



Australian Government
Department of Industry,
Innovation and Science

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval NMI 6/4C/308

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

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

NCR Model 7877-2000-9090 Weighing Instrument

submitted by NCR Corporation
864 Spring Street NW
Atlanta, Georgia 30308
USA

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated October 2015.

This approval becomes subject to review on 1/10/23, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – certificate issued	7/09/18

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/308' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) 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 document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0B.

Signed by a person authorised by the Chief Metrologist
to exercise their powers under Regulation 60 of the
National Measurement Regulations 1999.



Darryl Hines
Manager
Pattern Approval, Policy and
Licensing Section

TECHNICAL SCHEDULE No 6/4C/308

1. Description of Pattern

approved on 7/09/18

An NCR model 7877-2000-9090 (#) class **III** non-automatic self-indicating weighing instrument of 15 kg maximum capacity with a verification scale interval of 0.005 kg (Figures 1).

(#) The last three digits of the model number (7877-2***) may be numerals other than '0', and an additional suffix (e.g. -9090) may be added, but these represent features which are not metrologically significant.

Instruments are fitted with the NCR model 7825 Remote Compact Display unit (Figure 2) which have one or two display(s) mounted on a supporting pole. Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording) unless two displays are present or unless the single display is located such that all primary indications are clearly and simultaneously displayed to both the vendor and the customer.

The instrument has the load platter directly supported by four Flintec type PBNS 30 load cells. The platter size of the NCR 7877-2000-9090 is 285 mm x 316mm.

Instruments are approved for use over a temperature range of 0°C to +40°C and must be so marked.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

1.1 Zero

A zero-tracking device may be fitted.

Instruments have an initial zero-setting device with a nominal range of not more than 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

Note: The LED light beside the zero setting device button is a combined zero indicating and stable indication device.

1.2 Display Check

A display check is initiated whenever power is applied.

1.3 Scanner

Instruments are provided with an integral image scanner for reading bar codes.

1.4 Power Supply

Power for the NCR Model 7877-2000 instrument may be supplied by:

- an 12 V AC/DC mains adaptor; and/or
- a powered USB interface.

Note: The AC/DC mains adaptor supplied for the instrument was AcBel model API2AD13 power supply (output 12 V DC, 3.33 A) – the submitter should be consulted regarding the acceptability of alternative power supply units.

1.5 Levelling

The instrument is intended to be installed in a fixed position (e.g. a supermarket check-out) and hence is not fitted with adjustable feet.

1.6 Verification Provision

Provision is made for the application of a verification mark.

1.7 Interfaces

Instruments may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 of document NMI R76 (the basic intent of which is that it shall not be possible to alter weighing results via the interfaces).

Any measurement data output from the instrument or its interfaces shall only be used for trade in compliance with Supplementary Certificate No S1/0/B (in particular in regard to the data and its format).


Instruments may be fitted with RS-232/485, USB, Ethernet, and Sensormatic EAS interlock interface.

1.8 Sealing Provision

Provision is made for the calibration adjustments to be sealed.

This may be by sealing of the metal cover over the calibration adjustment switch which is located beneath the load receptor (Figure 3a), and below a plastic calibration switch cover. The metal cover may be sealed by means of a lead and wire (or similar) type seal through the holes provided. Alternatively, a destructible adhesive label placed over the plastic switch cover as shown in Figure 3b.


As an alternative to the above methods of physical sealing, sealing may be achieved by recording the values of calibration, parameter and firmware flash counters on a destructible adhesive label and affixing this to the instrument at the time of verification.

The counters are accessed by holding down the  button. The counters will appear alternately as a number followed by .CAL or .PAL or .FLS (e.g. 9.CAL, 5.PAR, 2.FLS).

Any subsequent alteration to the calibration or configuration will be evident as the recorded values and the current counter values will differ.

1.9 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full	NCR Corporation
Indication of accuracy class	
Pattern approval number for the instrument	NMI 6/4C/308
Maximum capacity	Maxg or kg #
Minimum capacity	Ming or kg #

Verification scale interval	$e = \dots\dots\dots\text{g or kg \#}$
Special temperature limits	0°C to 40°C
Serial number of the instrument	\dots\dots\dots


These markings are also shown near the display of the result if they are not already located there.

1.10 Verification Provision

Provision is made for the application of a verification mark.

1.11 Software

The software is designated version 497-0520479.

The software version can be seen on the display by holding down the  button for 20 seconds.

2. Description of Variant 1

approved on 7/09/18

The model 7877-5000 (#) which is similar to the pattern except that it has a shorter, 282mm x 270 mm (Figure 4).

(#) The last three digits of the model number (7877-5***) may be numerals other than '0', and an additional suffix (e.g. -9090) may be added, but these represent features which are not metrologically significant.

TEST PROCEDURE No 6/4C/308

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

Ensure that instruments are only being used within the special temperature limits stated elsewhere in this Technical Schedule.

FIGURE 6/4C/308 – 1



NCR Model 7877-2000-9090 Weighing Instrument (Pattern)

FIGURE 6/4C/308 – 2

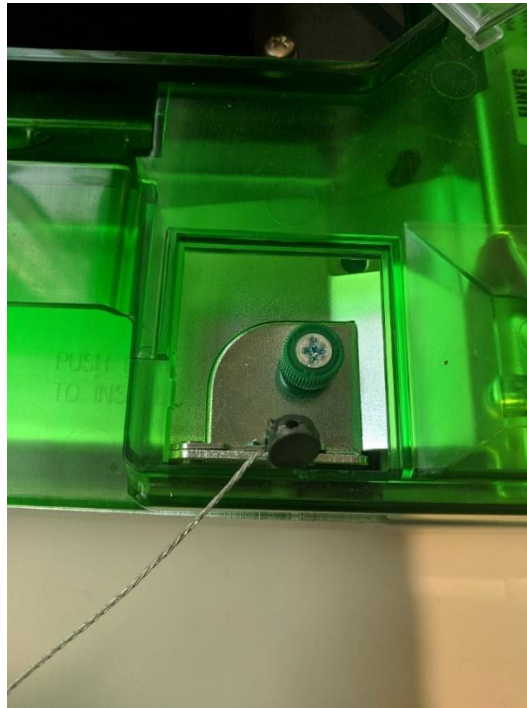


NCR Model 7825 Remote Compact Single Display

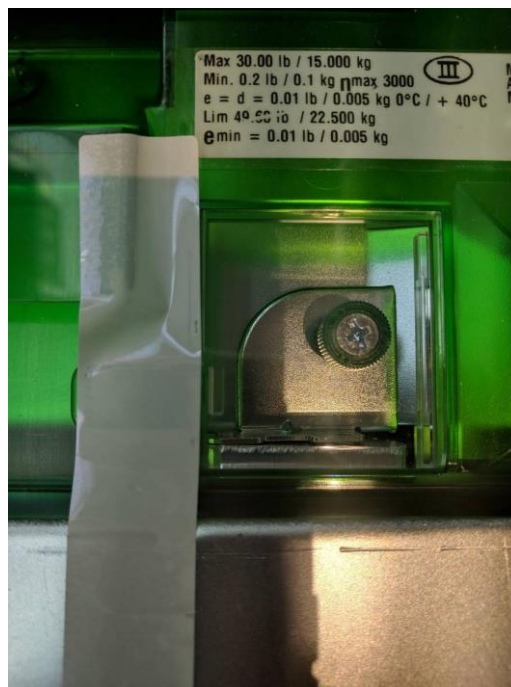


NCR Model 7825 Remote Compact Dual Display

FIGURE 6/4C/308 – 3

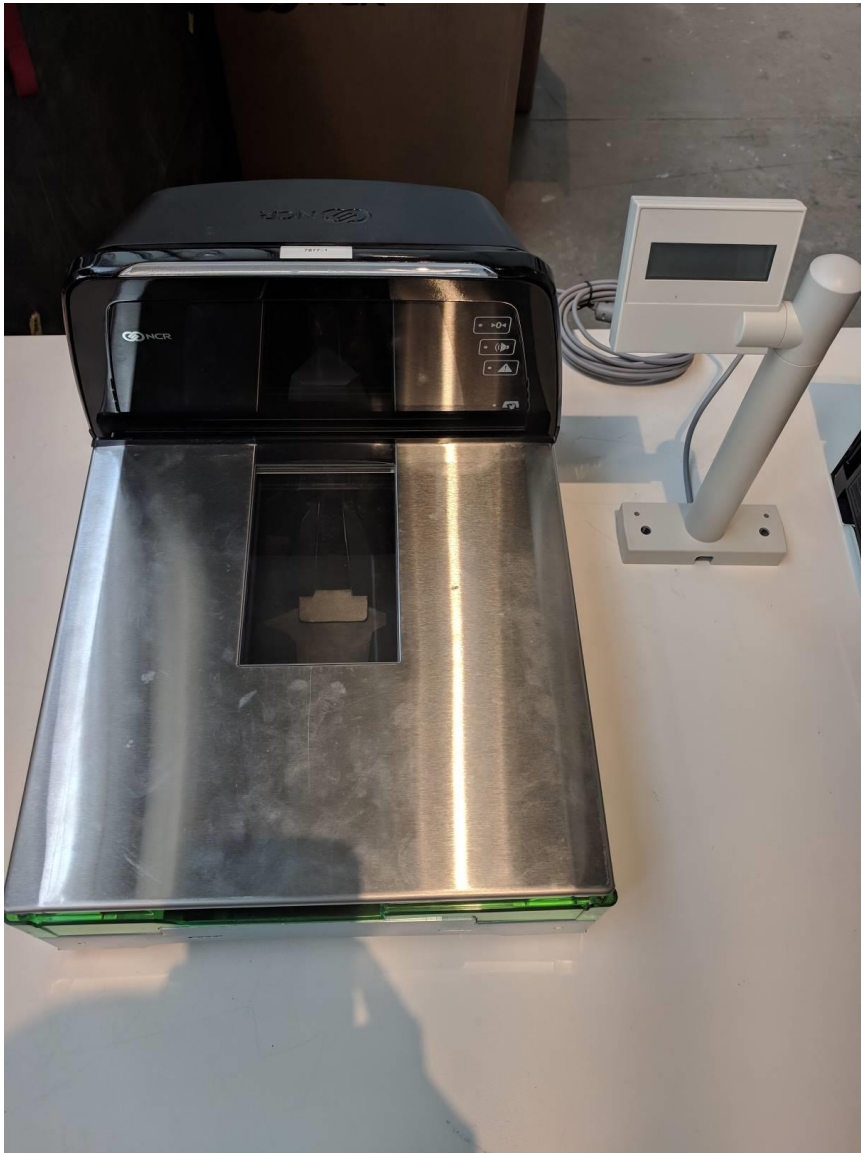


(a) Typical Sealing Using Lead and Wire Type



(b) Typical Sealing Using a Destructible Adhesive Label

FIGURE 6/4C/308 – 4



NCR Model 7877-5000-9090 Weighing Instrument (variant 1)

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