



# NATIONAL STANDARDS COMMISSION

## NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

## **REGULATION 9**

## SUPPLEMENTARY CERTIFICATE OF APPROVAL No S174

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

S.A. Petrol Resellers Model CN2530 Driveway Flowmeter Control System

submitted by S.A. Petrol Resellers Co-operative Limited 408 King William Street Adelaide SA 5000.

### CONDITIONS OF APPROVAL

#### General:

This approval is subject to review on or after 1/2/90.

Instruments purporting to comply with this approval shall be marked NSC No S174.

This approval may be withdrawn if instruments are constructed and used other than in accordance with the drawings and specifications lodged with the Commission.

## Special:

Any additional auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0.

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

The system shall incorporate a mechanism to prevent the instrument from initiating a transaction if the quantity in the supply tank is insufficient to complete the delivery.

Signed

Acting Executive Director

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## Descriptive Advice

Pattern:

approved 17/1/85

. A model CN2530 money-operated driveway flowmeter control system. Technical Schedule No S174 describes the pattern.

## Filing Advice

The documentation for this approval comprises:

Supplementary Certificate of Approval No S174 dated 20/1/86 Technical Schedule No S174 dated 20/1/86 Test Procedure No S174 dated 20/1/86 Figure 1 dated 20/1/86



# NATIONAL STANDARDS COMMISSION

## TECHNICAL SCHEDULE No S174

Pattern: S.A. Petrol Resellers Model CN2530 Driveway Flowmeter Control System

Submittor: S.A. Petrol Resellers Co-operative Limited

408 King William Street Adelaide SA 5000

## Description of Pattern

The model CN2530 is a money-operated driveway flowmeter control system and is connected to a modified Production Engineering model 6301P driveway flowmeter and a modified Retron 80 indicator.

## 1.1 Money-acceptor Unit

The CN2530 (Figure 1) will accept \$2 and \$5 banknotes and 20¢ coins, and has a note insertion aperture, a coin slot (and coin reject button and slot) a CREDIT BALANCE \$ display, and indicators designated READ, OUT OF ORDER, PUMP IN USE, NOTE BUSY and COINS ONLY, or similar.

The unit has a nominal maximum value of money that can be accepted. This maximum may be exceeded if for example a \$5 banknote is accepted when the unit is at \$1 below the maximum. The maximum for this unit is either \$20 or \$30.

#### 1.2 Display Check

A switch is provided within the CN2530 to check all segments of the CREDIT BALANCE display.

#### 1.3 Driveway Flowmeter and Indicator

A Production Engineering model 6301P driveway flowmeter similar to that described in the documentation of NSC approval No 5/6A/79, with the maximum flow rate reduced to 30 L/min and with a flow control valve fitted with enlarged orifices.

The Production Engineering Retron 80 indicator is similar to that described in the documentation of NSC approval No S101, modified by the inclusion of storage capacitors in the power supply.

Other modifications include changes to the electronics and removal of the preset keyboard/display.

## 1.4 Low-level Detection

The CN2530 is fitted with a low-level detection system which causes the system to go OUT OF ORDER if there is insufficient fuel to complete a delivery. This unit includes a microswitch attached to tubing inserted into a pipe in the supply tank.

Page 2

# 1.5 Markings

The CN2530 is marked with the following data, together in one location:

Manufacturer's name or mark Model number Serial number NSC approval number Year of manufacture

NSC No S174

In addition, the unit is marked:

WARNING NOZZLE REPLACEMENT TERMINATES DELIVERY

PART DELIVERY NO REFUND

## 1.6 Verification Provision

Provision is made for a verification mark to be applied.

#### TEST PROCEDURE No S174

The following should be conducted in conjunction with any tests specified in the approval documentation for the driveway flowmeter system to which this instrument is interfaced. The results shall not exceed the maximum permissible errors applicable to the driveway flowmeter system.

- 1. Check the display by means of the switch inside the CN2530 unit.
- 2. Record the unit price set on the driveway flowmeter.

Set the unit price to 99.9¢/L. Insert \$5 into the money-acceptor, and carry out a delivery. Check that the price display on the flowmeter agrees that \$5 exactly has been delivered.

Return the unit price to that previously in use.

## Power Failure

During a delivery simulate a power failure (do not replace nozzie during power failure). The Credit Balance should remain for at least 5 minutes.

Restore power and recommence delivery. The driveway flowmeter should indicate that the correct total value of fuel has been delivered at the completion of the delivery.

Note: The driveway flowmeter will go through a restart and display reset sequence before completing the delivery.

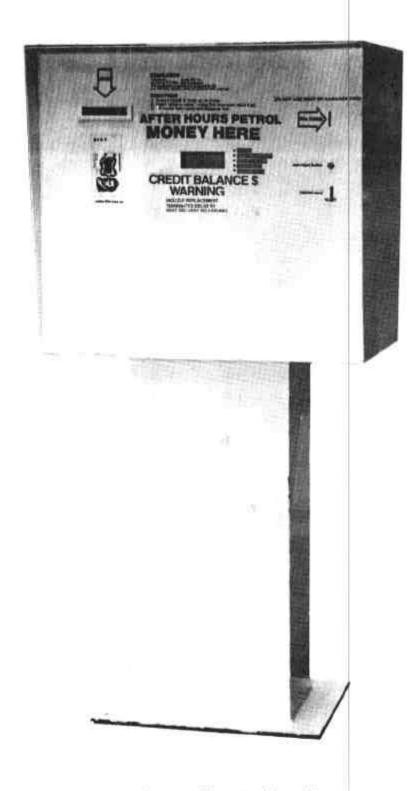
#### 4. Low-level Detector

(a) Simulate a low-level condition by removing one lead from the low-level detection microswitch, and check that the CN2530 goes OUT OF ORDER.

Note: This test should not be attempted during a delivery.

(b) Check, by comparing the length of the tube with the dipstick, that the mouth of the low-level probe is set so that its height above the bottom of the supply tank is at a level equivalent to not less than 200 litres on the dipstick.

FIGURE 5174 - 1



CN2530 Driveway Flowmeter Controller