



NATIONAL STANDARDS COMMISSION

S197
26/5/88

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S197

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

Production Engineering Model Autoserve Driveway Flowmeter Control System

submitted by Production Engineering (Aust) Pty Ltd
 270 Pacific Highway
 Crows Nest NSW 2065.

CONDITIONS OF APPROVAL

General:

This approval is subject to review on or after 1/8/90.
This approval expires in respect of new instruments on 1/8/91.

Instruments purporting to comply with this approval shall be marked NSC No S197.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.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

Special:

Instruments are only approved for installations incorporating the Commission-approved driveway flowmeters described in this approval.

Signed

Executive Director

Descriptive Advice

Pattern: approved 11/7/85 - re-approved 3/10/85

- Production Engineering model Autoserve card-operated driveway flowmeter control system.

Technical Schedule No S197 describes the pattern.

Variant: approved 5/12/86

1. With Commission-approved driveway flowmeters incorporating Gilbarco Calcopac or Electroline-type indicators.

Technical Schedule No S197 Variation No 1 describes variant 1.

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Variant: approved 10/2/88

2. With Commission-approved driveway flowmeters incorporating Email Eclipse indicators and with an Email Mk II control console.

Technical Schedule No S197 Variation No 2 describes variant 2.

Filing Advice

Supplementary Certificate of Approval No S197 dated 18/2/87 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Supplementary Certificate of Approval No S197 dated 26/5/88
Technical Schedule No S197 dated 20/11/85
Technical Schedule No S197 Variation No 1 dated 18/2/87
Technical Schedule No S197 Variation No 2 dated 26/5/88
Test Procedure No S197 dated 20/11/85
Test Procedure No S197 Variation No 2 dated 26/5/88
Figures 1 to 3 dated 20/11/85
Figure 4 dated 26/5/88



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S197

Pattern: Production Engineering Model Autoserve Driveway Flowmeter Control System

Submitter: Production Engineering Pty Ltd
56 Berry Street
North Sydney NSW 2060

1. Description of Pattern

The pattern is a Production Engineering model Autoserve card-operated terminal for controlling a combination of Commission-approved Production Engineering Empec 80 driveway flowmeters or flowmeters incorporating Commission-approved Retron 80 indicators. The system allows account transactions to be made either locally or remotely using electronic fund transfer (EFT) facility. The authorised cards may either be controlled distribution cards issued to selected users or financial institution cards available to the public.

The system comprises:

- (a) An Autoserve card-operated control terminal (Figures 1 and 2); and
- (b) Up to 16 compatible Commission-approved driveway flowmeters controlled directly by the Autoserve.

If interfaced with a Commission-approved Micro-M self-serve console, the driveway flowmeters may be authorised either by the Autoserve card-operated terminal or by the Micro-M console.

1.1 Autoserve Terminal

- (a) An alphanumeric display is used to generate prompts to guide the user through data entry functions.
- (b) One or two pressure-sensitive keypads (Figure 3) provide numeric keys and other special function keys e.g. separate pump select keys, ENTER, CANCEL, CLEAR, CHEQUE, SAVINGS, CREDIT. The special function keys determine the types of transaction facilities available on the Autoserve and may vary with the financial institution data entry requirements.
- (c) A card-acceptor into which the authorised card is inserted. Access to the managerial and service functions of the Autoserve are available only to authorised personnel and are described in the manuals. All accesses to the Autoserve terminal are recorded internally.
- (d) A ticket printer and an internal journal printer are provided.

1.2 Operating Procedure

- (a) Insert authorised card into the Autoserve.
- (b) Select the required driveway flowmeter number.
- (c) Enter personal identification number (optional).
- (d) Select the account to be debited (optional).

- (e) Enter odometer reading and/or fleet number (optional).
- (f) Ticket required? Press Yes or No.
- (g) The card is then returned and a delivery may be made.
- (h) After nozzle hang-up, the internal record is printed and, if requested at step (f), a ticket is made available by re-inserting the card within the ticket time-out period indicated on the Autoserve unit.

NOTE:

1. The order of the operating procedure may vary with the financial institution requirements e.g. step (c) may be required to take place after step (f).
2. The authorised card(s) may contain restrictions and special conditions e.g. limits on the type and/or amount of fuel that a user may obtain, which may vary with the type of card and account transaction utilised.

1.3 Markings

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

Manufacturer's name or mark	
Serial number	
Model	
NSC approval number	NSC No S197
Year of manufacture	

In addition the Autoserve unit shall indicate the period of time during which an authorised card may be re-inserted to obtain a ticket.

1.4 Verification Provision

Provision is made for a verification mark to be applied.

TEST PROCEDURE No S197

The following tests should be conducted in conjunction with any tests specified in the approval documentation for the driveway flowmeter systems to which this instrument is connected. The results shall not exceed the maximum permissible errors as specified in Document 118.

1. For systems incorporating a self-serve console check that a driveway flowmeter shall not be authorised by the Autoserve if the nozzle is not in the hung-up position.
2. Make at least two deliveries and check that the vendor's and purchaser's records of transaction are identical to that of the display on the driveway flowmeter.



NATIONAL STANDARDS COMMISSION

S197
18/2/87

TECHNICAL SCHEDULE No S197

VARIATION No 1

Pattern: Production Engineering Model Autoserve Driveway Flowmeter Control System.

Submittor: Production Engineering Pty Ltd
56 Berry Street
North Sydney NSW 2060

1. Description of Variant 1

With Commission-approved driveway flowmeters incorporating Gilbarco Calcopac or Electroline-type indicators.



NATIONAL STANDARDS COMMISSION

S197
26/5/88

TECHNICAL SCHEDULE No S197

VARIATION No 2

Pattern: Production Engineering Model Autoserve Driveway Flowmeter Control System.

Submitter: Production Engineering (Aust) Pty Ltd
270 Pacific Highway
Crows Nest NSW 2065.

1. Description of Variant 2

Production Engineering model Autoserve card-operated terminal with Commission-approved driveway flowmeters incorporating Email Eclipse indicators and with an Email Mk II control console.

Note:

- (i) Autoserve card terminals may also be in the alternative housing as shown in Figure 4.
- (ii) In the event of a power failure occurring while a driveway flowmeter is delivering after being authorised by the Autoserve terminal there may be a discrepancy between the values printed on the receipt and the values displayed on the driveway flowmeter. In this case the following is printed on the receipt:

POWER FAILURE
RECEIPT IS CORRECT
RECORD OF TRANSACTION.



NATIONAL STANDARDS COMMISSION

S197
26/5/88

TEST PROCEDURE No S197

VARIATION No 2

To check the operation of the Autoserve Card-operated terminal a special Weights and Measures card may be used. This card allows a delivery to be authorised and recorded through the Autoserve without interfering with its financial aspects.

The Weights and Measures test card operation is authorised by the Autoserve's Managers card and allows one delivery to be authorised and recorded.

1. Obtain the managers assistance to authorise the Weights and Measures card, using the Managers card and personal-identification-number (PIN). The manager should select the:

AUTHORISE
TEST CARD?

function by pressing the YES key to the above prompt. The CANCEL key should then be pressed to return the Managers card.

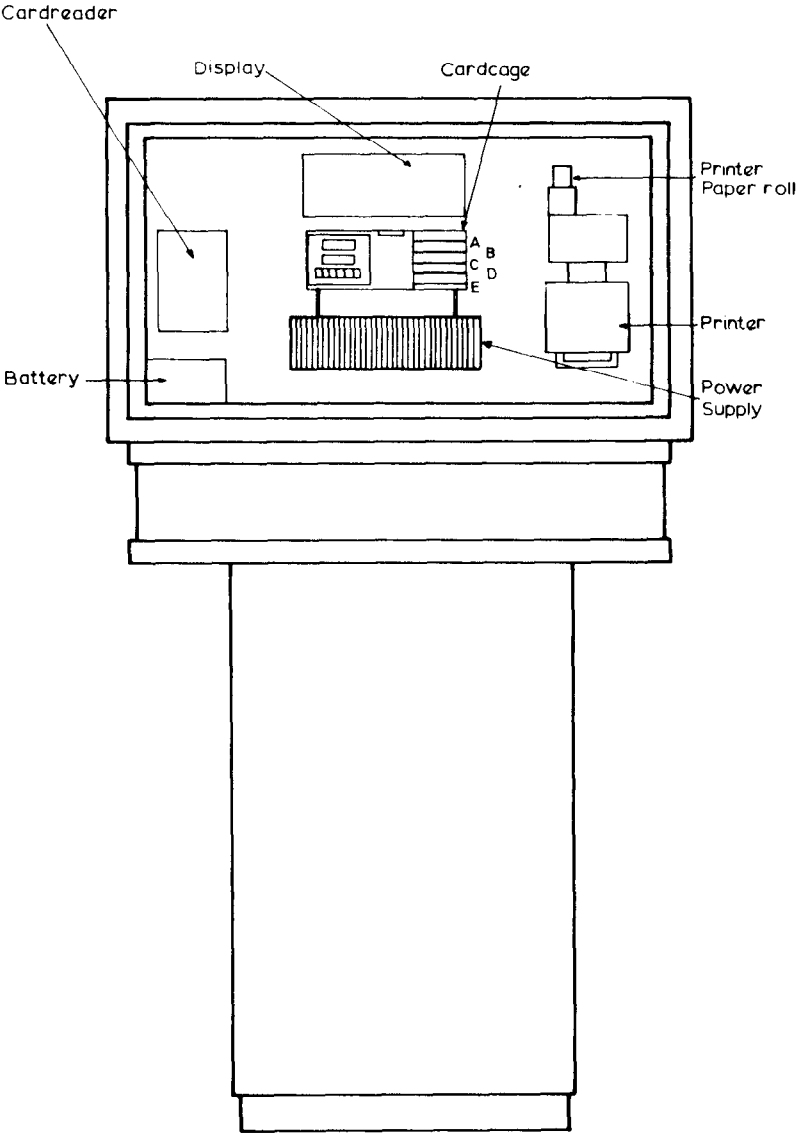
2. Insert the Weights and Measures test card.
3. Answer the prompts to authorise a transaction from a driveway flowmeter.
4. Make a delivery from the selected driveway flowmeter.
5. Re-insert the Weights and Measures test card to obtain a receipt, and compare the printed values on the receipt with those displayed on the indicators of the selected driveway flowmeter.

FIGURE S197 - 1



Autoserve Driveway Flowmeter Controller

FIGURE S197 - 2



- A Pump Comms
- B Printer Controller
- C Bubble Memory
- D Keyscan Cardreader
- E Spare

Autoserve - Rear View

FIGURE S197 - 3

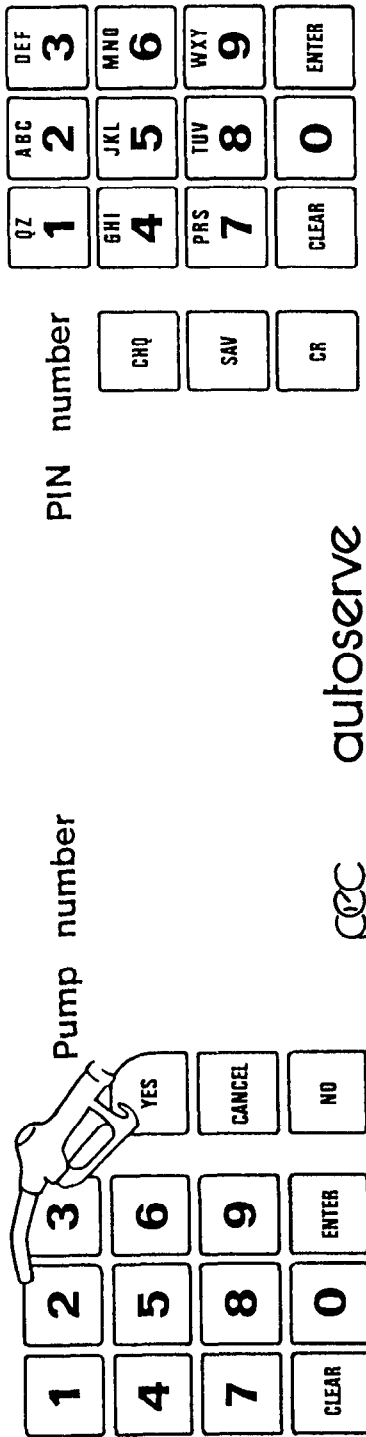
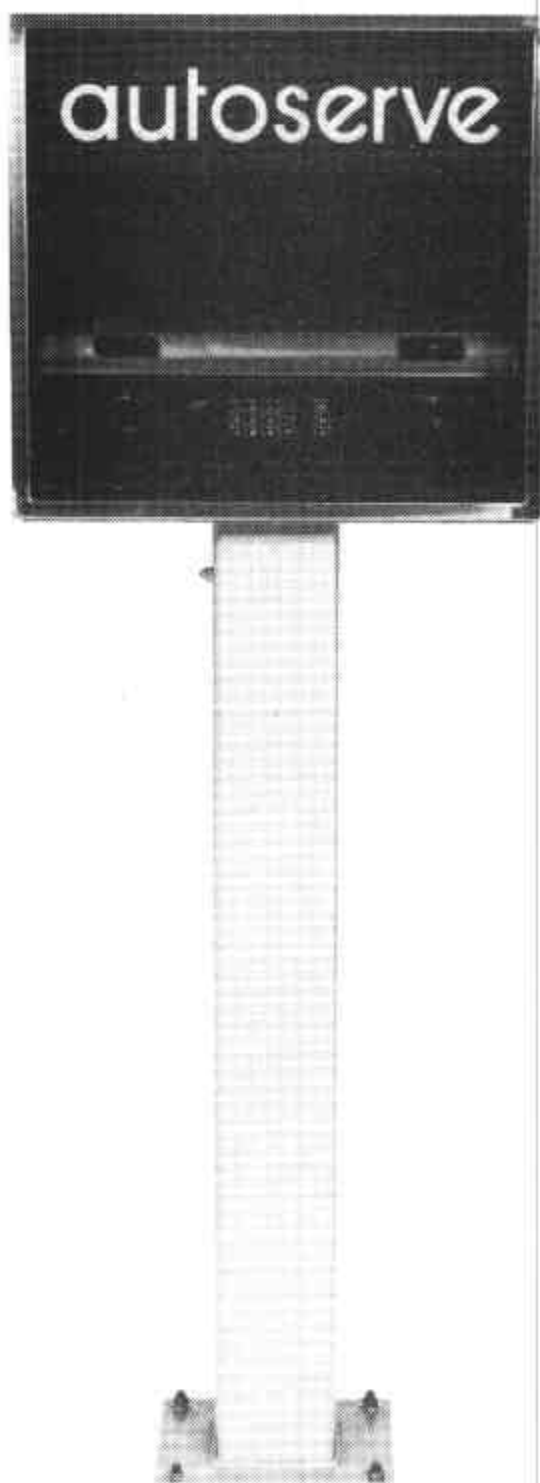


FIGURE S197 - 4



Autoserve In Alternative Housing