



NATIONAL STANDARDS COMMISSION

6/4C/35
8/1/87

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/4C/35

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

TEC Model SL44-15 Weighing Instrument

submitted by TEC Retail Systems and Office Products
(formerly submitted by Swift-MIP)
6-8 Byfield Street
North Ryde NSW 2113.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/10/87.
This approval expires in respect of new instruments on 1/10/88.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/35.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.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 24/9/82

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

Variant: approved 24/9/82

1. With a single-sided display replacing the display of the pattern.

Technical Schedule No 6/4C/35 describes the pattern and variant 1.

...../2

Variants: approved 1/10/86

2. In alternative housings and known as a model SL47-15.
 3. Of 9.995 kg capacity with a verification scale interval of 0.005 kg.
- Technical Schedule No 6/4C/35 Variation No 1 describes variants 2 and 3.

Filing Advice

Certificate of Approval No 6/4C/35 dated 12/10/82 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 6/4C/35 dated 8/1/87
Technical Schedule No 6/4C/35 dated 12/10/82
Technical Schedule No 6/4C/35 Variation No 1 dated 8/1/87
Test Procedure No 6/4C/35 dated 12/10/82
Figures 1 and 2 dated 12/10/82
Figures 3 and 4 dated 8/1/87



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/35

Pattern: TEC Model SL44-15 Weighing Instrument

Submitter: Mauri Industrial Group,
1 Alice Street,
Newtown, New South Wales, 2042.

1. Description of Pattern

1.1

The pattern is a self-indicating weighing instrument of 15 kg capacity by 0.005 kg (Figures 1 and 2), displaying mass only on both sides.

1.2 Zero

1.2.1 Zero Setting

The instrument is automatically corrected to zero within 0.25e when the push-button marked ZERO ADJ is pressed, or when power is applied. A light marked ZERO indicates when zero is set to within 0.25e.

1.2.2 Automatic Zero Correction

This device re-zeroes the instrument within 0.25e whenever the mass indicator indicates zero.

1.3 Display Check

When power is applied, all indicators will display 0 to 9 sequentially, all function indicators will light, and the indicator will then display zero.

1.4 Markings

The instrument is marked with the following data, together in one location:

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No 6/4C/35
Accuracy class	(III)
Maximum capacity	Max 15 kg*
Minimum capacity	Min 0.1 kg*
Verification scale interval	e = d = 0.005 kg*

1.5 Output Socket

An output socket is provided for the connection of a peripheral device.

1.6 Sealing

The instrument cover is sealed with lead and wire seals (Figure 2).

* These markings are repeated in the vicinity of each reading face.

1.7 Levelling

The instrument is fitted with a level indicator and adjustable feet. A notice advising that the instrument must be level when in use, is located near the level indicator.

2. Description of Variant

2.1 Variant 1

With a single sided display of mass replacing the double sided display of the pattern.

2.2 Markings

As for the pattern, except that a notice advising that the instrument is NOT FOR RETAIL COUNTER USE will be required when the instrument is not connected to a cash register in accordance with NSC Circular 149.

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

Accuracy Requirements

- ±0.5e for loads between 0 and 500e;
- ±1e for loads between 501e and 2000e; and
- ±1.5e for loads above 2000e.

1. Zero Test

- (a) Check using Document 104, that when the ZERO light is illuminated, zero is set within 0.25e.
- (b) As the automatic zero tracking 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 device should not exceed 4% of the capacity of the instrument (± 2% approximately). Satisfactory setting may be checked by the following method:

- (a) With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument; it should not be possible to obtain zero balance by means of the zero adjustment.
- (b) Reduce the load to, say, 1.5% of maximum capacity; it should now be possible to obtain zero.

3. Level Sensitivity

As the automatic zero device may prevent the zero from changing when the instrument is tilted at zero load, the effect of tilt should be initially checked with a small load on the instrument, say, 10e.

When the instrument is tilted so that the bubble in the level indicator moves 2 mm, the indication of 10e should not change by more than 2e, and when, in the tilted position, the 10e load is removed and zero is allowed to automatically reset, or it is manually reset, the instrument should satisfy the accuracy requirements given above.

4. Range of Indication

- (a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this, the indicator should be blank.
- (b) The minimum mass indicated should be zero; below this the indicator should be blank.

5. Test Loads

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 of not less than 5 approximately equal steps.

The instrument should display these loads within the applicable tolerance as listed above.



NATIONAL STANDARDS COMMISSION

6/4C/35
8/1/87

TECHNICAL SCHEDULE No 6/4C/35

VARIATION No 1

Pattern: TEC Model SL44-15 Weighing Instrument

Submittor: TEC Retail Systems and Office Products
6-8 Byfield Street
North Ryde NSW 2113

1. Description of Variants

1.1 Variant 2

In alternative housings, including with integral display(s) and with additional interfacing capabilities, and then known as a model SL47-15 (Figures 3 and 4).

1.2 Variant 3

Of 9.995 kg capacity with a verification scale interval of 0.005 kg.

NOTIFICATION OF CHANGES

The following changes are made to Technical Schedule No 6/4C/35 dated 12/10/82.

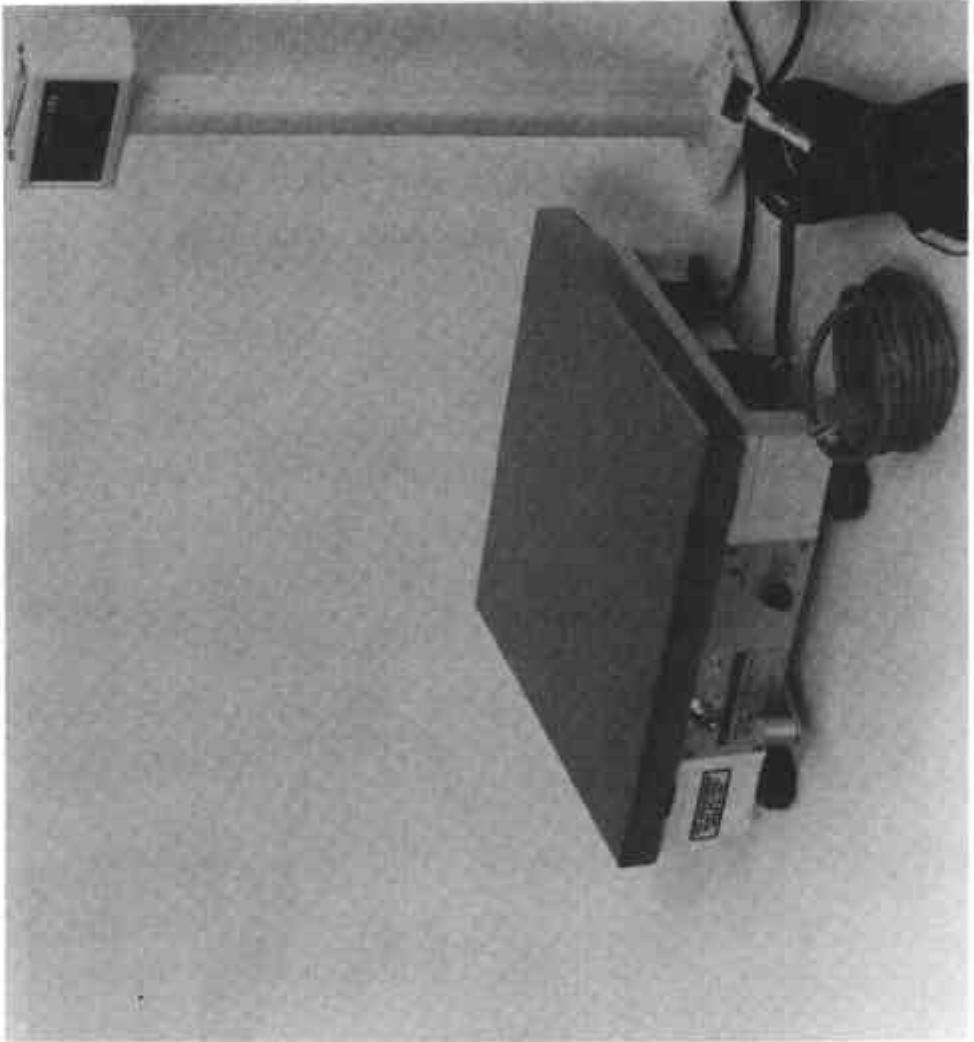
(a) Clause 1.5 Output Socket should be amended to read:

"An output socket is provided for the connection of a peripheral or an auxiliary device."

(b) Clause 2.2 Markings (for variant 1) should be amended to read, in part:

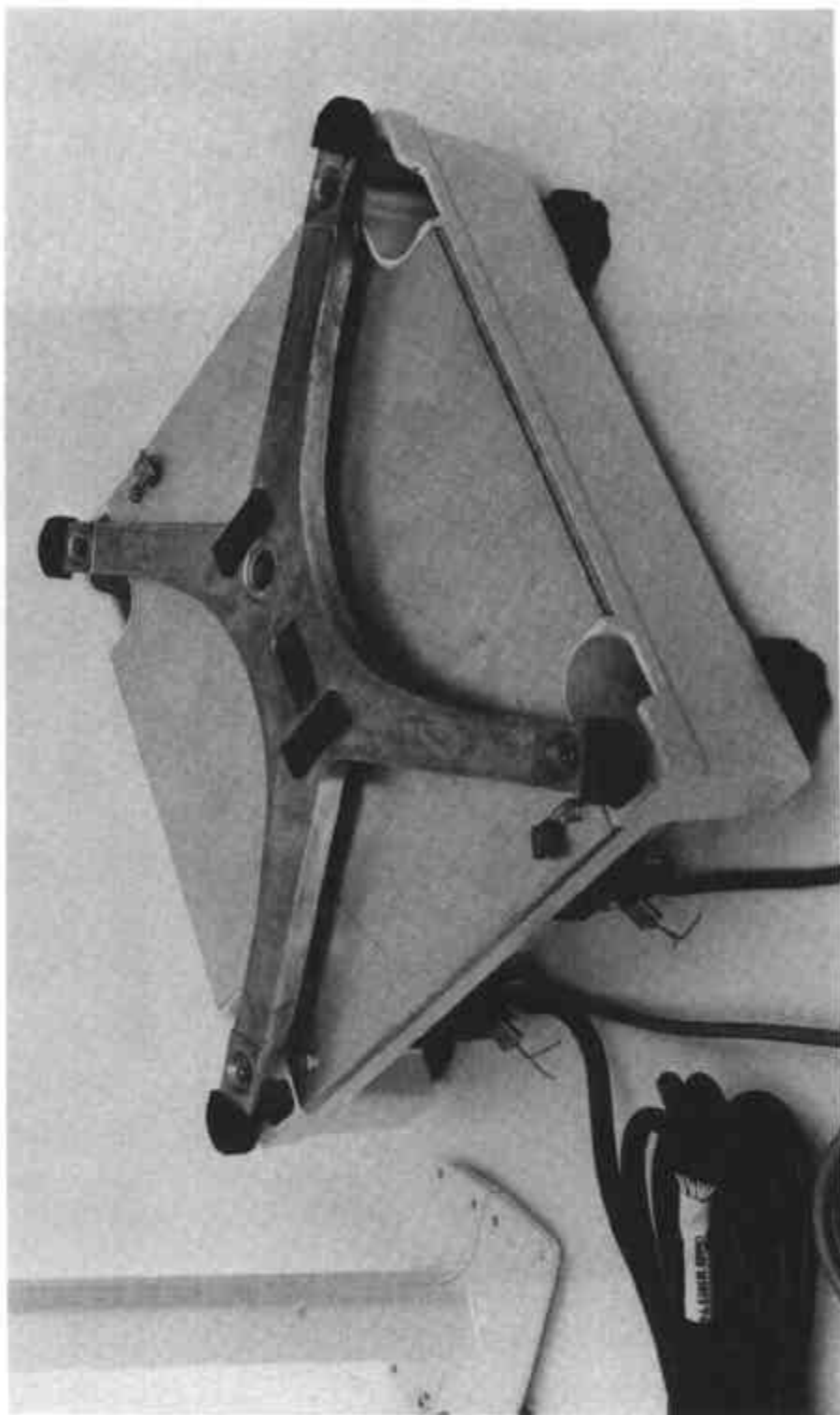
"... a cash register in accordance with NSC General Supplementary Certificate No S2/0."

FIGURE 6/4C/35 - 1



TEC Model 1 SL44-15

FIGURE 6/4C/35 - 2



TEC Model SL44-15 Showing Sealing

12/10/82

FIGURE 6/4C/35 - 3



Model SL47 In Alternative Housings

FIGURE 6/4C/35 - 4



Model SL47 With Integral Displays