CANCELLED 013 31-12-90

S168
8/3/84

NATIONAL STANDARDS COMMISSION

WEIGHTS AND MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S168

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

Gilbarco Transac TCR 14 Driveway Flowmeter Control Console

submitted by Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde, New South Wales, 2113

are suitable for use for trade, when used as detailed in these approval documents.

The approval of the pattern is subject to review on or after 1/3/89.

The approval of provisional variant 1 is subject to review on or after 1/3/85.

Instruments incorporating a control console purporting to comply with this approval shall be marked NSC No S168 in addition to the approval number of the instrument.

The approval may be withdrawn if instruments are used other than in accordance with the drawings and specifications lodged with the Commission.

Conditions of Approval

1. When used to replace a Transac 11 control console, the central unit price setting function shall be disabled.

2. In addition, for provisional variant 1;

   (a) The approval shall remain provisional pending satisfactory site examinations and field trials.

   (b) In the event of unsatisfactory performance the approval may be withdrawn.

Signed

Executive Director

Descriptive Advice

Pattern: approved 10/2/84

. Gilbarco Transac TCR 14 control console in lieu of the console in any Commission-approved Gilbarco driveway flowmeter system.

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Variant: Provisionally approved 10/2/84

The TCR 14 console with the addition of a dual memory facility.

Technical Schedule No S168 dated 8/3/84 describes the pattern and provisional variant 1.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No S168 dated 8/3/84
Technical Schedule No S168 dated 8/3/84
Test Procedure No S168 dated 8/3/84
Figures 1 and 2 dated 8/3/84.

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S168

Pattern: Gilbarco Transac TCR 14 Driveway Flowmeter Control Console

Submittor: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde, New South Wales, 2113

1. Description of Pattern

The pattern (Figures 1 and 2) is a control console with integral cash register which may replace the control console in any Commission-approved Gilbarco driveway flowmeter system and which provides facilities including:

- control of up to 16 driveway flowmeters
- central unit price setting (refer Conditions of Approval)
- a prepay facility
- a vendor's indicator shared by all driveway flowmeters
- a purchaser's indicator
- an emergency stop button
- a pump stop button
- 6 grade selection buttons, and
- a printer for both the vendor's journal record and purchaser's receipt.

1.1 Cash Register

The cash register facilities do not interact with the console in any way which would cause an incorrect indication of the measured volume or price.

1.2 Communications Interconnection Box

This comprises 12 switches and 2 indicator lights allowing the operator to electrically disconnect any of the driveway flowmeters from the TCR 14 console; the TCR 14 records on the journal roll the time at which the pump was disconnected or reconnected to the control unit.

1.3 Verification Provision

Provision is made for a verification mark to be applied. No sealing is required on the TCR 14 console.

1.4 Markings

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

Manufacturer's name or mark
Model number
NSC approval number NSC No S168
Serial number

2. Description of Provisional Variant 1

The TCR 14 control console as described in the pattern with the addition of a dual memory facility allowing two purchasers to operate simultaneously.

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2.1 Operation

The first purchaser carries out the delivery of fuel and the status of this transaction is indicated by the flashing A status indicator associated with the flowmeter SELECT button. 15 seconds after the first purchaser has hung the nozzle up, but before the first transaction has been completed, a second purchaser can be authorised for the same flowmeter. The details of the first transaction are then stored in the console memory and the status of the second transaction is indicated by the flashing B status indicator. The details of the now finished A delivery will be displayed whenever the flowmeter SELECT button is pressed, and operation of the SALE A/B button will allow the B transaction to be also displayed. The status A or B of the transaction is indicated on the SALE part of the vendor's display. The transactions are completed by using the flowmeter SELECT buttons and SALE A/B button to display the sale appropriate to the purchaser on both the purchaser's and vendor's indicators and then completing the transaction as usual.

2.2 Limitations

(a) If transactions are stored in both memories then both transactions must be completed before a third transaction can be authorised.

(b) Only one prepay transaction may be stored in each memory at any time.

TEST PROCEDURE No S168

The following tests should be conducted in conjunction with any tests specified in the approval documents for the driveway flowmeters to which the pattern is connected.

1. Prepay Mode

(a) Conduct a suitable prepay test on one or more driveway flowmeters. This should include at least one partially completed delivery.

(b) At the console, attempt to authorize a prepay delivery for a driveway flowmeter that is not fitted with a preset panel and indicator. This should not be possible.

2. For Instruments With Dual Memory Facility

2.1 Post Pay Mode

(i) At the console select and authorize a number of driveway flowmeters and make a delivery.

The illuminated A status indicator for each flowmeter involved will be flashing slowly and when each flowmeter is selected the console will repeat the indications of the flowmeter computer with the letter A in the SALE sector of the vendor's indicator.

(ii) Authorize each flowmeter by pressing the flowmeter SELECT button and the AUTHORIZE button. The B status indicator for each flowmeter will now glow steadily indicating that the flowmeter has been re-authorized.

(iii) For each flowmeter re-authorized in (ii),

(a) deliver sufficient fuel to cause the price and quantity indicators to move off zero,

(b) stop the flowmeter by returning the nozzle to its hang-up,

(c) record the details of the delivery.

(iv) At the console both the A and B status indicators of the flowmeters involved will be flashing slowly.

(v) Select each driveway flowmeter and observe that the display on the console is as described in (i).

(vi) Using the SALE A/B button observe that the indications of the current transaction can be displayed on the console with the letter B appearing in the SALE section of the vendor's display.

(vii) For one of the flowmeters involved call up the A transaction display and complete the transaction by pressing GAS and CASH or CREDIT. Observe that the A status indicator is now not illuminated.

(viii) Attempt to re-authorize the flowmeter. This should not be possible.

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(ix) Complete the B transaction for the flowmeter in (vii) by displaying the B transaction and pressing GAS and CASH or CREDIT. The B status indicator will not be illuminated and the flowmeter can now be re-authorized.

(x) For the other flowmeters complete the steps (vii) to (ix) except in these cases complete the B transaction first.

Observe that the flowmeters cannot be re-authorized until both the B and the A transactions have been completed.

2.2 Prepay Mode

The operation in the prepay mode is very similar to that described in 2.1.

(i) At the console authorize a flowmeter by pressing the flowmeter SELECT button and the AUTHORIZE button.

(ii) While the delivery is continuing, attempt to authorize a prepaid transaction as follows:

Select the flowmeter and enter a value via the keyboard, say, $2. Then press the GAS button, the CASH or CREDIT button followed by pressing AUTHORIZE.

(iii) Complete the delivery and return the nozzle to its hang-up. The illuminated A status indicator will now flash slowly.

(iv) Authorize a prepaid transaction for the flowmeter as in (ii). The console will accept the authorization and issue a receipt indicating acceptance of the prepaid amount, which flowmeter is to be used and the unit price. The B status indicator will now glow steadily. Check that the preset value is showing on the console and on the flowmeter preset display panel.

(v) Lift the nozzle and observe that the flowmeter stops on the preset value, and that when the nozzle is returned to its hang-up the B status indicator is now not illuminated.

(vi) Attempt to authorize a second prepaid transaction. The console will not accept the transaction.

(vii) Complete the first transaction as in paragraph 2.1(vii).

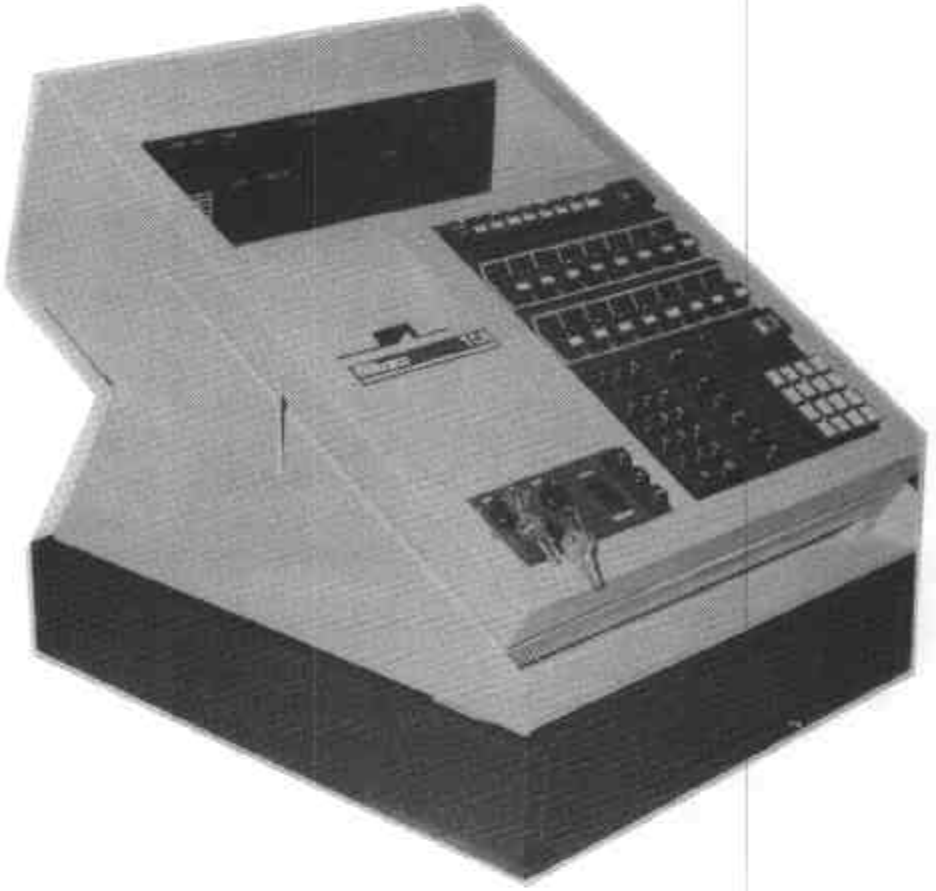
(viii) Repeat steps (i) to (iv) for another driveway flowmeter.

(ix) Lift the nozzle and allow the transaction to start but return the nozzle to its hang-up before the prepaid value is reached. Observe that both the A and B status indicators are flashing slowly indicating incomplete transactions and that the details of each transaction can be displayed.

(x) Complete the A and B transactions. Observe that the details on the receipt issued and the console indications are the same.

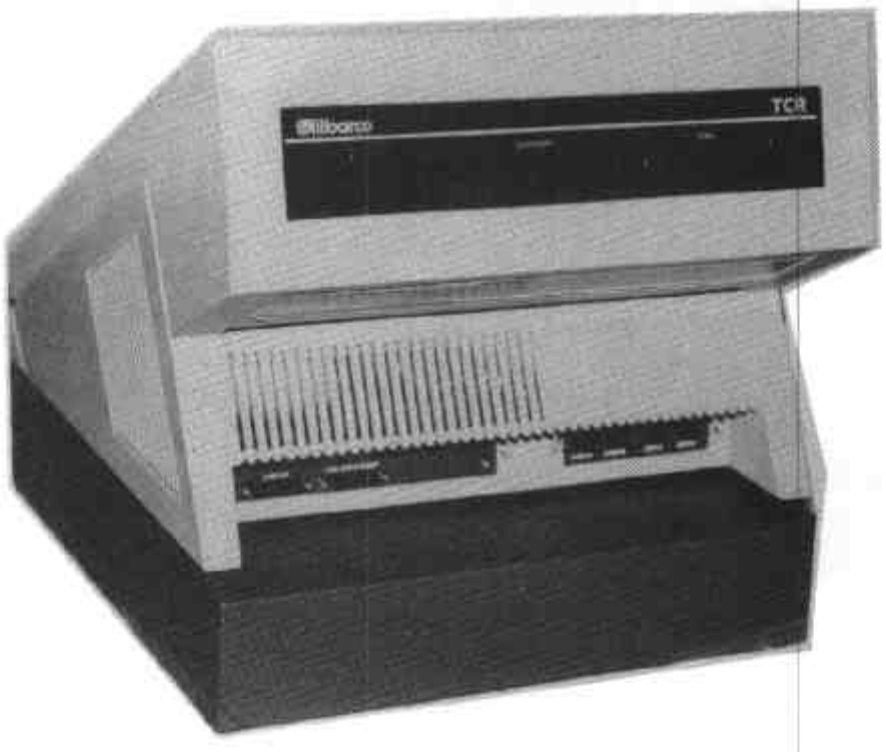
Try to re-authorize the flowmeter. This should not be possible for 3 minutes from the time that the nozzle is hung-up on the flowmeter used for the pre-paid transaction.

FIGURE S168 - 1



TCR 14 Console

FIGURE S168 - 2



TCR 14 Console - Purchaser's Side