

# National Standards Commission

C/- CSIRO NATIONAL STANDARDS LABORATORY UNIVERSITY GROUNDS

CITY ROAD, CHIPPENDALE, N.S.W. 2008.

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## CERTIFICATE OF APPROVAL No 2/1/1

This is to certify that the pattern and variants of the

Metraplan Leather-measuring Instrument

submitted by Metraplan - SPAA,  
Rue Lesdiguières,  
38640 Claix,  
Grenoble, France,

have been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade.

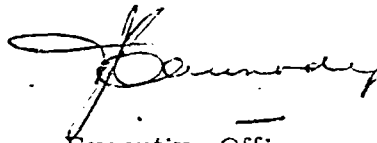
Date of Approval: 26 July 1974.

The pattern and variants are described in Technical Schedule No 2/1/1, and in drawings and specifications lodged with the Commission.

The approval is subject to review on or after 1 August 1979.

All instruments conforming to this approval shall be marked with the approval number "NSC No 2/1/1".

Signed



Executive Officer



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No 2/1/1

Pattern: Metraplan Leather-measuring Instrument

Submittor: Metraplan - SPAA,  
Rue Lesdiguières,  
38640 Claix,  
Grenoble, France.

Date of Approval: 26 July 1974

All instruments conforming to this approval shall be marked "NSC No 2/1/1".

Description:

The pattern (see Figure 1) is of an instrument for measuring the area of opaque sheets of leather. The area of the leather is determined by passing the leather between a row of photocells which are spaced at 3,125-cm intervals, the photocells scanning once for every 2-cm advance of the leather past the measuring head. At each scan a pulse from each photocell covered by the leather at the scanned position is counted in the measuring unit (see Figure 2). The area represented by each pulse is 6,25 cm<sup>2</sup>, and the total number of pulses counted is divided by 16 to produce an indication in 1-dm<sup>2</sup> increments on the nixie tube indicator.

When the unit of measurement selected by the switch on the preselection and peripheral control unit (see Figure 3) is ft<sup>2</sup>, the number of pulses each of which represents 6,25 cm<sup>2</sup> of area is divided by 37 to produce an indication in 0,25-ft<sup>2</sup> increments on the nixie tube indicator (6,25 cm<sup>2</sup> × 37 = 231,25 cm<sup>2</sup> which is 0,249 ft<sup>2</sup>).

The measuring head comprises a 2-metre row of photocells and a fluorescent lamp above the photocells. The conveyor belt which is driven by the drum on the end of the instrument carries the leather between the photocells and the fluorescent lamp, thus blocking the light from the fluorescent lamp to some of the photocells. A disc driven by a

belt from the motor driving the conveyor triggers a sensing head every 2 cm of the leather movement on the conveyor belt, generating the photocell scanning pulses.

Changes in calibration are made by varying the diameter of the pulleys driving the disc, thus slightly changing the distance of the leather advance between photocell scanning pulses. This effectively varies the area represented by each pulse from the measuring head. A sealed cover prevents access to the disc and belt which generate the scanning pulses (see Figures 4 and 5).

The measuring unit is sealed by a lead-plug seal over a set screw which retains the cover on the unit (see Figure 6).

A sign on the measuring head is marked:

"place leather with any straight edge at an angle to direction of conveyor movement".

Peripheral equipment such as a ticket printer, leather printer and batching devices may be used without affecting the performance of the instrument. Figures 7, 8 and 9 illustrate typical devices and Figure 10 illustrates sample tickets.

The approval includes:

1. The instrument with two measuring heads, only one of which may be used at a time.
2. The one instrument Serial No M373, located at the Michaelis Bayley Leather Co., Botany, New South Wales, which is the prototype of the commercial instrument and does not have a nixie tube display unit.

### Special Tests

When two measuring heads are fitted, verification tests should be repeated for each head.



# NATIONAL STANDARDS COMMISSION

## CANCELLATION OF CERTIFICATE OF APPROVAL No 2/1/1

This is to certify that Certificate of Approval No 2/1/1 for the pattern and variants of the

Metraplan Leather-measuring Instrument

submitted by Metraplan - SPAA  
Rue Lesdiguières  
38640 Claix  
Grenoble, France,

was cancelled in respect of new instruments on 1 March 1983.

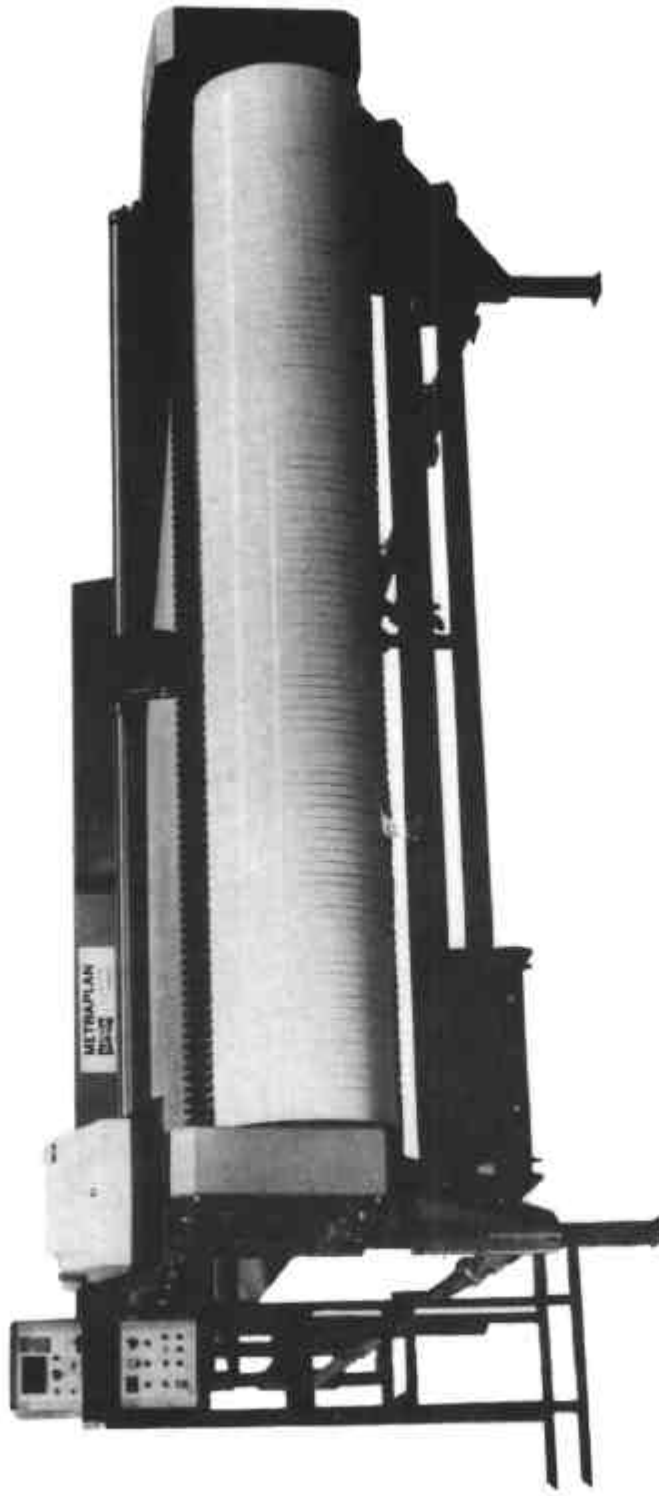
Instruments which were verified before 1 March 1983 may, with the concurrence of the State or Territorial verifying authorities, be submitted for reverification.

Signed

Acting Executive Director

Instruments conforming to the pattern do not comply with the latest design rules.

FIGURE 2/1/1 - 1



Metraplan Leather-measuring Instrument

20/8/74

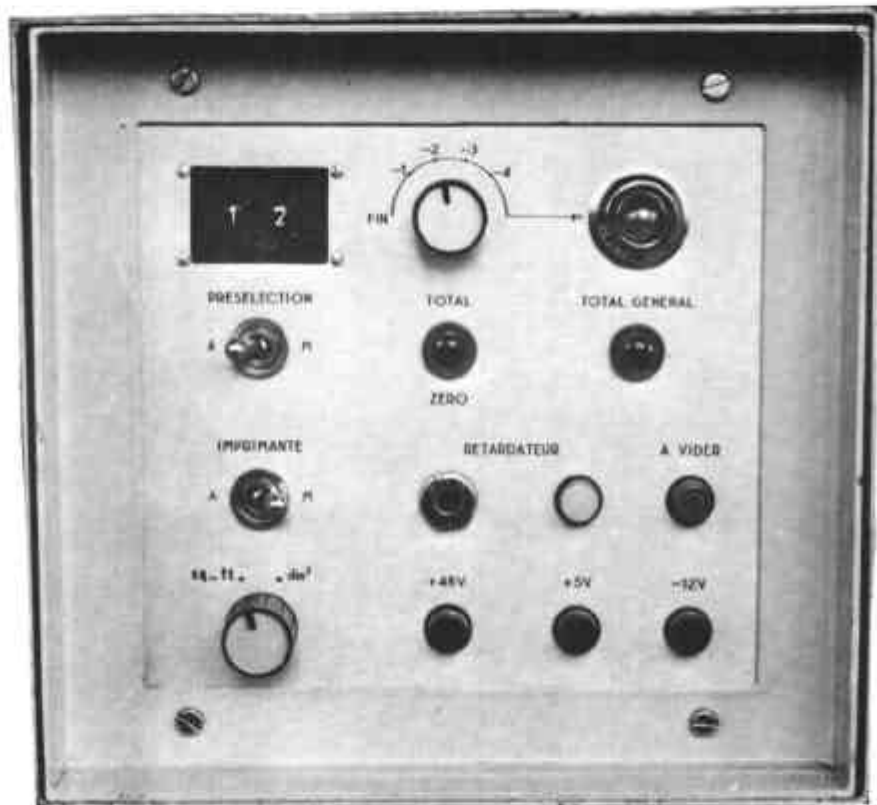
FIGURE 2/1/1 - 2



Measuring Unit

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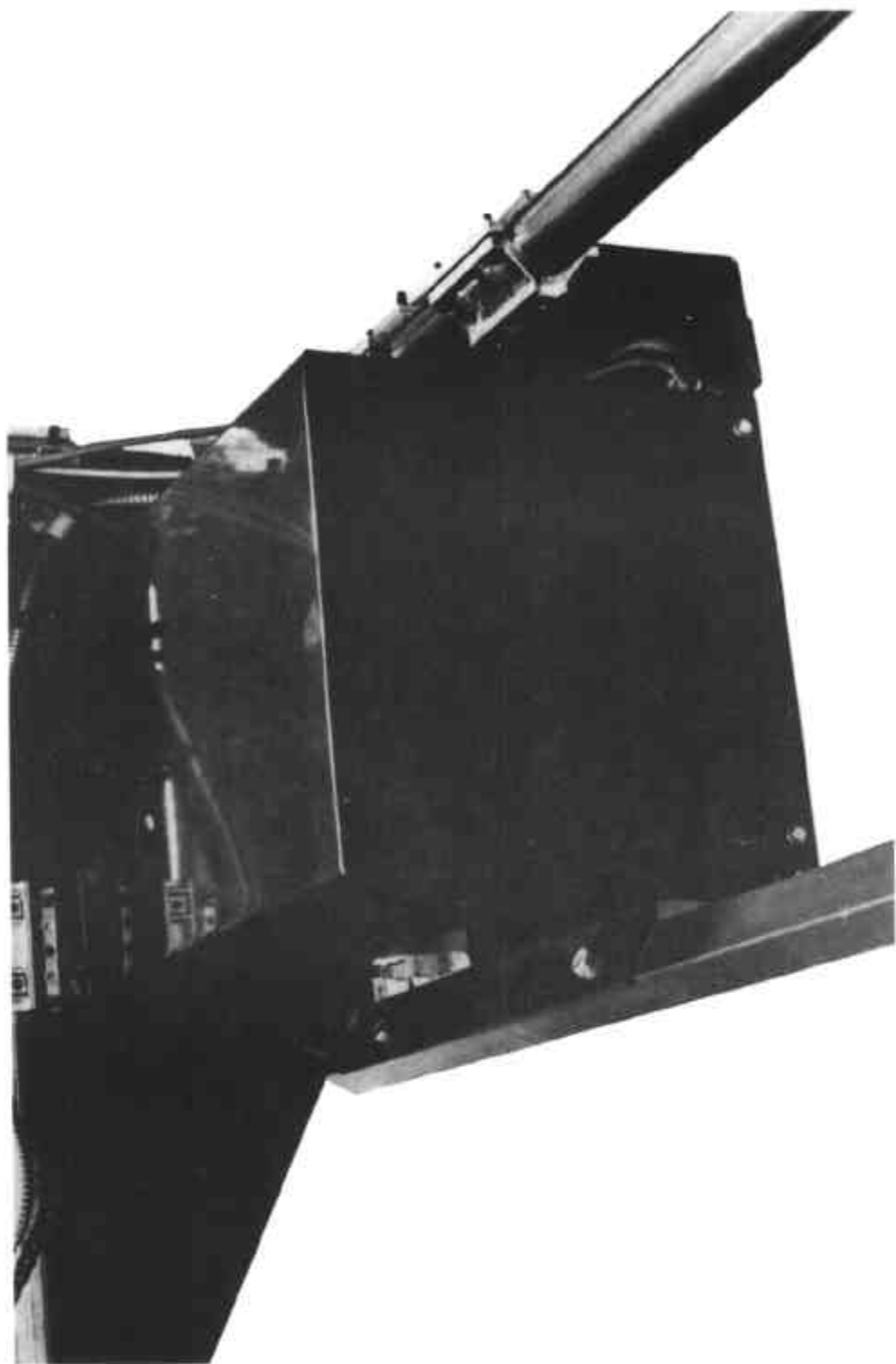
FIGURE 2/1/1 - 3



Preselection and Peripheral Control Unit

20/8/74

FIGURE 2/1/1 - 4

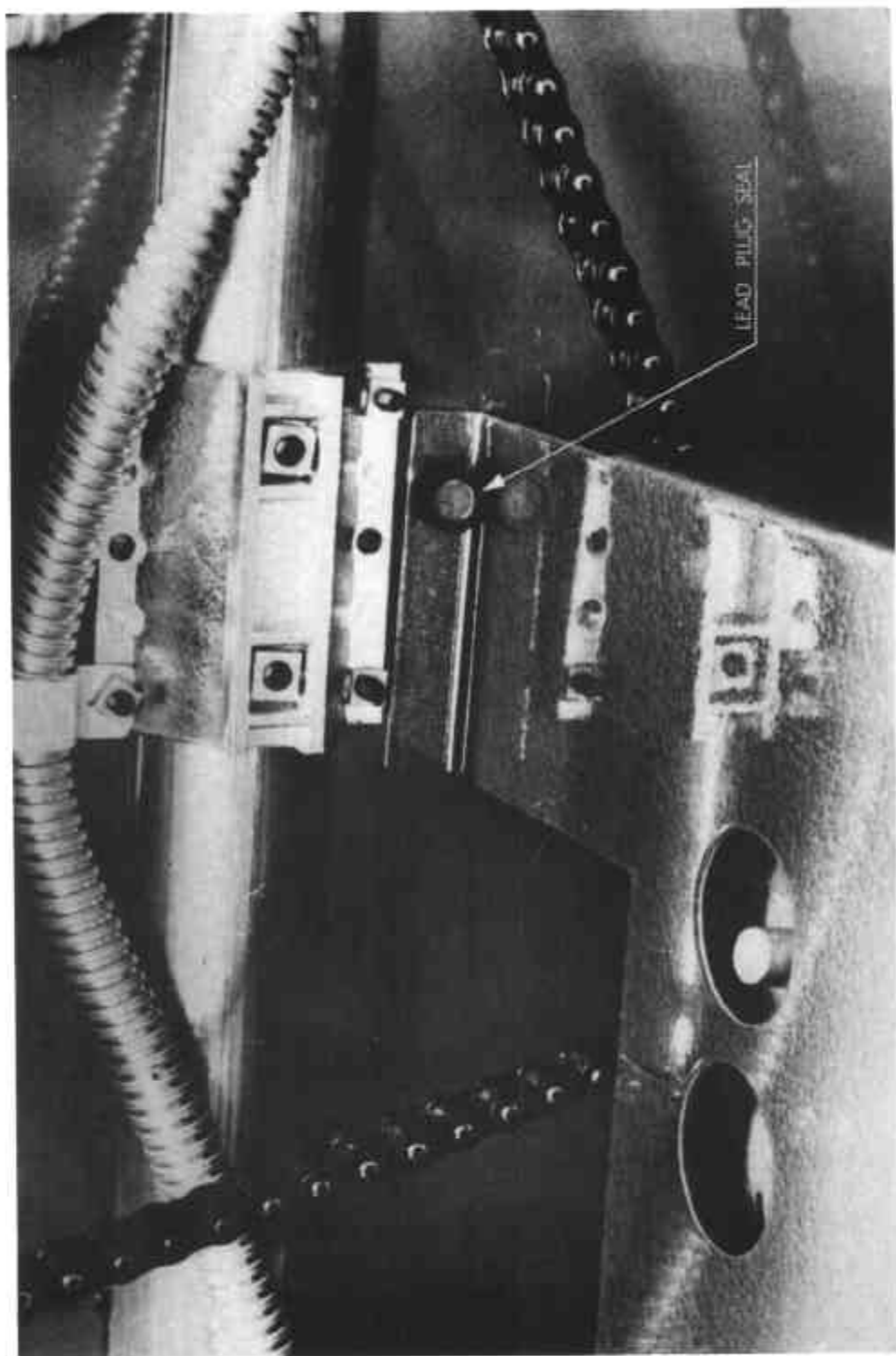


Cover over the Scanning Pulse Generator

20/8/74



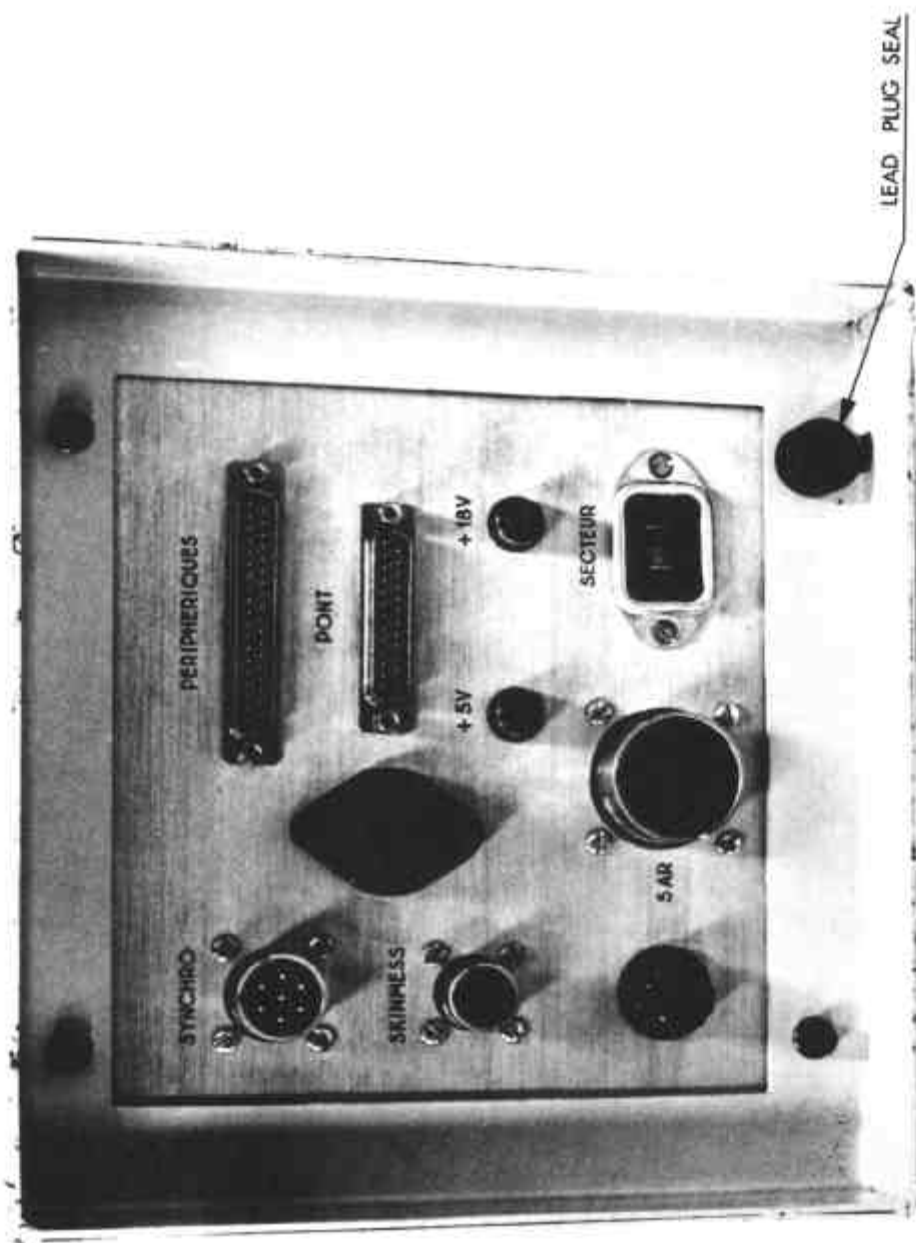
FIGURE 2/1/1 - 5



Sealing of Cover over Scanning Pulse Generator

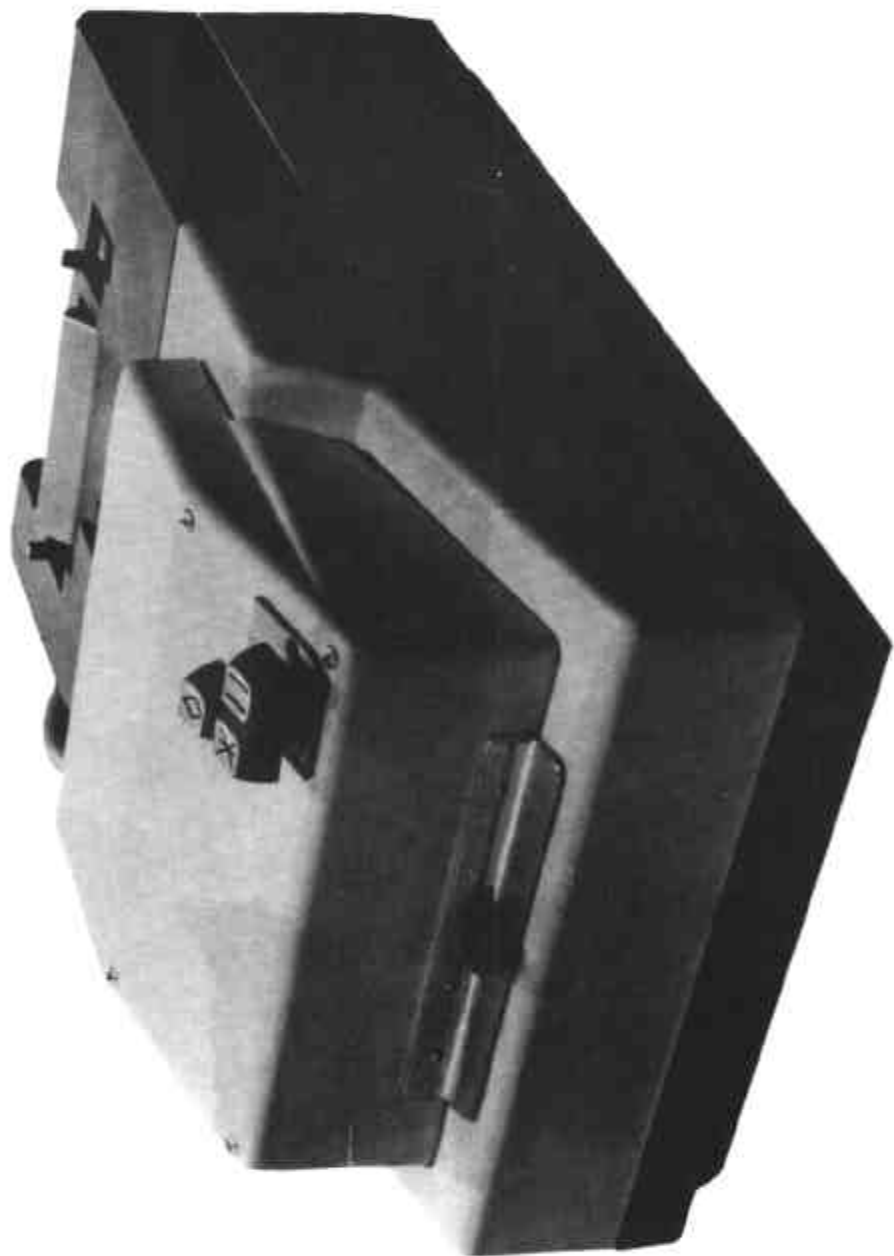
20/8/74

FIGURE 2/1/1 - 6



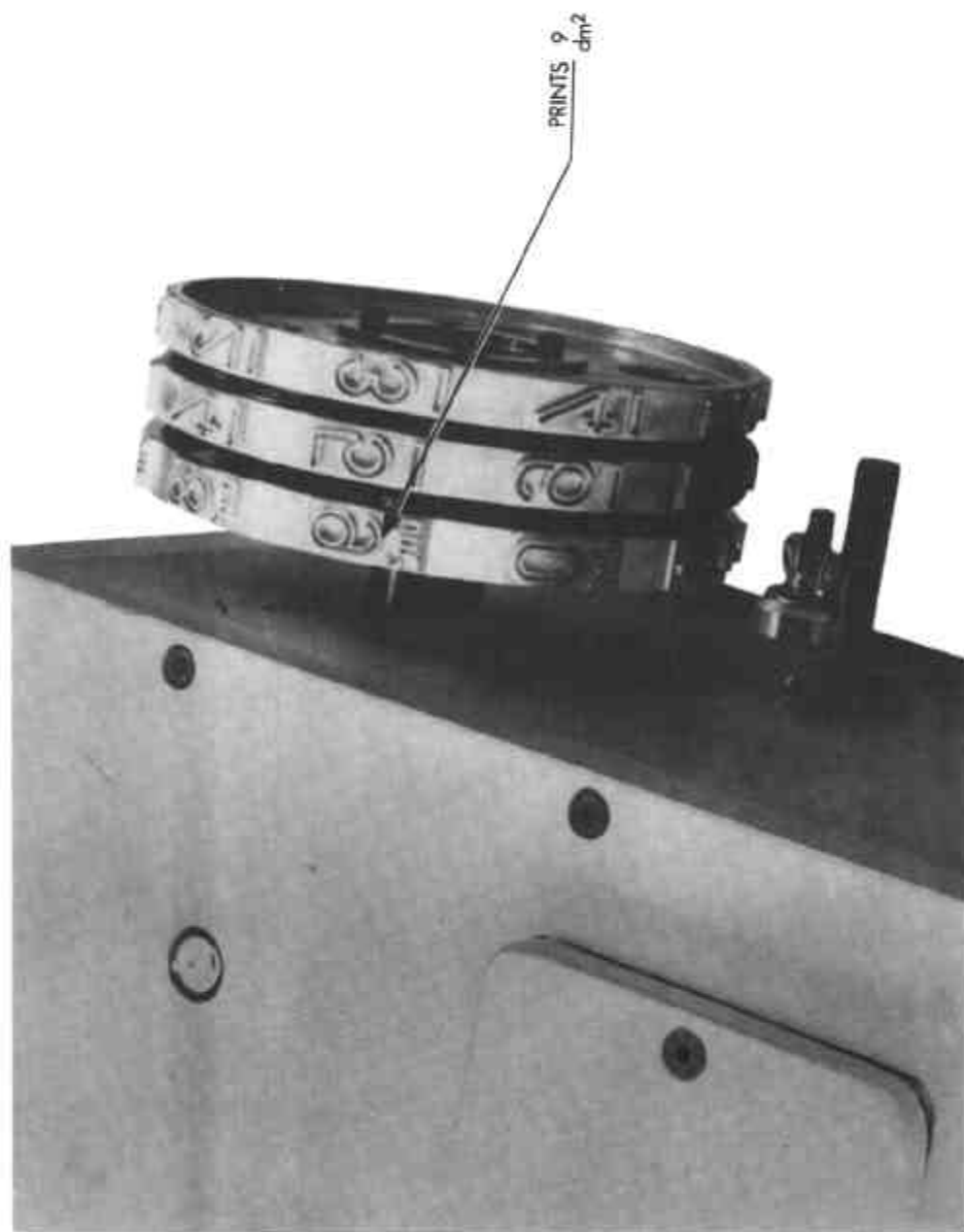
Seal on the Rear of the Measuring Unit

FIGURE 2/1/1 - 7



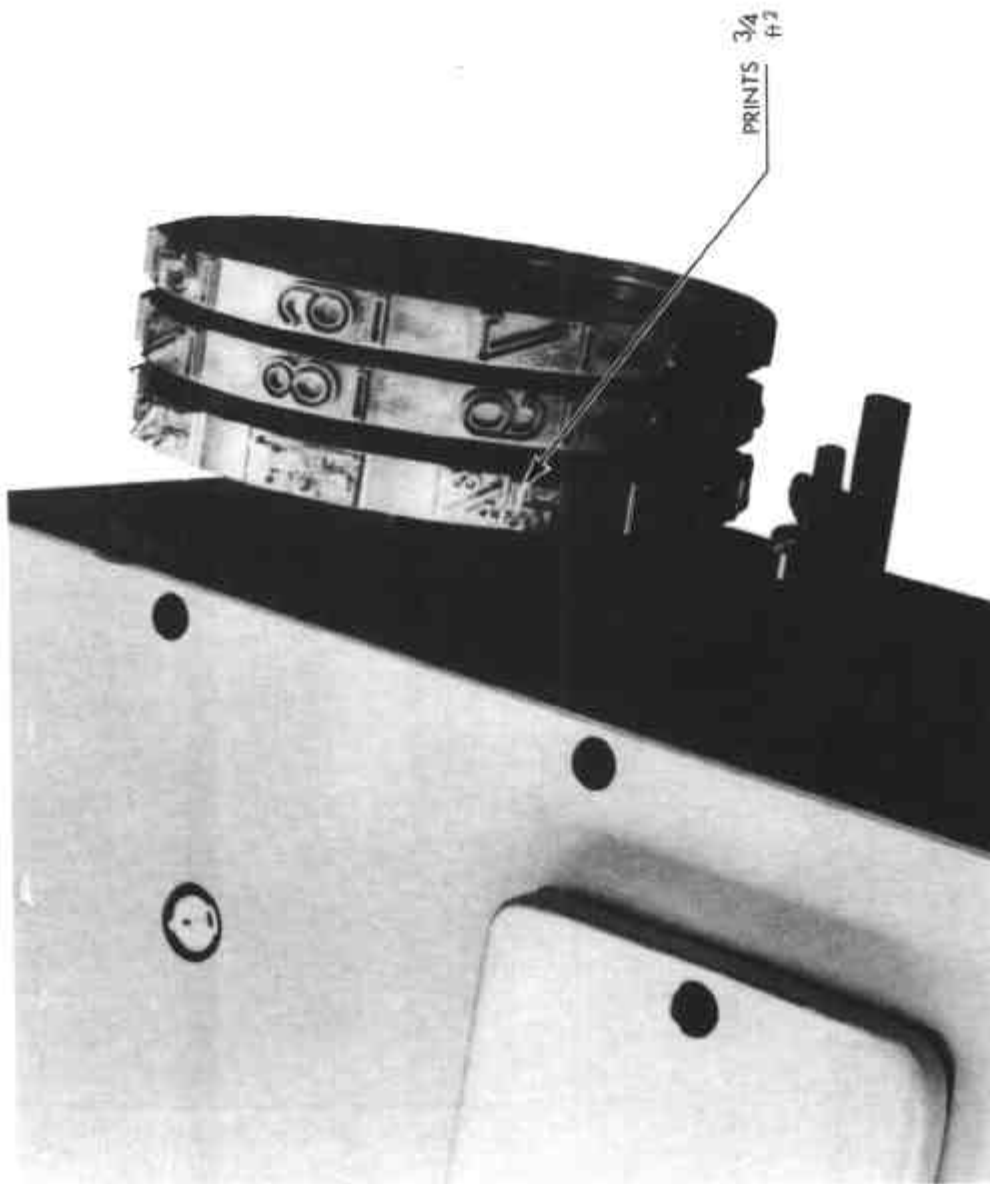
Ticket Printer

FIGURE 2/1/1 - 8



Leather Printer —  $dm^2$

FIGURE 2/1/1 - 9



Leather Printer — ff<sup>®</sup>

20/8/74

FIGURE 2/1/1 - 10

$ft^2 - ft^2 - ft^2 - ft^2 - ft^2 - ft^2 - ft^2 - ft^2 - ft^2$   
tal - \* sub total - \*<sup>11</sup> total - \* sub total - \*<sup>11</sup> total

$m^2 - m^2 - m^2 - m^2 - m^2 - m^2 - m^2 - m^2 - m^2$   
tal - \* sub total - \*<sup>11</sup> total - \* sub total - \*<sup>11</sup> total

Sample Tickets

20/8/74