



NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S148A

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

L & L Model DCA Driveway Flowmeter Control System

submitted by Email Limited
Electronics and Petroleum Equipment Division
Canterbury Road
Kilsyth Vic 3137.

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 S148A.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.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

The instrument is only approved for installations incorporating the Commission-approved driveway flowmeter systems described in this approval.

Signed

Acting Executive Director

Descriptive Advice

Pattern: approved 1/7/85 - reapproved 2/10/85

. L & L model DCA card-operated driveway flowmeter control system (also known as an Email Computer Systems model DCA).

Technical Schedule No S148A describes the pattern.

Variant: approved 20/3/86

1. Model DCA-V1 with Commission-approved driveway flowmeters incorporating Calcopac indicators or Commission-approved Gilbarco driveway flowmeters incorporating indicators with remote electronic unit price change facility, either with or without a Commission-approved Gilbarco console.

Technical Schedule No S148A Variation No 1 describes variant 1.

Variant: approved 20/7/87

2. Model DCA-V1 for use with a Gilbarco T12AC control console.

Technical Schedule No S148A Variation No 2 describes variant 2.

Filing Advice

Supplementary Certificate No S148A dated 15/5/86 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Supplementary Certificate of Approval No S148A dated 21/9/87
Technical Schedule No S148A dated 20/11/85
Technical Schedule No S148A Variation No 1 dated 15/5/86
Technical Schedule No S148A Variation No 2 dated 21/9/87
Test Procedure No S148A dated 20/11/85
Figures 1 to 4 dated 20/11/85



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S148A

Pattern: L & L Model DCA Driveway Flowmeter Control System

Submittor: L & L Australia Pty Ltd
Cnr Canterbury and Liverpool Roads
Kilsyth Vic 3137

1. Description of Pattern

The pattern is an L & L model DCA card-operated terminal (also known as an Email Computer Systems model DCA) for controlling a combination of Commission-approved Epitronic driveway flowmeters or flowmeters incorporating Commission-approved Eclipse indicators. The DCA allows account transactions to be made either locally or remotely using an 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 DCA card-operated control terminal, and either;

- (a) Up to 8 driveway flowmeters controlled directly by the DCA, or
- (b) Any 8 of up to 16 driveway flowmeters when the system includes an Epitronic MK II self-serve console.

1.1 DCA Terminal

This unit (Figures 1 to 4) has the following features:

- (a) An alphanumeric liquid crystal display used to generate prompts to guide the user through data entry functions.
- (b) A pressure-sensitive keypad providing 10 numeric keys and other special function keys e.g. ENTER, CANCEL, CHEQUE, SAVINGS, CREDIT, CHANGE. The special function keys determine the types of transaction facilities available on the DCA controller 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 DCA are available only to authorised personnel and are described in the manuals. All accesses to the DCA terminal are recorded internally.
- (d) A ticket printer and internal journal printer.

1.2 Operating Procedure

- (a) Insert authorised card into DCA unit.
- (b) Enter personal identification number (optional).
- (c) Select account to be debited (optional).
- (d) Enter odometer reading and/or fleet number (optional).

- (e) Ticket required? Press Yes or No.
- (f) Select the required driveway flowmeter number.
- (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 (e), a ticket is made available by re-inserting the card within the ticket time-out period indicated on the DCA unit.

NOTE:

1. The order of the operating procedure may vary with the financial institution requirements e.g. step (b) 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 S148A
Year of manufacture	

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

1.3 Verification Provision

Provision is made for a verification mark to be applied on the DCA.

TEST PROCEDURE No S148A

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 can not be authorised by the DCA 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

TECHNICAL SCHEDULE No S148A

VARIATION No 1

Pattern: L & L Model DCA Driveway Flowmeter Control System

Submittor: Email Limited
Cnr Canterbury and Liverpool Roads
Kilsyth Vic 3137

1. Description of Variant 1

The model DCA-V1 system controlling up to 8 of either (a) or (b) directly, or any 8 of up to 12 of either (a) or (b) when the system incorporates a Gilbarco T11, T11-5 or T12 console.

- (a) Commission-approved driveway flowmeters incorporating Calcopac indicators having manual unit price setting by means of thumb-wheels on the face of the indicator, in which case the system shall only read the unit price set at the driveway flowmeter and the instruction command in the DCA allowing remote unit price change shall be disabled; or
- (b) Commission-approved Gilbarco driveway flowmeters incorporating indicators with remote electronic unit price change facility.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S148A

VARIATION No 2

Pattern: L & L Model DCA Driveway Flowmeter Control System

Submittor: Email Limited
Canterbury Road
Kilsyth Vic 3137

1. Description of Variant 2

Model DCA-V1 system controlling any 8 of up to 12 Commission-approved driveway flowmeters (see variant 1) when interfaced with a Gilbarco T12AC control console.



NATIONAL STANDARDS COMMISSION

S148A
5/9/86

NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S148A

CHANGE No 1

The following change is made to the approval documentation for the

L & L Model DCA Driveway Flowmeter Control System

submitted by Email Limited
Electronics and Petroleum Equipment Division
Canterbury Road
Kilsyth Victoria 3137.

Test Procedure No S148A dated 20/11/85, is amended to include the following:

3. Instruments which are interfaced to a financial institution and which authorise transactions via an EFT facility, may be tested using the following:

(a) Insert RETAILER card.

(b) Select Function 82.

Note: Instruments which are connected to the Westpac bank have a second keypad located inside the instrument which is used to enter the Retailer Functions.

(c) Exit the RETAILER function by pressing the 0 key and then enter.

(d) Insert RETAILER card again; the instrument will now treat this as a normal purchaser card except that no communication will take place with the financial institution. Any personal identification number (PIN) and account type will be accepted.

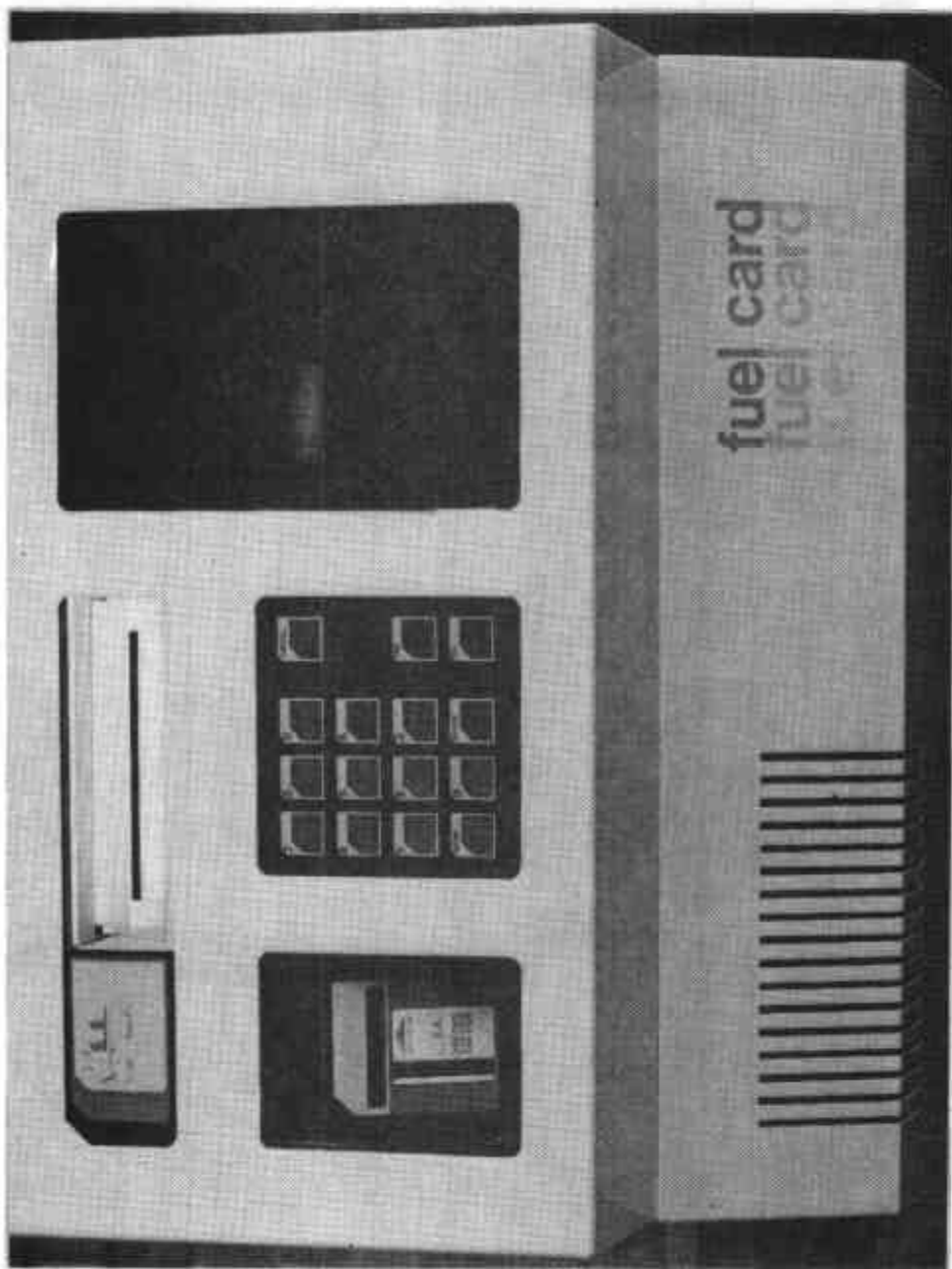
(e) Proceed to make a delivery as described in the Technical Schedule.

Note: The value of fuel that can be delivered is limited depending on the financial institution concerned.

Signed

Executive Director

FIGURE S148A - 1



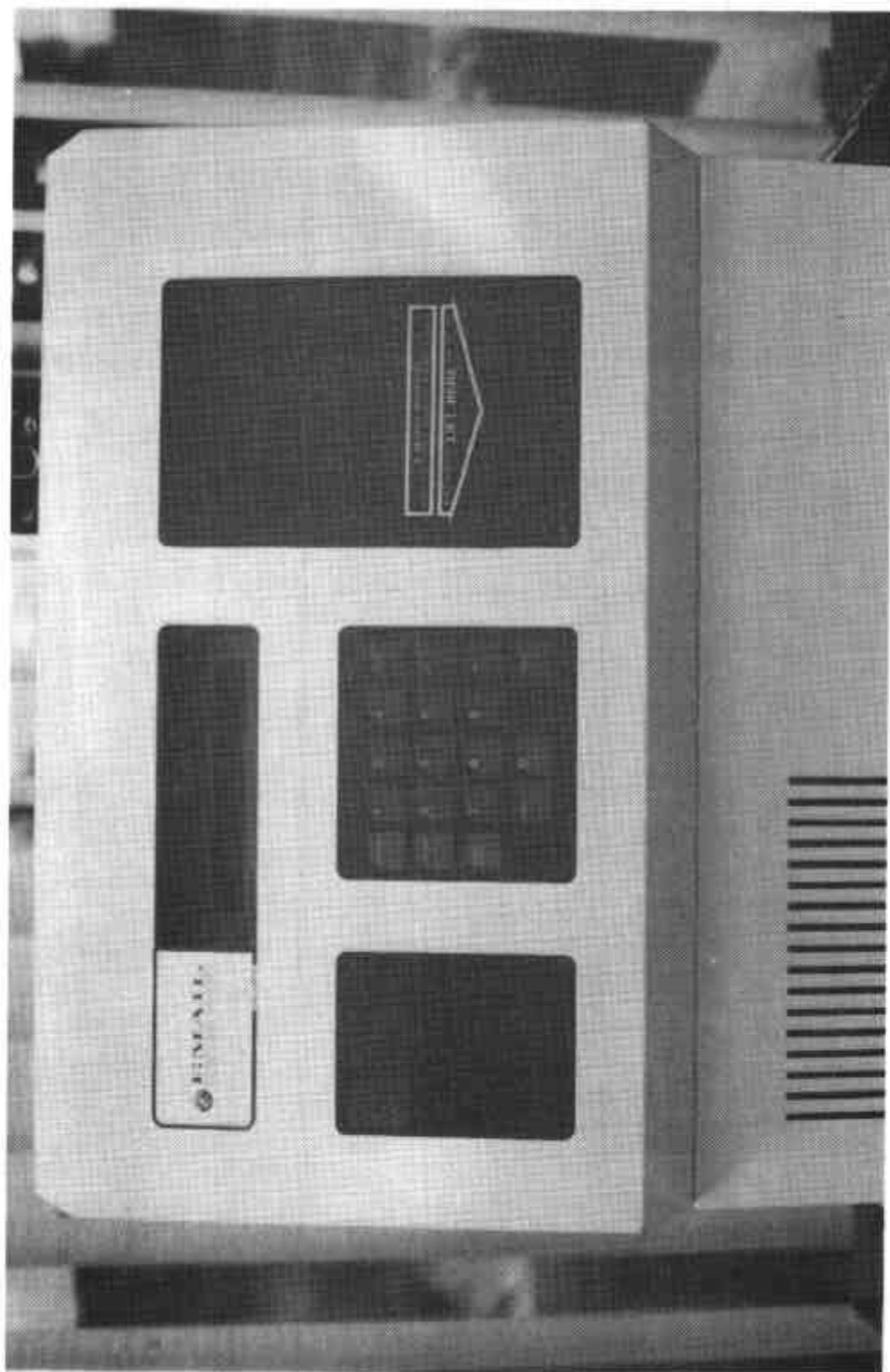
L & L Model DCA Terminal

FIGURE S148A - 2



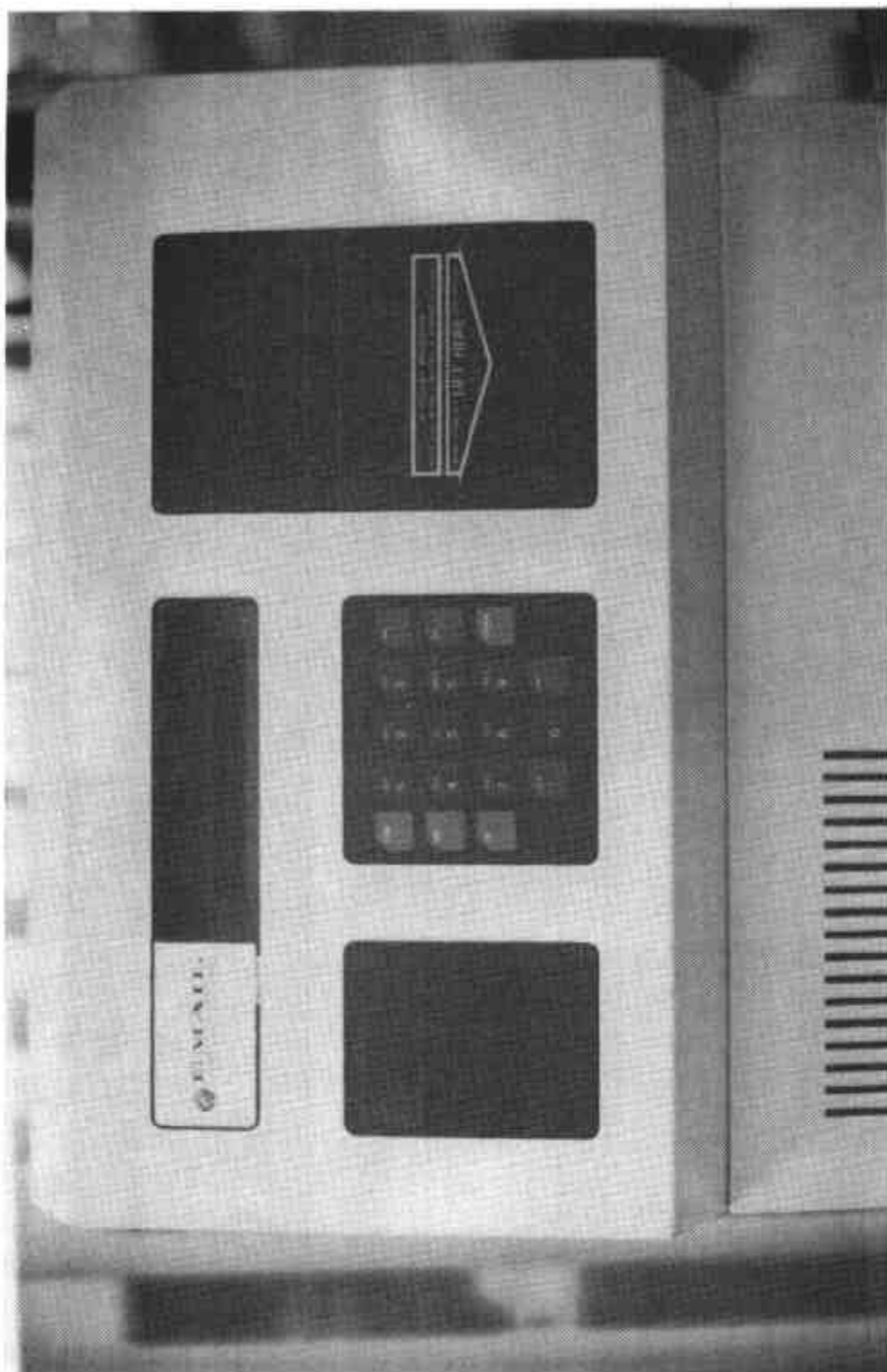
Model DCA Showing Markings

FIGURE S148A - 3



Showing An Alternate Keypad

FIGURE S148A - 4



Showing An Alternate Keypad