National Standards Commission

Supplementary Certificate of Approval

No S197A

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

Production Engineering Model Autoserve Driveway Flowmeter Control System

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

This Certificate is issued upon completion of a review of NSC approval No S197.

Signed and sealed 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.

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CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/10/96.
This approval expires in respect of new instruments on 1/10/97.

Instruments purporting to comply with this approval shall be marked NSC No S197A and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S197A in addition to the approval number of the instrument.

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.

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

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

DESCRIPTIVE ADVICE

Pattern: approved 5/9/91

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

Variants: approved 5/9/91

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

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

Technical Schedule No S197A describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S197A dated 22/11/91
Technical Schedule No S197A dated 22/11/91 (incl. Test Procedure)
Figures 1 to 4 dated 22/11/91

National Standards Commission

TECHNICAL SCHEDULE No S197A

Pattern: Production Engineering Model Autoserve Driveway Flowmeter Control System.

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

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 or Multipec driveway flowmeters or flowmeters incorporating Commission-approved Retron 80 indicators. The system allows account transactions to be made either locally or remotely using electronic funds 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 instrument is approved for use over an operating (air) temperature range of -10°C to +45°C.

1.1 The System

The system (Figure 1) comprises:

- An Autoserve card-operated control terminal (Figures 2 to 4); and
- Up to 16 compatible Commission-approved driveway flowmeters controlled directly by the Autoserve. Empec 80 and Multipec (8000 and 9000 series multi-product) driveway flowmeters are described in the documentation of NSC approvals Nos 5/6A/68A and 5/6A/85, respectively.

If interfaced with a Commission-approved Micro-M or Efpec self-serve console, the driveway flowmeters may be authorised either by the Autoserve card-operated terminal or by the console. The consoles are described in the documentation of NSC approvals Nos S231 and S222, respectively.

1.2 Autoserve Terminal

- An alphanumeric display is used to generate prompts to guide the user through data entry functions.

- One or two pressure-sensitive keypads 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.

- 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.

- A ticket printer and an internal journal printer are provided.

1.3 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.

1.4 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

1.5 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark
Serial number
Model name or number
NSC approval number NSC No S197A

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

2. Description of Variants

2.1 Variant 1

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

2.2 Variant 2

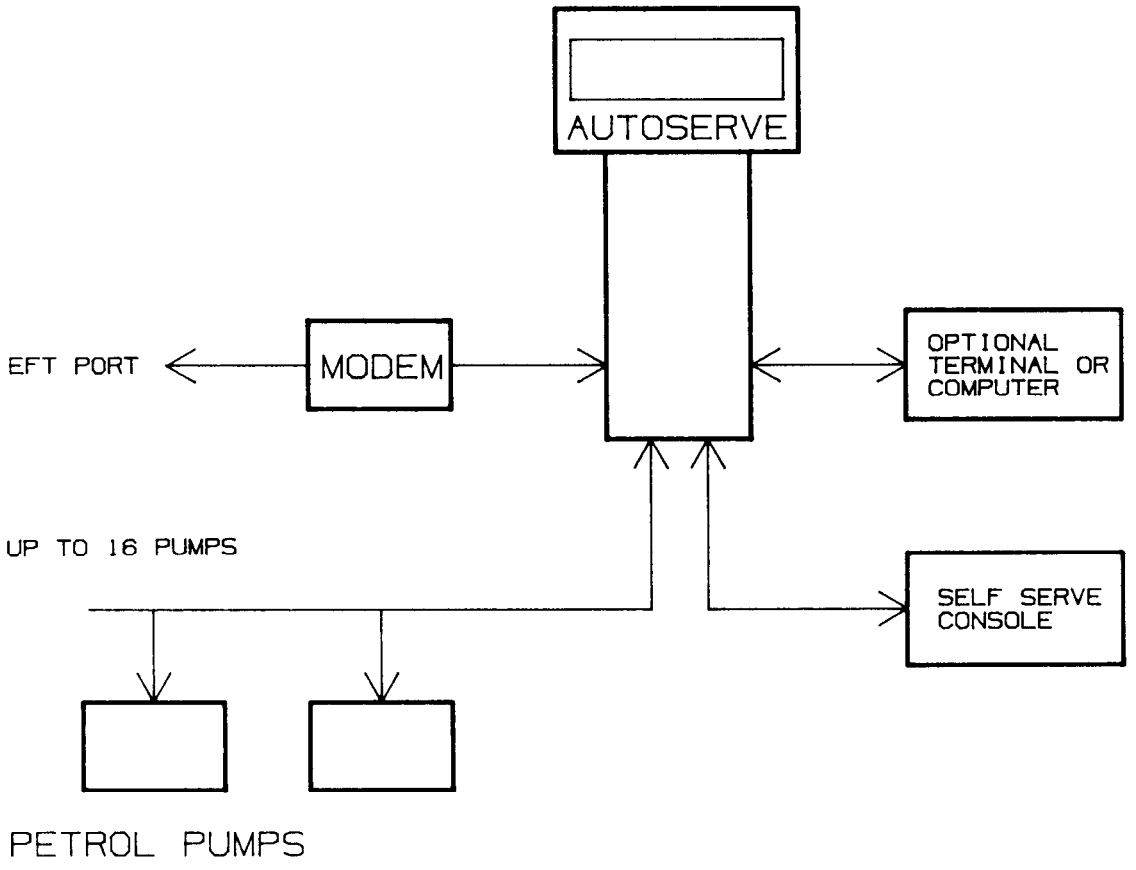
With Commission-approved driveway flowmeters incorporating Email Eclipse indicators and with an Email Mk II control console.

NOTE:

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

FIGURE S197A - 1

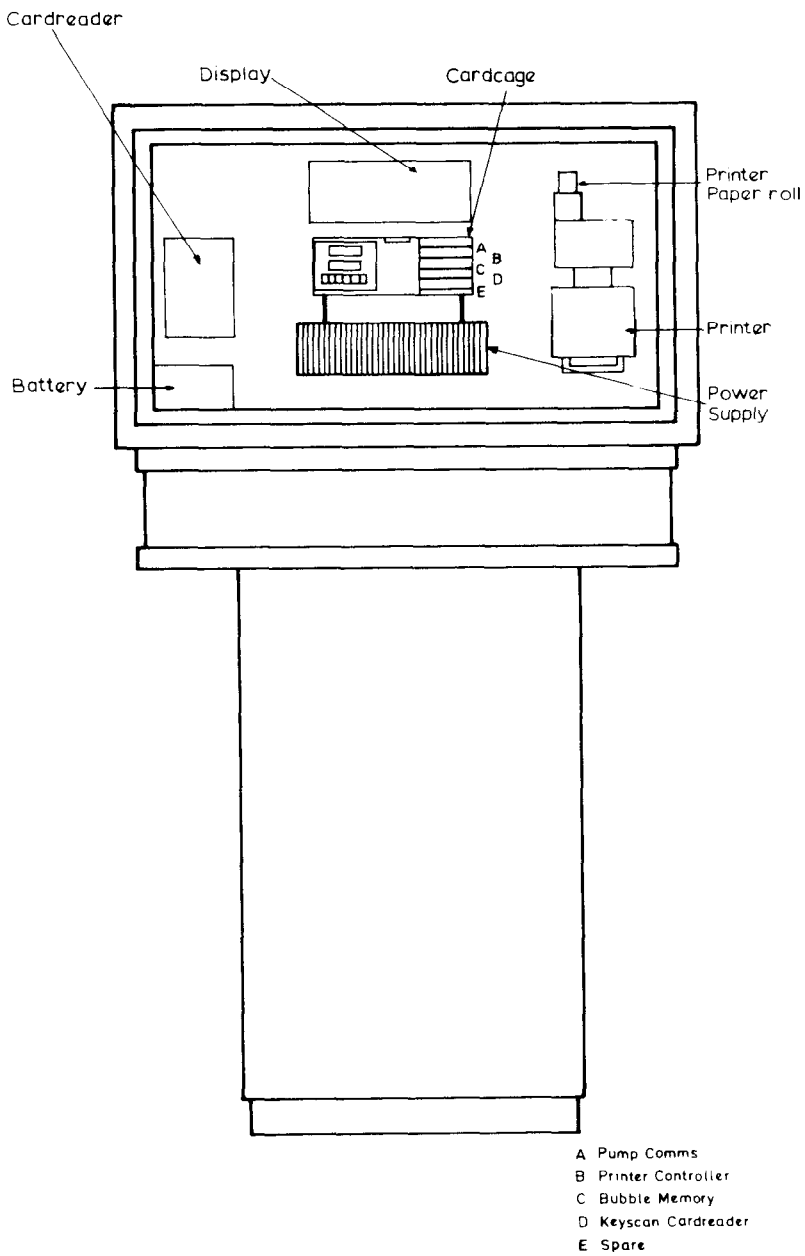


Typical Production Engineering Autoserve Control System

FIGURE S197A - 2

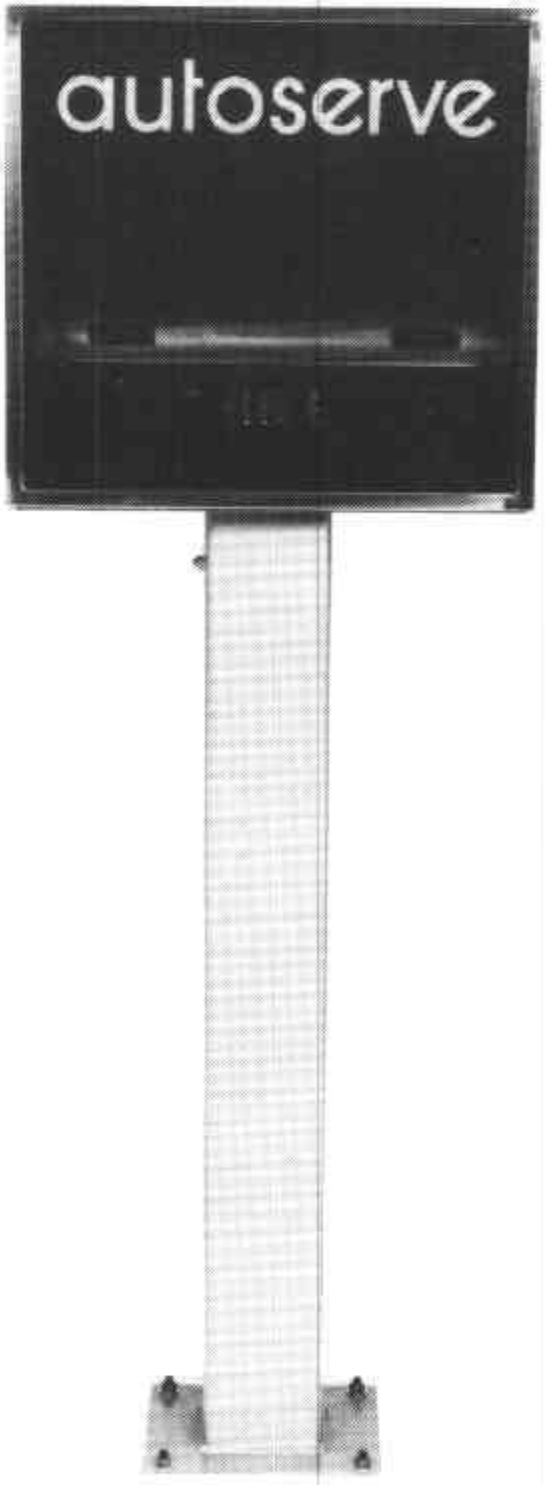
Production Engineering Autoserve Terminal

FIGURE S197A - 3



Autoserve - Rear View

FIGURE S197A - 4



Autoserve in Alternative Housing