



**Australian Government**  

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**National Measurement  
Institute**

Bradfield Road, West Lindfield NSW 2070

**Cancellation**  
**Supplementary Certificate of**  
**Approval No S246A**

Issued by the Chief Metrologist under Regulation 60  
of the  
*National Measurement Regulations 1999*

This is to certify that the approval for use for trade granted in approval S246A in respect of the

Gilbarco Model T24 Control System for Fuel Dispensers for Motor Vehicles

submitted by Gilbarco Aust. Ltd  
(now Gilbarco Australia Limited)  
now of 20 Highgate Street  
Auburn NSW 2144

has been cancelled in respect of new instruments as from 1 December 2006.

Signed by a person authorised by the Chief Metrologist  
to exercise his powers under Regulation 60 of the  
*National Measurement Regulations 1999*.

A handwritten signature in black ink, appearing to be 'J. G. T.', is located in the bottom right corner of the page.



## National Standards Commission

### Supplementary Certificate of Approval

#### No S246A

Issued under Regulation 63  
of the  
National Measurement Regulations 1999

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

Gilbarco Model Transac T24 Control System for Fuel Dispensers for Motor Vehicles

submitted by Gilbarco (Aust.) Ltd  
12-38 Talavera Road  
North Ryde NSW 2113.

**NOTE:** This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This Certificate is issued upon completion of a review of NSC approval No S246.

## CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 October 2004, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked NSC No S246A and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S246A 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 documentation 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.

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

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

### **Special:**

Instruments are only approved for installations incorporating the Commission-approved fuel dispensers for motor vehicles described in this approval, and may only be used for central unit price setting of fuel dispensers which have been Commission-approved with that facility.

## DESCRIPTIVE ADVICE

**Pattern:** approved 30 September 1999

- A Gilbarco model Transac T24 control system for use with certain Commission-approved fuel dispensers for motor vehicles.

**Variation:** approved 30 September 1999

1. With two operator's consoles connected in a network.

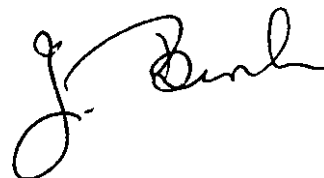
Technical Schedule No S246A describes the pattern and variation 1.

## FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S246A dated 12 November 1999  
Technical Schedule No S246A dated 12 November 1999 (incl. Test  
Procedure)  
Figures 1 to 4 dated 12 November 1999

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Bush', written in a cursive style.

## TECHNICAL SCHEDULE No S246A

**Pattern:** Gilbarco Model Transac T24 Control System for Fuel Dispensers for Motor Vehicles.

**Submittor:** Gilbarco (Aust.) Ltd  
12-38 Talavera Road  
North Ryde NSW 2113.

### 1. Description of Pattern

A Gilbarco model Transac T24 control system for use with Commission-approved Gilbarco Enterprise series fuel dispensers for motor vehicles or with any other compatible Commission-approved fuel dispensers interfaced with a Gilbarco model T176B Interface Module, in attended service mode.

The Gilbarco model T176B Interface Module for Fuel Dispensers for Motor Vehicles is described in the documentation of NSC approval No S260A.

The instrument is approved for use over a temperature range of -10°C to 40°C and is so marked.

#### 1.1 The system (Figure 1)

The Gilbarco model Transac T24 system may be used with up to 24 fuel dispensers. The system comprises:

- a Gilbarco model Transac T24 operator's console (Figure 2);
- a remote purchaser's indicator (Figure 3);
- a Gilbarco model data distribution module (DDM); and
- a Gilbarco communication interconnection box.

The system facilities include:

- a point of sale facility;
- a facility for centrally setting the unit price (refer to the Special Condition of Approval) for up to eight grade of fuel;
- a pre-set facility;
- a postpay or pre-pay facility;
- a pump stop and all pumps emergency stop function; and
- a temporary storage facility.

## **1.2 Operator's Console**

The Gilbarco model Transac T24 operator's console (Figure 2) controls the various functions of the system including the fuel dispensers, and purchaser's indicator. The operator's console uses Gilbarco version 32.0\* software, where \* indicates the issue version of a non-regulatory feature.

The operator's console provides the means of authorisation of the fuel dispensers.

## **1.3 Data Distribution Module**

The data distribution module supplies power to the operator's console and allows communication with the fuel dispensers. The DDM contains a communication PCB, a transformer, a power supply assembly, and four 6 V batteries to maintain power and enable memory (temporary storage) transactions to be paid off at times of power failure.

## **1.4 Communication Interconnection Box**

The communication interconnection box allows the operator to electrically disconnect any of the fuel dispensers from the operator's console.

## **1.5 Point of Sale Facility**

The console incorporates point of sale (POS) terminal facilities and these shall not interact with the console in any way which would cause an incorrect indication of the measured volume or price.

## **1.6 Temporary Storage Facility**

This facility allows two purchasers to operate simultaneously, i.e. a second transaction may be carried out while a previous transaction which has not yet been completed is retained in memory.

Only one transaction for each fuel dispenser may be stored in memory at any time.

The first purchaser carries out a delivery of fuel and the transaction data is indicated on both the purchaser's and vendor's indicators. After a period of not less than 5 seconds, and once the first purchaser has hung-up the nozzle but before the first transaction has been completed, a second purchaser can be authorised for the same dispenser. The details of the first transaction are temporarily stored in the memory, and are shown on both the vendor's and purchaser's displays.

Either the current or stored transaction can be displayed by pressing the CURRENT/STORED button.

## 1.7 Sealing Provision

No sealing is required.

## 1.8 Verification/Certification Provision

Provision is made for the application of a verification/certification mark.

## 1.9 Markings

Instruments carry the following markings, in the form shown at right:

Pattern approval sign	NSC No S246A
Manufacturer's identification mark or trade mark	.....
Manufacturer's designation (model number)	.....
Serial number and year of manufacture	.....
Operating temperature range	-10°C to 40°C

## 2. Description of Variant 1

Two operator's consoles may be connected in a network (Figure 4) for use with or for controlling up to 24 fuel dispensers.

Pre-set transactions can only be initiated from one of the consoles; either console may then be used to monitor and complete the transaction.

### TEST PROCEDURE

Instruments should be tested in accordance with any tests included in the approval documentation for the fuel dispenser/s for motor vehicles to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

The maximum permissible errors applicable are those applicable to the system to which the pattern is connected, as stated in the approval documentation for the system.

#### 1. Post-payment (including temporary storage test)

- (i) At the operator's console select and authorise a number of fuel dispensers and make a delivery.
- (ii) The left-hand (CURRENT) status indicator for each dispenser involved will be flashing slowly and the console indications will repeat the indications of the dispenser computer by its identification number.

- (iii) Authorise each dispenser by pressing the dispenser SELECT button and the AUTHORISE button. The left-hand (CURRENT) status indicator for each dispenser will now glow steadily indicating that the dispenser has been reauthorised and the right-hand (STORED) status indicator will flash slowly.
- (iv) For each dispenser reauthorised in (iii):
  - deliver sufficient fuel to cause the price and quantity indicators to move significantly off zero;
  - stop the dispenser by returning the nozzle to its hang-up; and
  - record the details of the delivery.
- (v) At the console, the CURRENT status indicators of the dispensers involved will be flashing slowly. Observe that the indications from the first transaction (i) are still available as well as indications from the second transaction (iv). Use the CURRENT/STORED button.
- (vi) Using the PUMP SELECT buttons, observe that as each dispenser is selected, the indications observed in (i) are displayed and are repeated on the purchaser's indicator.
- (vii) Using the CURRENT/STORED button, observe that the indications from the second transaction for that dispenser are displayed and are repeated on the purchaser's indicator.
- (viii) For one of the dispensers involved, complete the stored transaction by pressing the PUMP SELECT button and then the PAID button. Observe that the status indicator for the stored transaction is now off.
- (ix) Complete the other transaction for the dispenser in (viii) by pressing the same PUMP SELECT button and then the PAID button. The status indicator will then be off.

## **2. Pre-payment**

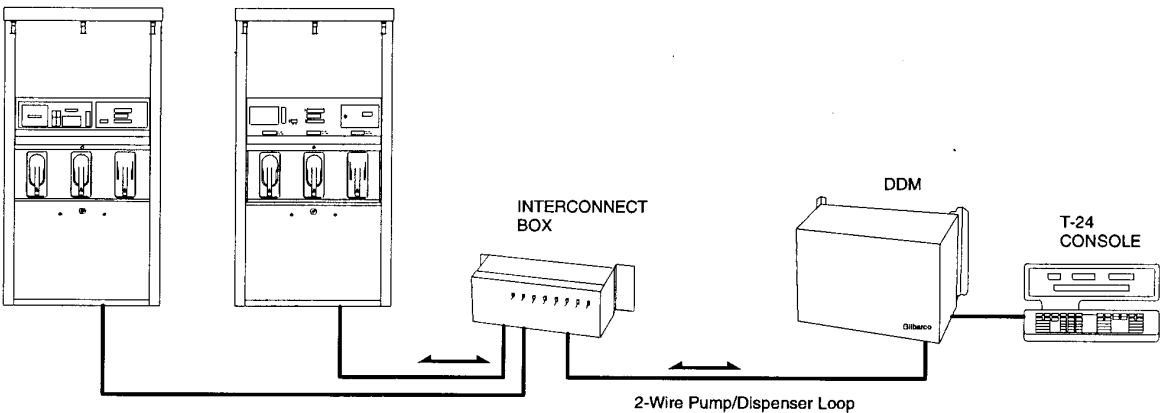
The operation in pre-payment mode is very similar to that described in 1. above.

- (i) At the console, authorise a dispenser by pressing the dispenser SELECT button and the AUTHORISE button.
- (ii) While the delivery is continuing, attempt to authorise a pre-paid transaction (by selecting the dispenser, entering a cash value via the keyboard, and pressing the PAID button). This should not be possible.



- (iii) Complete the first delivery and return the nozzle to its hang-up position. The CURRENT status indicator will now flash slowly.
- (iv) Authorise a pre-paid transaction for the dispenser as in (ii) in the second memory using the CURRENT/STORED button. The console will accept the authorisation. The CURRENT status indicator will glow steadily. Check that the pre-set value is showing on the console and on the dispenser pre-set display panel.
- (v) Lift the nozzle and deliver fuel. Observe that the dispenser stops on the pre-set value, and that when the nozzle is returned to its hang-up position, no amount is due at the console for this transaction.
- (vi) Complete the first transaction as in paragraph 1 (viii).
- (vii) Repeat steps 2 (i) to 2 (iv) for another dispenser.
- (viii) Lift the nozzle and deliver fuel but return the nozzle to its hang-up before the pre-paid value is reached. Observe that the status indicator is flashing slowly indicating incomplete transactions and that the details of each transaction are displayed.
- (ix) Complete the transactions.  
Try to reauthorise the dispenser. This should not be possible for at least 3 minutes from the time that the nozzle is hung-up on the dispenser used for the pre-paid transaction.
- (x) If there is a dispenser on site to which a pre-set panel and indicator are not fitted, attempt to authorise a pre-pay delivery at the console. This should not be possible.

FIGURE S246A - 1



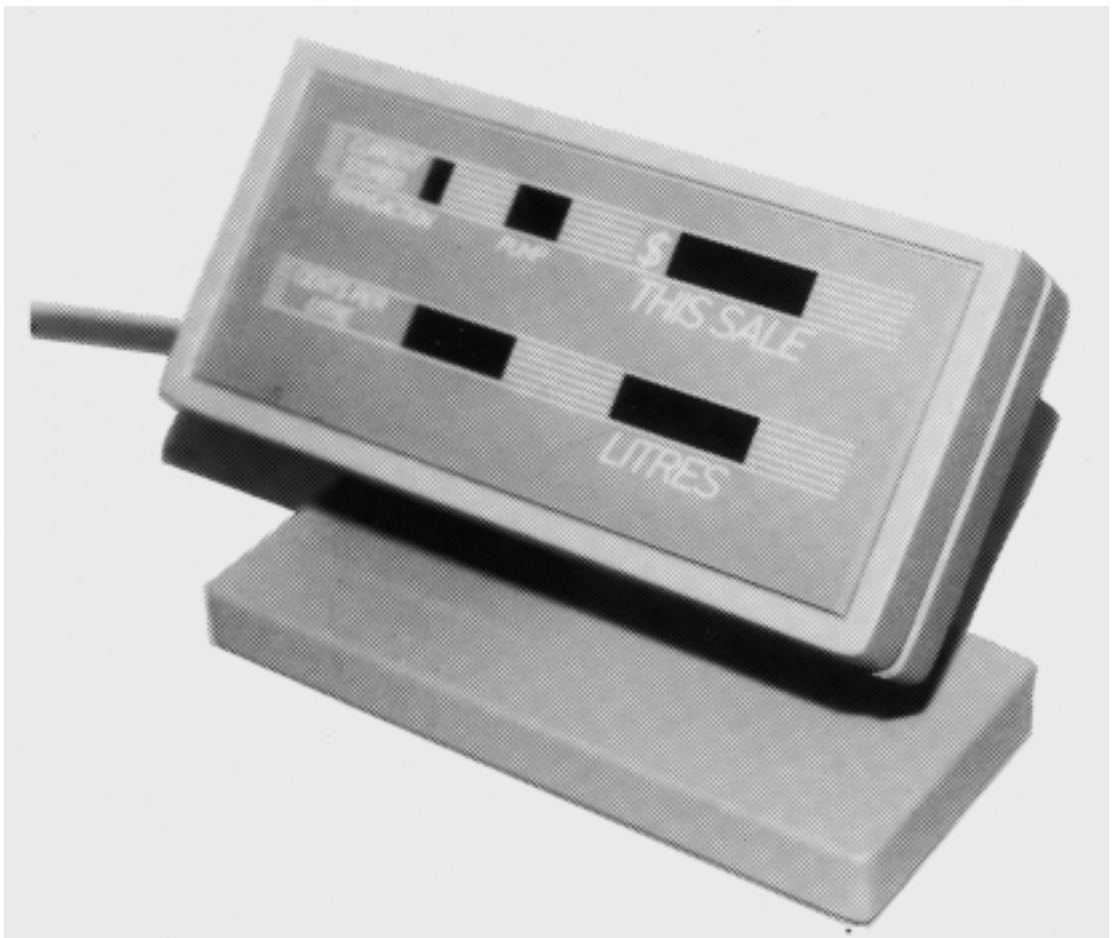
Typical Gilbarco Model Transac T24 Control System  
for Fuel Dispensers for Motor Vehicles

FIGURE S246A - 2



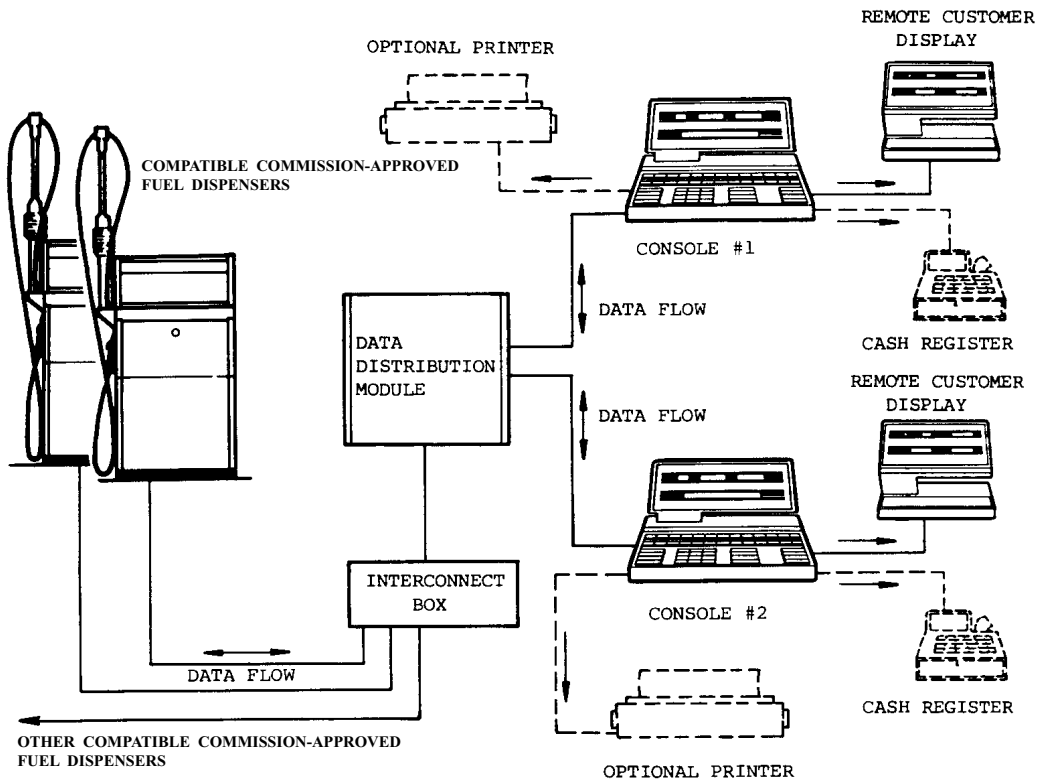
Model Transac T24 Operator's Console

FIGURE S246A - 3



Purchaser's Indicator

FIGURE S246A - 4



Typical System With Two Operator's Consoles