



NATIONAL STANDARDS COMMISSION

WEIGHTS AND MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS - REGULATION 9

CERTIFICATE OF APPROVAL No 4/5/4

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

Bar Boy Liquor Dispenser

submitted by G G Benjamin & Co. Pty Ltd,
110 Roberts Avenue,
Peakhurst, New South Wales, 2210,

Variation No 1

submitted by Glenn Pleass Industries Pty Ltd,
37B Humphries Terrace,
Kilkenny, South Australia, 5009.

are suitable for use for trade.

The approval of this pattern is subject to review on or after 31/7/81.

All instruments purporting to comply with this approval shall be marked NSC No 4/5/4.

Relevant drawings and specifications are lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: approved 18/6/73

. A displacement type alcoholic liquor dispenser to deliver 30 mL.

Variants: approved 18/6/73

1. With the metering unit supplied from one or more canisters.
2. With a relay unit and two dispensing stations.
3. With dispensing station components arranged vertically.
4. Having the DRAIN switch electrically connected.
5. To deliver 15 mL.

Certificate of Approval No 4/5/4 (pages 3 to 5 and Figures 1 to 9) dated 22/6/73, describes the pattern and variants 1 to 5.

Note: No Technical Schedule No 4/5/4 was issued.

28/5/82

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Variants: approved 28/4/82

6. With the reservoir supplied from a bulk container.
7. With the liquor tube more than 0.5 m above the dispensing station, and a solenoid-operated discharge valve within 1 m of tube length of the dispensing station.
8. With the solenoid-operated discharge valve used in Variant 7 replaced by a spring-loaded-ball check (or discharge) valve.

Technical Schedule No 4/5/4 Variation No 1 dated 28/5/82 describes variants 6 to 8.

Filing Advice

Certificate of Approval No 4/5/4 pages 1 and 2 dated 22/6/73 are superseded by this Certificate and may be destroyed.

The documentation for this approval now consists of:

Certificate of Approval No 4/5/4 dated 28/5/82
Certificate of Approval No 4/5/4 pages 3 to 5 dated 22/6/73
Technical Schedule No 4/5/4 Variation No 1 dated 28/5/82
Figures 1 to 9 dated 22/6/73
Figure 10 dated 28/5/82.

DESCRIPTION OF PATTERN

The pattern is of an electrically operated piston displacement type alcoholic liquor dispenser for delivering 30 ml of whisky; it is known as Bar Boy Model 70, and consists of two assemblies: the dispensing station (Figure 1) and the metering unit (Figure 2), which has components arranged as shown in Figures 3 and 4.

The hydraulic diagram with electrical interconnections is illustrated in Figure 6.

An inverted bottle containing liquor to be dispensed is placed in the reservoir (see Figure 6). The indicator on the dispensing station is illuminated when the equipment is ready for operation. When the level of liquid falls to a predetermined minimum, set to ensure that the outlet port from the reservoir is always submerged, the light is extinguished by the float switch and the equipment is rendered inoperative until a working level is restored.

When the operating button on the dispensing station is momentarily depressed, the solenoid brake is released on the driving motor, and the hold circuit is energized by the microswitch on the brake cam of the cam assembly on the output shaft of the close-coupled gearbox. The motor remains running for one complete revolution of the cam assembly; the period of one cycle is not less than 1.7 seconds.

The positive displacement piston pump driven from the crank-pin on the adjustable quadrant on the cam assembly delivers a metered charge through a tube to the dispensing station, the spout of which is fitted with wire gauze to produce a clean cut-off; no part of the tube is more than 0.5 m above the dispensing station. The solenoid-operated discharge valve on the pump is opened during the discharge stroke by the microswitch on the discharge cam.

The suction valve incorporating a self-seating ball is mounted vertically (see Figure 4).

The predetermined delivery of 30 ml, having been calibrated by adjusting the quadrant which sets the length of the stroke cannot be changed without removing the cover, which is sealed with a stamping plug (see Figure 2). The three adjusting screws with their shake-proof

washers (see Figure 5) are tightened to a torque of not less than 1 N.m (10 lbf in).

The three-position isolating switch fitted to the underside of the metering unit (see Figure 5) has the terminal (see Figure 4) of the spring-loaded "drain" position electrically disconnected in order to prevent a delivery being made when the float switch is open on low level.

A counter which totalizes the number of deliveries is fitted to the metering unit. It is not in use for trade, and is not significant to the pattern.

DESCRIPTION OF VARIANTS

1. Having the metering unit supplied from one or more canisters (see Figure 7), in which case the suction valve (identified in Figure 4) is moved from the reservoir in the metering unit to the delivery connection of the header which interconnects all reservoirs, including the reservoir of the metering unit.
2. Having the metering unit connected to each of two dispensing stations through the dual station relay unit (see Figure 8). Either one of the two relay-operated solenoid valves directs the delivery to its associated dispensing station.
3. Having the components of the dispensing station mounted in a vertical arrangement (see Figure 9).
4. Having the metering unit with the "drain" position terminal on the isolating switch electrically connected, in which case the metering unit is located in such a position that one person cannot simultaneously hold the isolating switch in the "drain" position and depress the operating button.
5. In other capacities, namely, $\frac{1}{2}$ fl oz, 1 fl oz, and 15 ml; and with other liquors, namely, rum, gin, vodka and brandy.

GENERAL NOTES

1. The tolerances on the volumes dispensed are given below:

<u>Volume</u>	<u>Tolerance</u>
15 ml and $\frac{1}{2}$ fl oz	± 0.6 ml
30 ml and 1 fl oz	± 1 ml

2. During the examination for pattern approval, it was occasionally found that, after a stand-down period of five hours or more, the first delivery was outside the deficiency tolerance. The significance of such an occurrence is not sufficient to render the pattern unsuitable for use for trade.



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 4/5/4

VARIATION No 1*

Pattern: Bar Boy Liquor Dispenser

Submittor: G G Benjamin & Co. Pty Ltd,
110 Roberts Avenue,
Peakhurst, New South Wales, 2210, and

Submittor: Glenn Pleass Industries Pty Ltd,
(Variants 6 37B Humphries Terrace,
to 8) Kilkenny, South Australia, 5009.

1. Description of Variants

1.1 Variant 6

With the inverted bottle replaced by a bulk feed system (Figure 10).

The liquor level in the feed reservoir is maintained by gravity flow from a reserve container. Liquor flows into this reserve container from a pressurised bulk container through a solenoid valve which is activated by a float switch in the reserve container.

A switch is provided to isolate the solenoid when bottle feed is required.

1.2 Variant 7

With the liquor tube more than 0.5 m above the dispensing station and a solenoid-operated discharge valve within 1 m of tube length of the dispensing station.

1.3 Variant 8

With the solenoid-operated discharge valve used in Variant 7 replaced by a spring-loaded-ball check (or discharge) valve.

* There is no Technical Schedule No 4/5/4. Details of the Pattern and Variants 1 to 5 are given in pages 3 to 5 and Figures 1 to 9 of Certificate of Approval No 4/5/4.



NATIONAL STANDARDS COMMISSION

CANCELLATION OF CERTIFICATE OF APPROVAL No 4/5/4

This is to certify that Certificate of Approval No 4/5/4 for the pattern and variants of the

Bar Boy Liquor Dispenser

submitted by G G Benjamin & Co Pty Ltd,
110 Roberts Avenue,
Peakhurst, 2210, New South Wales,

and

Glenn Pleass Industries Pty Ltd,
37B Humphries Terrace,
Kilkenny, 5009, South Australia,

(including Variation Certificate) will expire* in respect of new instruments on 1 October 1982.

Instruments which were verified on or before 30 September 1982 may, with the concurrence of the State or Territorial verifying authorities, be submitted for reverification.

Signed

Executive Director

*Instruments conforming to the pattern do not comply with the latest design rules, and production of instruments conforming to the Variation Certificate has ceased.

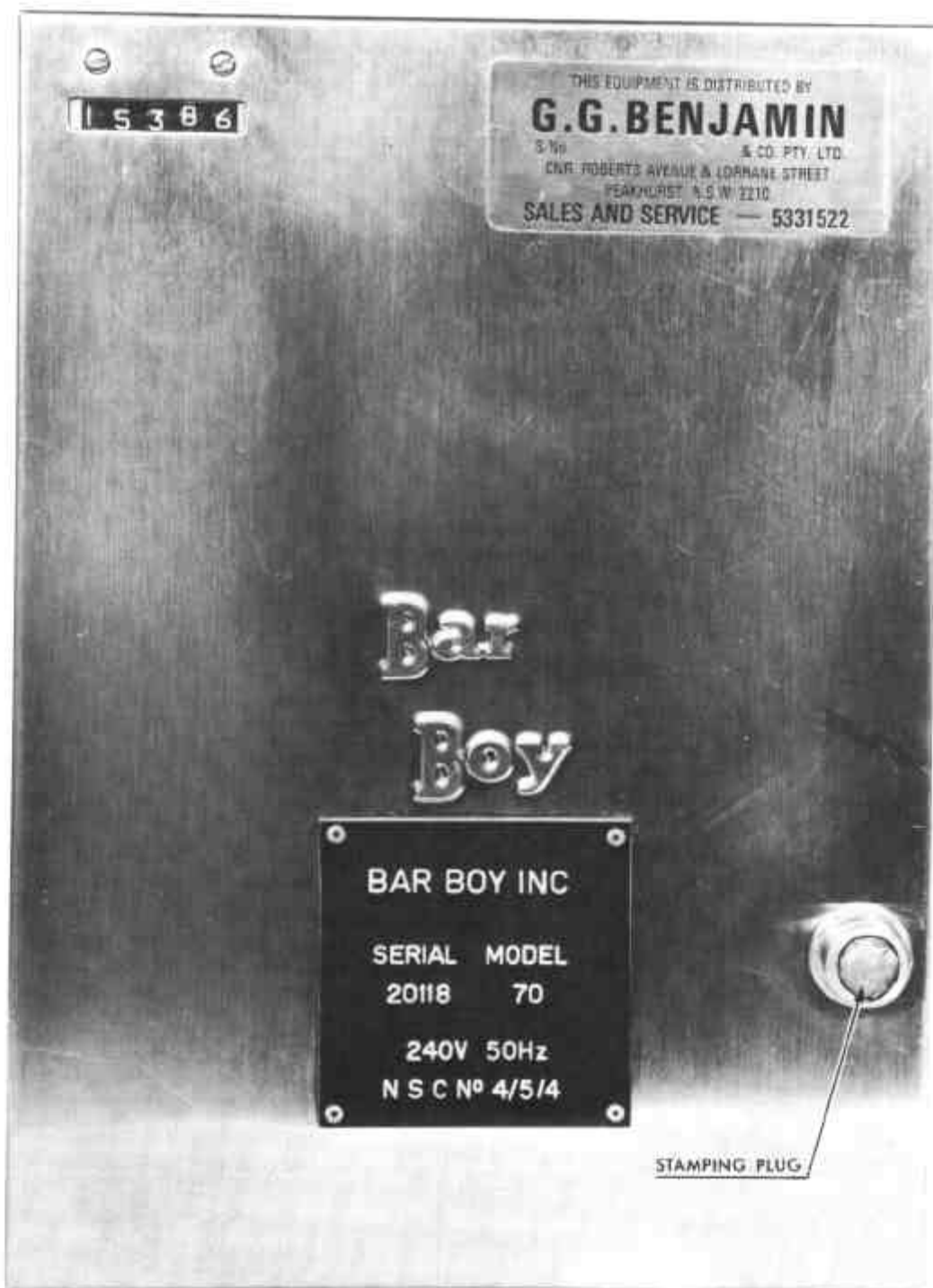
16/9/82

FIGURE 4/5/4 - 1



Dispensing Station

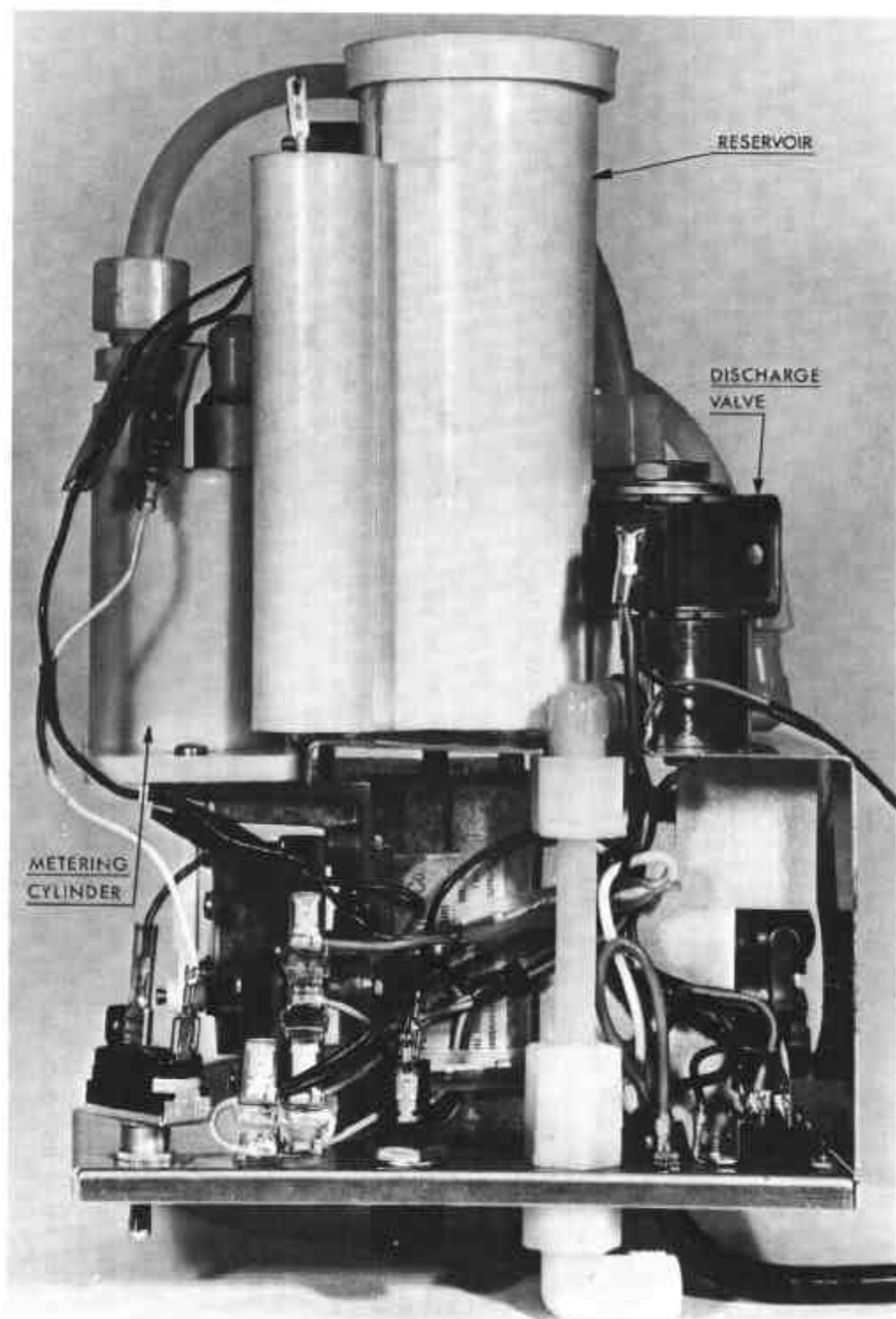
FIGURE 4/5/4 - 2



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Metering Unit

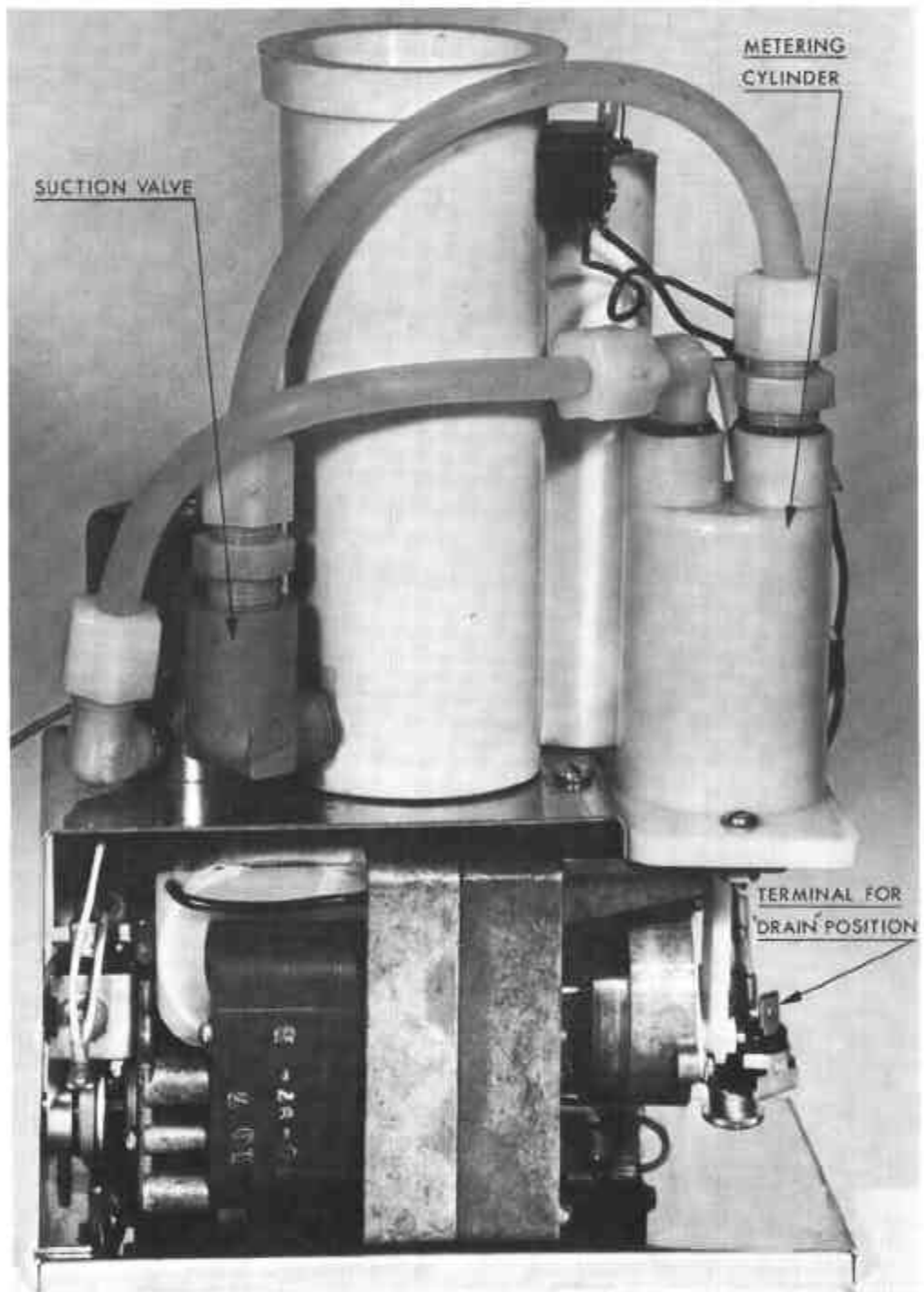
FIGURE 4/5/4 - 3



Arrangement of Components in Metering Unit

22/6/73

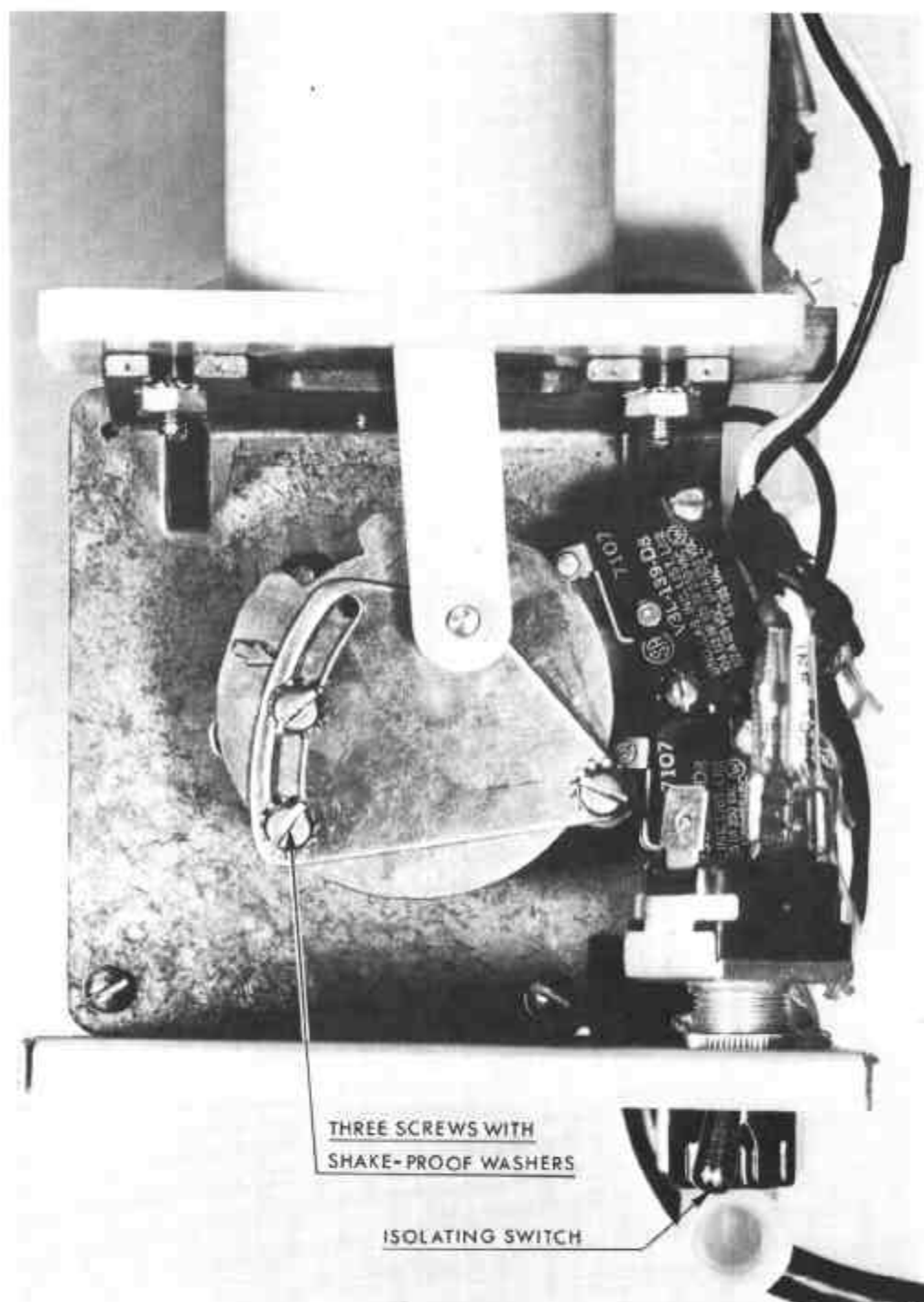
FIGURE 4/5/4 - 4



Arrangement of Components in Metering Unit

22/6/73

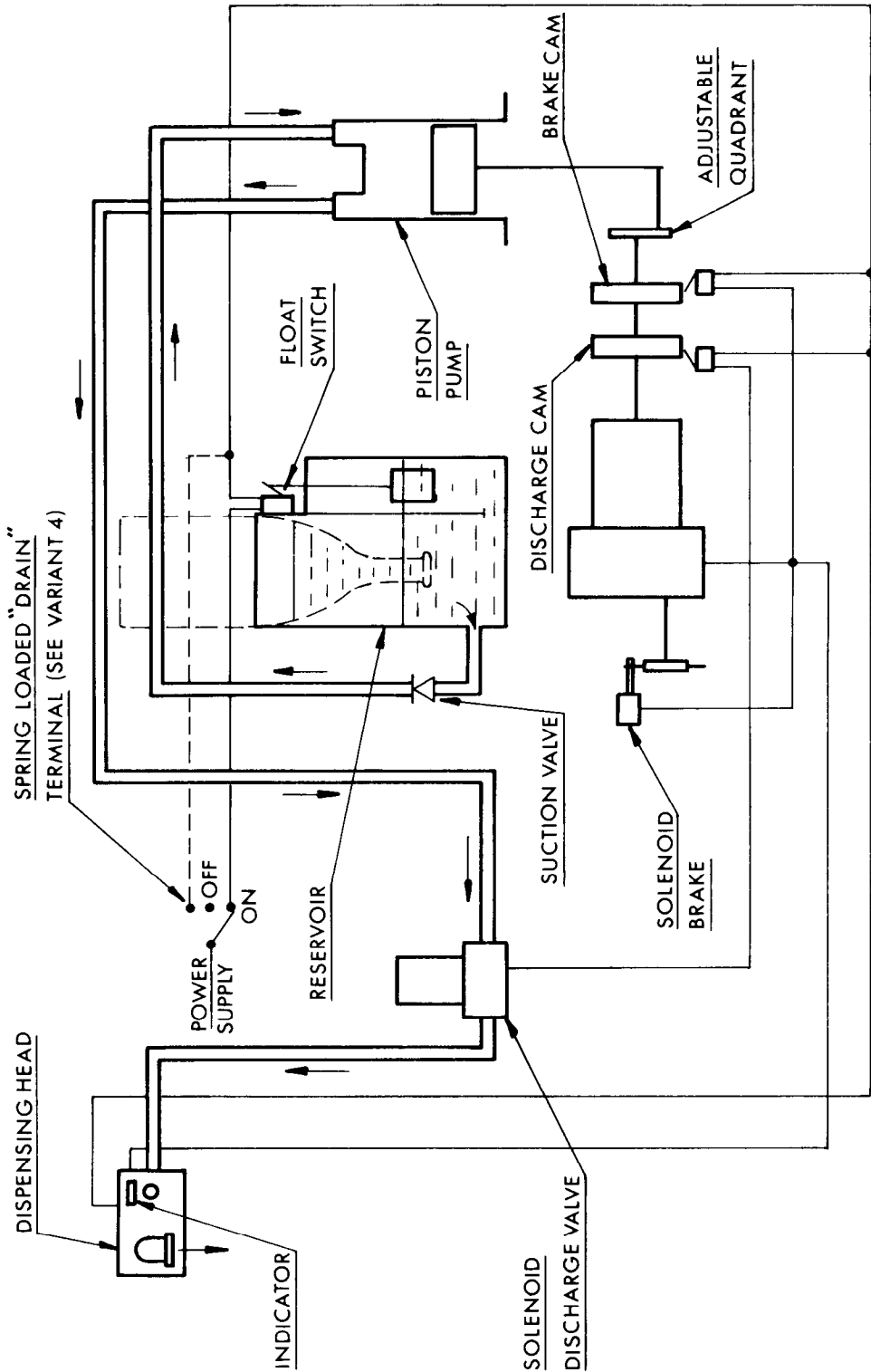
FIGURE 4/5/4 - 5



Adjustable Calibrating Quadrant

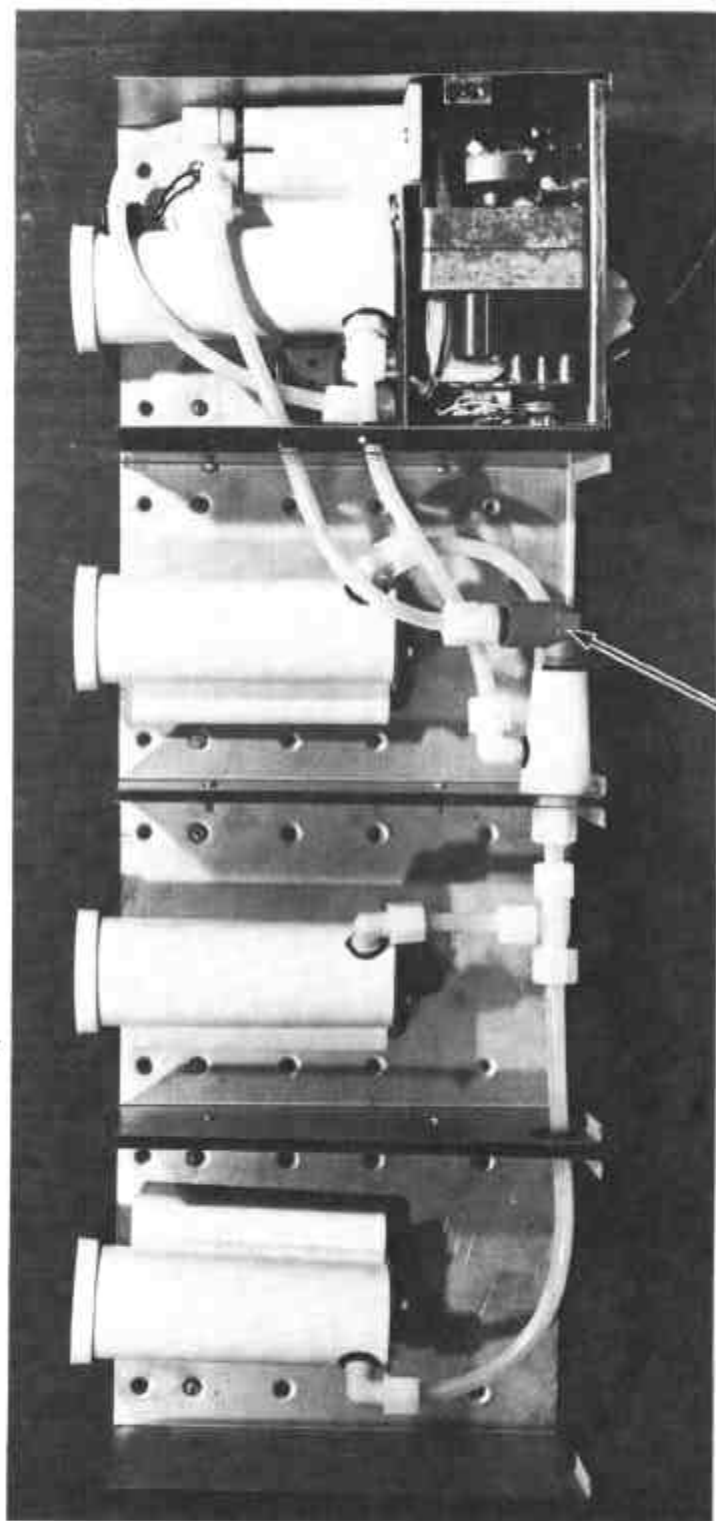
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FIGURE 4/5/4 - 6



Hydraulic Diagram

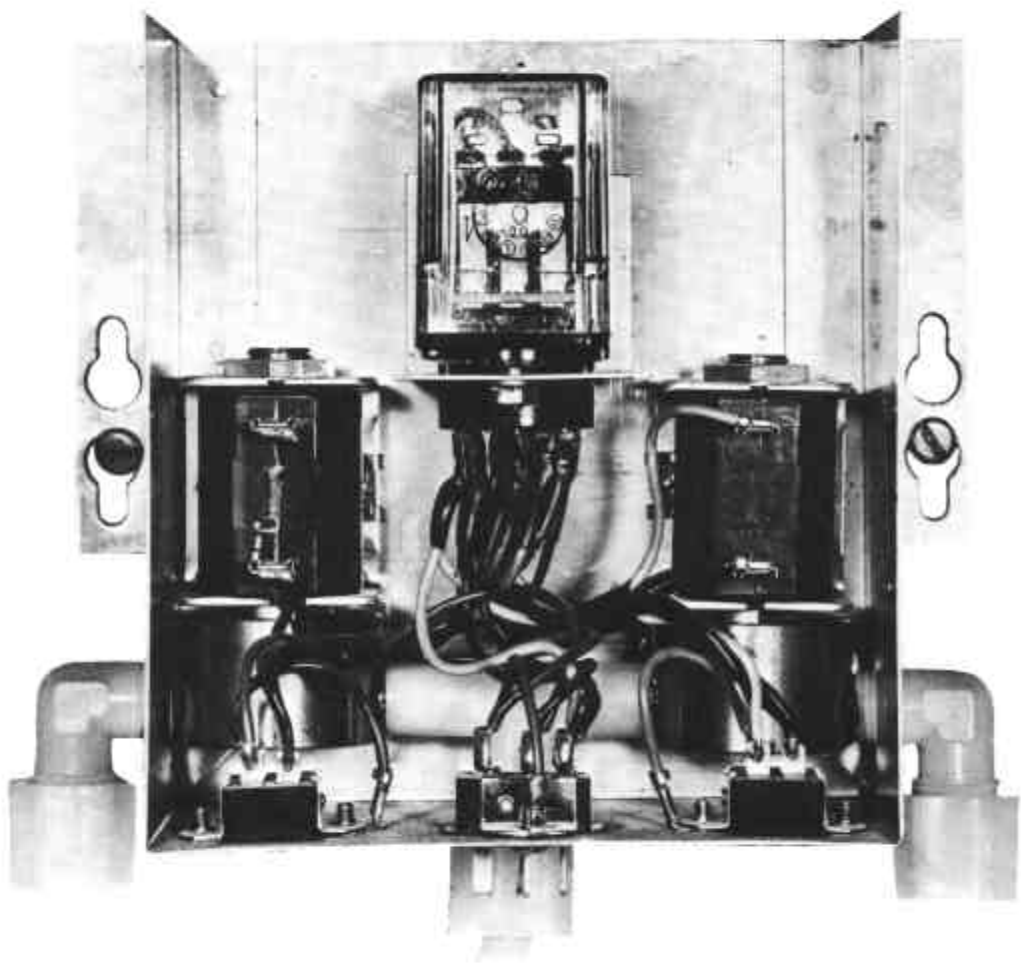
FIGURE 4/5/4 - 7



SUCTION VALVE

Metering Unit Supplied from Multiple Canisters

FIGURE 4/5/4 - 8



Dual Station Relay Unit

22/6/73

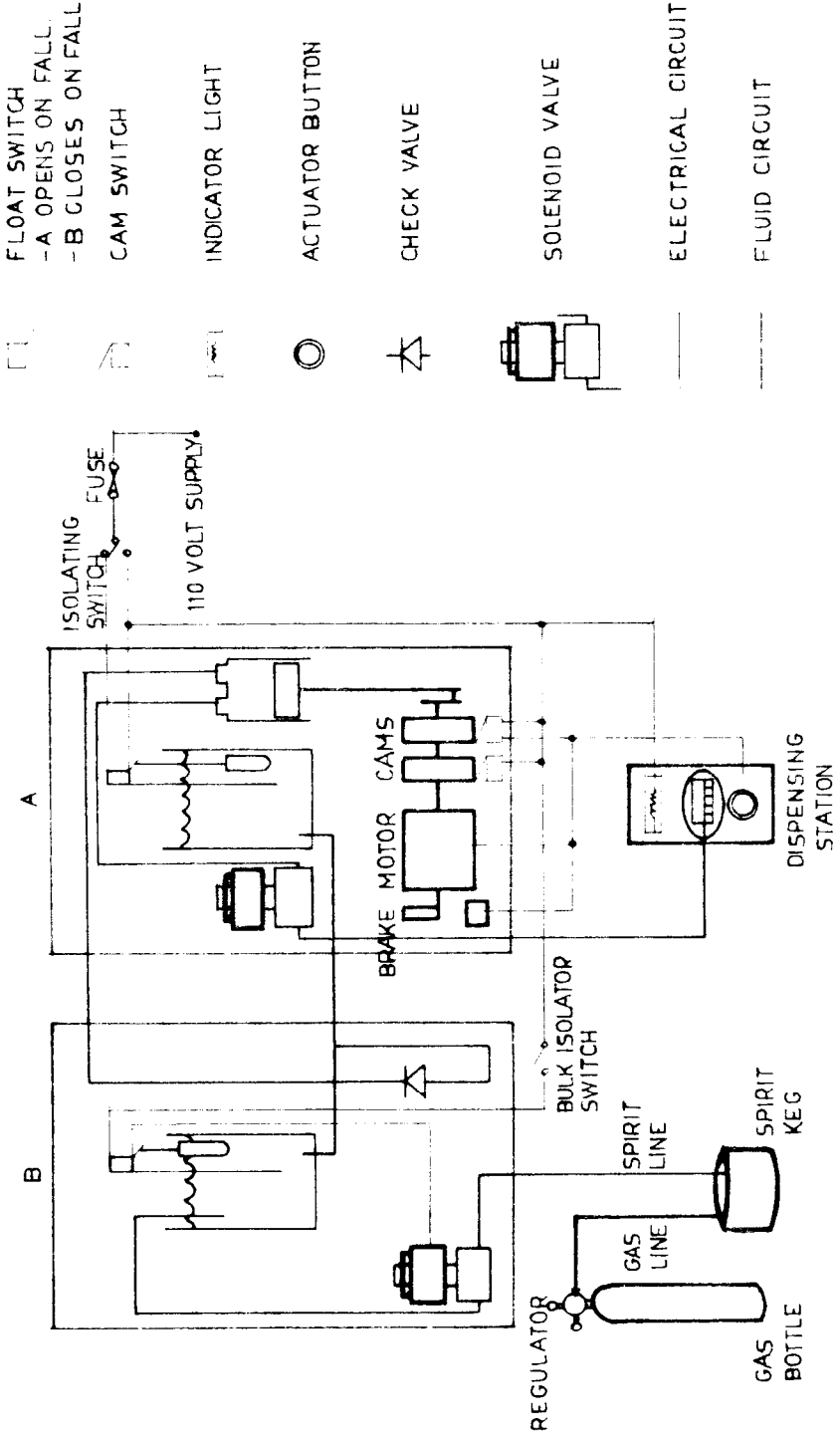
FIGURE 4/5/4 - 9



Dispensing Station — Vertical Arrangement

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FIGURE 4/5/4 - 10



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