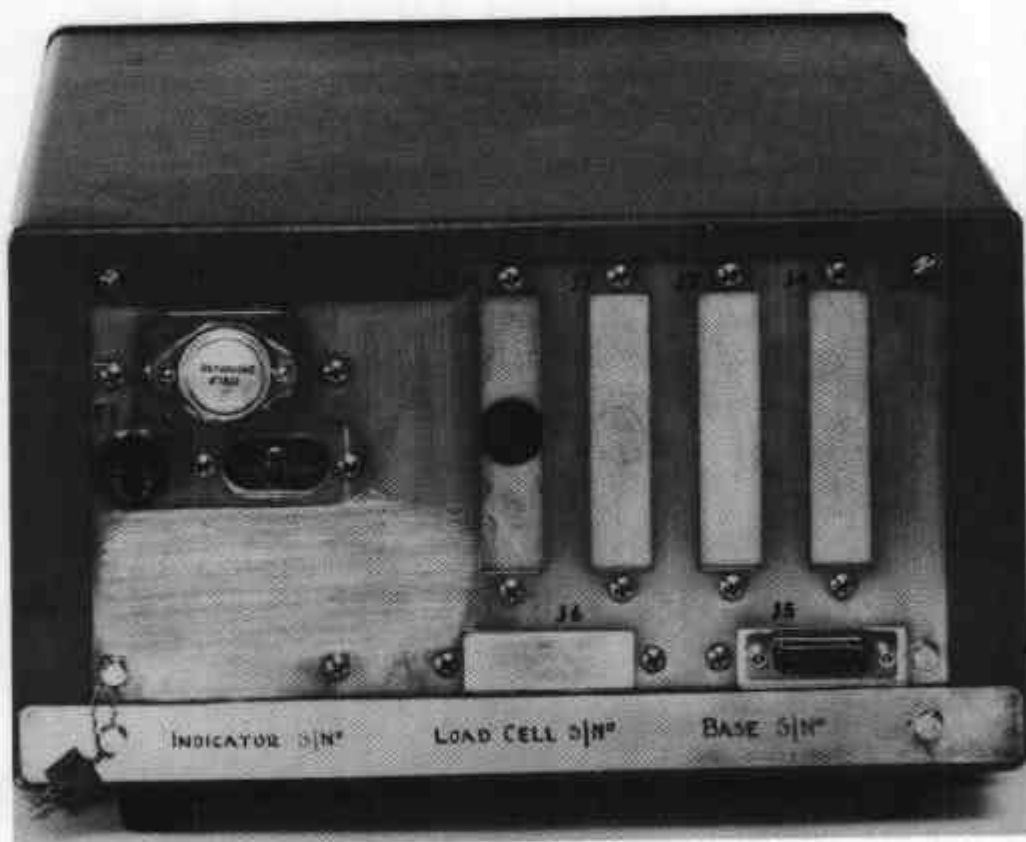
9/5/80

Figure 6/9C/70 - 4



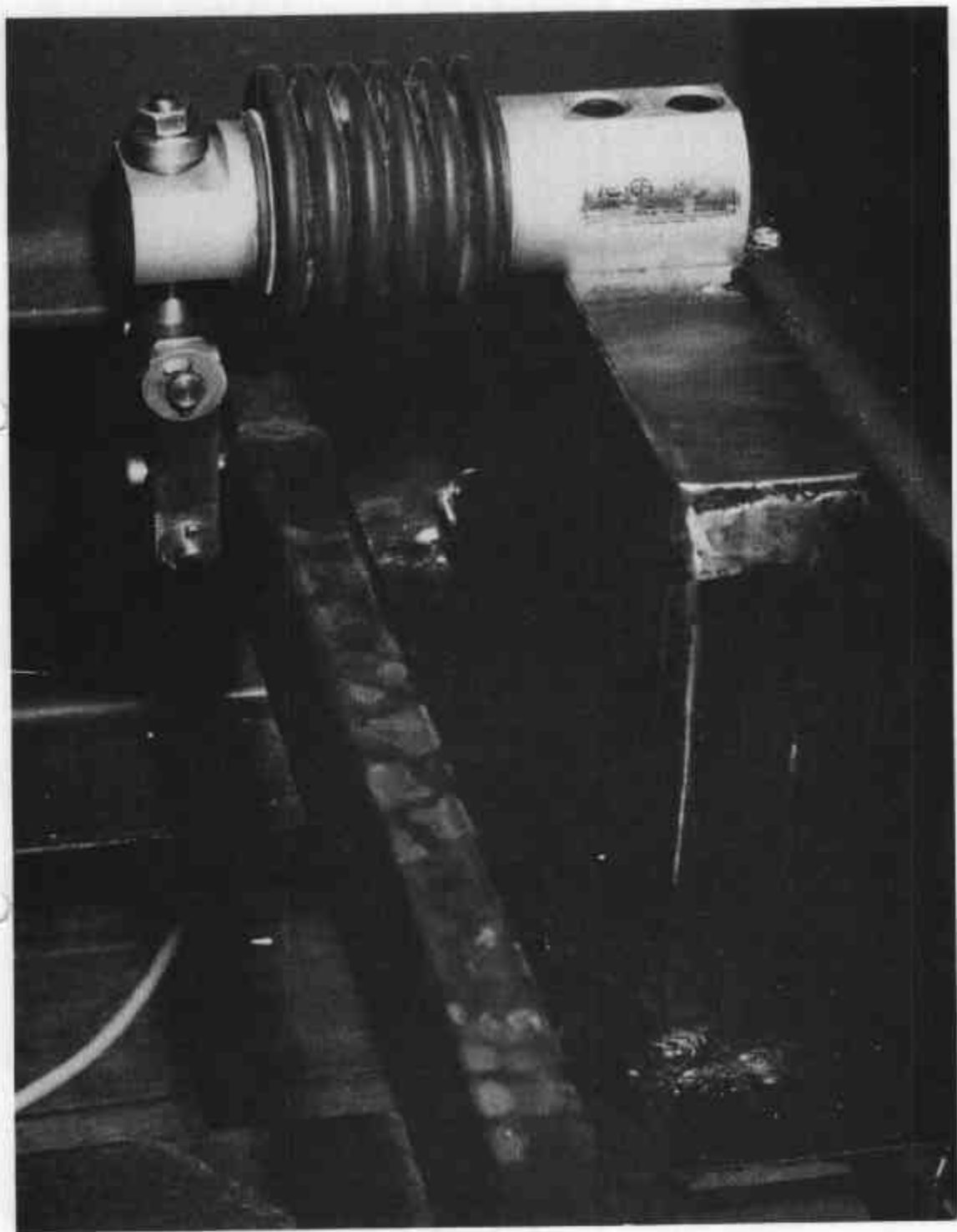
UMC 4000 Indicator - Sealing of Drawer

Figure 6/9C/70 - 5



UMC 4000 Indicator - Rear View Showing Sealing

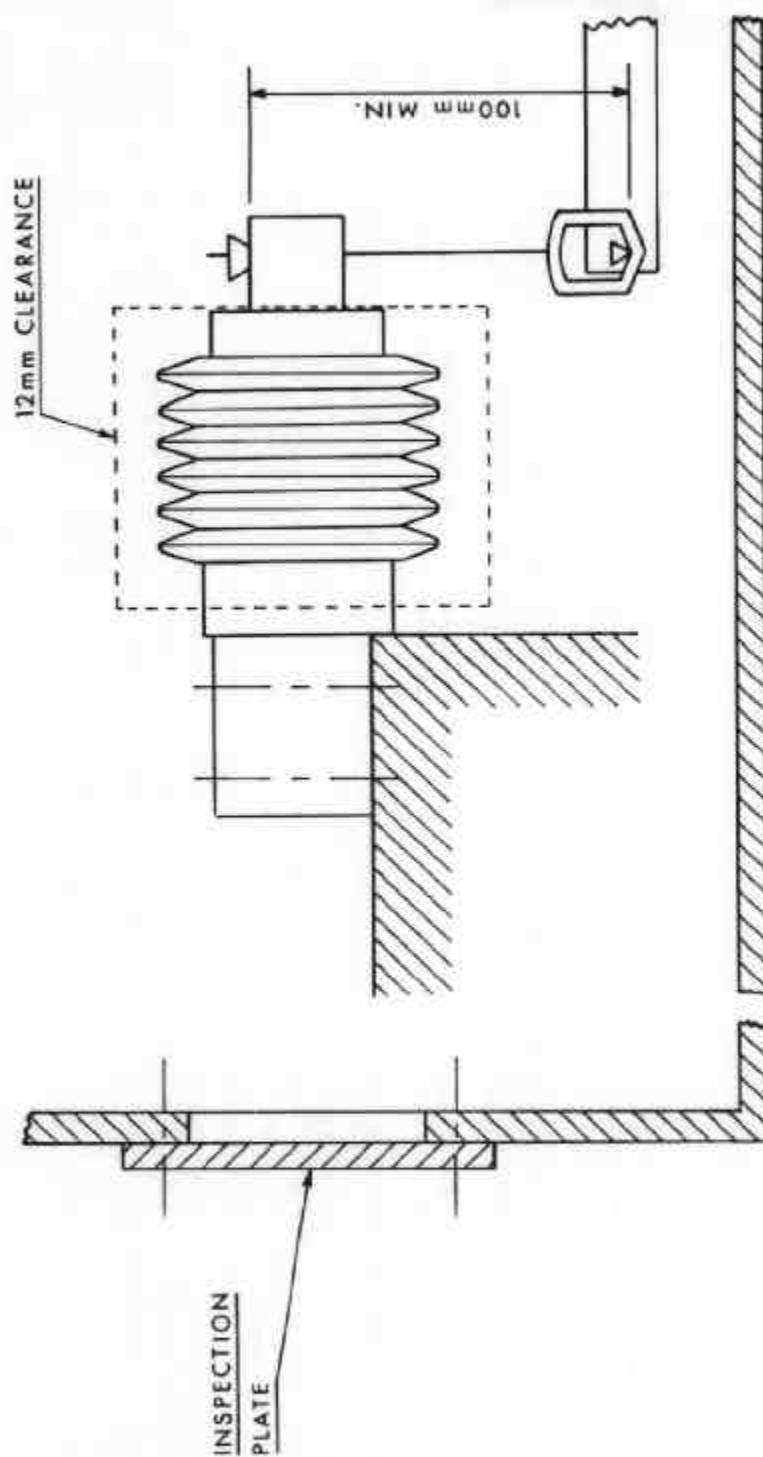
9/5/80



Load Cell Mounting

15/9/80

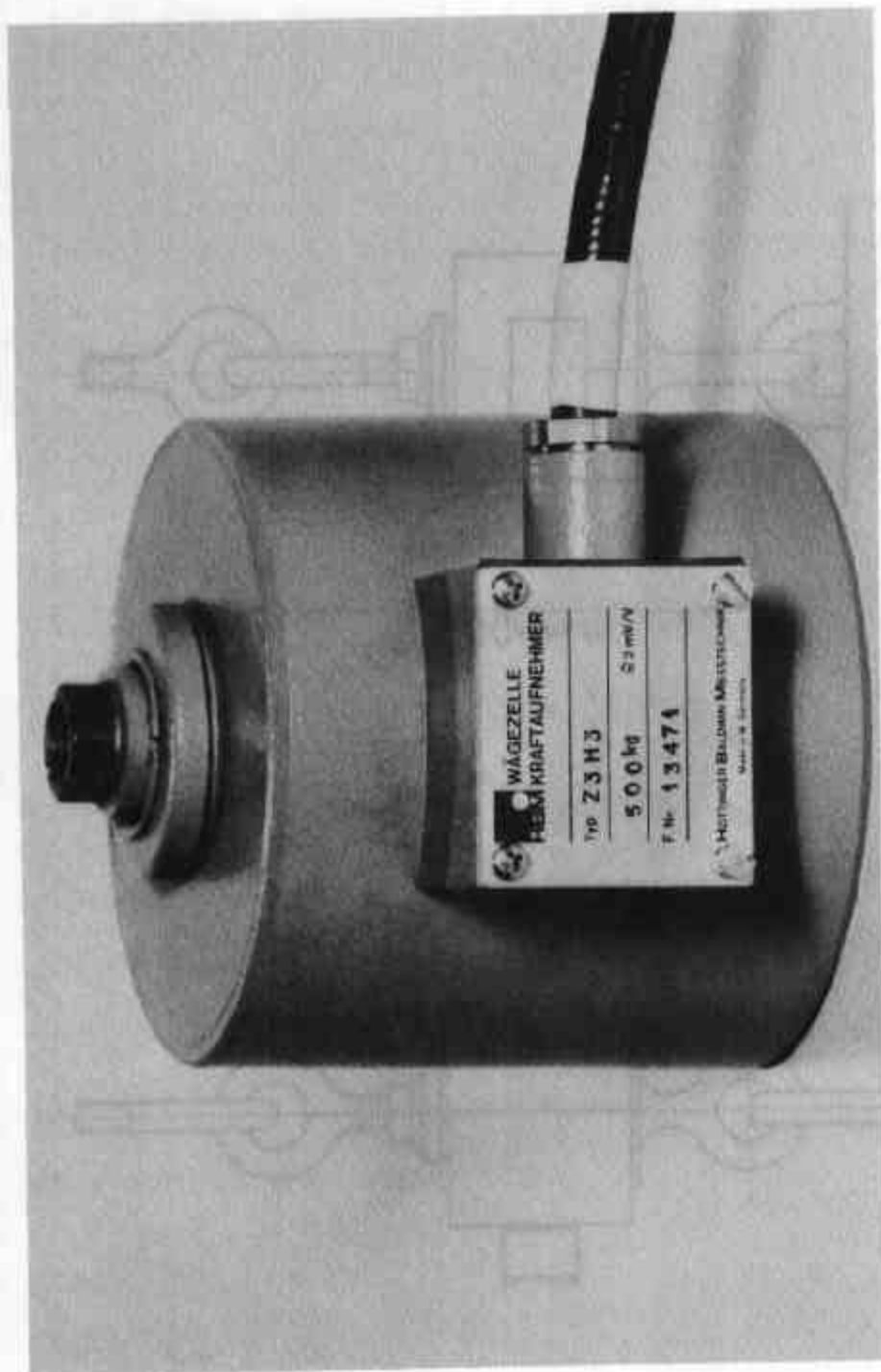
FIGURE 6/9C/70 - 7



Load Cell Mounting - Schematic Diagram

15/9/80

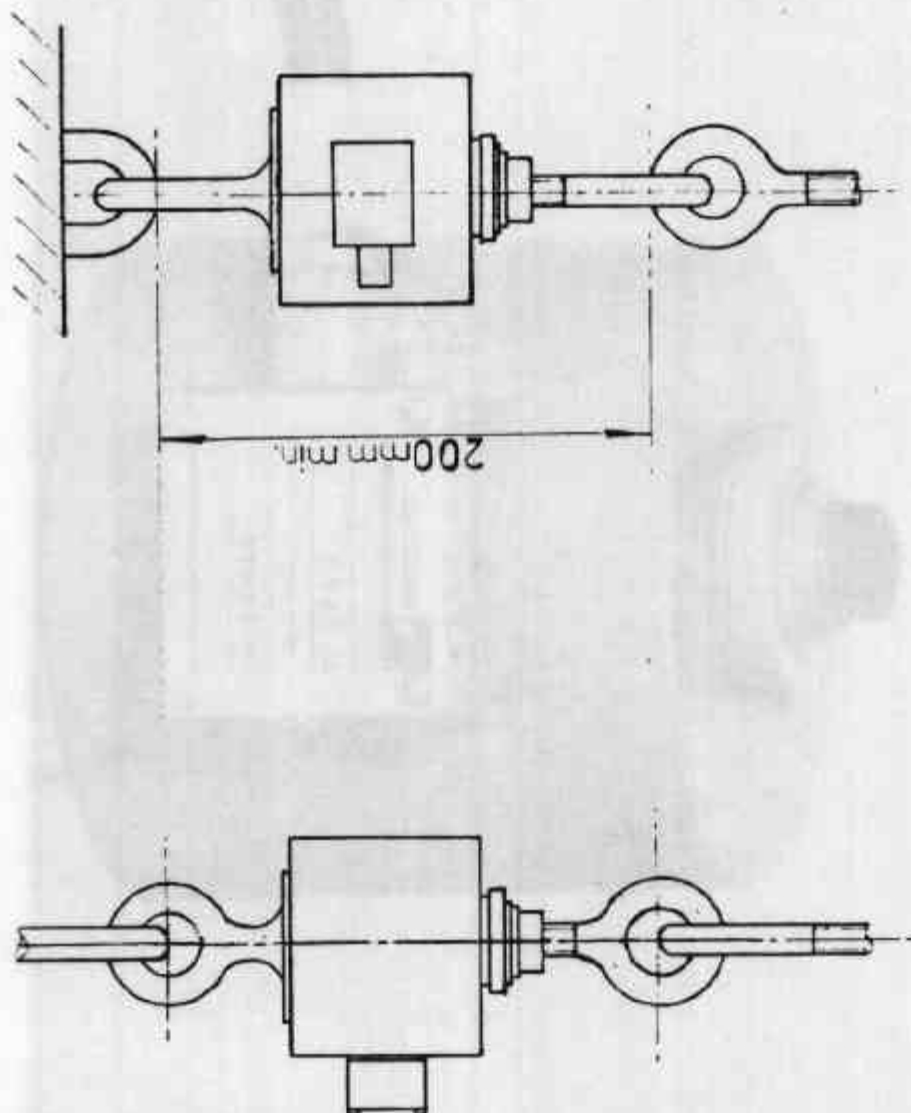
FIGURE 6/9C/70 - B



HBM (GDR) Load Cell Z3H3

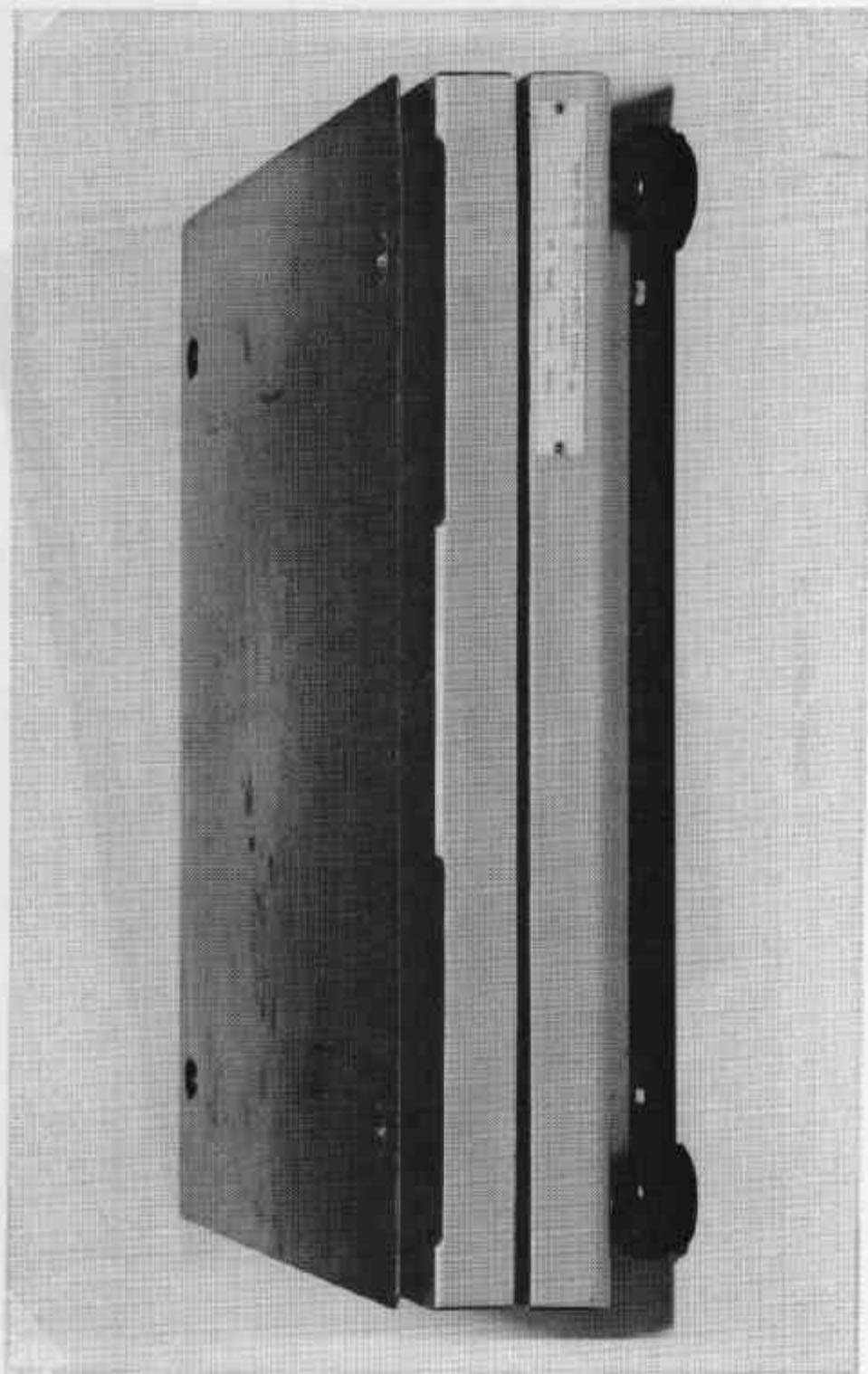
18/8/81

FIGURE 6/9C/70 - 9



Mounting of Z3H3 Load Cell

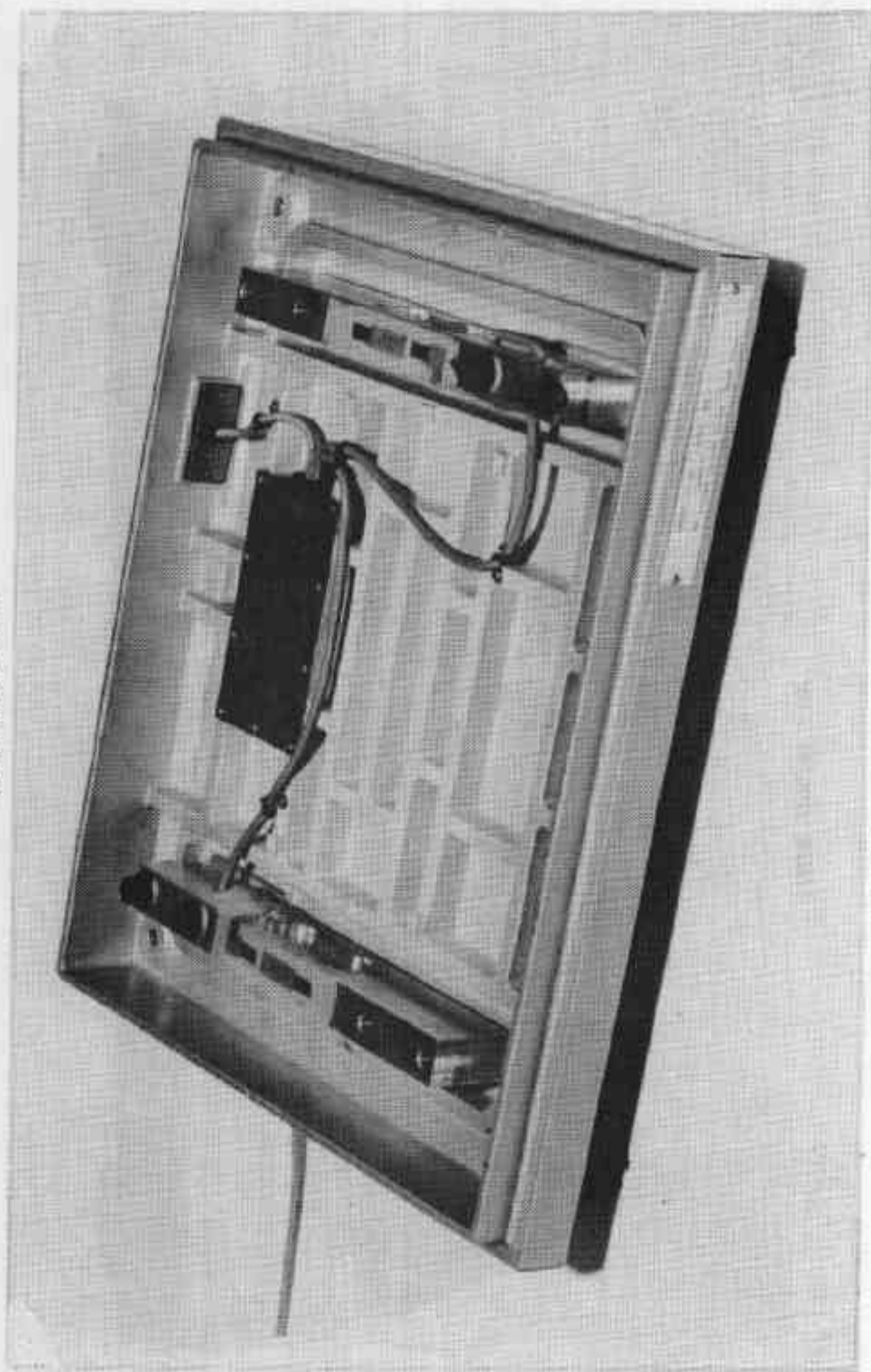
FIGURE 6/9C/70 - 10



Teraoka Model DS-90 Basework

6/5/83

FIGURE 6/9C/70 - 11



DS-90 Basework With Cover Removed

6/5/83