



COMMONWEALTH OF AUSTRALIA

NATIONAL STANDARDS COMMISSION

Weights and Measures  
(National Standards)  
Act 1960-1966

Weights and Measures  
(Patterns of Instruments)  
Regulations

## *Certificate of Approval*

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CERTIFICATE NUMBER 6/9C/16

This Certificate cancels Certificate No 6/9C/16 dated 12th May, 1969. \*

In respect of the pattern of

Avery Type 3303 CMB Self-indicating Bench Platform Weighing Machine and Variants.

Submitted and

manufactured by: W. & T. Avery (Australia) Pty. Ltd.,  
3-5 Birmingham Avenue,  
Villawood,  
New South Wales. 2163.

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 was approved on 19th February, 1969, and further variants were approved on 6th May, 1969, and 2nd September, 1970.

Approval was granted on condition that all instruments made in

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\* NOTE: Figures 6/9C/16 - 1 to 4 of the previous issue form part of the Certificate and must be retained.

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Cont'd over

conformity with this Certificate:

1. are appropriately marked NSC No 6/9C/16; and
2. comply with the General Specifications for Weighing and Measuring Instruments to be Used for Trade.

This Certificate comprises:

Pages 1 to 5 dated 11th September, 1970.  
Figures 6/9C/16 - 1 to 4 undated.  
Figure 6/9C/16 - 5 dated 11th September, 1970.

Date of issue 11th September, 1970.

Signed



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

DESCRIPTION OF PATTERN

The pattern is of a self-indicating platform weighing machine (see Figure 1) of 130 lb capacity, including 20 lb tare, known as the Avery Type 3303 CMB Self-indicating Bench Platform Weighing Machine, and comprising the components tabulated in Column 4 of Figure 5.

DESCRIPTION OF VARIANTS

1. The components listed in Column 5 of Figure 5 make up variants known as the Avery Type 3303 CMB Self-indicating Bench Platform Weighing Machine, each having the same housing and component arrangements as in the pattern. The variants are of any capacity up to 260 lb or 130 kg.
2. The components listed in Column 6 of Figure 5 make up variants known as the Avery Type 3303 COB Self-indicating Bench Platform Weighing Machine, each having the same housing and component arrangements as in the pattern. The variants are of any capacity up to 260 lb or 130 kg.
3. The components listed in Column 7 of Figure 5 make up variants known as the Avery Type 3303 COS Self-indicating Bench Platform Weighing Machine. The variants are of any capacity up to 260 lb or 130 kg.

DESCRIPTION OF COMPONENTS

1. Basework - Avery Type 3303 (see Figure 2), consisting of three first-order levers, two main levers, which are suspended from links in the base housing, and a transfer lever which is pivoted on self-aligning bearings mounted in the base housing. The load is transferred from the two main levers through links to the transfer lever and a pullrod to the intermediate lever.

Suspended from the two main levers and fixed to the platform by countersunk screws are two inverted pedestals extending the width of the basework; these are connected by a bent rod at the centre and have two diagonal corners adjustable.

2. Intermediate lever and tare bar — supported on self-aligning bearings by a pillar mounted on the basework housing. The fulcrum knife-edges of the intermediate lever are held in their bearings by metal brackets limiting their rise to 0.005 inch. Attached to the intermediate lever are balance weights, a dashpot, a screw-operated zero adjustment, pullrods to the transfer lever and headwork, and a tare bar (see Figure 3).

The tare bar is attached to the intermediate lever (see Figures 3 and 4) and is adjustable in a vertical direction with respect to the intermediate lever to provide adjustment for sensitivity. The tare poise is operated by a knob on a shaft passing through a hole in the front of the housing. Movement of the knob (which incorporates a friction clutch) is transferred through a gear and pinion to a rack fixed to the movable poise. The rack is prevented from coming out of mesh with the pinion by means of an adjustable screw having a clearance to the rack of not more than 0.020 inch.

A pointer indicating the tare weight is attached to the intermediate lever. It is adjustable by means of two slotted holes.

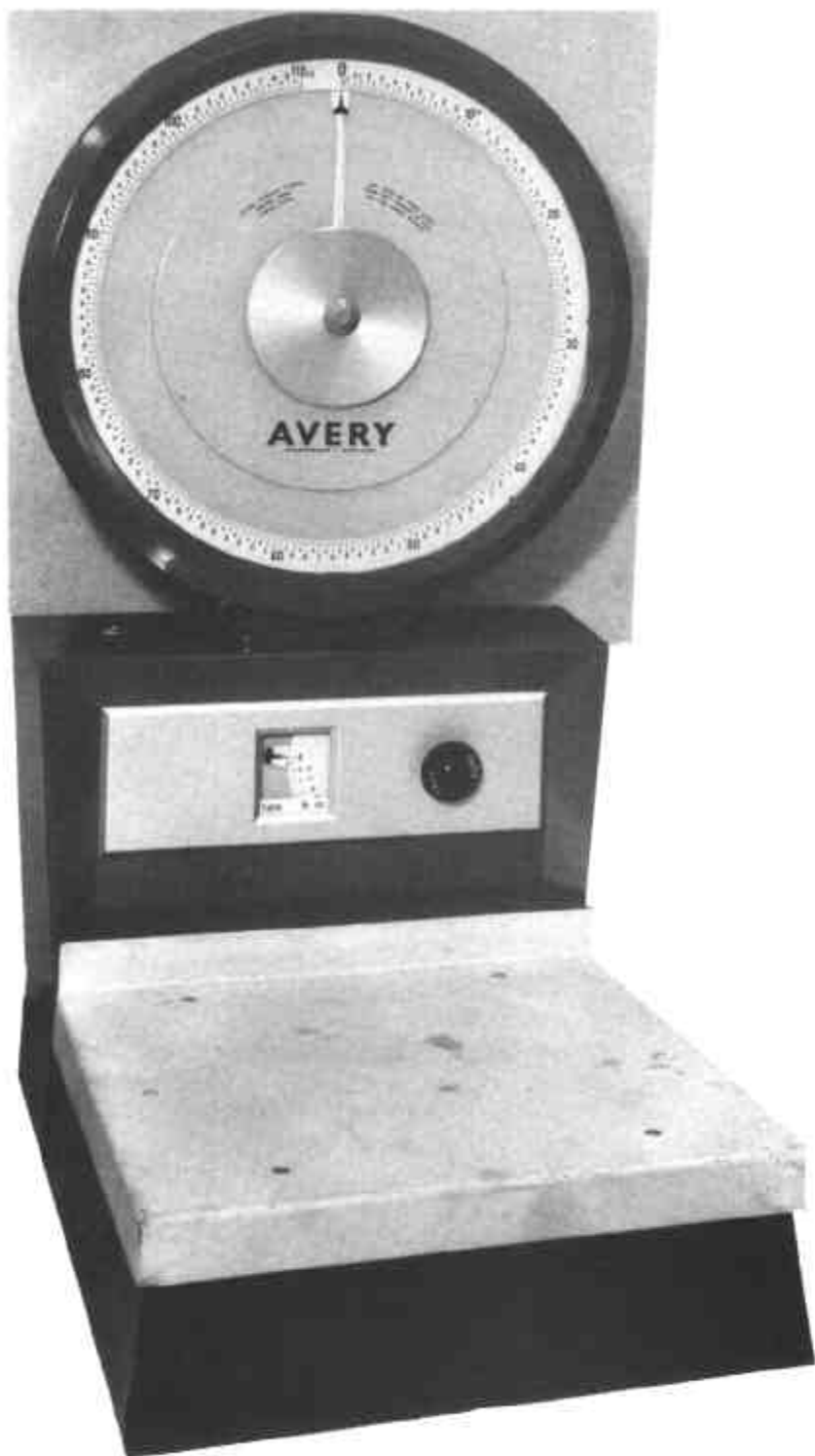
3. Intermediate lever — Component No 2 without tare bar.
4. Tare dial — 20 lb capacity, fixed to the pinion which moves the tare poise such that there is no relative movement; it is graduated in weight increments identical to those on the dial. Stops are provided to prevent the poise moving beyond zero and beyond the 20 lb graduation.
5. Tare dial — Component No 4 with any capacity up to 40 lb or up to 20 kg.
6. Headwork — Avery Type CGA, as described in Certificate No 6/9C/10.
7. Headwork — Avery Type CLA, as described in Certificate No 6/9C/10.

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8. Dial face — the dial has 440 graduations over  $350^{\circ}$ .
9. Dial face — the dial has not more than 1.4 graduations per degree.
10. Dial face — the dial has not more than 3 graduations per degree.

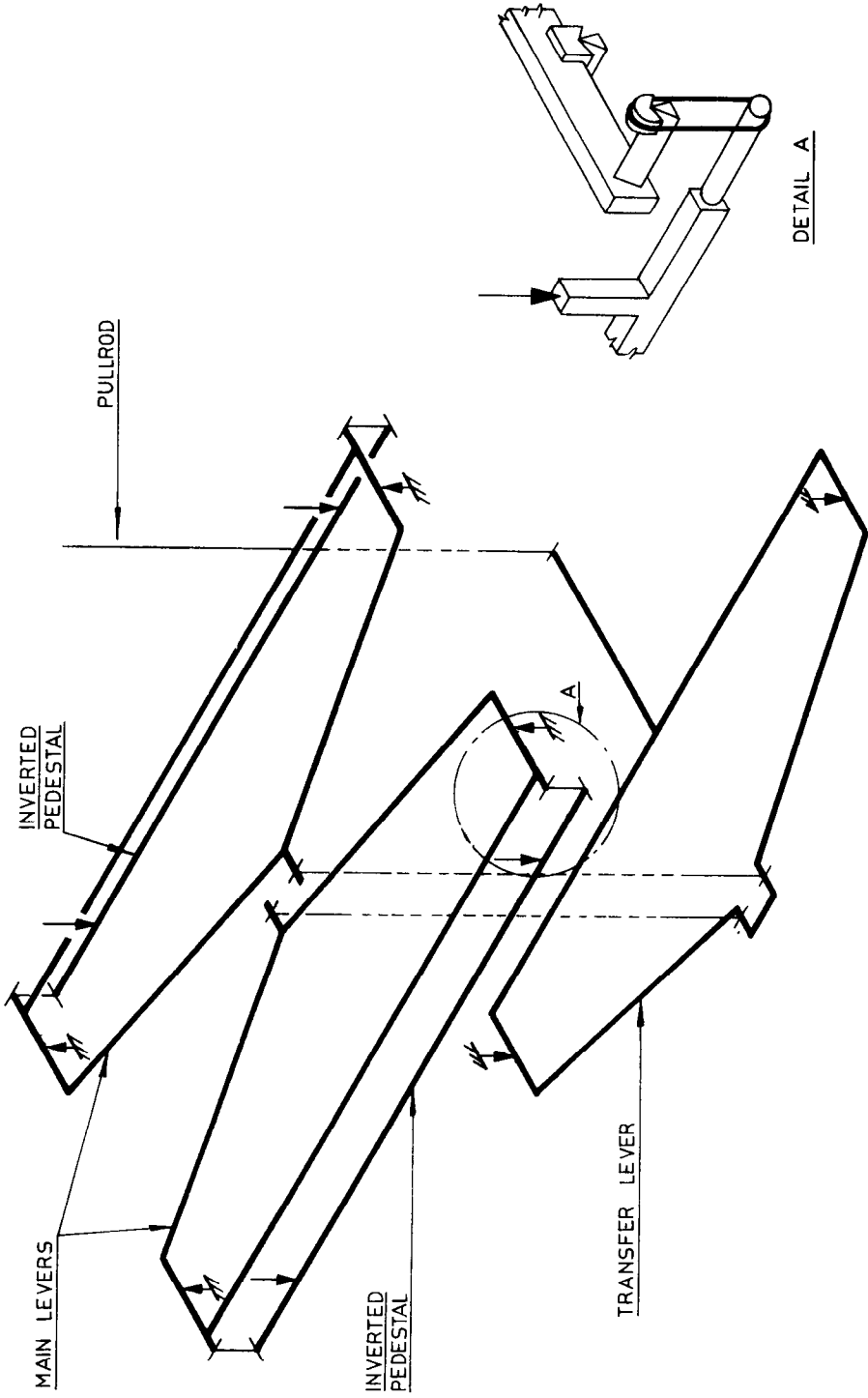
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FIGURE 6/9C/16 - 1



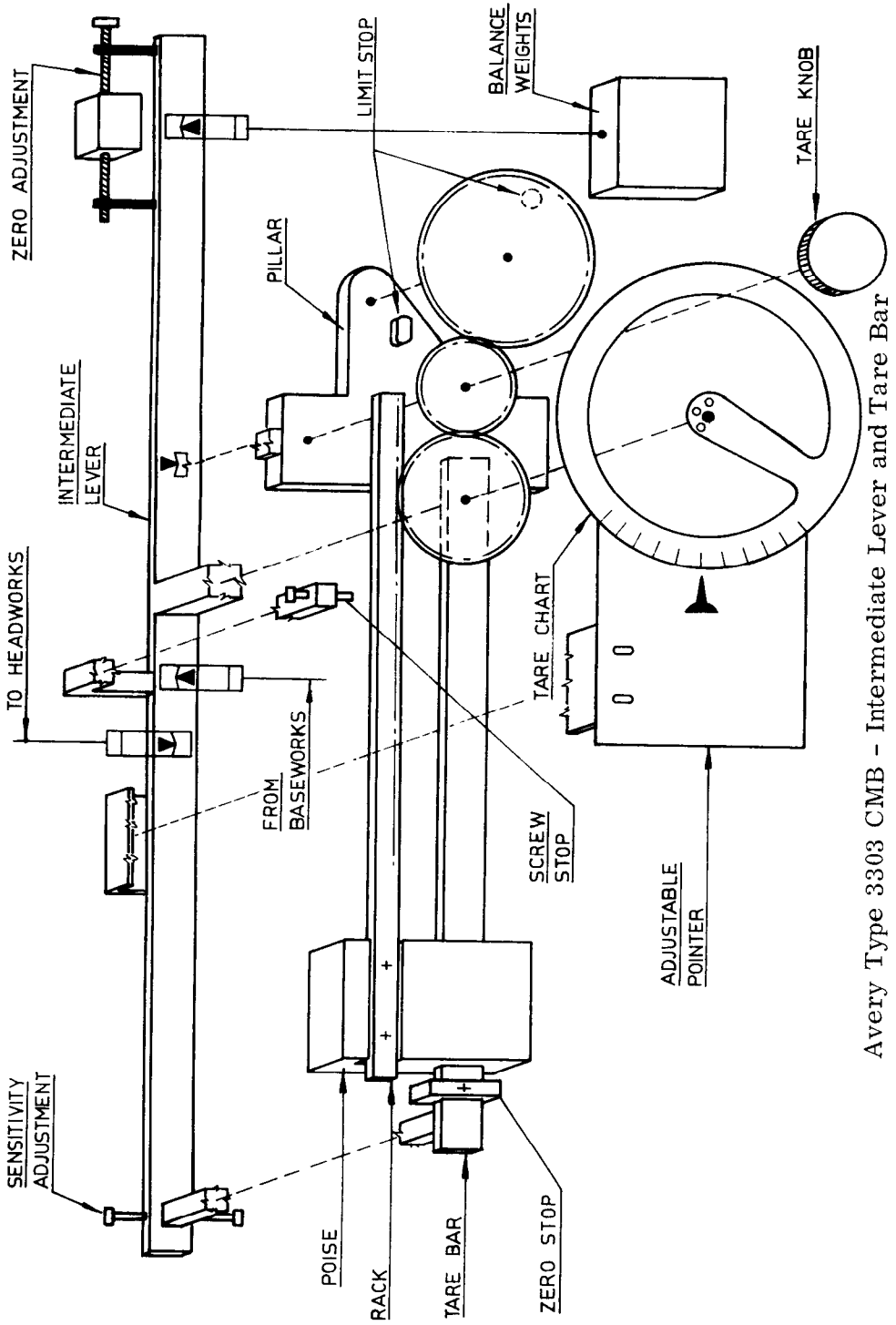
Avery Type 3303 CMB

FIGURE 6/9C/16 - 2



Avery Type 3303 CMB - Baseworks

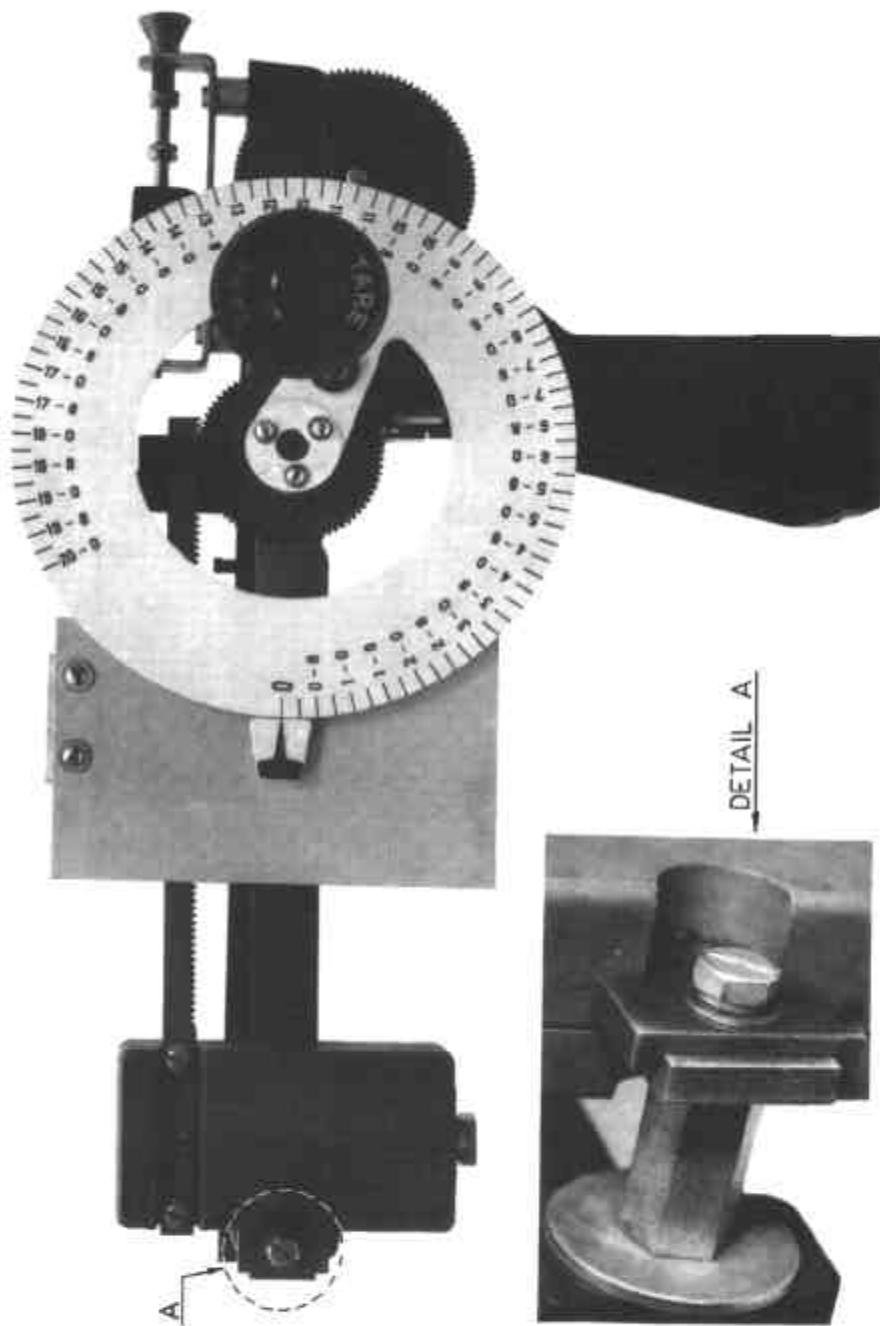
FIGURE 6/9C/16 - 3



Avery Type 3303 CMB - Intermediate Lever and Tare Bar



FIGURE 6/9C/16 - 4



Avery Type 3303 CMB - Intermediate Lever and Tare Bar

FIGURE 6/9C/16 - 5

1	2	3	4	5	6	7
	COMPONENTS	DATE APPROVED	PATTERN	VARIANTS		
			3303 CMB	3303 CMB	3303 COB	3303 COS
1	Basework, Avery 3303	19 FEB 69	*	*	*	*
2	Intermediate lever, with tare bar	19 FEB 69	*	A	A	A
3	Intermediate lever, no tare bar	19 FEB 69		A	A	A
4	Tare dial, 20 lb capacity	19 FEB 69	*	B	B	B
5	Tare dial, up to 40 lb or up to 20 kg	19 FEB 69		B	B	B
6	Headwork, Avery CGA	19 FEB 69	*	*		
7	Headwork, Avery CLA	19 FEB 69			*	*
8	Dial face, 440 graduations	19 FEB 69	*	C	C	
9	Dial face, 1.4 graduations per 1°	6 MAY 69		C	C	
10	Dial face, 3.0 graduations per 1°	2 SEP 70				*

\* - indicates required component

A - indicates alternative components, one of which is required

B and C - as for A

Compatibility Table for Components Described  
in this Certificate

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