CANCELLED 013 31-12-90

NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S130

This is to certify that an approval has been granted by the Commission that the pattern and variants of the

ProEda Model S44 Fuel Usage Recorder

submitted by ProEda Australasia Pty Ltd
11 Whiting Street
Artarmon, New South Wales, 2064,

are suitable for use for trade when attached to driveway flowmeters as detailed in the Conditions of Approval below.

The approval is subject to review on or after 1/7/87.

Instruments modified by the fitting of a fuel usage recorder purporting to comply with this approval shall be marked NSC No S130 in addition to the approval number of the unmodified pattern.

Relevant drawings and specifications are lodged with the Commission.

Conditions of Approval

1. (a) The pattern may be attached to Veeder-Root model VR101 driveway flowmeter price-computing indicators in any of the Commission-approved driveway flowmeters listed in Table 1 of Technical Schedule No S130 dated 5/7/82, when they are installed as stand-alone units.

   (b) The pattern may also be attached to Veeder-Root model VR2000 series price-computing indicators as approved in NSC No S107 when the associated driveway flowmeters are installed as stand-alone units.

   (c) The pattern may also be attached to driveway flowmeters incorporating electronic price-computing indication, via a 4:1 reduction gearbox, when they are installed as stand-alone units.

2. Variants 1 and 2 are provisional and instruments shall be marked PS130.

Signed

Executive Director

Descriptive Advice

Pattern: approved 23/6/82

. ProEda model S44 fuel usage recorder.

Provisional Variants: approved 17/3/83

1. With up to eight (8) driveway flowmeters, and known as a model S44/8M.

2. Using an alternative magnetic credit card.

Technical Schedule No S130 Variation No 1 dated 22/4/83 describes provisional variants 1 and 2.

Filing Advice

Certificate of Approval No S130 dated 5/7/82 is superseded by this Certificate and may be destroyed.

The documentation for this approval now comprises:

Certificate of Approval No S130 dated 22/4/83
Technical Schedule No S130 dated 5/7/82
Technical Schedule No S130 Variation No 1 dated 22/4/83
Test Procedure No S130 dated 5/7/82
Figures 1 to 9 dated 5/7/82
Figure 10 dated 22/4/83.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S130

Pattern: Proeda Model S44 Fuel Usage Recorder

Submittor: Proeda Australasia Pty Ltd,
11 Whiting Street,
Artarmon, New South Wales, 2064.

1. Description of Pattern

1.1

The pattern is a fuel usage recorder, and driveway flowmeter controller. The instrument may be attached to a maximum of four driveway flowmeters and is 'customer-operated' using a credit card. The system is programmed to have a maximum of 500 credit card users. The system may also be 'attendant-operated' using an attendant card. The system is programmed to have a maximum of 10 attendants. The maximum delivery that an individual customer may obtain at any one time can be internally set between 90 and 800 litres.

The system is designed to be attached to driveway flowmeters as follows:

1. Driven from the litre shaft of a Veeder-Root model VR101 price-computing indicator in any Commission-approved driveway flowmeter listed in Table 1 when installed as a stand-alone unit (Figure 1).

2. Driven from the litre shaft of a Veeder-Root model VR2000 series price-computing indicator (as approved in NSC No S107) in any Commission- approved driveway flowmeter when installed as stand-alone units in accordance with S107 (Figure 1).

3. Driven via a 4:1 reduction gear-box fitted in the meter output shaft between the meter and the price computing indicator, in driveway flowmeters as for 1 and 2 above, and in the case of driveway flowmeters fitted with electronic indicators (Figures 2 and 3).

The system comprises:

(a) Up to four (4) driveway flowmeters.

(b) A pulse transmitter model 0211.0013/2 attached to the litre shaft of the VR101 or VR2000 series indicator in each flowmeter or attached to the reduction gear-box (Figures 1, 2 and 3).

(c) Fuel usage recorder control unit incorporating both customer and vendor controls and indications (Figures 4 and 5).

(d) A metallised paper tally roll which forms the prime source of data for invoicing (Figures 4 and 5).

(e) A receipt printer which issues a customer ticket (Figures 4, 5 and 7).

1.2 Customer Controls And Indications On The Control Unit

1.2.1 Credit Card Reader

A coded credit card is inserted in a slot in the control unit. Each card holder has a 4-digit account number and a 4-digit secret code number corresponding to the card (Figures 4 and 6).

1.2.2 Keyboard

The keyboard has ten buttons and is used to enter the code corresponding to a particular card (Figure 4).

1.2.3 Display

The display located between keyboard and authorisation buttons consists of eight (8) digits, six (6) of which are visible through the front panel of the control unit. The display indicates digits keyed in by the user, and is cleared when an authorisation (driveway flowmeter select) button is pressed.

1.2.4 Receipt Selection Button

After a code has been keyed into the keyboard, a button marked with a triangle is used to select the printing of a receipt (Figure 4).

1.2.5 Authorisation Buttons

Buttons numbered 1 to 4 activate the driveway flowmeters and return the credit card to the customer after the code has been keyed into the keyboard (Figure 4).

1.2.6 Receipt Printer And Chute

At the end of a delivery of fuel, a receipt (if selected as in 1.2.4) is printed and presented to the customer through the receipt chute (Figures 4, 5 and 7). The information recorded top to bottom, left to right, is:

- Date and time of transaction.
- Driveway flowmeter number(under the heading 'P' on the receipt).
- The account type (under heading 'T'); 'U' for unrestricted credit, 'C' for restricted credit and 'P' for prepaid.
- The discount rate index which may vary between 0 and 9 (under heading 'R').
- The customer 4-digit account number (under heading 'AC').
- The quantity delivered in litres and hundredths of litres (under heading 'QTY L').
- The unit price in Dollars per Litre (under heading '$/L'). This unit price may differ from that on the driveway flowmeter.
- The transaction price in Dollars (under heading 'PRICE $'). If the unit price on S44 is different to that on the driveway flowmeter then this price will also differ.
- For type 'C' and 'P' accounts, the remaining respective credit or prepaid value in Dollars (under 'BAL. $').
- The total cumulative purchase value in Dollars (under 'TOTAL $').

1.2.7 Roll Printer

At the end of a delivery of fuel, the details of the transaction are recorded on the roll of metallised paper, which can be viewed through an aperture in the upper right corner of the control unit. The information recorded left to right is the customer 4-digit account number, the quantity of fuel delivered, the driveway flowmeter number, the account discount rate, and the time of transaction. The account type and discount rate are not visible to the user (Figures 4 and 5).

1.3 Vendor Controls And Indications On The Control Unit

Access is gained to various vendor functions by the use of 'Program Cards' in conjunction with the display, keyboard, authorisation and receipt push-buttons. For lengthy printouts, or to consult the roll printout, it is necessary to unlock and open the front panel of the control unit (Figure 5).

To initiate a program function, the operator inserts the appropriate program card, keys in the code number then presses any one of the authorisation buttons (1-4). Further input varies according to which program card was inserted.

1.3.1 Setting Of Date And Time

The date and time are quartz controlled with internal battery back-up.

1.3.2 Control Unit Totalising Functions

The control unit maintains cumulative transaction information relating to customer accounts, driveway flowmeters and driveway attendants.

1.3.3 Control Unit Price Variation And Discount Functions

Associated with each connected driveway flowmeter are two distinct unit prices. The first, attendant price, refers to the unit price charged for all attendant sales through that flowmeter. The second, customer price, is the unit price charged for sales through that flowmeter to customer card holders on '0' discount rate. Customers on discount rates '1' to '9' are given a corresponding reduction in their unit price based on the customer price less the listed discount for their discount rate.

1.3.4 Customer Barring Facility

A vendor may bar a customer from obtaining fuel through use of the fuel usage recorder. If on three consecutive attempts an incorrect code is entered via the keyboard, the credit card will automatically be taken in by the control unit and deposited in the card magazine drawer (Figure 5).

1.3.5 Customer Account Manipulation Facilities

The system supports three types of customer accounts; unrestricted credit accounts (denoted by the letter 'U'), restricted credit accounts (denoted by the letter 'C') and prepaid accounts (denoted by the letter 'P'). An unrestricted credit account allows the customer to purchase fuel without limitation. A restricted credit account allows the customer to purchase fuel to the value of his individual credit limit. A prepaid account allows the customer to purchase fuel in advance and then to dispense fuel to the value of his purchase.

1.4 Sealing

The control unit is sealed as shown in Figure 8. The verification stamping plug and nameplate are shown in Figure 9.

1.5 Marking

The nameplate is marked with the following data and is sealed to the cabinet via the stamping plug (Figure 9):

Manufacturers name or mark	
Serial number	
Year of Manufacture	
NSC Approval No	NSC S130
Model	S44

TEST PROCEDURE No S130

The following Test Procedure will ensure that the fuel usage recorder is operating in accordance with the approved design:

1. Obtain from the station operator a credit card for use with the four driveway flowmeters connected to the fuel usage recorder and note the account number and secret code corresponding to the card.

2. Insert the card, metal face up, into the card slot with the arrow pointing towards the instrument.

   2.1 Enter the 4-digit code for that card into the instrument via the keyboard, press the 'receipt selection button' (marked with a triangle), then press the 'authorise' button corresponding to driveway flowmeter number 1. The credit card will be returned and driveway flowmeter number 1 will be authorised and a delivery can commence.

   2.2 Lift the nozzle of driveway flowmeter number 1 and deliver approximately 15 litres of fuel. Record the quantity delivered to the nearest 0.01 litre as indicated on the driveway flowmeter indicator. Hang up the nozzle.

   2.3 Return to the control unit and collect the receipt from the receipt chute. The quantity printed on the receipt should agree with that indicated on the driveway flowmeter and recorded in 2.2 to within 0.06 litre.

   2.4 In addition, check that the account number printed corresponds to that on the card used and that the driveway flowmeter number printed corresponds to the driveway flowmeter from which fuel was just dispensed. Also check that the date and time recorded are correct.

   2.5 Repeat 2 to 2.4 inclusive, this time for a delivery of say, approximately 30 litres.

3. Repeat 2 to 2.5 using driveway flowmeters numbers 2, 3 and 4.

4. Accuracy tests should be conducted on the driveway flowmeters connected to this pattern, in accordance with the relevant tests of the certificate issued for the respective driveway flowmeters.

5. Return the credit card to the station operator.

TABLE 1

Certificates Of Approval Nos

5/6A/47

5/6A/61

5/6A/62

5/6A/63

5/6A/66

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S130

VARIATION No 1

Pattern: ProEda Model S44 Fuel Usage Recorder

Submittor: ProEda Australasia Pty Ltd
11 Whiting Street
Artarmon, New South Wales, 2064.

1. Description of Provisional Variants

1.1 Provisional Variant 1

The fuel usage recorder connected to up to eight (8) driveway flowmeters, in which case it is known as a model S44/8M (Figure 10).

1.2 Provisional Variant 2

Using an alternative magnetic credit card.

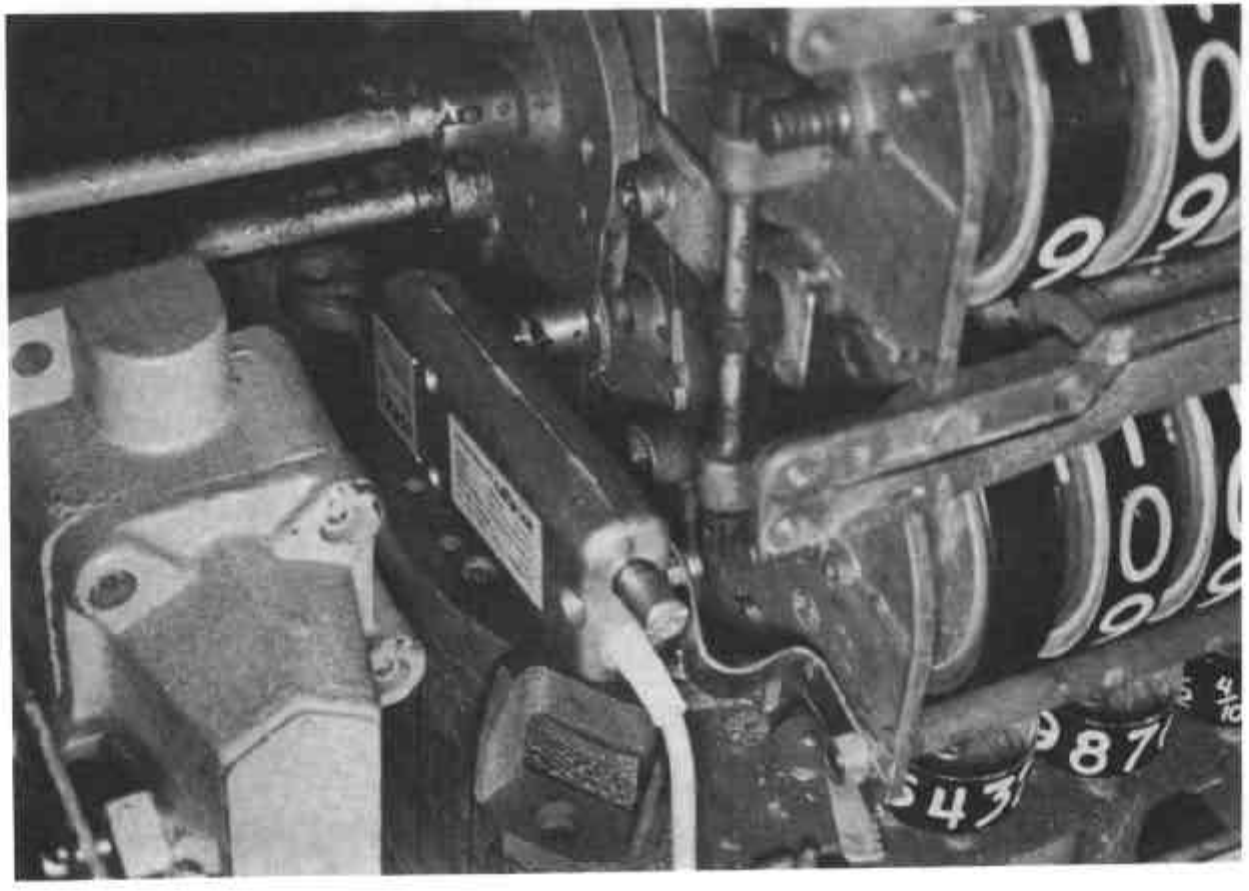
1.3 Markings

Instruments purporting to comply with provisional variants 1 or 2 shall be marked PS130.

22/4/83

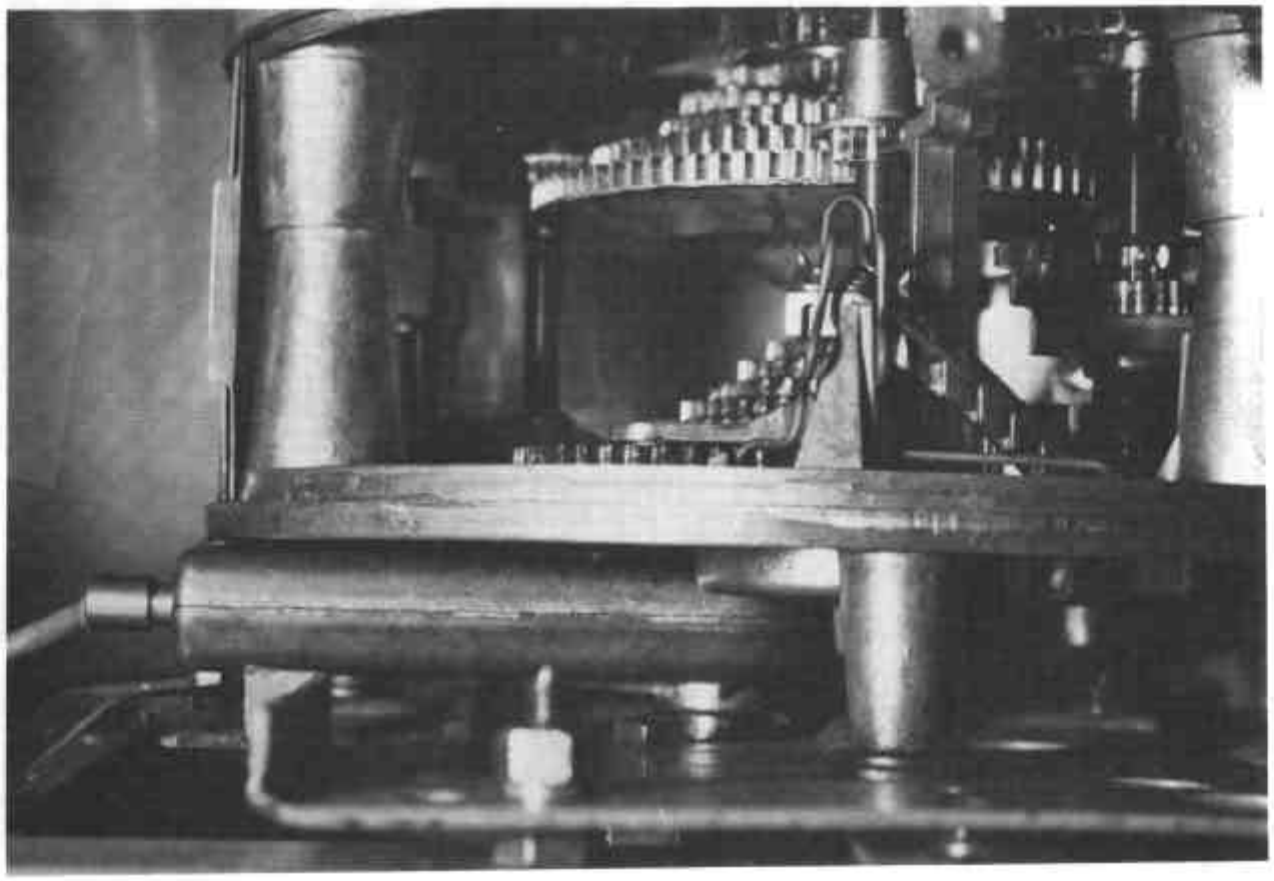
5/7/82

FIGURE S130 - 1



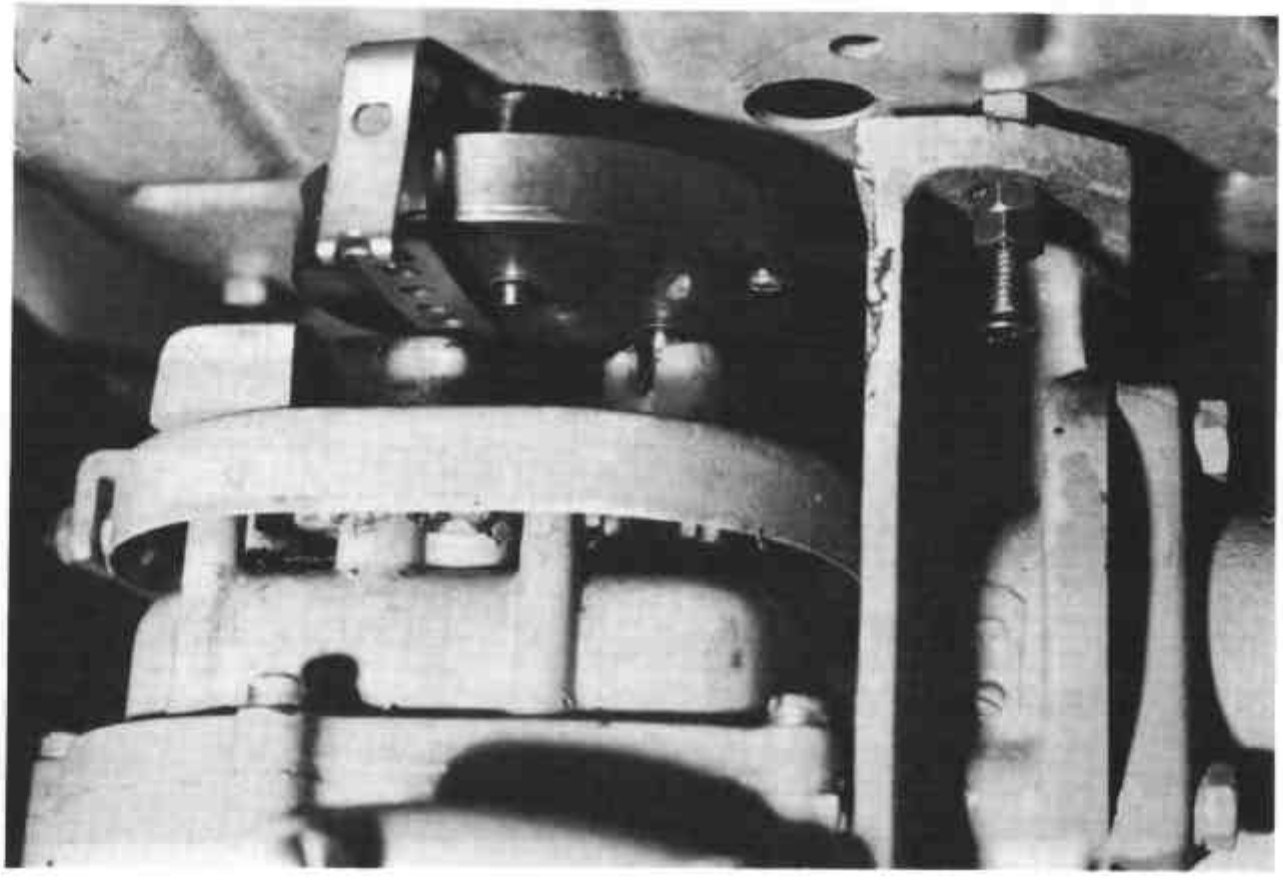
Pulse Transmitter When Driven From VR Computer

FIGURE S130 - 2



Pulse Transmitter When Driven From Reduction Gearbox

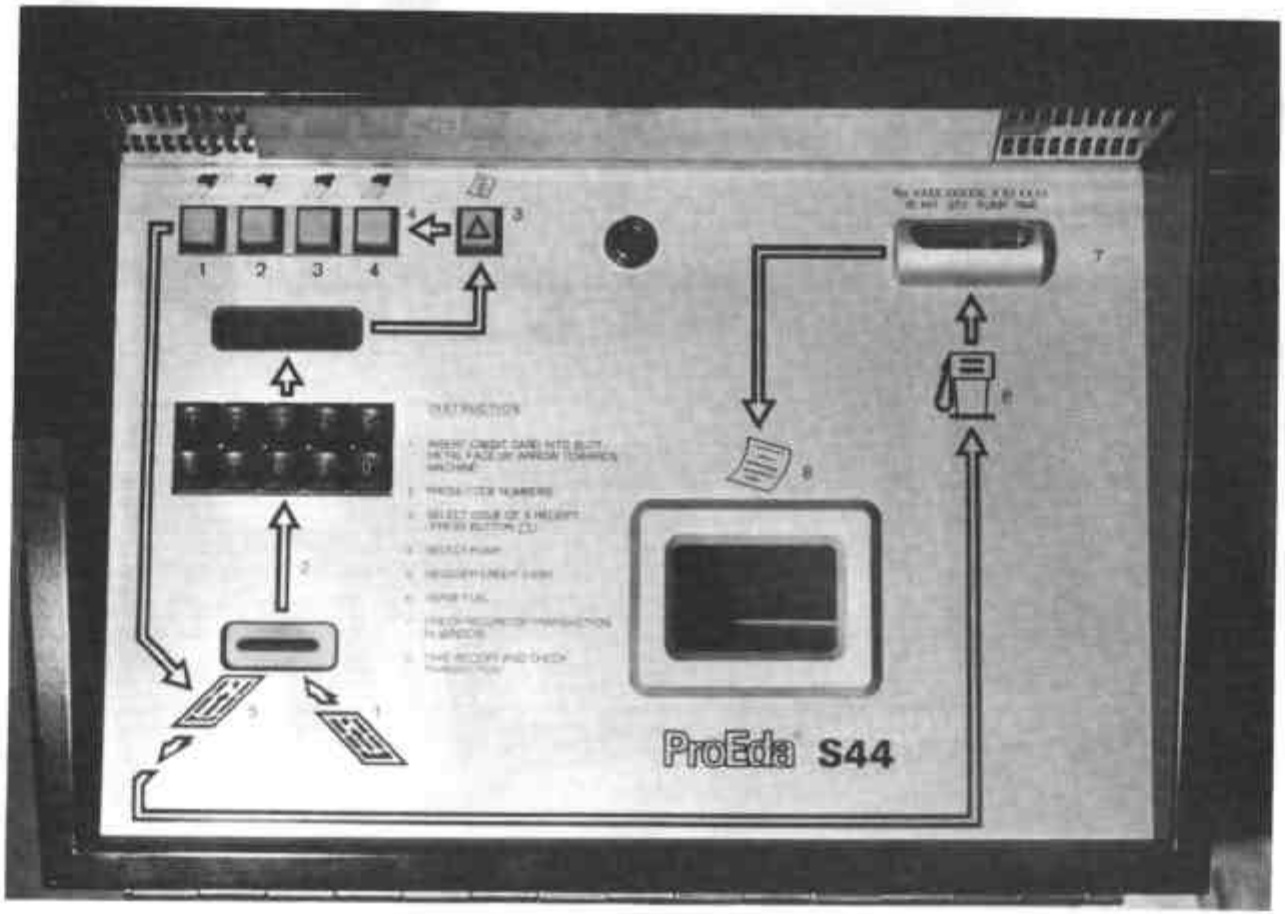
FIGURE S130 - 3



Reduction Gearbox

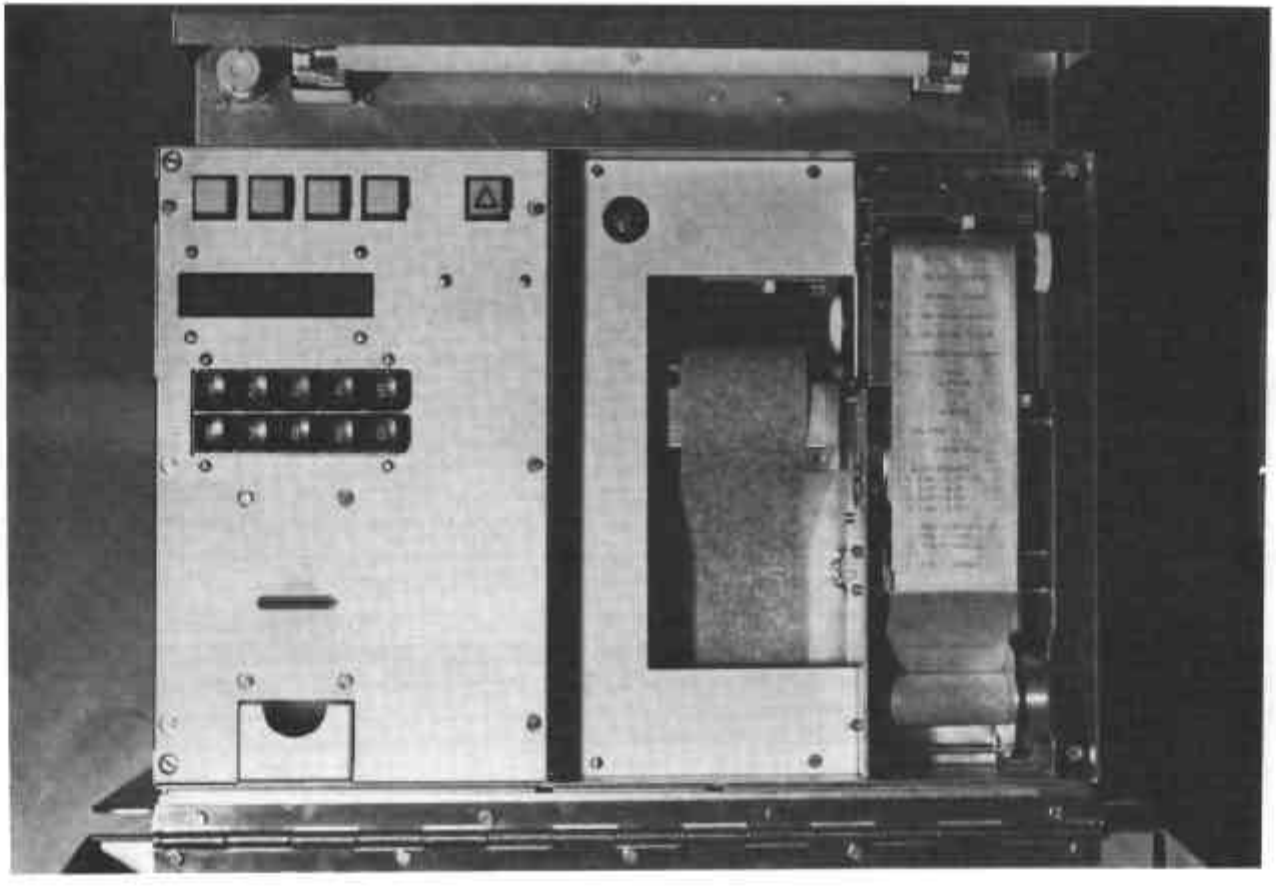
FIGURE S130 - 4

5/7/82



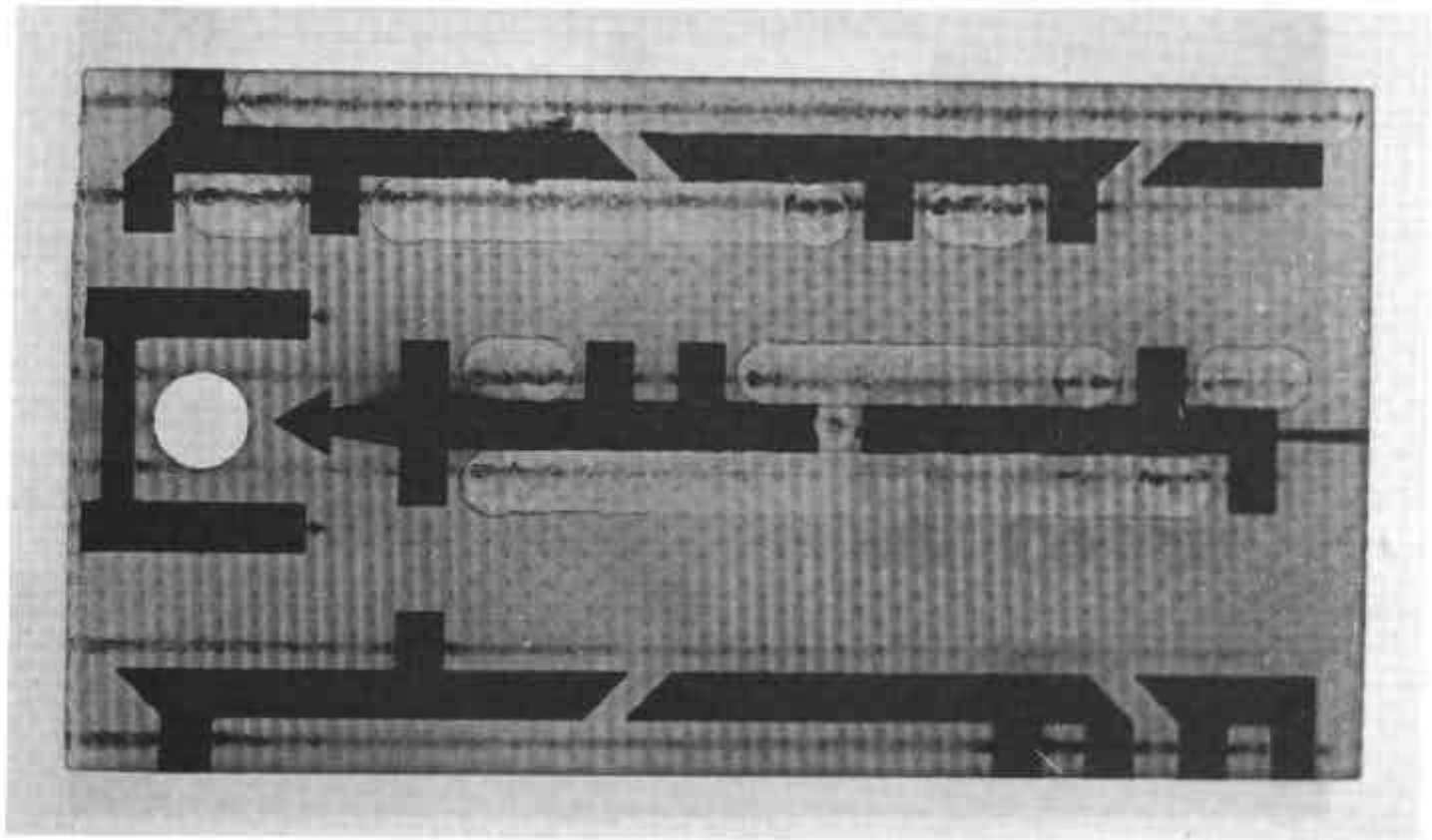
Front Panel Of Control Unit

FIGURE S130 - 5



Control Unit - Front Panel Lowered

FIGURE S130 - 6

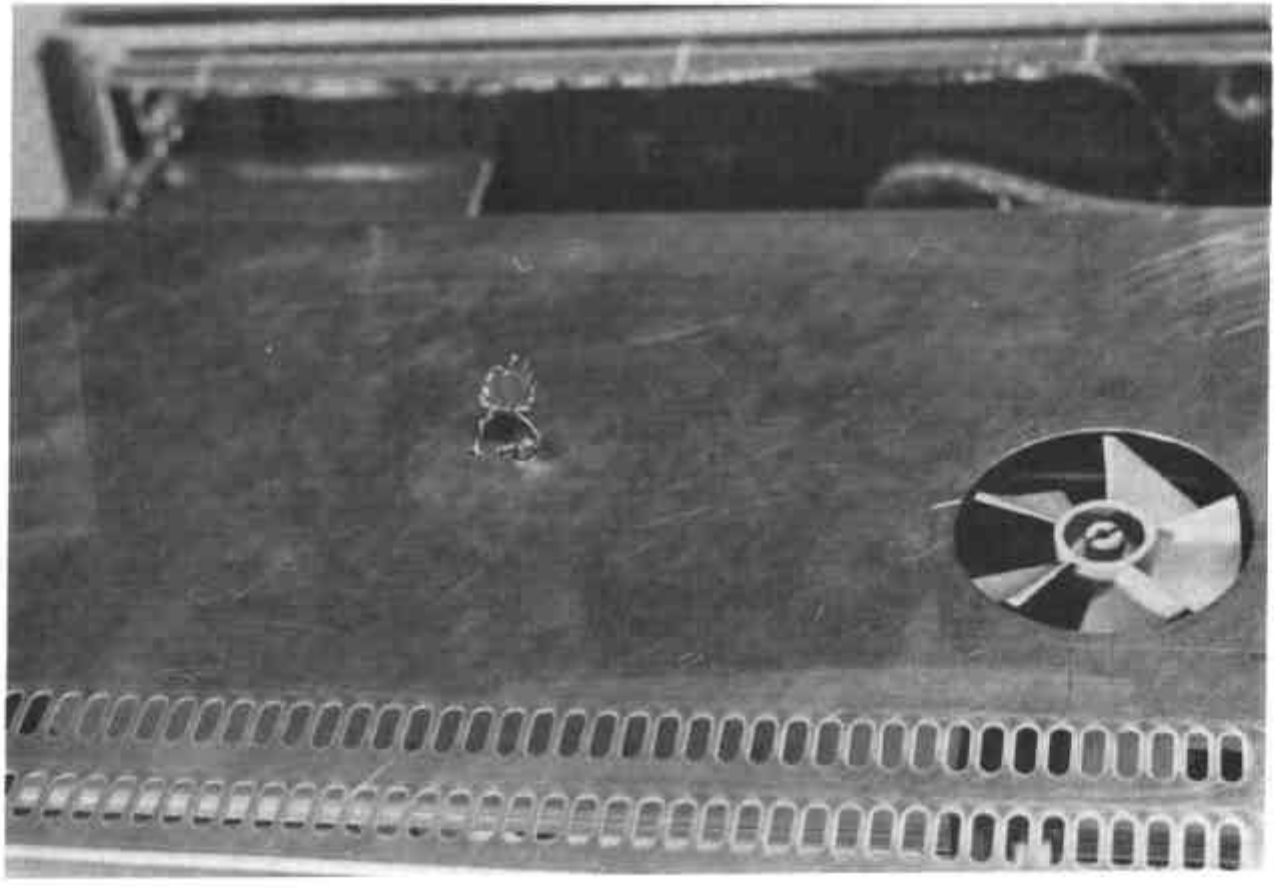


Coded Magnetic Card

FIGURE S130 - 7

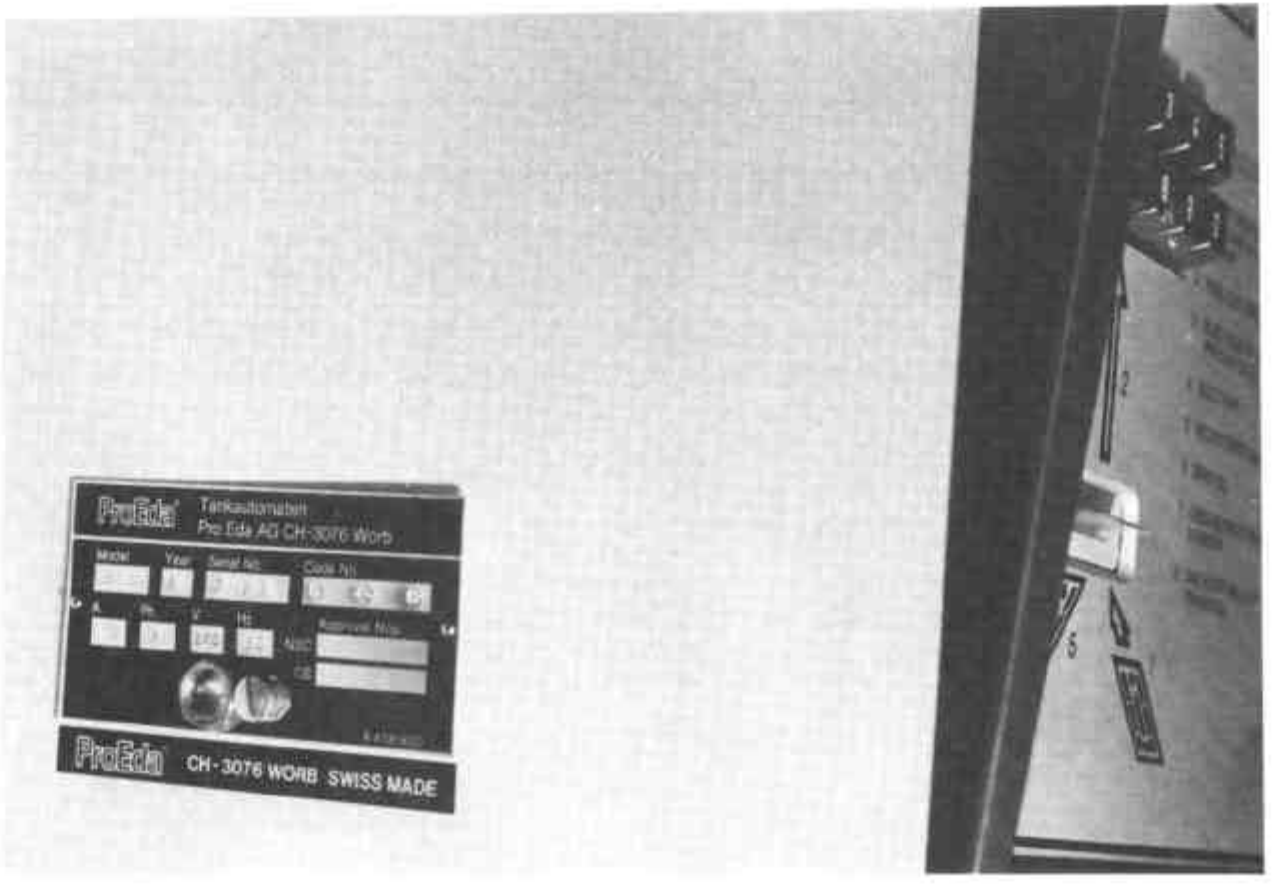
Typical Ticket/Receipt

FIGURE S130 - 8



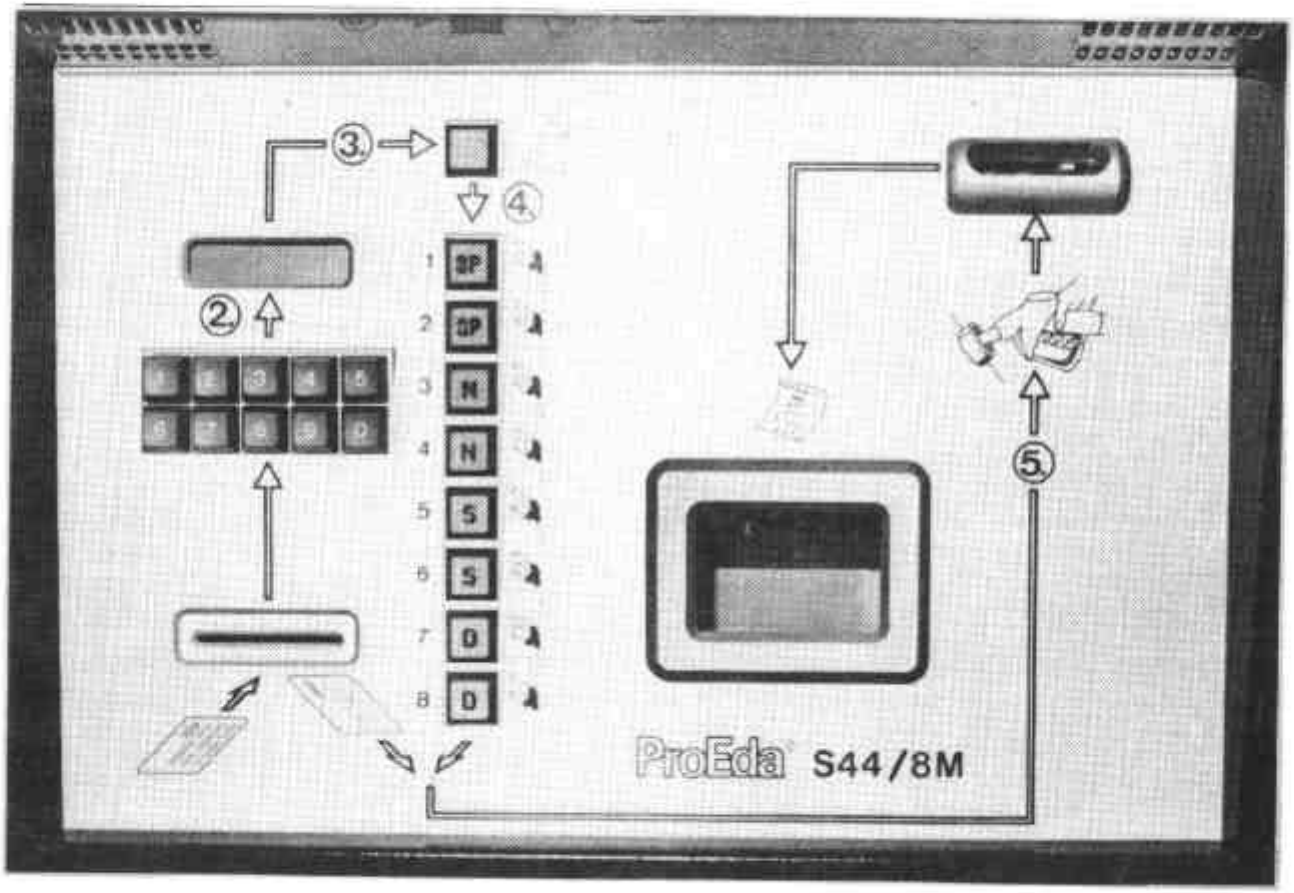
Sealing Of Control Unit

FIGURE 5130 - 9



Stamping Plug And Nameplate

FIGURE S130 - 10



Model S44/8M Control Unit