

National Standards Commission



Certificate of Approval

No 5/6A/81

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

Axiom Model AX107 Driveway Flowmeter

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

Signed and sealed on 14/3/90 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.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/3/90.
This approval expires in respect of new Instruments on 1/3/91.

Instruments purporting to comply with this approval shall be marked NSC No 5/6A/81 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 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 Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

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

DESCRIPTIVE ADVICE

Pattern: approved 1/3/85

An Axiom model AX107 driveway flowmeter.

Variants: approved 1/3/85 (* - Variant 2 withdrawn 29/1/88)

1. With any compatible Commission-approved Indicator replacing the indicator of the pattern.
2. With the Tokico hydraulics replacing the hydraulics of other Commission-approved driveway flowmeters. (*)
3. In other models as listed in Table 1.

Technical Schedule No 5/6A/81 describes the pattern and variants 1 to 3.

Variant: approved 15/5/89

4. With a preset facility.

Variant: approved 23/6/89

5. For use with distillate.

Technical Schedule No 5/6A/81 Variation No 1 describes variants 4 and 5.

FILING ADVICE

Certificate of Approval No 5/6A/81 dated 12/3/86 is superseded by this approval and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No 5/6A/81 dated 9/4/90
Technical Schedule No 5/6A/81 dated 12/3/86 (incl. Table 1)
Technical Schedule No 5/6A/81 Variation No 1 dated 9/4/90
Test Procedure No 5/6A/81 dated 12/3/86
Figures 1 to 4 dated 12/3/86
Figures 5 and 6 dated 9/4/90



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6A/81

Pattern: Axiom Repairs Model AX107 Driveway Flowmeter

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

1. Description of Pattern

An Axiom Repairs model AX107 attendant-operated single driveway flowmeter (Figures 1 and 2) for delivering petrol only at flow rates between 15 L/min and 40 L/min.

The system incorporates:

- (i) A Tokico four-piston positive displacement meter,
- (ii) A Tokico type 31 series pump/strainer/air separator,
- (iii) A Tokico nozzle, and
- (iv) A Veeder-Root VR2004 mechanical indicator,

all in an Axiom Repairs housing.

1.1 Markings

The instrument data plate shall include the following information:

Manufacturer's name or mark	
Model number	
Serial number	
NSC approval number	5/6A/81
Maximum flow rate L/min
Minimum flow rate L/min
Maximum operating pressure	

In addition, the instrument is marked APPROVED FOR PETROL.

1.2 Sealing and Verification Provision

Provision is made for the application of a verification mark.

The meter calibration is sealed.

2. Description of Variants

2.1 Variant 1

With any compatible Commission-approved driveway flowmeter indicator replacing the indicator of the pattern.

2.2 Variant 2

With the Tokico hydraulics, comprising the meter and pump/strainer/air separator, replacing the hydraulics of other Commission-approved driveway flowmeters approved for use with petrol in either attendant-operated or self-serve systems.

2.3 Variant 3

Various model Tokico driveway flowmeters with the features as listed in Table 1, including with a Tokico model FF177 electronic driveway flowmeter indicator (Figure 3).

Figure 4 shows a dual driveway flowmeter with a Veeder-Root mechanical indicator.

TABLE 1

Model	Type	Indicator	Housing
AX107	Single	VR2004	Axiom Repairs
SS31C	Single	VR2004	Tokico
SW31C	Dual	VR2004	Tokico
SSMXC	Single	Tokico	Tokico
SWMXC	Dual	Tokico	Tokico

Approved Models

TEST PROCEDURE No 5/6A/81

Carry out at least five test deliveries by comparing the volume indication of the instrument with the actual volume delivered.

The maximum permissible errors at verification are:

- (a) Linearity: $\pm 0.3\%$ over the flow rate range approved for the flowmeter.
- (b) Repeatability: $\pm 0.15\%$ from the mean of at least five test runs at any constant flow rate.
- (c) Price indication: $\pm 0.5c$ for unit prices up to \$1.00/L,
 $\pm 1.0c$ for unit prices over \$1.00/L and up to \$2.00/L.

The hose dilation and the anti-drain valve of a nozzle are checked when the pump is stopped and the trigger of the nozzle is depressed; the measured volume of the product shall not exceed 50 mL.



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TECHNICAL SCHEDULE No 5/6A/81

VARIATION No 1

Pattern: Axiom Model AX107 Driveway Flowmeter.

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

1. Description of Variants

1.1 Variant 4

Any driveway flowmeter approved under Variant 3 (*) fitted with a preset facility, which may be purchaser-operated via a panel fitted to the flowmeter, for presetting of either total price (dollars) or volume (litres).

* This includes any of the driveway flowmeters listed in Table 1 of Technical Schedule No 5/6A/81 dated 12/3/86, except the model AX107 (i.e. the pattern).

1.2 Variant 5

Any model driveway flowmeter of this approval used to dispense distillate, in which case a gas detection/elimination system is fitted (Figures 5 and 6).

National Standards Commission



NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 5/6A/81

CHANGE No 1

The following change is made to the approval documentation for the

Axiom Model AX107 Driveway Flowmeter

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

In Certificate of Approval No 5/6A/81 dated 9/4/90;

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 variants 1, 3, 4 and 5; the approval for variant 2 was withdrawn as of 29/1/88.

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.

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30/9/93

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NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 5/6A/81

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 5/6A/81 dated 9/4/90, 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 variants 1, 3, 4 and 5; the approval for variant 2 was withdrawn as of 29/1/88.

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.

A handwritten signature in black ink, appearing to be 'J. B. B. B.' with a stylized flourish at the end.



NATIONAL STANDARDS COMMISSION

G.H.
5/6A/81
18/3/88

WITHDRAWAL CERTIFICATE OF APPROVAL No 5/6A/81

This is to certify that the approval for use for trade granted in respect of variant 2 of the

Axiom Model AX107 Driveway Flowmeter

submitted by Axiom Australia Pty Ltd
39 Kembla Street
Cheltenham Victoria 3192

has been withdrawn in respect of all instruments as from 29 January 1988.

The approvals of the pattern and variants 1 and 3 are still valid.

Signed

Executive Director

5/6A/81
12/3/86

FIGURE 5/6A/81 - 1



Axiom Model AX107

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12/3/86

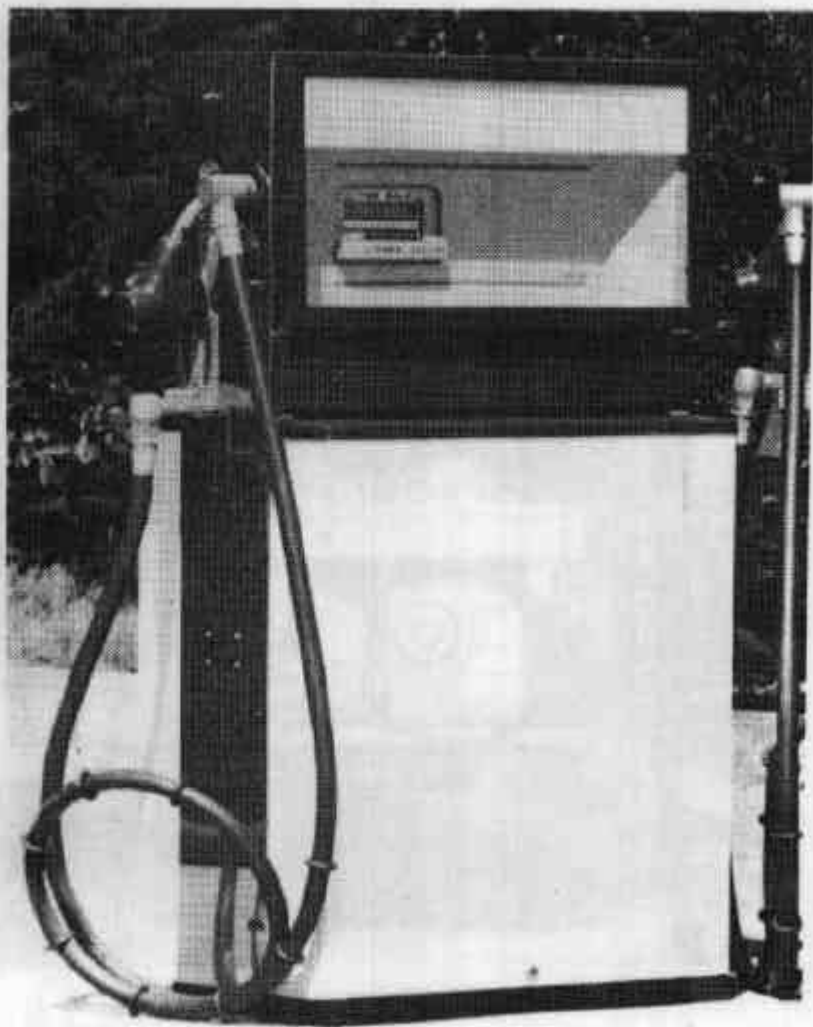
FIGURE 5/6A/81 - 2



AX107 - Cover Removed

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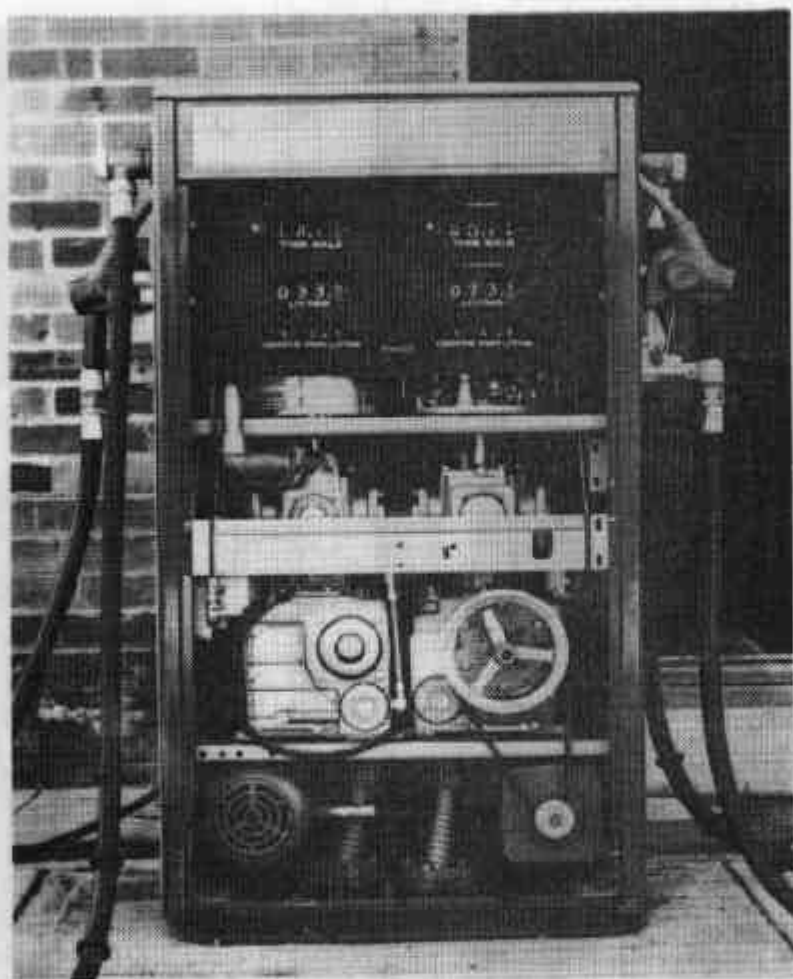
FIGURE 5/6A/81 - 3



Model SSMXC

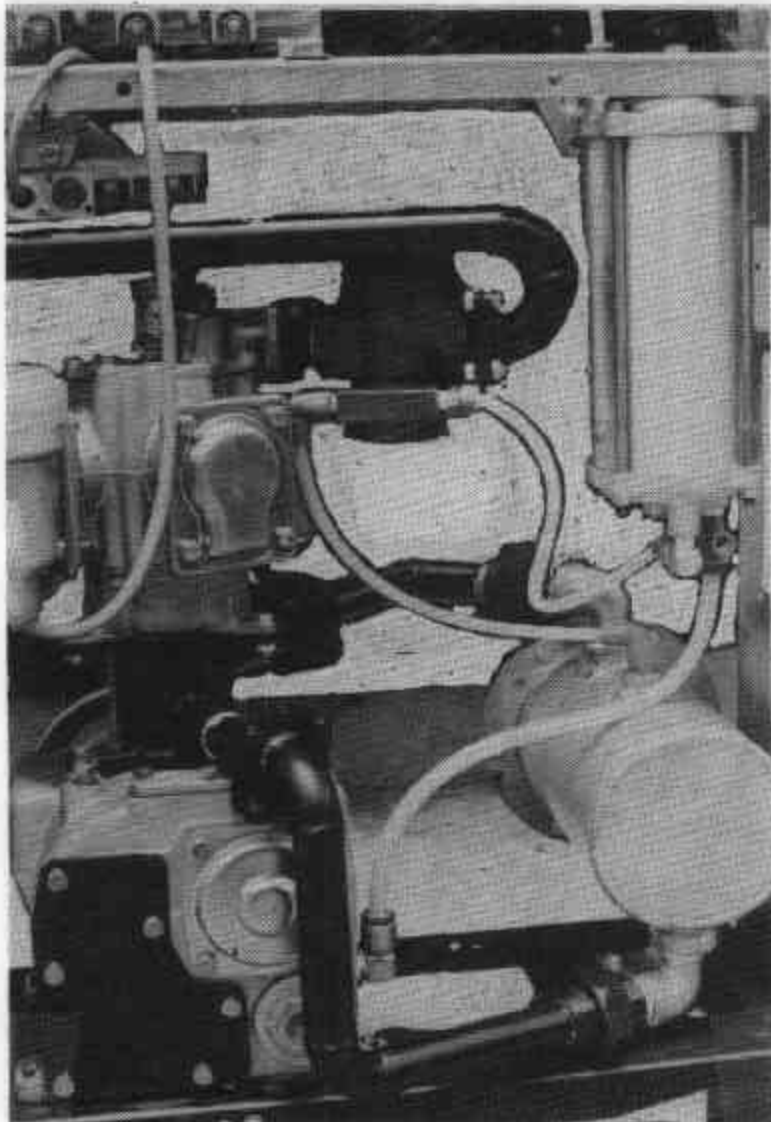
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FIGURE 5/6A/81 - 4



Model SW31C

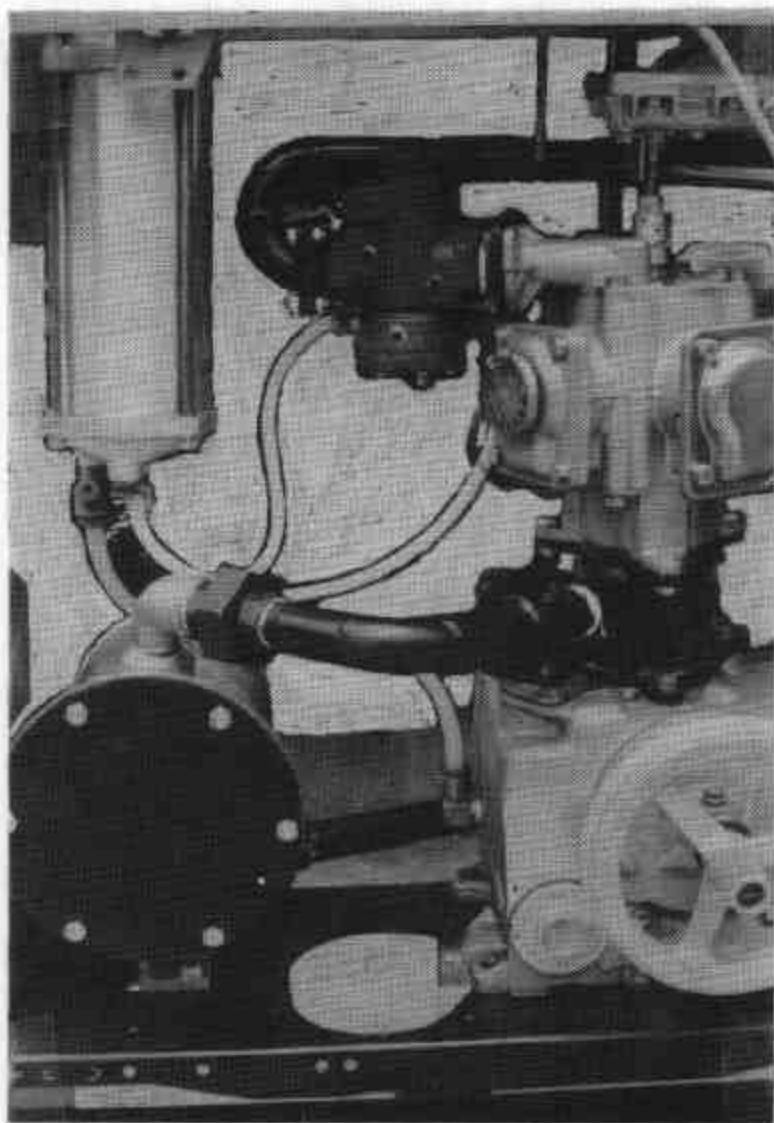
Figure 5/6A/81 - 5



Showing Gas Detection/elimination System

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Figure 5/6A/81 - 6



Showing Gas Detection/elimination System