



COMMONWEALTH OF AUSTRALIA

NATIONAL STANDARDS COMMISSION

Weights and Measures  
(National Standards)

Act 1960-1966

Weights and Measures  
(Patterns of Instruments)  
Regulations

# *Certificate of Approval*

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CERTIFICATE NUMBER 5/6A/6

*In respect of the pattern of*

Epex Reseller Meter Pump Model 670-0 and Variants.

Submitted and  
manufactured by:      Engineering Products Pty. Ltd. ,  
   418-428 Burnley Street,  
   Burnley,  
   Victoria.    3121.

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 were approved on 24th November, 1966.

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

1. are appropriately marked NSC No 5/6A/6; and
2. comply with the General Specifications for Weighing and Measuring Instruments to be Used for Trade.

19/3/71

Cont'd over

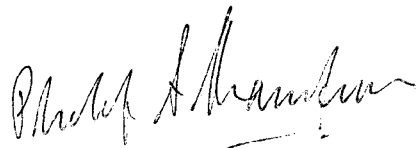
This Certificate comprises:

Pages 1 to 5 dated 19th March, 1971.

Figures 5/6A/6 - 1 to 10 dated 19th March, 1971.

Date of issue 19th March, 1971.

Signed

A handwritten signature in cursive script, appearing to read "Philip J. Manderson". The signature is written in dark ink and is positioned centrally below the word "Signed".

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

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DESCRIPTION OF PATTERN

The pattern (see Figure 1) is of a driveway flowmeter known as the Epex Reseller Meter Pump Model 670-0 and comprises the following components significant to the approval, housed in a sheet-metal cabinet and arranged as shown in Figures 2, 3 and 4:

1. Pump - positive displacement rotary pump.
2. Gas separator - Epex 674-0 (see Figure 5), in which gas separation is achieved by reducing the velocity of the liquid emerging from the pump, passing it through a mesh element and changing its direction to pass beneath an inverted weir; the gas rises to the surface and is forced by pump pressure through an orifice to the float chamber.
3. Float chamber - Epex 5586, as described in Certificate No 5/6A/7.
4. Meter - Epex H25, Part No 659-0, 4-piston radial (see Figure 6).
5. Meter sealing - by a stamping-plug seal contained in an undercut hole in a sealing cup in a bracket locking the meter adjustment.
6. Computer - Veeder-Root Model 1613 (see Figure 7), a 4-drum decimal-currency unit indicating quantity to 999.5 gallons, price to \$99.99 and unit price to 99.9 cents per gallon in 0.1 cent increments. The computer is similar to the Veeder-Root 1611 computer converted to decimal currency described in Certificate No 5/6A/11; the significant difference is the cone gear in the 99.9 cents variator, which has 9 steps (see Figure 8) instead of 11.
7. Sight glass - Epex EP 661-0, as described in Certificate No 5/6A/7.

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8. Back-pressure valve - Epex 689-0, located downstream of the meter, between the inlet and outlet pipe of the partial-flow sight glass; it ensures that liquid flows through the sight glass by creating a pressure difference between the inlet and outlet pipe.
9. Hose - external retractable  $\frac{3}{4}$  inch bore.
10. Nozzle - STM 363, as described in Certificate No 5/6A/7.
11. Dial face - on each side of the cabinet behind a glazed window is a white dial face with black markings.
12. Non-return valve - between the supply tank and the pump.

#### DESCRIPTION OF VARIANTS

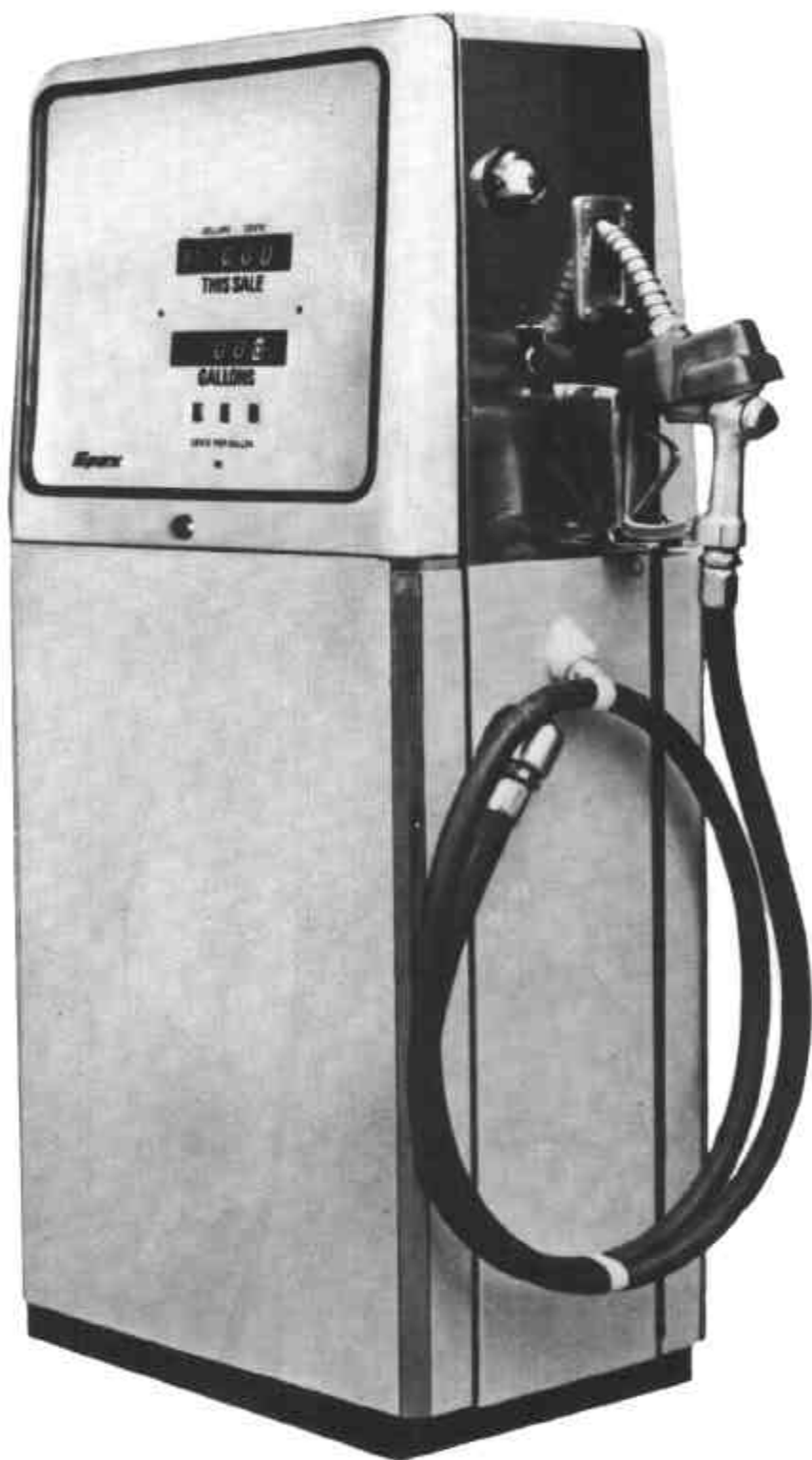
1. Having two sets of the components of the pattern fitted in a dual housing.
2. The pattern or variant 1 fitted with a final filter, as described in Certificate No 5/6A/1/3.
3. The pattern or variants 1 or 2 having any hose nozzle replaced by:
  - (a) an OPW 1A automatic hose nozzle, as described in Certificate No 5/6A/7;
  - (b) an OPW 811A manual hose nozzle with flexible spout (see Figures 9 and 10);
  - (c) a Gilbarco T250-4C manual hose nozzle with flexible spout, as described in Certificate No 5/6A/7; and
  - (d) a Gilbarco T250K manual hose nozzle with flexible spout, as described in Certificate No 5/6A/7.

4. The pattern being converted to a self-serve pump known as the Epex Self-serve Pump Model 670-80, by fitting the components of the Epex Self-serve Pump Model SS/VR, as described in Certificate No 5/6A/19.

GENERAL NOTES

1. Notice of approval of the pattern and variants described in this Certificate was given in Memorandum of Approval No 43 dated 24th November, 1966.
2. Notice of approval of the self-serve pump approved in Certificate No 5/6A/19 and referred to in variant 4 was given in Memorandum of Approval No 35 dated 17th November, 1966.

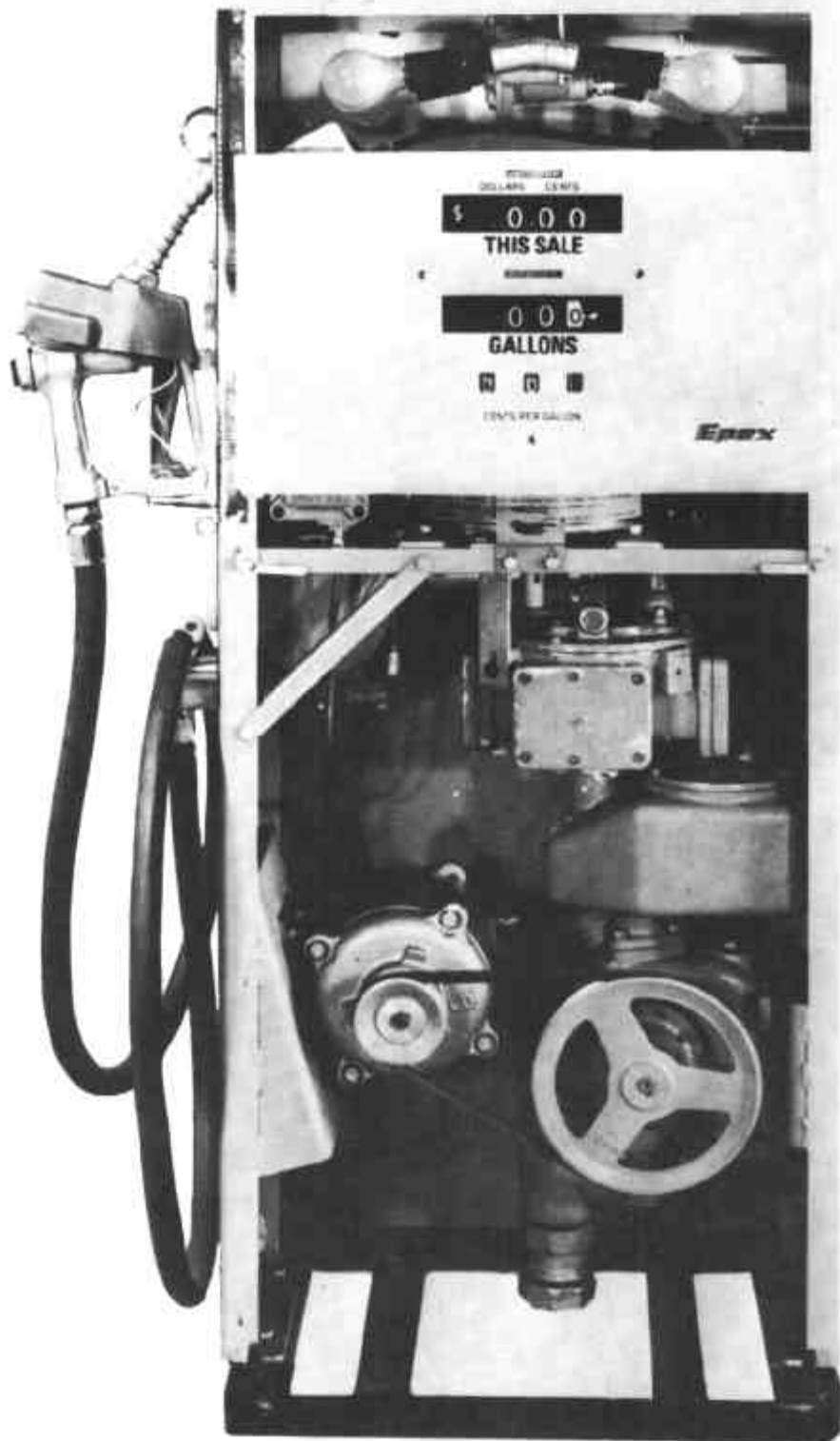
FIGURE 5/6A/6 - 1



Epex 670-0

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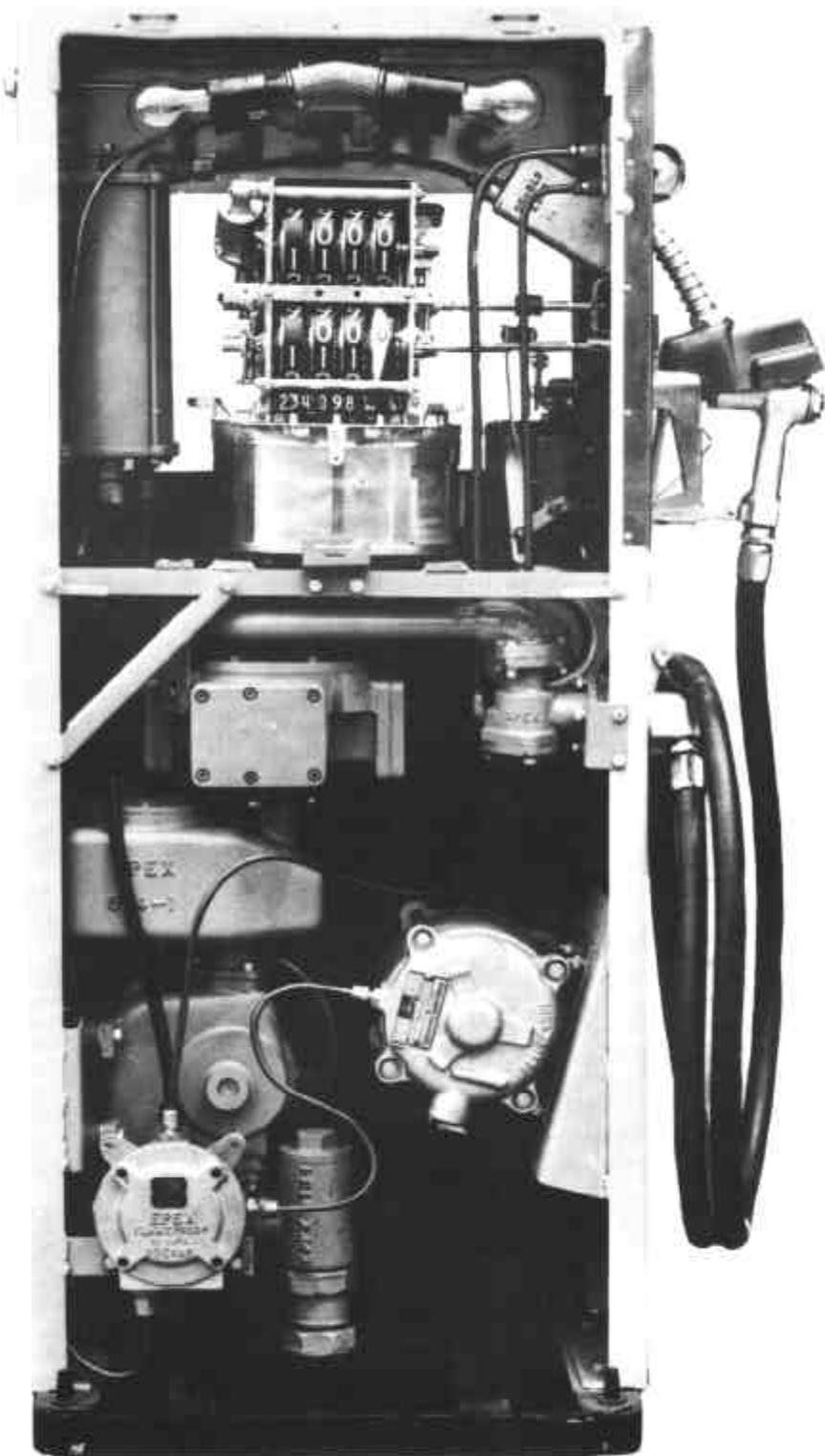
FIGURE 5/6A/6 - 2



Epex 670-0 - Front Cover Removed

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FIGURE 5/6A/6 - 3

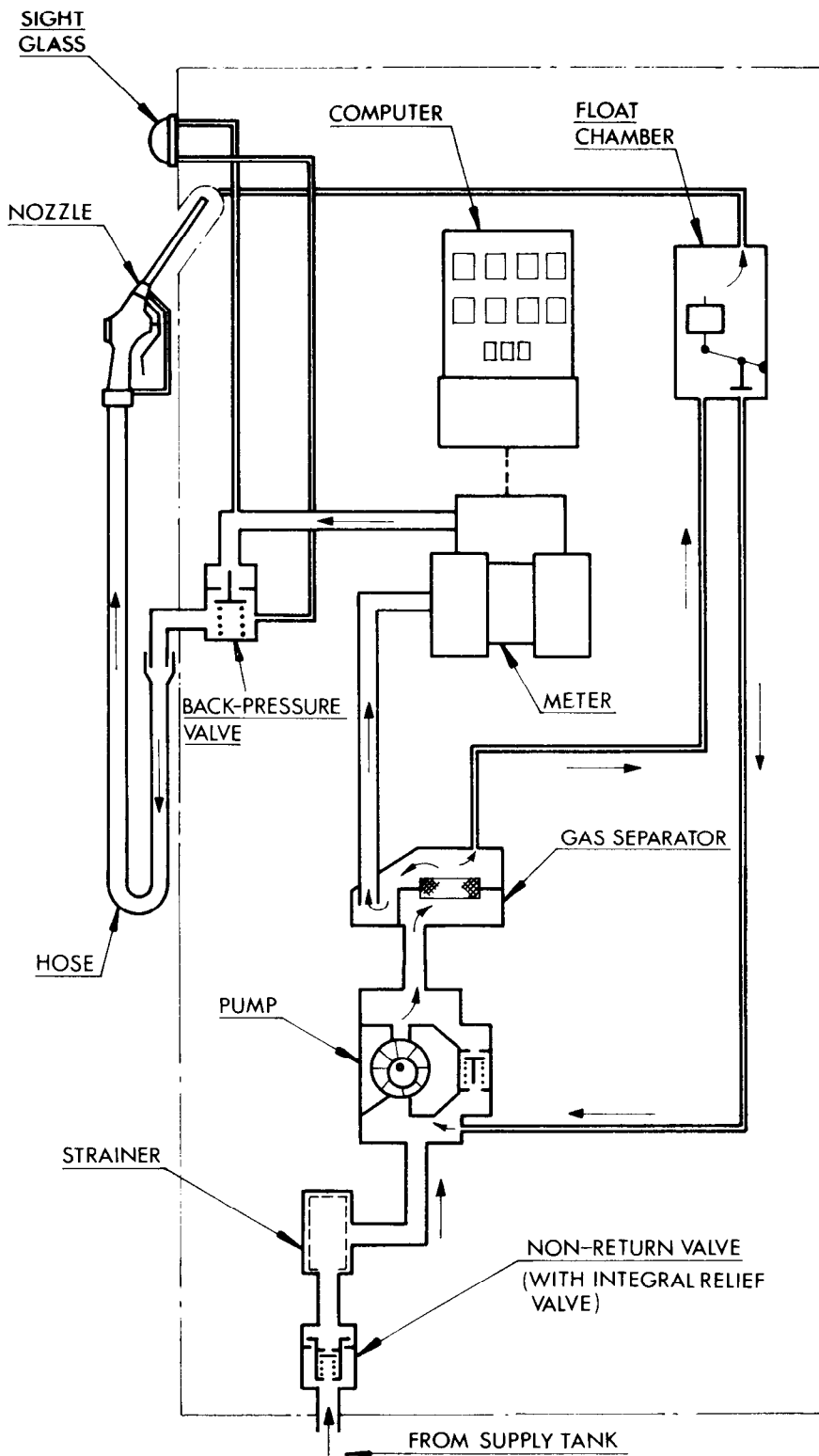


Epex 670-0 - Rear Cover Removed

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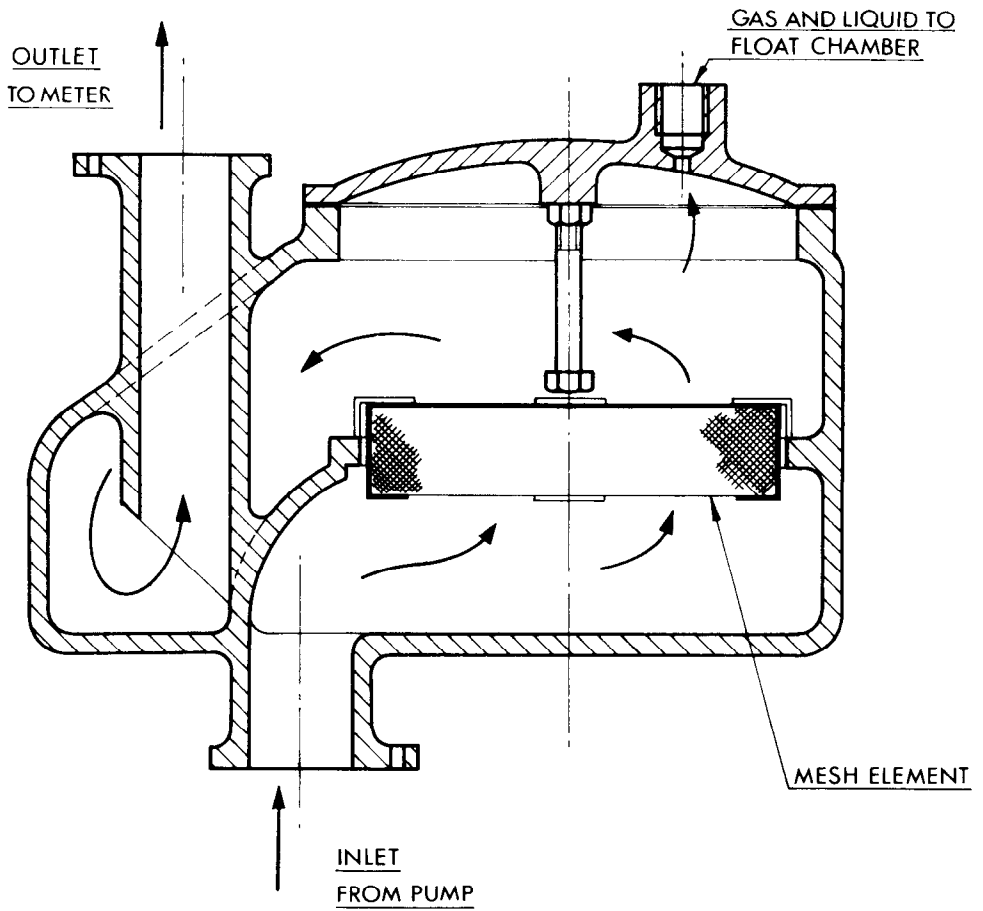
FIGURE 5/6A/6 - 4



Epex 670-0 - Hydraulic Diagram

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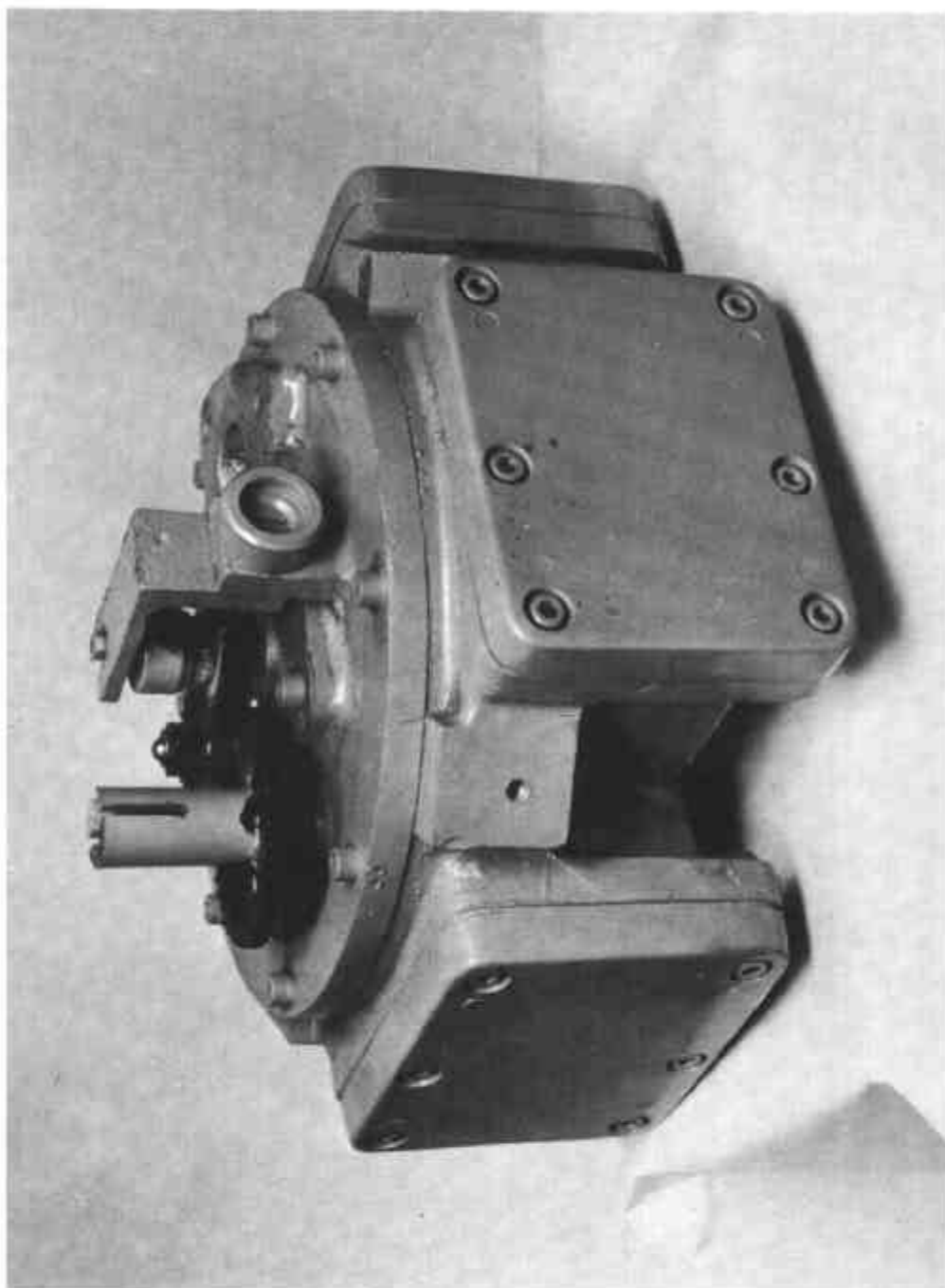
FIGURE 5/6A/6 - 5



Epex 674-0 - Gas Separator

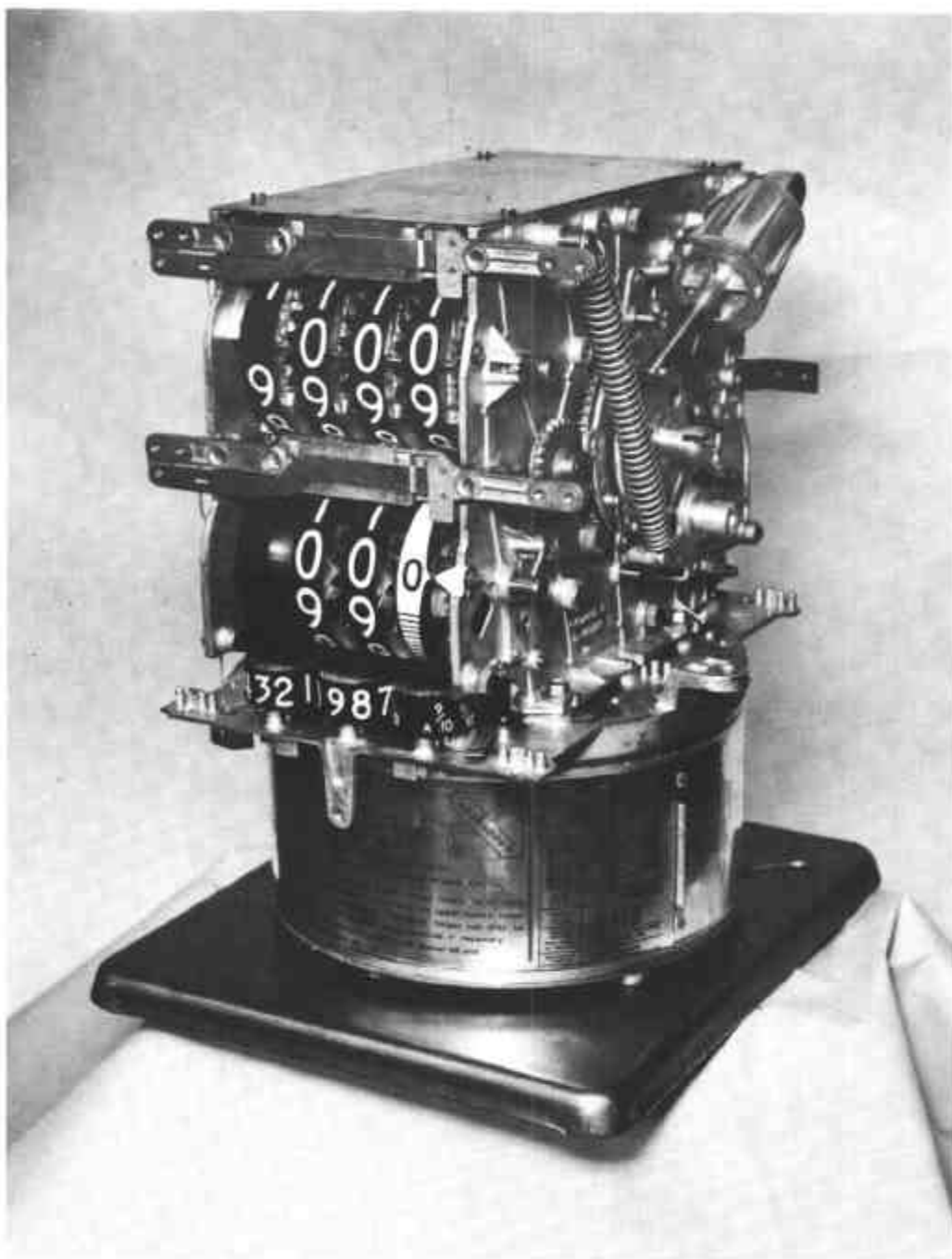
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FIGURE 5/6A/6 - 6



Epex H25 Meter

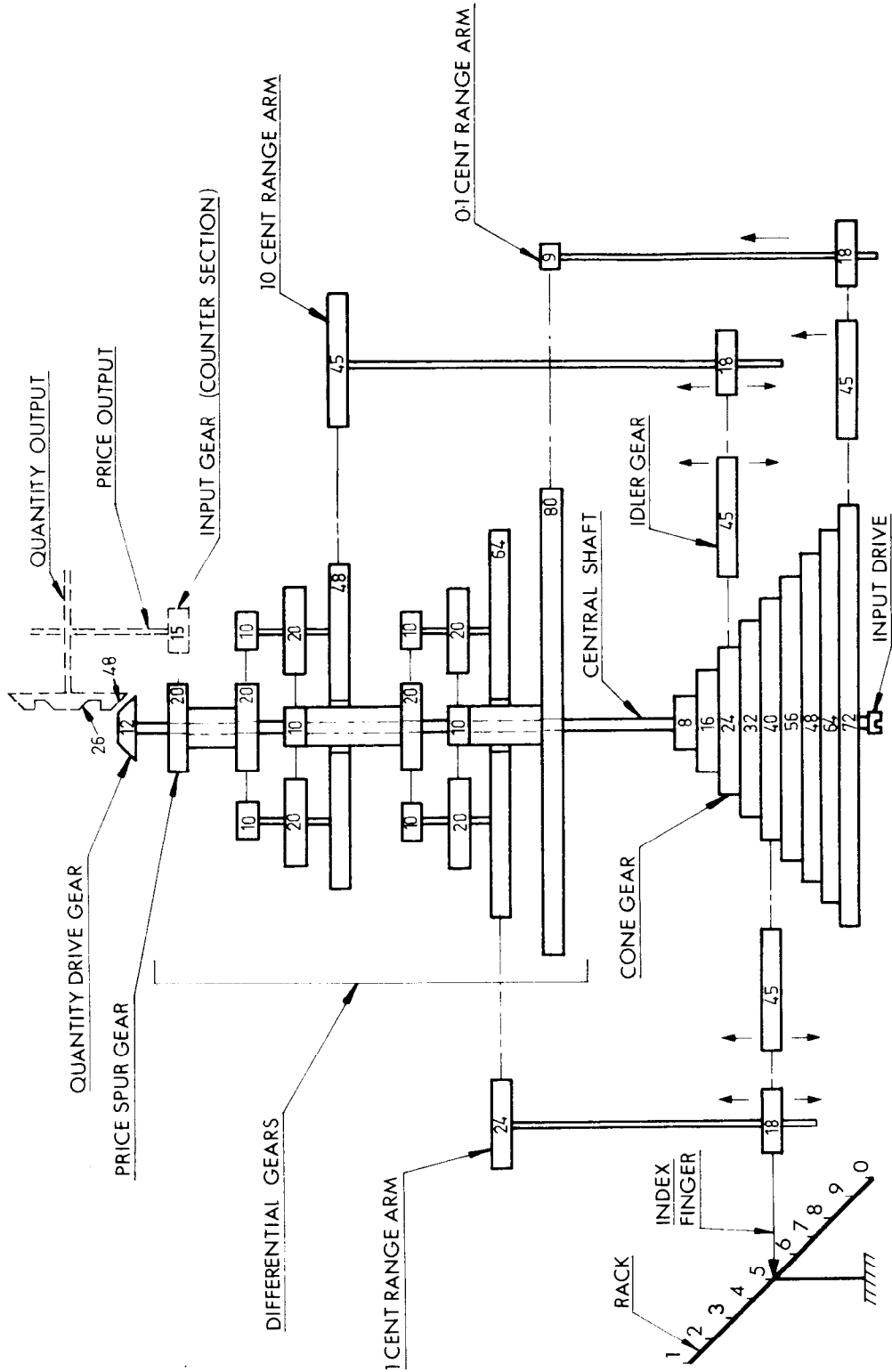
FIGURE 5/6A/6 - 7



Veeder-Root 1613 Computer

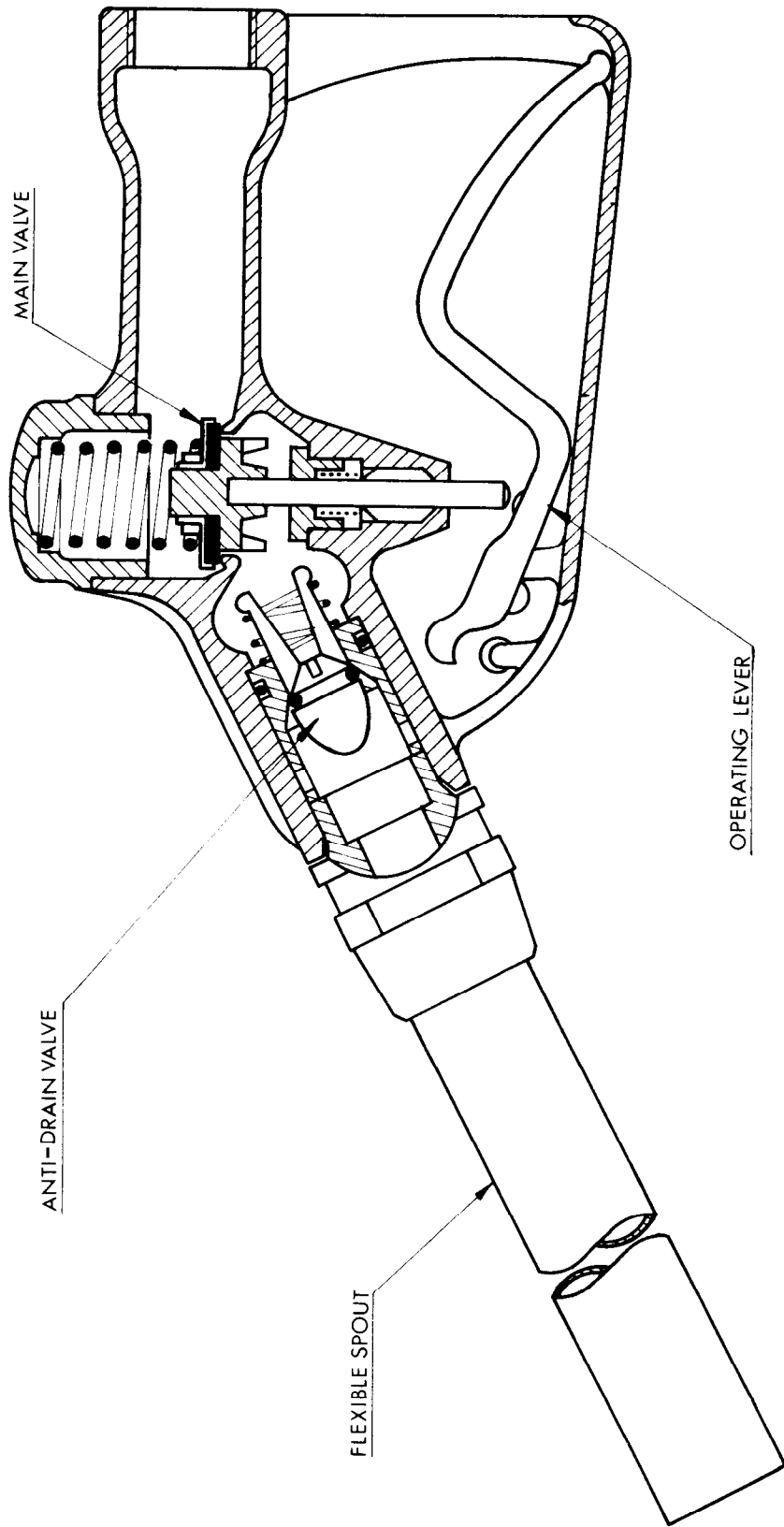
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FIGURE 5/6A/6 - 8



Veeder-Root 99.9 Cents Variator

FIGURE 5/6A/6 - 9



OPW 811A Hose Nozzle

FIGURE 5/6A/6 - 10



OPW 811A Hose Nozzle