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Weights and Measures (National Standards) Act 1960-1966

Weights and Measures (Patterns of Instruments) Regulations

#### COMMONWEALTH OF AUSTRALIA

### NATIONAL STANDARDS COMMISSION

# Certificate of Approval

## **CERTIFICATE NUMBER** 5/6A/30

This Certificate cancels Certificate No 5/6A/30 dated 9th February, 1970.\*

In respect of the pattern of

Gilbarco Trimline Single Dispensing Pump Model T166A and Variants.

Submitted by:

Veeder-Root (Australia) Pty. Ltd.,

274 City Road, South Melbourne, Victoria. 3205.

Manufactured by:

Gilbarco Australia Ltd.,

16-34 Talavera Road,

North Ryde,

New South Wales. 2113.

This is to certify that the pattern and variants of the instrument illustrated and described in this Certificate have been examined by the National Standards Commission under the provisions of the abovementioned Regulations and have been approved as being suitable for use for trade.

The pattern and variants 1 and 2 were approved on 3rd February, 1970, and variant 3 was approved on 15th July, 1971.

\*NOTE: Figures 5/6A/30 - 1 to 6 of the previous issue form part of this Certificate and must be retained.

30/7/71

Cont'd over

Approval was granted on condition that all instruments made in conformity with this Certificate:

- 1. are appropriately marked NSC No 5/6A/30 and, where required by State legislation, with the State approval number also: and
- 2. comply with the General Specifications for Weighing and Measuring Instruments to be Used for Trade, in respect of that part of the instrument which was not previously approved by a State.

This Certificate comprises:

Pages 1 to 5 dated 30th July, 1971. Figures 5/6A/30 - 1 to 6 dated 9th February, 1970.

Pursuant to regulation 12 of the abovementioned Regulations, this Certificate is applicable in all States.

Date of issue 30th July, 1971.

Signed

A person authorised by the Commission to sign Certificates under the abovementioned Regulations.

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### DESCRIPTION OF PATTERN

The pattern is of a retail price-computing flowmeter known as the Gilbarco Trimline Single Dispensing Pump Model T166A, as described in Certificate No 5/6A/24, except that the Veeder-Root Computer Model 1613 has been replaced by the Veeder-Root Computer Model VR 101.

The VR 101 computer (see Figure 1) comprises a counter section and variator.

The variator (see Figures 2, 3 and 4) comprises price-posting wheels, a price-per-gallon setting mechanism, and gearing to rotate the output drive at a speed proportional to the price per gallon selected, contained in a cast-metal frame which supports the counter section.

The meter is coupled to a central shaft in the variator and through a pinned gear at the top of the shaft directly drives the quantity bevel gears in the counter section.

The price bevel gears are driven from a spur gear which rotates on the same shaft but it is driven by the meter through the central shaft and the price-computing gear train.

A cone gear containing nine gears, varying in steps of 8 teeth from 8 to 72 teeth, is pinned to the central shaft, and three differential gears are free to rotate on the central shaft. Three price-selecting range arms couple the selected cone gears to the three differential gears. An output gear on the differential gear train integrates the revolutions of the differential gears and drives the spur gear.

The gearing in the three range arms is such that the second range arm has a multiplying factor of ten times the first range arm, and the third range arm has a multiplying factor ten times the second. Hence monetary values in increments of 1/10, 1, and 10 or 1, 10 and 100 are accommodated.

To set a desired price per gallon, the range arms are lifted and turned so that numbered slots corresponding to the price are engaged in the three index fingers. This determines which cone gears are engaged.

Three price-posting wheels, each numbered 0 to 9, are mounted on opposite sides of the variator. They are synchronised with the price selected on the range arms through segmented gears driven by pinions on the range arm shafts. The pinions (see Figures 2 and 5) are fitted with pinned metal shields which prevent the segmented gears from being disengaged from the pinions and the price-posting wheels from being out of synchronism with the price selected on the range arms.

The counter section is the same as the counter section of the Veeder-Root 1613 computer, except for the following significant modifications:

- (a) The graduation value is 0.1 gallon, the right-hand wheel having 10 graduations numbered 0 to 9;
- (b) Attached to study on the counter section (see Figure 6) are metal guards which restrict access to the segmented gears on the variator, and prevent the price-posting wheels from being disengaged from the segmented price-posting gears; and
- (c) The drive gears on the money and quantity wheels, except for the right-hand wheel in each bank, are of plastic slotted construction.

The dial face has a decimal point before the right-hand volume wheel, before the right-hand price-posting wheel, and between the dollars and cents wheels.

#### DESCRIPTION OF VARIANTS

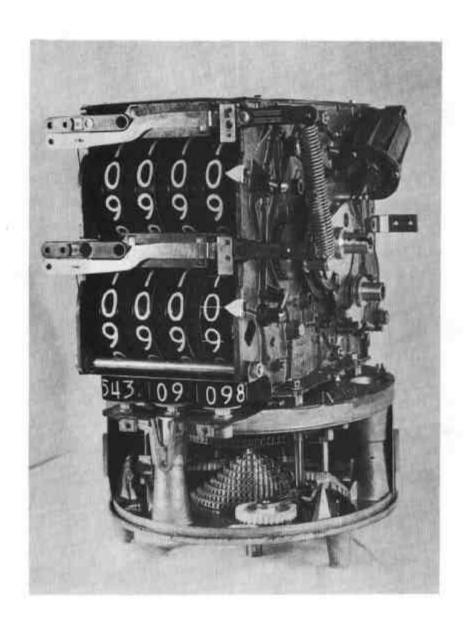
- 1. Having the Veeder-Root Computer Model VR 1613 in any State-approved pattern\* or Commission-approved pattern replaced by the Veeder-Root Computer Model VR 101.
- 2. Having the Veeder-Root Computer Model VR 1611 converted to decimal currency, as described in Certificate No 5/6A/11, in any State-approved pattern\* or Commission-approved pattern replaced by the Veeder-Root Computer Model VR 101.
- 3. Having the Veeder-Root M36 and M56 Computers, as described

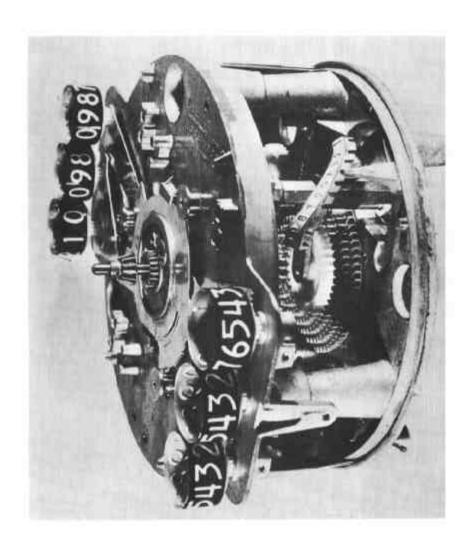
<sup>\*</sup> Approved pursuant to regulation 12.

in Certificate No 5/6A/16, in any State-approved pattern\* or Commission-approved pattern replaced by a Veeder-Root Computer Model VR 1613 or Veeder-Root Computer Model VR 101.

<sup>\*</sup> Approved pursuant to regulation 12.

# FIGURE 5/6A/30 - 1





Veeder-Root Computer Model VR101 - Variator



Veeder-Root Computer Model VR101 - Variator Gear Train

Veeder-Root Computer Model VR101 - Variator Schematic Diagram



Veeder-Root Computer Model VR101 - Pinned Shield

Veeder-Root Computer Model VR101 - Shield for Price-posting Wheels