



6/4D/235
20/7/89

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4D/235

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

Avery Model A100 Weighing Instrument

submitted by Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/7/90.
This approval expires in respect of new instruments on 1/7/91.

Instruments purporting to comply with this approval shall be marked NSC No 6/4D/235.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.

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

Signed

Executive Director

Descriptive Advice

Pattern: approved 21/6/85

- A self-indicating price-computing weighing instrument of 15 kg capacity with a verification scale interval of 0.005 kg.

Variants: approved 21/6/85

1. With the ability to display a negative indication.
2. With an integral label printer.

Technical Schedule No 6/4D/235 describes the pattern and variants 1 and 2.

Variant: approved 28/1/86

3. With an alternative indicator, and known as a model A102.

Technical Schedule No 6/4D/235 Variation No 1 describes variant 3.

Variants: approved 2/12/86

4. With a ticket printer and known as a model A101.
5. Model A104, similar to variant 4, with additional functions.
6. A number of A100 and/or A102 instruments connected in a network.

Technical Schedule No 6/4D/235 Variation No 2 describes variants 4 to 6.

Variant: approved 29/1/88

7. In an alternative housing and known as a Brecknell model 150.

Technical Schedule No 6/4D/235 Variation No 3 describes variant 7.

Variant: approved 16/5/88

8. With an Avery model T103 load cell.

Technical Schedule No 6/4D/235 Variation No 4 describes variant 8.

Variant: approved 29/7/88

9. With a stored tare facility and known as a model B700.

Technical Schedule No 6/4D/235 Variation No 5 describes variant 9.

Variant: approved 15/5/89

10. With 'prepack' mode option and known as a model A100E.

Technical Schedule No 6/4D/235 Variation No 6 describes variant 10.

Filing Advice

Certificate of Approval No 6/4D/235 dated 22/9/88 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

- Certificate of Approval No 6/4D/235 dated 20/7/89
- Technical Schedule No 6/4D/235 dated 1/10/85
- Technical Schedule No 6/4D/235 Variation No 1 dated 1/4/86
- Technical Schedule No 6/4D/235 Variation No 2 dated 21/9/87
- Technical Schedule No 6/4D/235 Variation No 3 dated 23/3/88
- Technical Schedule No 6/4D/235 Variation No 4 dated 8/7/88
- Technical Schedule No 6/4D/235 Variation No 5 dated 22/9/88
- Technical Schedule No 6/4D/235 Variation No 6 dated 20/7/89
- Test Procedure No 6/4D/235 dated 1/10/85
- Figures 1 and 2 dated 1/10/85
- Figure 3 dated 1/4/86
- Figure 4 dated 21/9/87
- Figure 5 dated 22/9/88

Note: Refer to "Note to Inspectors" in Technical Schedule Variation No 6 dated 20/7/89 for details of the operation of the zero indicator.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4D/235

Pattern: Avery Model A100 Weighing Instrument

Submittor: Avery Australia Limited
3-5 Birmingham Avenue
Villawood NSW 2163

1. Description of Pattern

A self-indicating price-computing weighing instrument of 15 kg capacity with 0,005 kg scale intervals, unit price to \$999.99, price to \$9999.99, and with price-look-up (PLU) facility (Figure 1).

The instrument may be fitted with an output socket for the connection of peripheral and/or auxiliary devices.

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 zero reset range, zero may be reset by pressing the zero button. The zero light illuminates whenever zero is within $0,25e$.

1.2 Display Check

A display check is initiated whenever the power is applied to the instrument or by pressing the button marked V.

1.3 Tare

A semi-automatic taring device of up to 7,5 kg capacity may be fitted.

1.4 Markings

The instrument must be marked with the following data together in one location:

Manufacturer's name or mark	
Serial number **	
NSC approval number	NSC No 6/4D/235
Accuracy class	(III)
Maximum capacity	Max kg *
Minimum capacity	Min kg *
Verification scale interval	e = d = kg *
Maximum subtractive tare	T = - kg

** May be located separately from the other markings.

* These markings are repeated close to the reading face if the nameplate is not in that vicinity.

1.5 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.

1.6 Verification Provision

Provision is made for a verification mark to be applied.

2. Description of Variants

2.1 Variant 1

With the ability to display a negative indication in which case the instrument is not for retail counter use and must be so marked.

2.2 Variant 2

With an integral label printer (Figure 2).

TEST PROCEDURE No 6/4D/235

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

- ± 0.5e for loads between 0 and 500e;
- ± 1.0e for loads between 501e and 2000e; and
- ± 1.5e for loads above 2000e.

1. Zero Test

As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5e of zero, zero should be checked as described in Document 104, with a load equal to, say, 10e on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will be 10e and 11e respectively.

2. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity (± 2% approximately). With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and press the zero button; the instrument should not rezero.

3. Load Test

Test loads are to be applied to the instrument in not less than 5 approximately equal steps increasing to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

4. Range of Indication

- (a) The maximum mass indicated should not exceed the marked maximum capacity by more than 10e; above this indicated mass the indication should be blank or show non-numerical characters.
- (b) The minimum mass indicated should be zero; below this the indication should be blank or show non-numerical characters.

5. Taring

The tare function should be able to reset the mass indicator to zero within 0.25e at any load within its capacity. This may be checked as described for Zero Test. A tare should not be able to be acquired above the marked tare capacity.



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TECHNICAL SCHEDULE No 6/4D/235

VARIATION No 1

Pattern: Avery Model A100 Weighing Instrument

Submittor: Avery Australia Limited
3-5 Birmingham Avenue
Villawood NSW 2163

1. Description of Variant 3

With an alternative indicator (Figure 3) and then known as either an Avery or Brecknell model A102.



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TECHNICAL SCHEDULE No 6/4D/235

VARIATION No 2

Pattern: Avery Model A100 Weighing Instrument

Submittor: Avery Australia Limited
3-5 Birmingham Avenue
Villawood NSW 2163

1. Description of Variants

1.1 Variant 4

Fitted with a side-mounted ticket printer and known as the model A101. The instrument has facilities for transaction data to be entered into operator memories, with a totalised ticket being produced at the end of a number of transactions. This model has a total price range up to \$999.99.

1.2 Variant 5

As for variant 4, but with additional cash register functions, such as the entry of amount tendered, and calculation of change. Known as model A104 (Figure 4).

In addition, a number of A101 and/or A104 instruments may be connected in a network to utilise common price-look-up (PLU) data, to allow communication of other management data, and to allow data on individual transactions to be communicated between instruments so that the data is available to be printed when a total is required. This network may be connected to a computer for the downloading of PLU data and for the communication of other management data.

1.3 Variant 6

A number of A100 and/or A102 instruments may be connected in a network to utilise common price-look-up (PLU) data and to allow communication of other management data. This network may be connected to a computer for the downloading of PLU data and for the communication of other management data.

Note To Inspectors: (for all networks)

The weighing and price-computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate the reverification of any other instrument in the network.



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23/3/88

TECHNICAL SCHEDULE No 6/4D/235

VARIATION No 3

Pattern: Avery Model A100 Weighing Instrument.

Submittor: Avery Australia Limited
3-5 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 7

The pattern in an alternative housing, similar to the model A102, and then known as a Brecknell model 150.

A number of Brecknell model 150 and/or Avery model A100 and/or Avery model A102 instruments may be connected in a network to utilise common price-look-up (PLU) data and to allow communication of other management data. This network may be connected to a computer for the downloading of PLU data and for the communication of other management data.

Note to Inspectors: (for all networks)

The weighing and price-computing functions of each weighing instrument in the network are independant, and the removal, repair or replacement of a particular weighing instrument does not necessitate the reverification of any other instrument in the network.



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8/7/88

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TECHNICAL SCHEDULE No 6/4D/235

VARIATION No 4

Pattern: Avery Model A100 Weighing Instrument.

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 8

With the Avery model 8707 15 kg load cell used in the pattern and variants replaced by the Avery model T103 15 kg load cell.



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TECHNICAL SCHEDULE No 6/4D/235

VARIATION No 5

Pattern: Avery Model A100 Weighing Instrument.

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 9

With a facility for storing tare values and known as a model B700 (Figure 5). Instruments have unit price to \$9.99/kg and price to \$99.99, and may be fitted with alternative label dispensers other than the roller-type illustrated in Figure 5.

1.1 Tare

The stored tare facility may be either semi-automatic or non-automatic keyboard-entered.

Instruments may also be fitted with a semi-automatic subtractive taring device.

1.2 Display Check

A display check is initiated whenever power is applied to the instrument or when the TEST button is pressed.

1.3 Markings

In addition to the markings specified for the pattern, instruments shall be marked NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

1.4 Network

A number of model B700 and/or other Commission-approved Avery and/or Brecknell weighing instruments may be connected in a network to utilise common price-look-up (PLU) data and to allow communication of other management data.

This network or a single model B700 instrument may be connected to a computer for the downloading of PLU data and for the communication of other management data.

Note to Inspectors:

The weighing and price-computing functions of each weighing instrument in the network are independant, and the removal, repair or replacement of a particular weighing instrument does not necessitate the reverification of any other instrument in the network.



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TECHNICAL SCHEDULE No 6/4D/235

VARIATION No 6

Pattern: Avery Model A100 Weighing Instrument.

Submittor: Avery Australia Limited
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 10

Avery model A100E which is similar in operation to the model B700 (Variant 9), including networking and the operation of the taring devices.

In addition to the 'Prepack' mode of operation, the A100E may be switched to 'Retail' mode (via the manager's key) in which case a purchaser's indicator shall function, and only the semi-automatic taring device shall be operable. When in 'Prepack' mode, the vendor's and purchaser's commodity displays show the word 'Prepack' except when a product is being selected when the vendor's display will show the product description and the purchaser's display will blank; both displays will revert to 'Prepack' after a short interval.

Instruments are fitted with a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC WHILE IN PREPACK MODE, or similar wording.

Note to Inspectors

Instruments complying with this approval were initially provided with a zero light which illuminates when the indication of the instrument is within $\pm 0.25e$ of zero. Later instruments may be provided with a zero light which illuminates when the platter of the instrument is empty (to within $\pm 0.25e$) as provided in the May 1986 edition of Document 100.



6/4D/235
14/12/87

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4D/235

CHANGE No 1

The following change is made to the approval documentation for the

Avery Model A100 Weighing Instrument

submitted by Avery Australia Limited
3-5 Birmingham Avenue
Villawood NSW 2163.

In Technical Schedule No 6/4D/235 dated 1/10/85, the description of Variant 2 should be amended to read:

"With an integral label printer. Figure 2 shows the printer beneath the platter. Alternatively, the printer may be mounted on the side of the instrument."

Signed

A handwritten signature in cursive script, appearing to read 'J. Birch'.

Executive Director



NATIONAL STANDARDS COMMISSION

6/4D/235
8/12/88

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/4D/235

CHANGE No 2

The following change is made to the approval documentation for the
Avery Model A100 Weighing Instrument

submitted by Avery Australia Limited
3-5 Birmingham Avenue
Villawood NSW 2163.

In Technical Schedule No 6/4D/235 Variation No 5 dated 22/9/88, the description of Variant 9 should be amended to read, in part:

"Instruments have unit price to \$999.99/kg and price to \$9999.99 for non-barcode tickets. When a barcode is used the maximum price is \$999.99. Instruments may be fitted with alternative label dispensers"

Signed

Executive Director

FIGURE 6/40/235 - 1



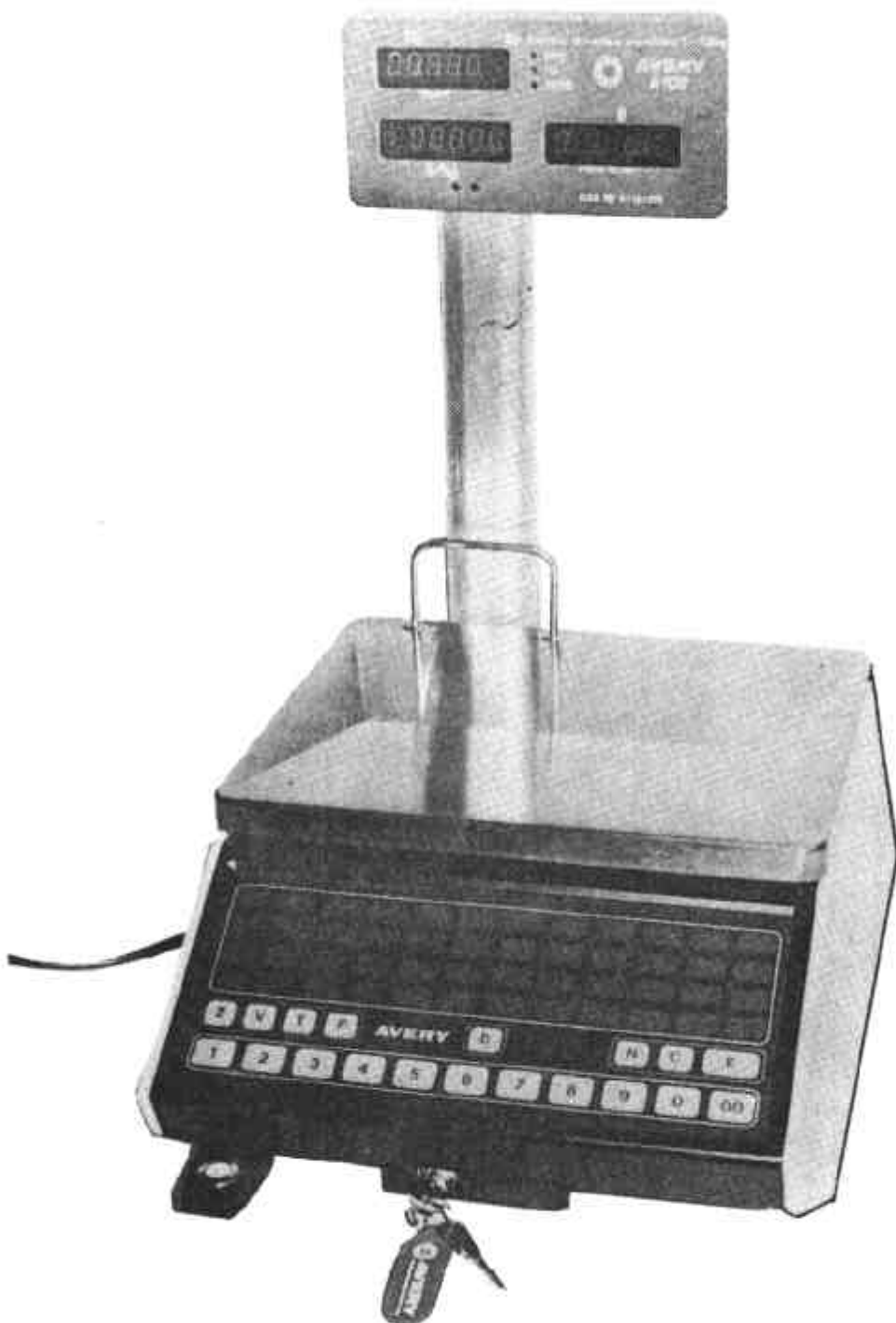
Avery Model A100

FIGURE 6/40/235 - 2



With Integral Printer

FIGURE 6/40/235 - 3



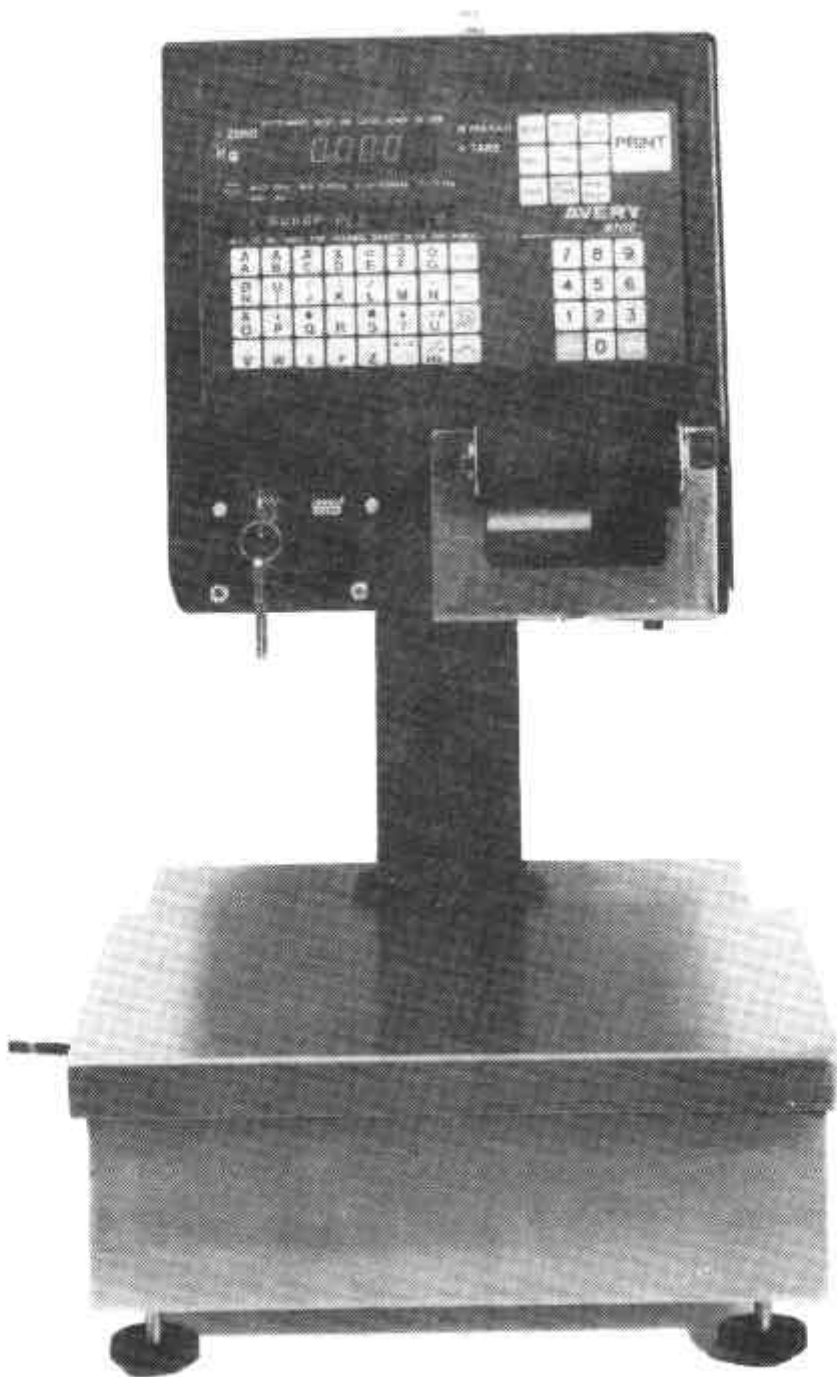
Avery Model A102

FIGURE 6/4D/235 - 4



Model A104

FIGURE 6/40/235 - 5



Avery Model B700