



S202
26/8/88

NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S202

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

Tokico Model FF177 Driveway Flowmeter Indicator

submitted by Axiom Australia Pty Ltd
(formerly Axiom Repairs Pty Ltd)
39 Kembla Street
Cheltenham VIC 3192.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/10/90.
This approval expires in respect of new instruments on 1/10/91.

Instruments purporting to comply with this approval shall be marked NSC No S202.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.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 16/9/85

- A Tokico model FF177 electronic driveway flowmeter indicator.

Technical Schedule No S202 describes the pattern.

Variant: approved 12/2/87 - withdrawn 11/12/87

1. A model FF188 electronic driveway flowmeter indicator.

Interim Supplementary Certificate No S202 Variation No 1 describes variant 1.

Variant: approved 19/5/88

2. The TR-1 series electronic driveway flowmeter indicator, comprising models KK00101 and KK01102.

Technical Schedule No S202 Variation No 1 describes variant 2.

Supplementary Certificate of Approval No S202 Page 2

Filing Advice

Supplementary Certificate of Approval No S202 dated 17/7/86 is superseded by this Certificate and may be destroyed.

Note: Variant 1 is described in Interim Supplementary Certificate No S202 Variation No 1 dated 12/2/87 only - no other documentation was issued for this variant before the approval was withdrawn.

The documentation for this approval now comprises:

Supplementary Certificate of Approval No S202 dated 26/8/88
Technical Schedule No S202 dated 17/7/86
Technical Schedule No S202 Variation No 1 dated 26/8/88
Test Procedure No S202 dated 17/7/86
Figure 1 dated 17/7/86
Figure 2 dated 26/8/88



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S202

Pattern: Tokico Model FF177 Driveway Flowmeter Indicator

Submitter: Axiom Repairs Pty Ltd
39 Kembla Street
Cheltenham Vic 3192

1. Description of Pattern

The pattern is an electronic price-computing indicator (Figure 1) for use in Commission-approved driveway flowmeters intended for attendant operation.

1.1 Display

The indicator, which uses liquid crystal displays for volume, unit price and price, is connected via cables to the pulse generator and to the unit price setting device.

The mechanical volume totaliser is driven from the meter/pulse generator shaft by means of a shaft, worm and worm-wheel.

Volume	999.99 L in 0.01 L increments
Unit price	999.9 c/L in 0.1 c increments
Price	\$999.99 in 1 c increments
Volume totaliser	999999.9 L in 1 L increments

1.2 Unit Price Setting

The unit price setting device is remote from the indicator and consists of a closed cylinder with 4 buttons (Figure 1).

The unit price is set by depressing each button individually until the desired unit price is displayed on the indicator. If no buttons are pressed for more than 5 seconds, the computer goes into a "price setting" mode for at least 1 minute; during this time the unit price and price displays are blanked out.

1.3 Markings

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

Manufacturer's name or mark	
Model number	FF177
Serial number	
Approval number	NSC No S202

1.4 Verification Provision

Provision is made for the application of a verification mark.

TEST PROCEDURE No S202

The instrument should be tested in conjunction with any tests specified in the approval documentation for the flowmeter to which this instrument is connected.

Electrical Reset

Remove the driveway flowmeter nozzle from its hang-up; the indicator should show all 8's then all 0's, before a delivery may be initiated.



NATIONAL STANDARDS COMMISSION

S202
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TECHNICAL SCHEDULE No S202

VARIATION No 1

Pattern: Tokico Model FF177 Electronic Driveway Flowmeter Indicator.

Submitter: Axiom Australia Pty Ltd
39 Kembla Street
Cheltenham VIC 3192.

1. Description of Variant 2

The TR-1 series electronic price-computing indicator (Figure 2) comprising models KK00101 and KK01102, approved to replace the indicator in any Commission-approved driveway flowmeter. (The resulting instrument shall only be used for locally-authorised operation.) The TR-1 series comprise a single control-unit driving two indicators (one for each side of the driveway flowmeter), a unit price setting device and a pulse generator. The indicator incorporates an automatic display segment check facility.

1.1 Indicator Display

The indicator comprises 3 separate liquid crystal displays which indicate the price, volume and unit price respectively.

Volume	9999.99 L in 0.01 L increments
Unit price	999.9 c/L in 0.1 c increments
Price	\$9999.99 in 1 c increments
Volume totaliser	99999999 L in 1 L increments

1.2 Unit Price Setting Device

The unit price setting device consists of a 4 digit mechanical indicator with 4 "price-up" (+) buttons and 4 "price-down" (-) buttons. A button is also provided to display the total litres on the main indicator. A tool-operated button is used to reset this totaliser.

After a unit price change, the indicator should be reset and any previous transaction details cleared, by removing the nozzle from its hang-up.

1.3 Pulse Generator

The shaft of the pulse generator is driven by the meter either directly or via gearing and produces a display on the main indicator of 0.50 L per shaft revolution of the pulse generator for the model KK00101, or 0.25 L per shaft revolution for the model KK01102.

National Standards Commission



NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S202

CHANGE No 1

The following changes are made to the approval documentation for the

Tokico Model FF177 Driveway Flowmeter Indicator

submitted by Axiom Australia Pty Ltd
 39 Kembla Street
 Cheltenham VIC 3192.

In Certificate of Approval No S202 dated 26/8/88;

1. The name and address of the submitter should be changed to read:

"Kanematsu Australia Limited
14th Floor
575 Bourke Street
Melbourne VIC 3000."

2. The Condition of Approval referring to when the approval expires, should be amended to read:

"This approval expires in respect of new instruments on 31/12/93."

NOTE: This refers only to the validity of the pattern and variant 2; the approval for variant 1 was withdrawn as of 11/12/87.

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

National Standards Commission



NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No S202

CHANGE No 2

The following change is made to the approval documentation for the

Axiom Model AX107 Driveway Flowmeter

submitted by Kanematsu Australia Limited
(formerly submitted by Axiom Australia Pty Ltd)
Level 52, Rialto, South Tower
525 Collins Street
Melbourne VIC 3001.

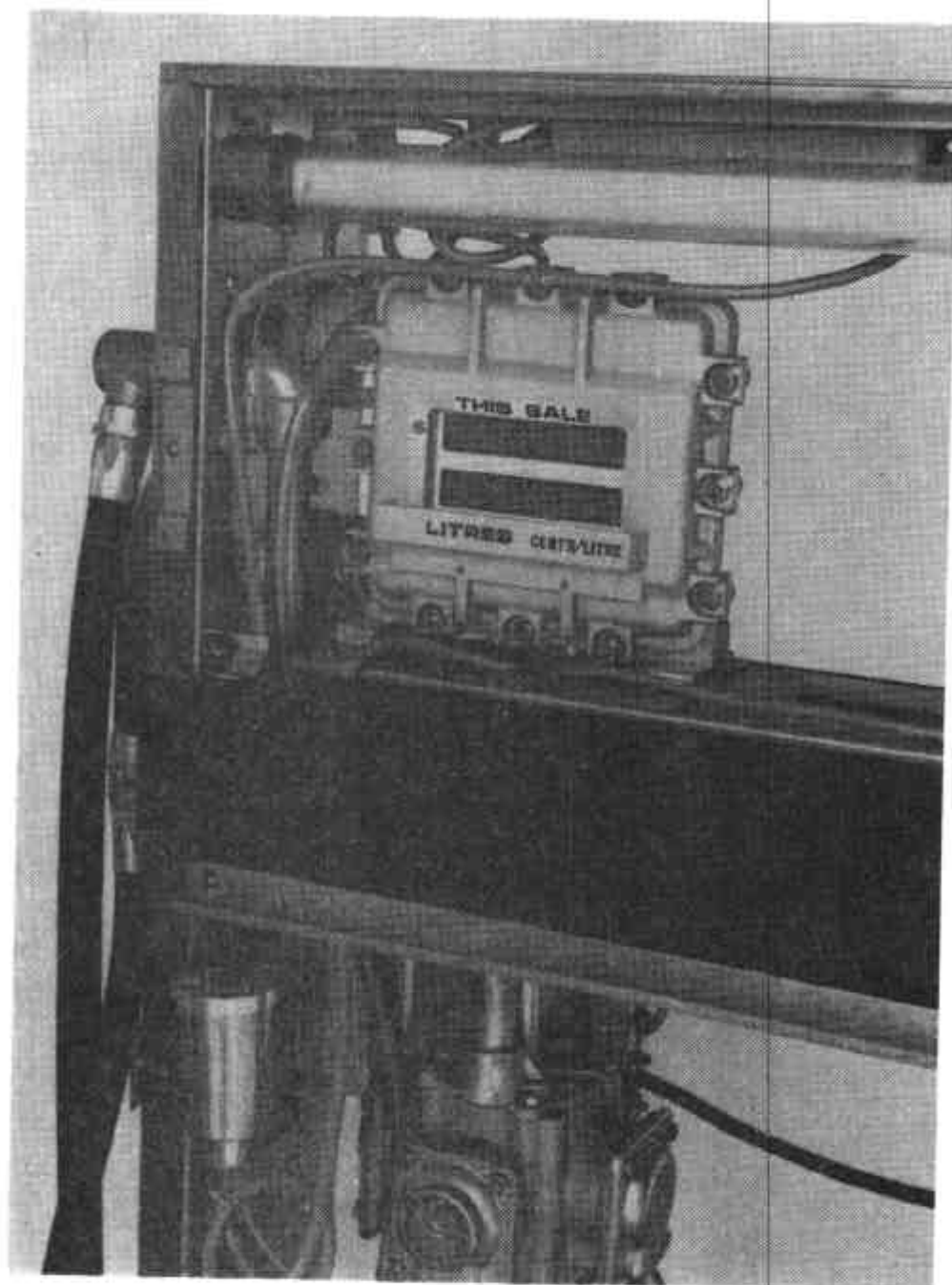
In Certificate of Approval No S202 dated 26/8/88, the Condition of Approval referring to when the approval expires, previously amended by Notification of Change No 1, should be amended to read:

"This approval expires in respect of new instruments on 31/12/94."

NOTE: This refers only to the validity of the pattern and variant 2; the approval for variant 1 was withdrawn as of 11/12/87.

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

FIGURE S202 - 1



Tokico FF177 Indicator and Unit Price
Setting Device

FIGURE S202 - 2



Tokico TR - 1 Series Indicator