

# National Standards Commission



## Certificate of Approval

No 6/4C/64

Issued under Regulation 9  
of the  
National Measurement (Patterns of Instruments) Regulations

This is to certify that an approval for use for trade has been granted in respect of the

AND Model FV-30 Weighing Instrument

submitted by A & D Mercury Pty Ltd  
32 Dew Street  
Thebarton SA 5031.

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read "J. Birch".

### CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/6/95.  
This approval expires in respect of new instruments on 1/6/96.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/64 and only by persons authorised by the submitter.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the drawings and specifications lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document 106.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates Nos S1/0 and/or S2/0, as appropriate.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

### DESCRIPTIVE ADVICE

**Pattern:** approved 4/5/90

- An AND Mercury model FV-30 self-indicating weighing instrument of 30 kg maximum capacity.

Technical Schedule No 6/4C/64 describes the pattern.

### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No 6/4C/64 dated 25/6/90  
Technical Schedule No 6/4C/64 dated 25/6/90 (Incl. Test Procedure)  
Figures 1 to 3 dated 25/6/90



# National Standards Commission

## TECHNICAL SCHEDULE No 6/4C/64

**Pattern:** AND Model FV-30 Weighing Instrument.

**Submittor:** A & D Mercury Pty Ltd  
32 Dew Street  
Thebarton SA 5031.

### 1. Description of Pattern

An AND model FV-30 self-indicating weighing instrument of 30 kg maximum capacity with a verification scale interval of 0.01 kg (Figure 1). The instrument may be operated by battery-power or using an external plug-in power supply.

The Indicator, which may be remote from the basework, may be fitted with an output socket for the connection of a peripheral or an auxiliary device, and may also be in an alternative waterproof enclosure.

#### 1.1 Zero

Zero is automatically corrected to within  $\pm 0.25e$  whenever the instrument comes to rest within  $0.5e$  of zero. If the instrument comes to rest outside that range but within the zero reset range, zero is reset by use of the zero button.

#### 1.2 Display Check

A display check is initiated whenever the instrument is switched on.

#### 1.3 Tare

A semi-automatic subtractive taring device of up to maximum capacity may be fitted.

#### 1.4 Set Point

The instrument may be fitted with a set point function, whereby HI and LO set points may be entered by means of the SET, HI/LO/S.SIZE and MODE (or UNIT) buttons.

#### 1.5 Counting Function

The instrument may be fitted with a counting facility for determining the number of items, of nominally equal mass, from the mass of a quantity of the items. The unit mass of an item must be entered by weighing a sample of 5, 10, 20, 50 or 100 items.

#### 1.6 Basework

The basework (Figure 2) has an AND Litra model LC4102-K030 load cell mounted directly between the main frame and the weighing platform frame.

### 1.7 Levelling

The instrument is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use. Figure 3 shows an alternative level indicator location.

### 1.8 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/4C/64
Accuracy class	III
Maximum capacity	Max ..... kg *
Minimum capacity	Min ..... kg *
Verification scale interval	e=d=..... kg *
Maximum subtractive tare	T = -..... kg

\* Repeated adjacent to each reading face.

### 1.9 Verification Provision

Provision is made for a verification mark to be applied.

## TEST PROCEDURE

Instruments should be tested in conjunction with any relevant tests specified in the Inspector's Handbook.

### Maximum Permissible Errors at Verification/Certification

The maximum permissible errors for increasing and decreasing loads, expressed in terms of verification scale interval (e), with the instrument adjusted to zero within  $\pm 0.25e$  at no load, are:

$\pm 0.5e$  for loads from 0 to  $500e$ ;  
 $\pm 1.0e$  for loads over  $500e$  up to  $2\ 000e$ ; and  
 $\pm 1.5e$  for loads over  $2\ 000e$ .

#### 1. Non-approved Function

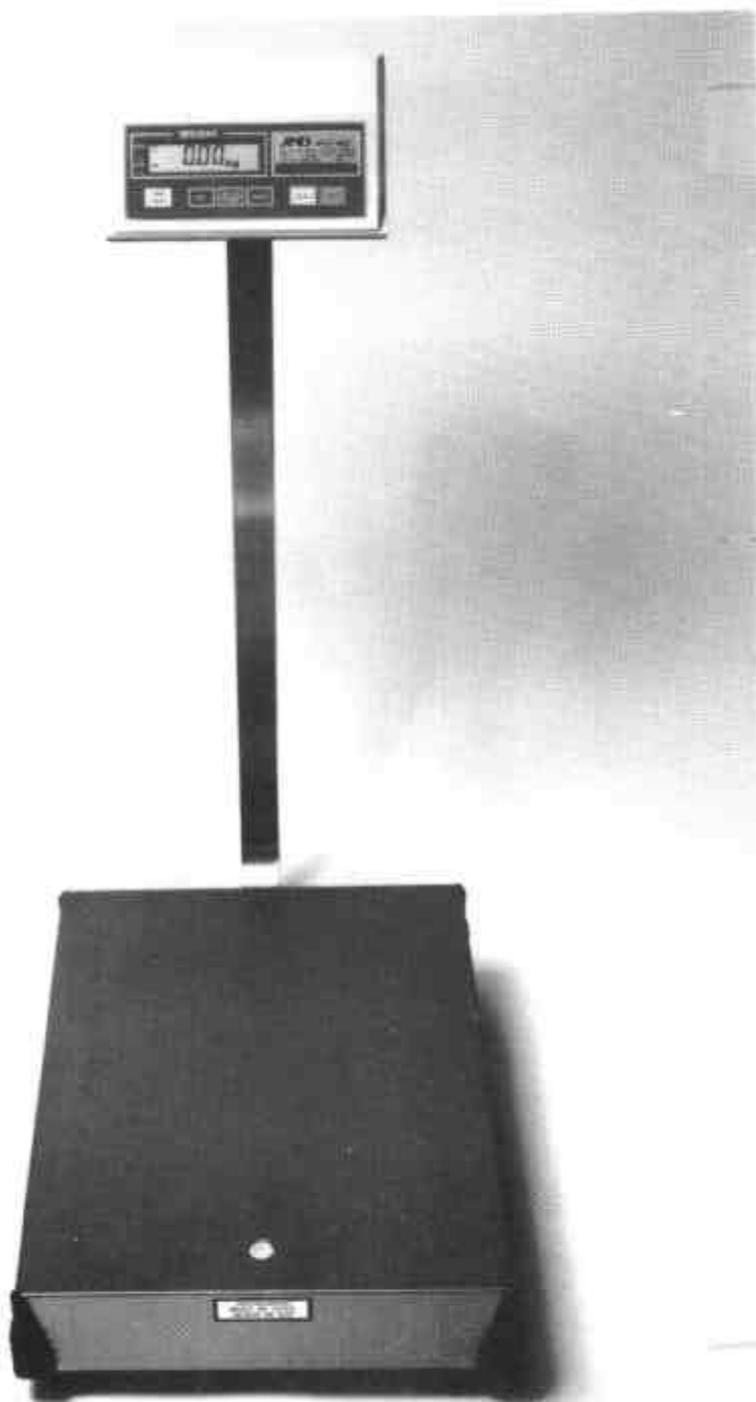
Check, using the MODE (or UNIT) button, that the capability to display in 'lb' is disabled.

#### 2. Counting Function

A test may be carried out for accuracy of count for a unit mass equal to or greater than the verification scale interval. The number counted shall be correct to one count. All tests shall be carried out using standard masses.

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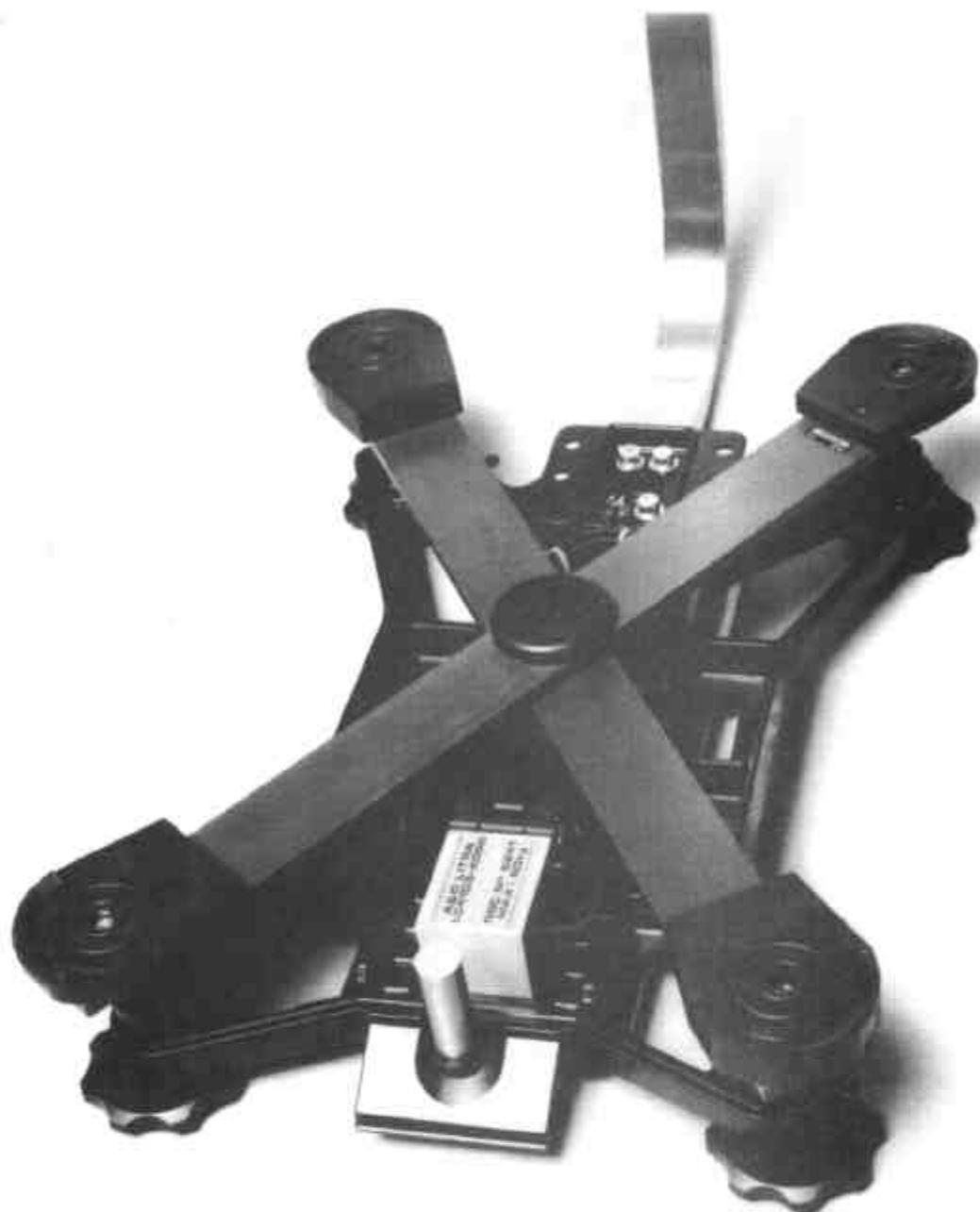
Figure 6/4C/64 - 1



AND FV-30 Weighing Instrument

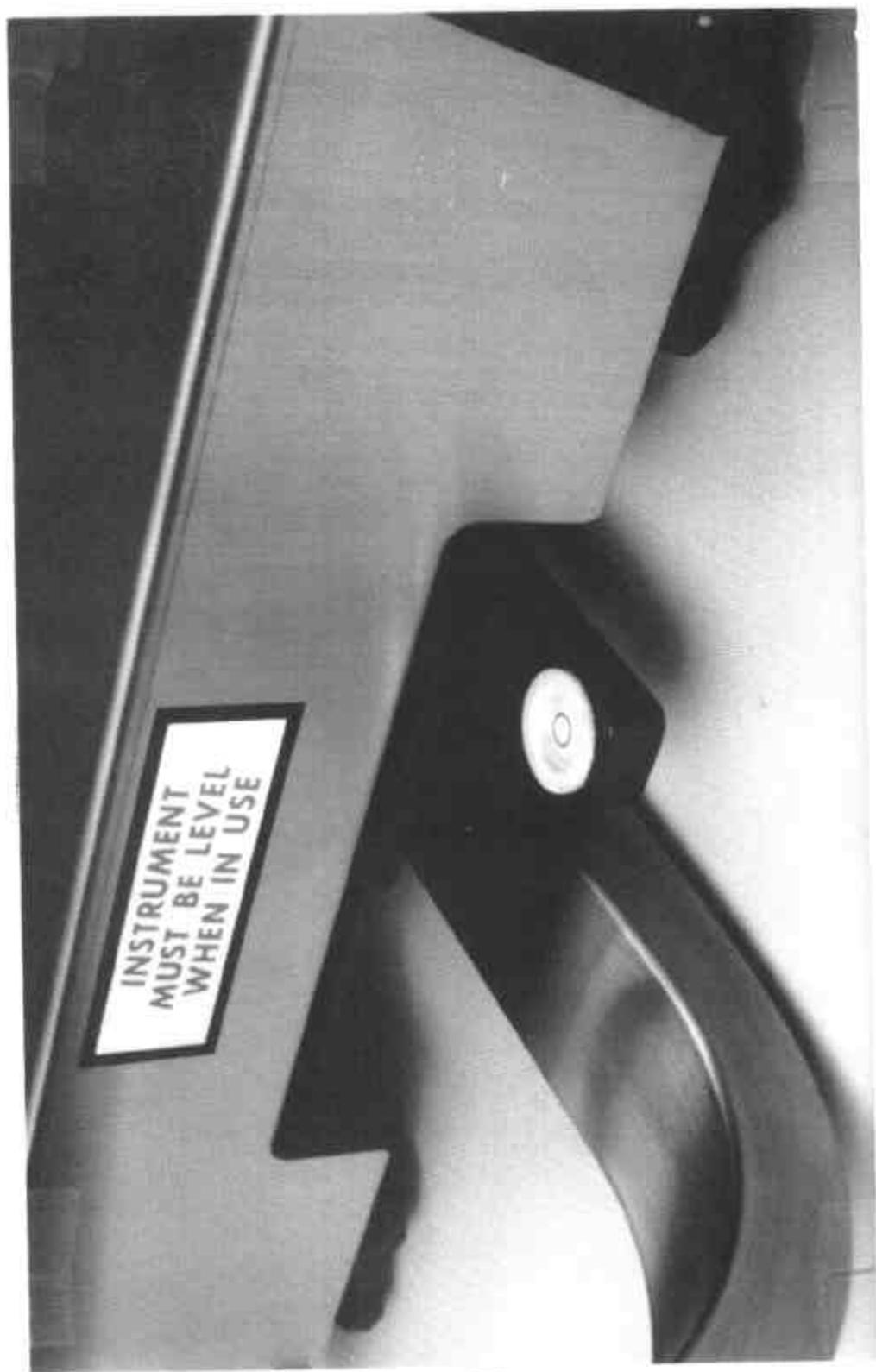
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Figure 6/4C/64 - 2



With Load Receptor Removed

Figure 6/4C/64 - 3



Alternative Level Indicator Location

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