COMMONWEALTH OF AUSTRALIA

NATIONAL STANDARDS COMMISSION

Weights and Measures
(National Standards)
Act 1960-1966

Weights and Measures
(Patterns of Instruments)
Regulations

Certificate of Approval

CERTIFICATE NUMBER 6/9C/26

In respect of the pattern of

Suprema Self-indicating Weighing Instrument of 722-kg Capacity and Variants.

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

Manufactured by: Suprema dei Fratelli Bettinelli SNC,
Via Matteotti 28,
21040 Santo Stefano,
Varese. Italy.

This is to certify that the pattern and variants of the instrument illustrated and described in this Certificate have been examined by the National Standards Commission under the provisions of the abovementioned Regulations and have been approved as being suitable for use for trade.

The pattern and variants were approved on 30 May 1973.

The pattern and variants:

1. are marked "NSC No 6/9C/26" and, where required by State legislation, with the State approval number also; and

Cont'd over

2. comply with the General Specifications for Measuring Instruments to be Used for Trade in respect of those parts which were not previously approved by a State.

This Certificate comprises:

Pages 1 to 5 dated 8 June 1973.
Figures 6/9C/26 - 1 to 9 dated 8 June 1973.

Pursuant to regulation 12 of the abovementioned Regulations, variants incorporating components marked ** are approved only in those States in which a State approval of a pattern incorporating the components is in force.

Date of issue 8 June 1973.

Signed

A person authorized by the Commission to sign Certificates under the abovementioned Regulations.

DESCRIPTION OF PATTERN

The pattern (see Figure 2) is of a self-indicating platform weighing instrument of 722-kg capacity and comprises the components tabulated in Column 5 of Figure 1. The capacity of 722 kg includes a dial capacity of 600 kg with the indicator making three revolutions of the dial, which is marked to 200 kg by 500-g graduations. The major tare bar has a capacity of 120 kg by 2-kg graduations and the minor tare bar has a capacity of 2 kg by 500-g graduations.

The pattern is known as the Suprema Model 3G.

DESCRIPTION OF VARIANTS

The components tabulated in the columns of Figure 1 marked "Variants" make up the variants of the pattern with capacities up to the capacities of the baseworks described in the components.

DESCRIPTION OF COMPONENTS

1. Three-lever system basework (see Figures 3, 4 and 5) — consists of two second-order main levers with divided end sections to support both ends of the knife-edges which are force-fits in the lever.

   The platform is supported on a frame which is suspended from the load knife-edges on four swinging links fitted with self-aligning bearings.

   The main-lever fulcrum knife-edges are supported on self-aligning bearings mounted in a stand fixed on the base frame.

   The transfer-lever fulcrum support is similar to the main-lever fulcrums and the nose-end knife-edge of each main lever is connected to the transfer-lever load knife-edges by swinging links fitted with self-aligning bearings.

   A zero adjustment is accessible through a hole in the front of the basework housing. By inserting a screwdriver a threaded rod can be turned to adjust the position of a weight located in the inverted U-shape of the transfer lever.

The maximum capacity is 1405 kg.

2. Wheels, level indicator and screwed levelling feet.

3. Wheel lock — Bowden cables extend from a headwork locking device to the basework where spring-loaded pins engage in holes in two of the wheels when the headwork lock is in the "off" position.

4. The basework of any State-approved pattern** or Commission-approved pattern.

5. Double-pendulum resistant mechanism (see Figures 6 and 7) — movement of the basework pullrod is transferred through two steel tapes to the pendulum cams. The pendulums pivot on knife-edges located in self-aligning bearings mounted on a rigid centre section of the dial housing.

   A frame to which the rack and flash dial are attached straddles the pendulums and cams and is suspended by steel tapes from other cams attached to the pendulums. As the pendulums swing, the frame is raised or lowered vertically and drives the rack and indicator pinion and flash dial.

   The indicator makes up to three revolutions of the dial and with each revolution the flash dial changes the major graduations visible in the principal dial apertures. The resistant mechanism is suitable only for dials with up to 1.15 graduations per degree.

6. Dial housing and pillar (see Figures 2, 6 and 9) — the resistant mechanism is located in a housing mounted on a pillar attached to the base frame. All covers on the housing are fitted with dust seals.

7. Main headwork lever (see Figures 7 and 8), located in the column immediately beneath the dial housing.

8. Tare bar (see Figures 2, 8 and 9), mounted on the main headwork lever, consists of a major tare bar fitted with a movable poise

** See page 2.

housing a minor tare bar which can be adjusted in increments equal to the graduations on the dial. The major bar is graduated in increments equal to the capacity of the minor bar.

9. Single circular dial and flash dial (see Figure 9).

10. Two similarly marked dials with flash dials, one on each side of the dial housing, in which case no tare bar is fitted.

11. Dashpot (see Figures 7 and 9) — an oil-filled dashpot fitted to the pullrod is accessible through a covered port in the column.

12. Headwork locking device (see Figures 6 and 9) — a handle on the top of the dial housing raises an extension to the basework pullrod to relieve the load on the pendulum tapes and lock the pendulums. A notice on the top of the dial indicates the direction the handle is to be turned to lock and unlock the headwork, thus:

LOCKING HANDLE
ROTATE CLOCKWISE TO UNLOCK

13. The headwork of any State-approved pattern** or Commission-approved pattern.

** See page 2.

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NATIONAL STANDARDS COMMISSION

CANCELLATION OF CERTIFICATE OF APPROVAL No 6/9C/26

This is to certify that Certificate of Approval No 6/9C/26 for the pattern and variants of the

Suprema Self-indicating Weighing Instrument of 722 kg capacity

submitted by J W Wedderburn & Sons Pty Ltd
90 Parramatta Road
SUMMER HILL, NSW, 2130

will expire* in respect of new instruments on 1/6/83.

Instruments which were verified before 1/6/83 may, with the concurrence of the State or Territorial verifying authorities, be submitted for reverification.

Signed

Executive Director

* Instruments conforming to the pattern and variants do not comply with the current design rules.

31/5/83

FIGURE 6/9C/26 - 1

1	2	3	4	5	6	7	8
	COMPONENTS	DATE APPROVED	FOOT-NOTES	PATTERN	VARIANTS		
					1	2	3
	BASEWORK COMPONENTS						
1	3-lever system to 1405 kg (Figures 3, 4 & 5)	30 MAY 73		*	*	*	
2	Wheels, level indicator and feet	30 MAY 73		*	‡		
3	Wheel lock	30 MAY 73		*	‡		
	BASEWORK						
4	Basework of State or Commission-approved pattern	30 MAY 73					*
	HEADWORK COMPONENTS						
5	Double-pendulum resistant mechanism (Figures 6 & 7)	30 MAY 73		*	*		*
6	Dial housing and pillar (Figures 2, 6 & 9)	30 MAY 73		*	*		*
7	Main headwork lever (Figures 7 & 8)	30 MAY 73		*	‡		‡
8	Tare bar (Figures 2, 8 & 9)	30 MAY 73		*	‡		‡
9	One dial (Figure 9)	30 MAY 73		*	A		A
10	Two dials	30 MAY 73	1		A		A
11	Oil-filled dashpot (Figures 7 & 9)	30 MAY 73		*	*		*
12	Headwork locking device (Figures 6 & 9)	30 MAY 73		*	‡		‡
	HEADWORK						
13	Headwork of State or Commission-approved pattern	30 MAY 73				*	

* - indicates required components
A - indicates alternative components, one of which is required
‡ - indicates optional components

FOOTNOTES

1 - tare bars are not fitted to instruments with two dials

Compatibility Table for Components Described in this Certificate

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FIGURE 6/9C/26 - 2

Suprema 3G Platform Weighing Instrument

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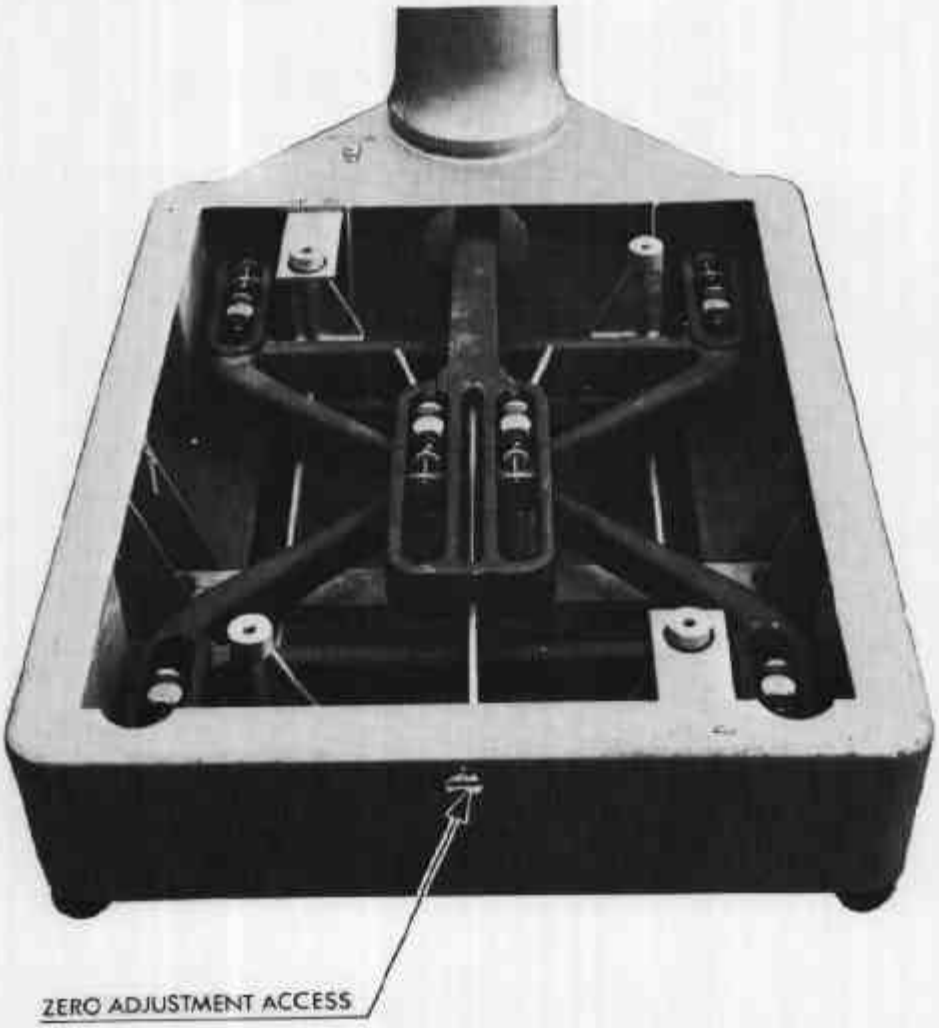
FIGURE 6/9C/26 - 3



3-lever Basework — 1405-kg Capacity

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FIGURE 6/9C/26 - 4

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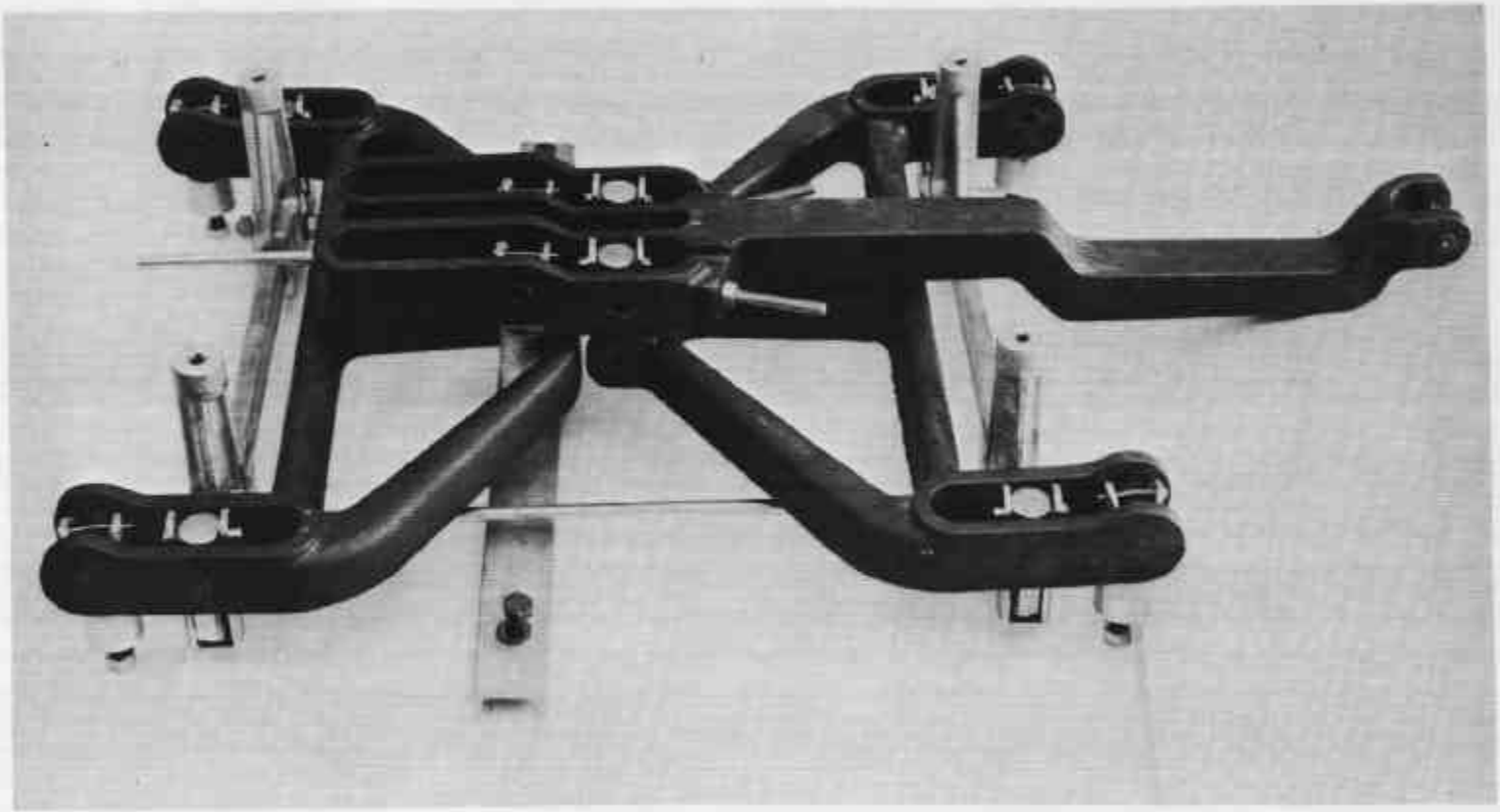
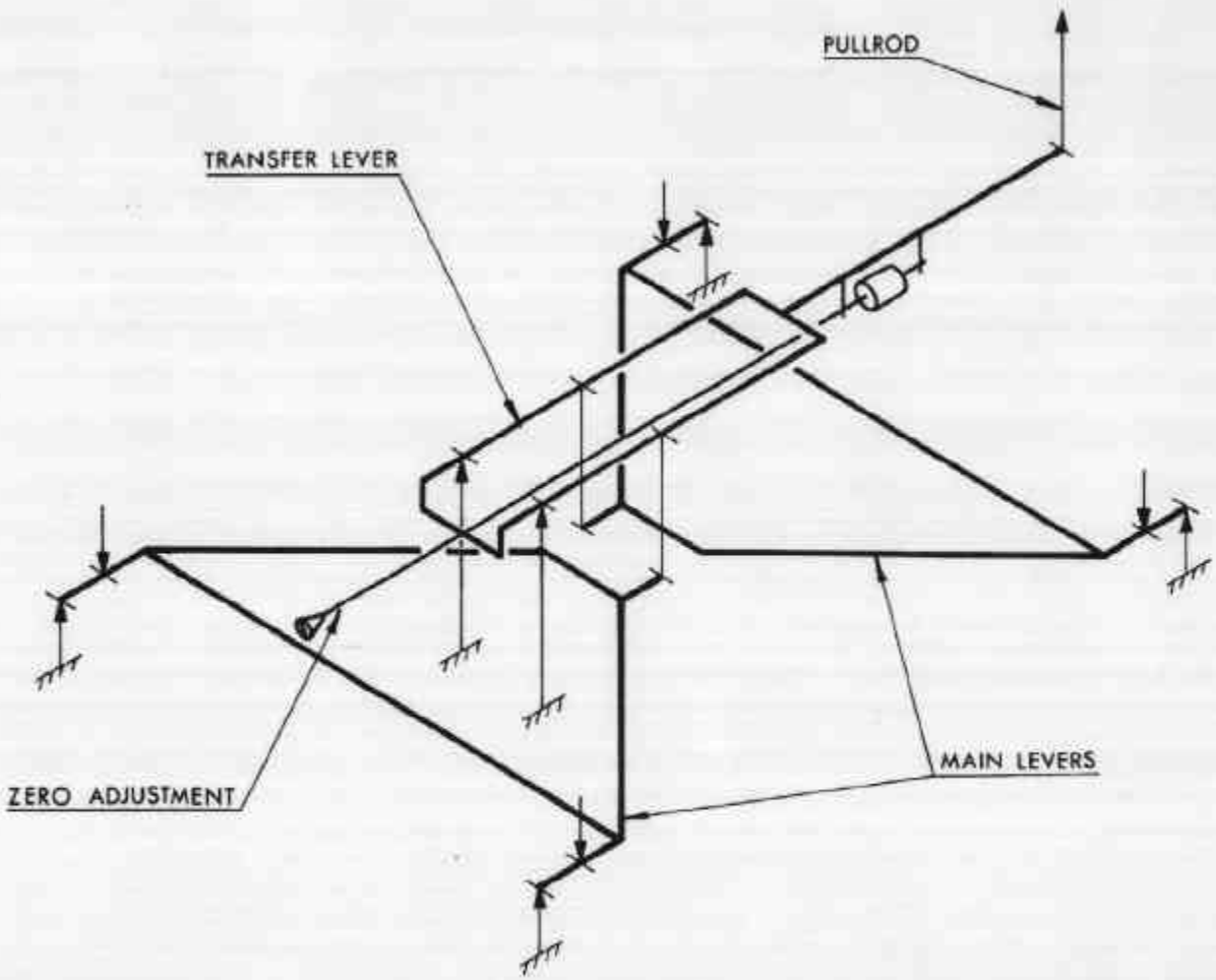


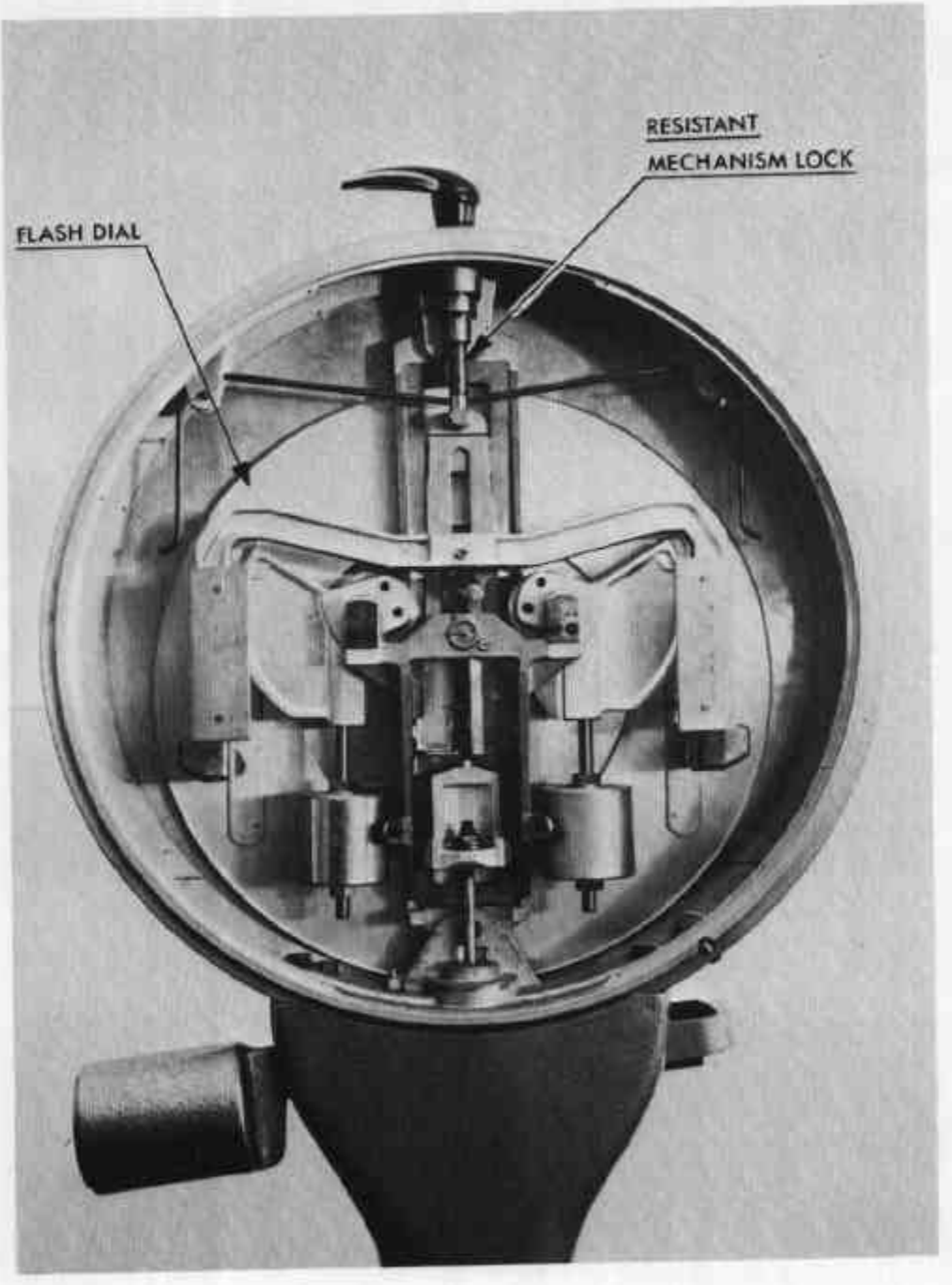
3-lever Basework — 1405-kg Capacity

FIGURE 6/9C/26 - 5



3-lever Basework — Schematic Diagram

FIGURE 6/9C/26 - 6



Double-pendulum Resistant Mechanism

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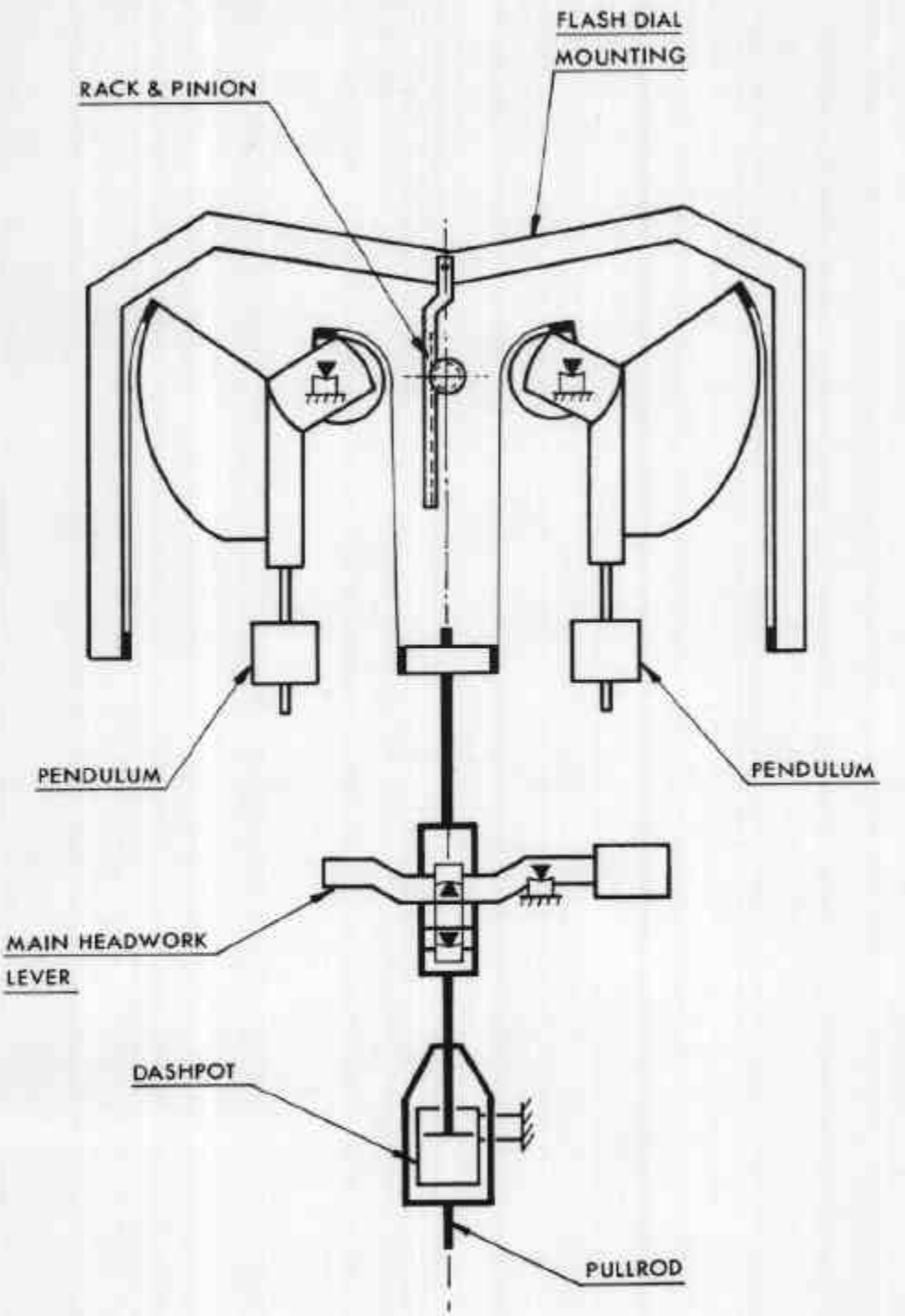
FIGURE 6/9C/26 - 7



Resistant Mechanism, Main Headwork Lever and Dashpot — Schematic Diagram

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FIGURE 6/9C/26 - 8

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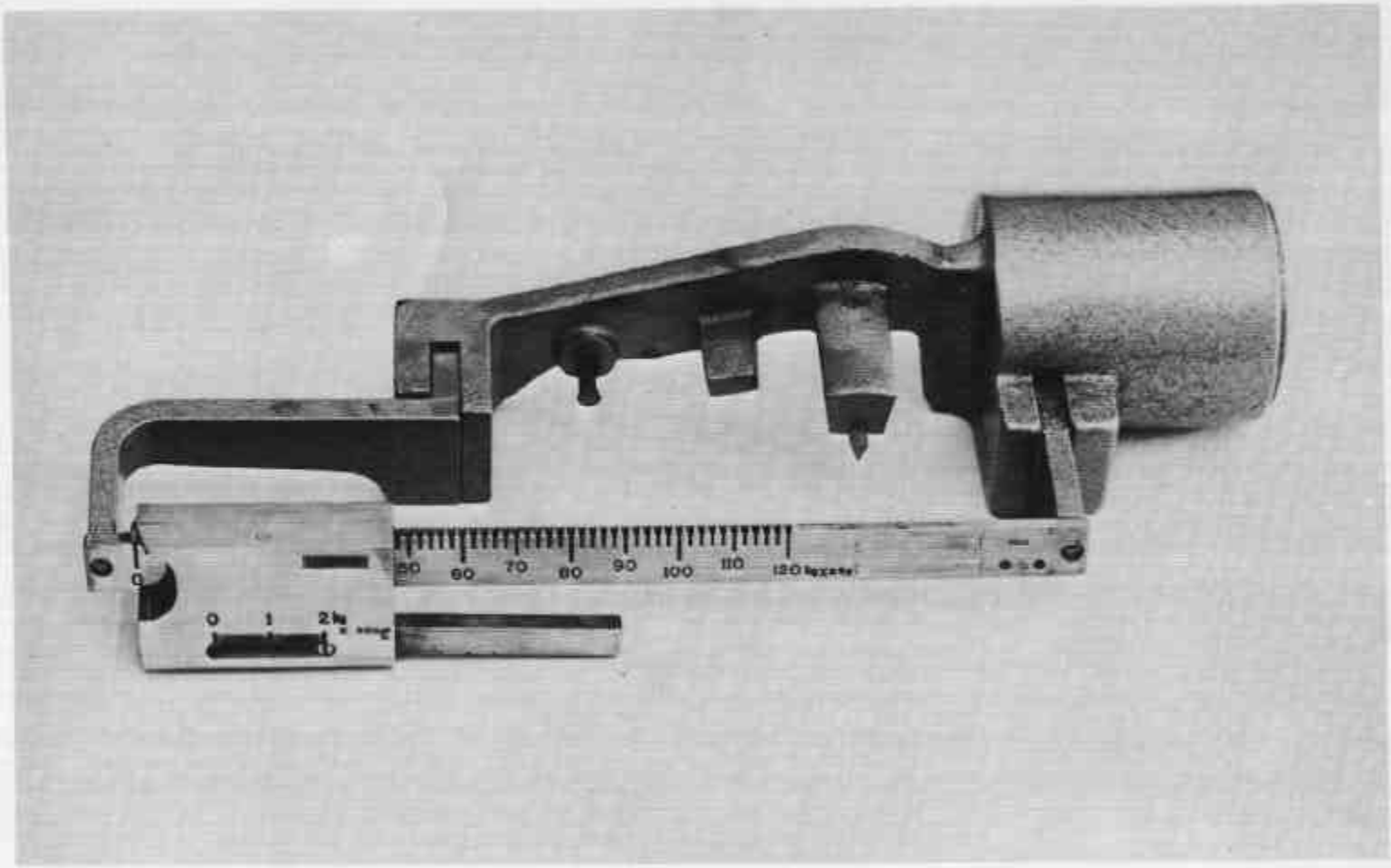
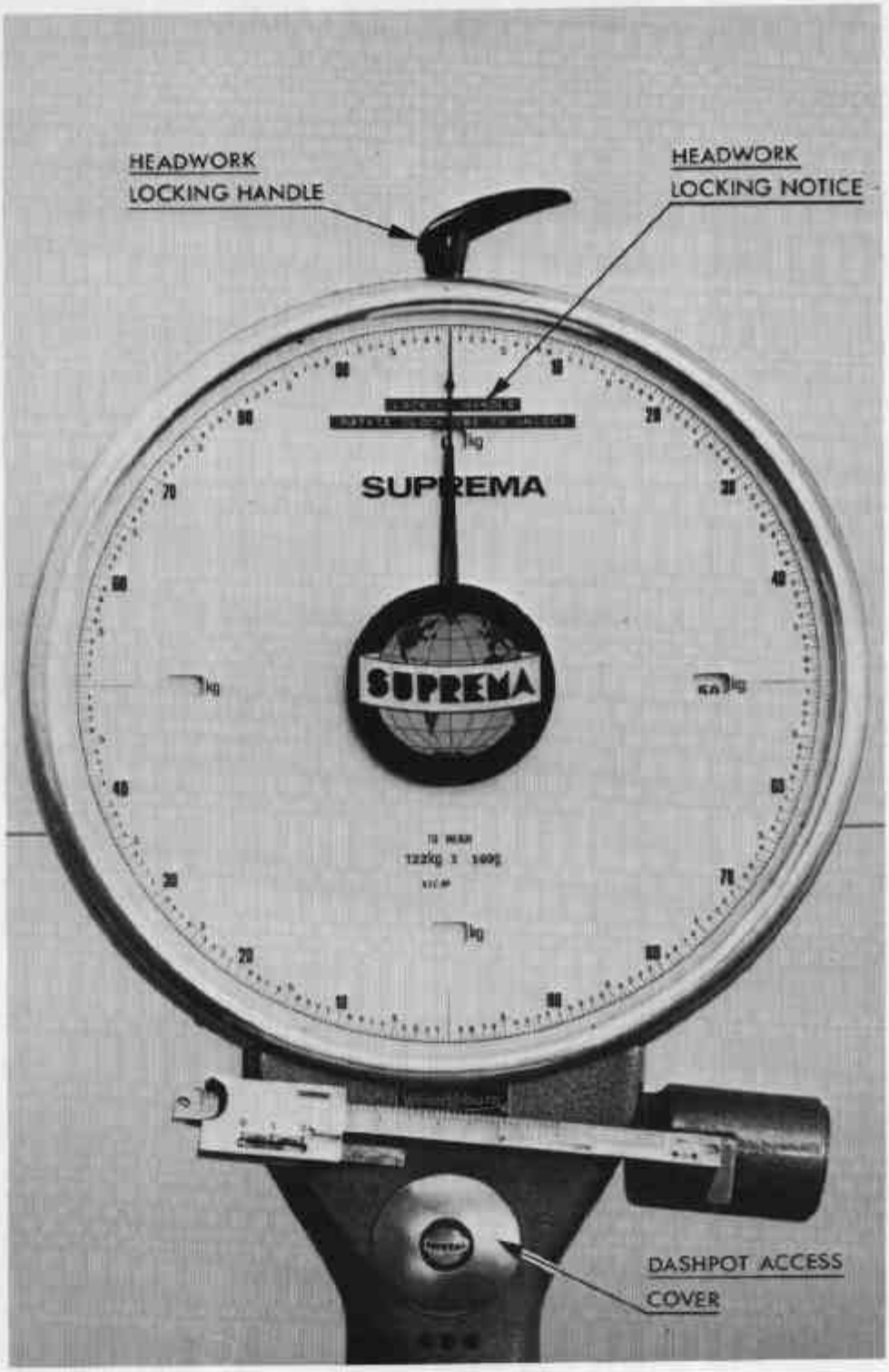


Main Headwork Lever and Tare Bar

FIGURE 6/9C/26 - 9



Principal Dial, Flash Dial and Tare Bar

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