

CERTIFICATE OF APPROVAL No 5/6B/19

This is to certify that the pattern of the

Wayne 2PM4 (Drum-filling) Flowmeter

submitted by Wayne Pumps Australia Pty Ltd,
29 Anzac Highway,
Keswick, South Australia, 5035,

has been approved under the Weights and Measures (Patterns of Instruments) Regulations as being suitable for use for trade.

Date of Approval: 29 April 1975

The pattern is described in Technical Schedule No 5/6B/19 and in drawings and specifications lodged with the Commission.

The approval is subject to review on or after 1 May 1980.

All instruments conforming to this approval shall be marked with the approval number "NSC No 5/6B/19".

Approval is granted on condition that:

1. The flow rate is limited to a maximum of 90 litres per minute.
2. The pump suction is operated under a positive liquid head.
3. The supply tank is of sufficient capacity to ensure that the liquid in the tank does not fall to a level at which air could be drawn into the pump, or a device is fitted to prevent the level of the liquid falling to a level at which air could be drawn into the pump.
4. The liquids to be measured are limited to viscosities between 1 and 220 mm²/s only. The viscosity range of the liquids for which the instrument is calibrated is nominated on the instrument data plate.

Signed



Acting Executive Officer

~~NSC 40~~
Bill 7

27/5/75



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 5/6B/19

Pattern: Wayne 2PM4 (Drum-filling) Flowmeter

Submitter: Wayne Pumps Australia Pty Ltd,
29 Anzac Highway,
Keswick, South Australia, 5035.

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4. The liquids to be measured are limited to viscosities between 1 and 220 mm²/s only. The viscosity range of the liquids for which the instrument is calibrated is to be nominated on the instrument data plate.
5. All instruments conforming to this approval shall be marked "NSC No 5/6B/19".

Description:

The pattern (see Figures 1, 2 and 3) is a flooded-suction drum-filling flowmeter to measure 5 litres or 20 litres of liquid petroleum within a viscosity range of 1 and 220 mm²/s.

The flowmeter comprises the following:

1. Supply tank.
2. Pump mounted lower than the minimum height of the liquid in the

supply tank. The supply pipe from the tank to the pump has a continuous fall to the pump.

3. Non-return valve in the pipe between the pump and the gas separator.
4. A. O. Smith TEB-6 gas separator (see Figures 1 and 4), which is only used as a strainer.
5. Wayne 2PM4 meter (see Figure 1).
6. Veeder-Root 5/20-litre preset counter, which causes the outlet control valve to close when the quantity delivered is 5 litres or 20 litres (see Figure 5). Two counters are provided which are not approved for use for trade; one is a non-resettable totalizer and the other a resettable drum counter.

The counter is marked "to deliver 5 litres or 20 litres, see setting instructions" (see Figures 5, 6 and 7).

7. Outlet control valve. The valve may be closed manually or by the counter.
8. Hose of up to 1 metre in length.
9. Nozzle — Wayne P6561 modified by the removal of the main nozzle valve (see Figures 8 and 9).
10. Marking — an instrument data plate sealed to the instrument is marked:

"approved for liquid petroleum of viscosity 1 to 10 mm²/s only",

(that is, kerosene, heating oil, distillate and liquid petroleum of similar viscosity only); or

"approved for liquid petroleum of viscosity 10 to 220 mm²/s only",

(that is, lubricating oils, etc.);

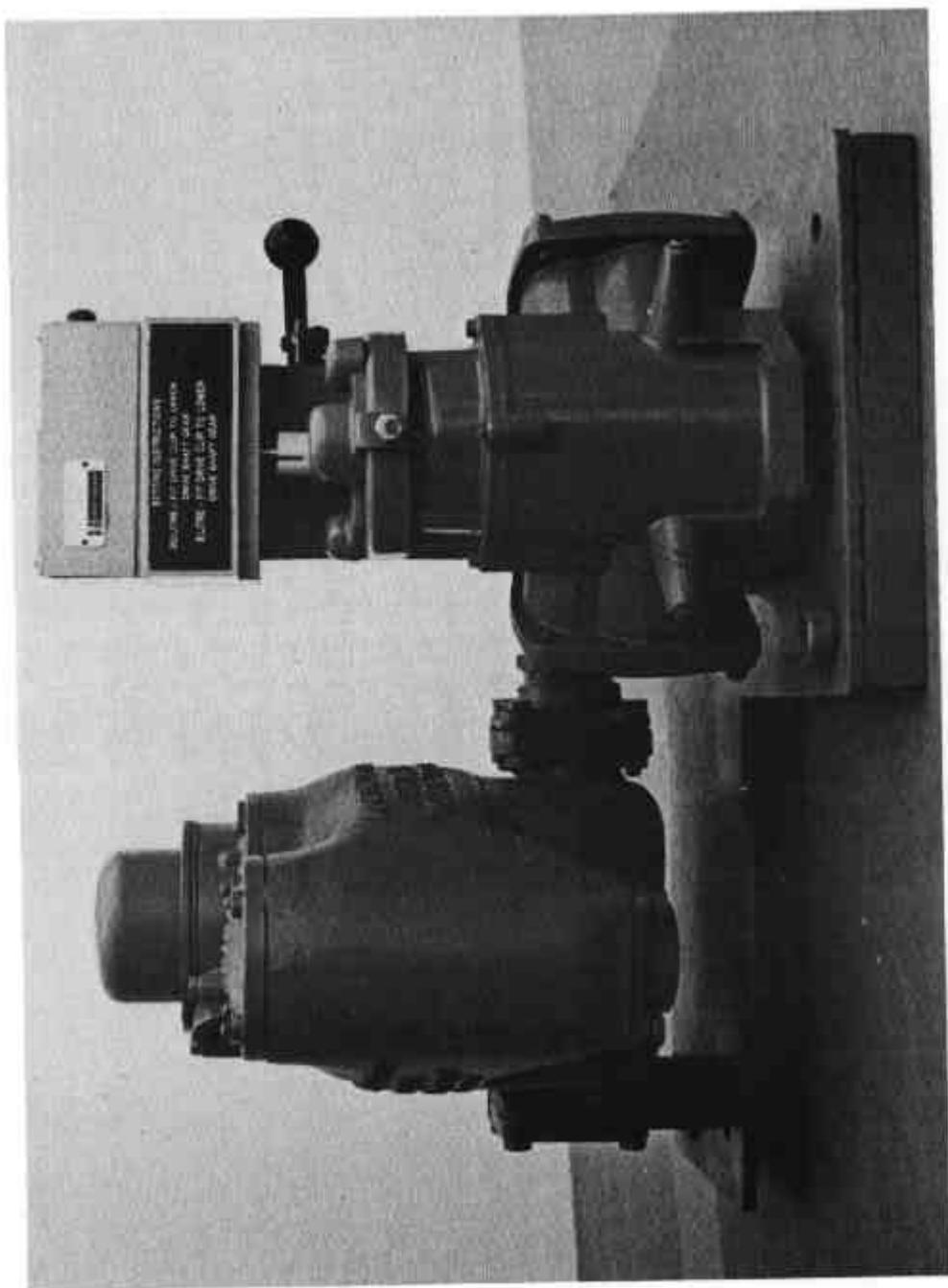
the instrument is marked "not for retail use".

11. Sealing — the meter is sealed as illustrated in Figure 1.

Special Tests:

1. The instrument should be tested with a liquid in the viscosity range for which it will be used and which is marked on the instrument data plate.
2. If a device is fitted to prevent the level of the liquid in the supply tank falling to the level of the pump, at least one delivery should occur during which the device stops the delivery. It will be necessary to refill the supply tank to finish the delivery into the proving measure.
3. As the meter will give a fixed-quantity delivery only, no minimum delivery has been specified.

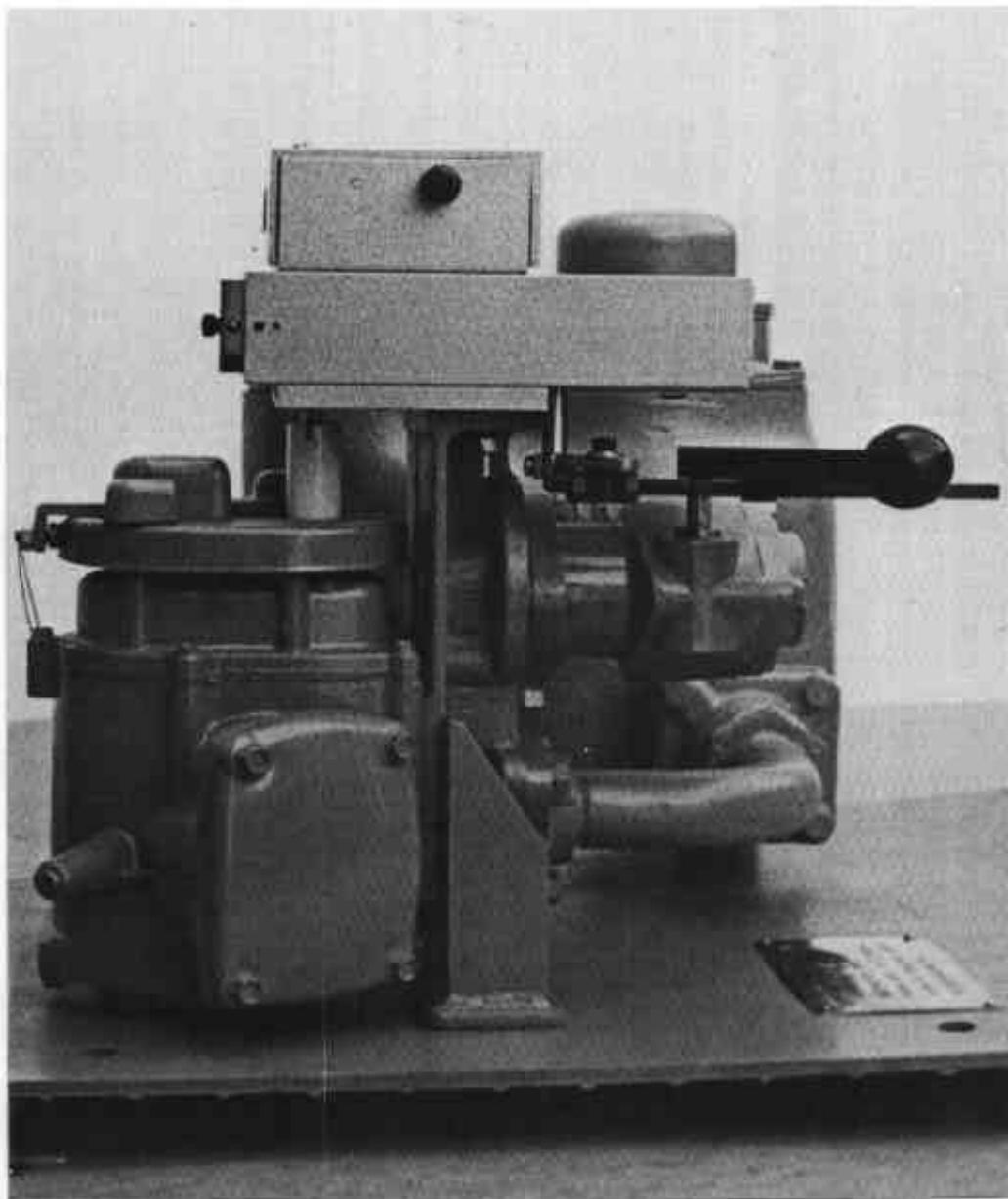
FIGURE 5/6B/19 - 1



Wayne 2PM4 (Drum-filling) Flowmeter

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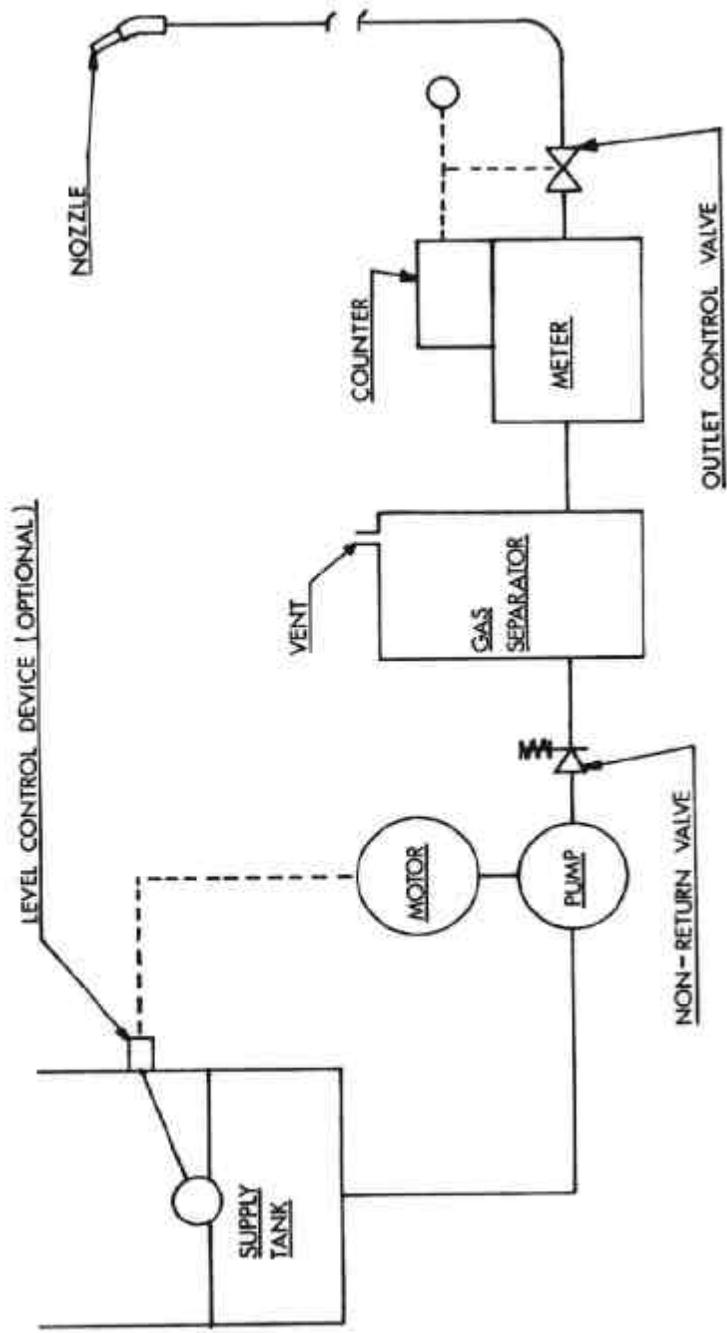
FIGURE 5/6B/19 - 2



Wayne 2PM4 (Drum-filling) Flowmeter

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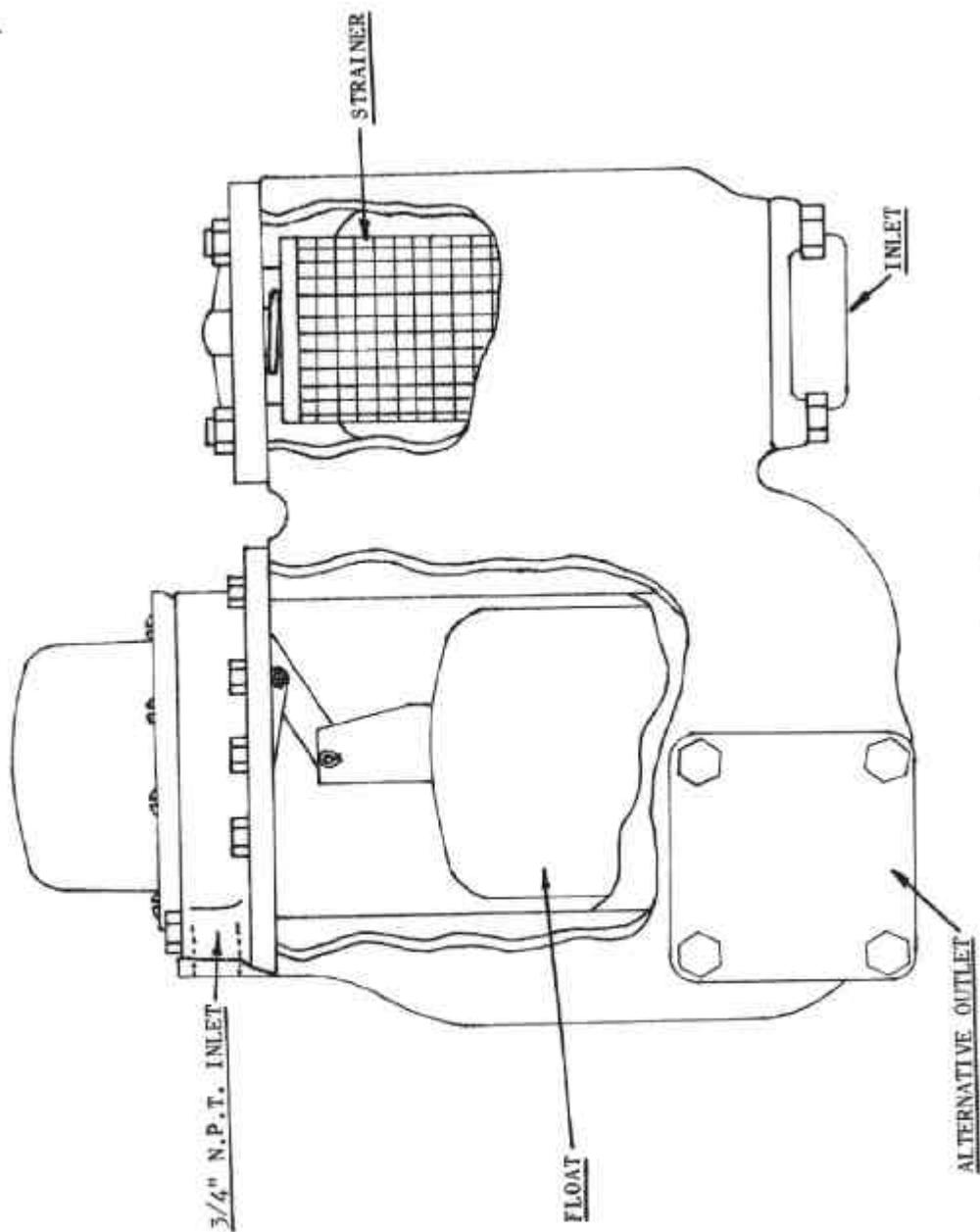
FIGURE 5/6B/19 - 3



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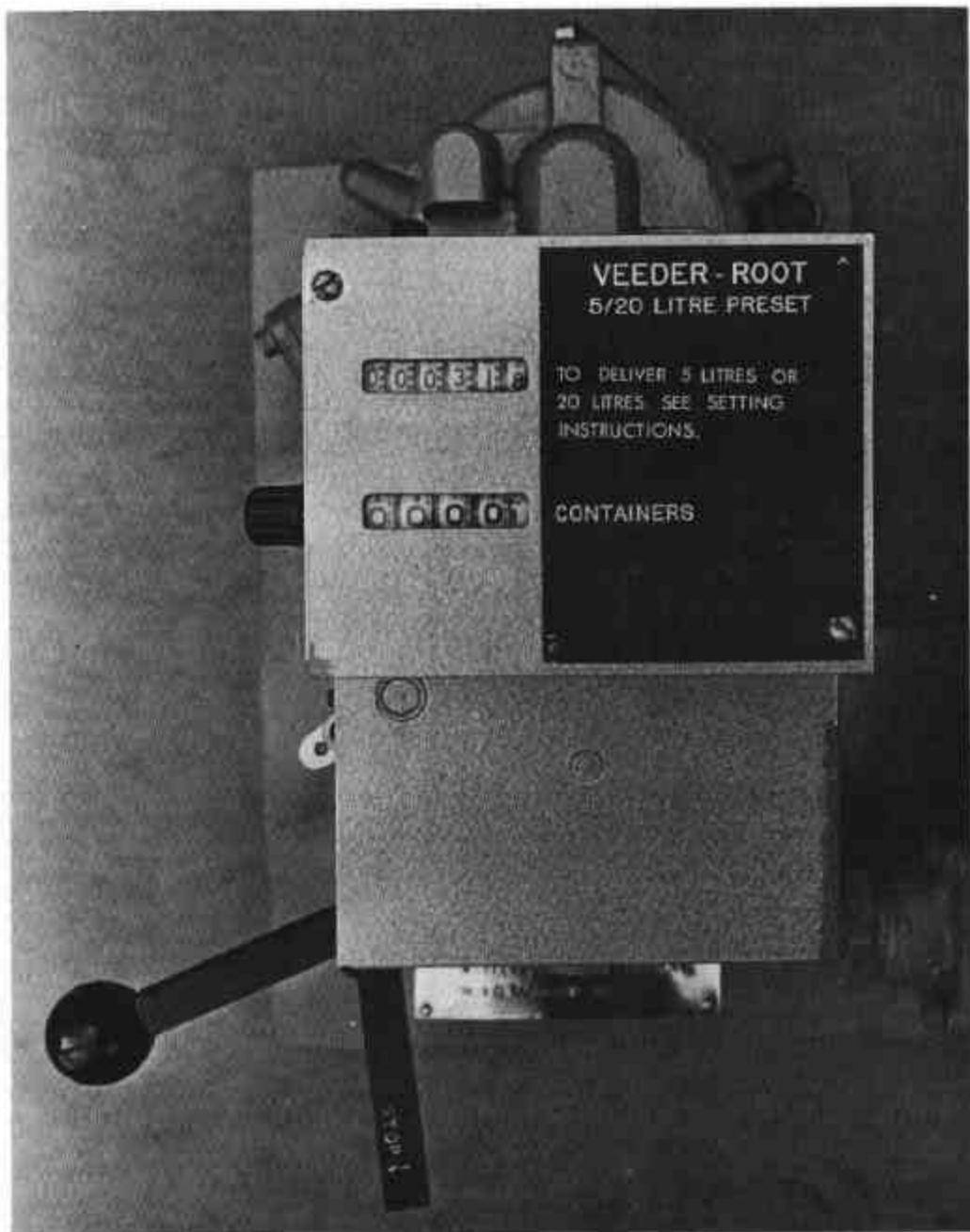
Wayne 2PM4 (Drum-filling) Flowmeter -- Schematic Diagram

FIGURE 5/6B/19 - 4



A. O. Smith Model TEB-6 Gas Separator

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Veeder-Root 5/20-litre Preset Counter

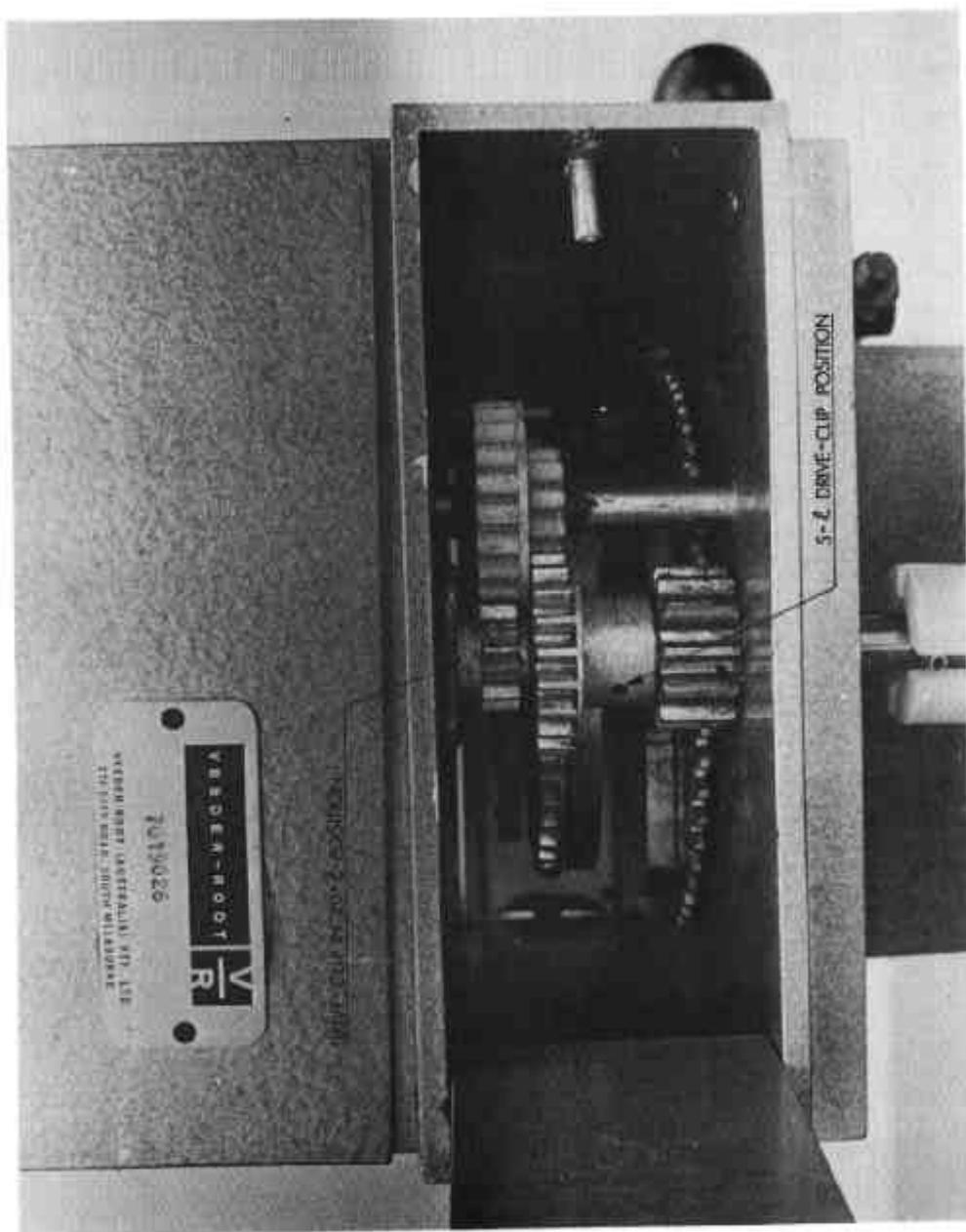
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FIGURE 5/6B/19 - 6



Setting Instructions

FIGURE 5/6B/19 - 7



5-litre or 20-litre Setting Mechanism

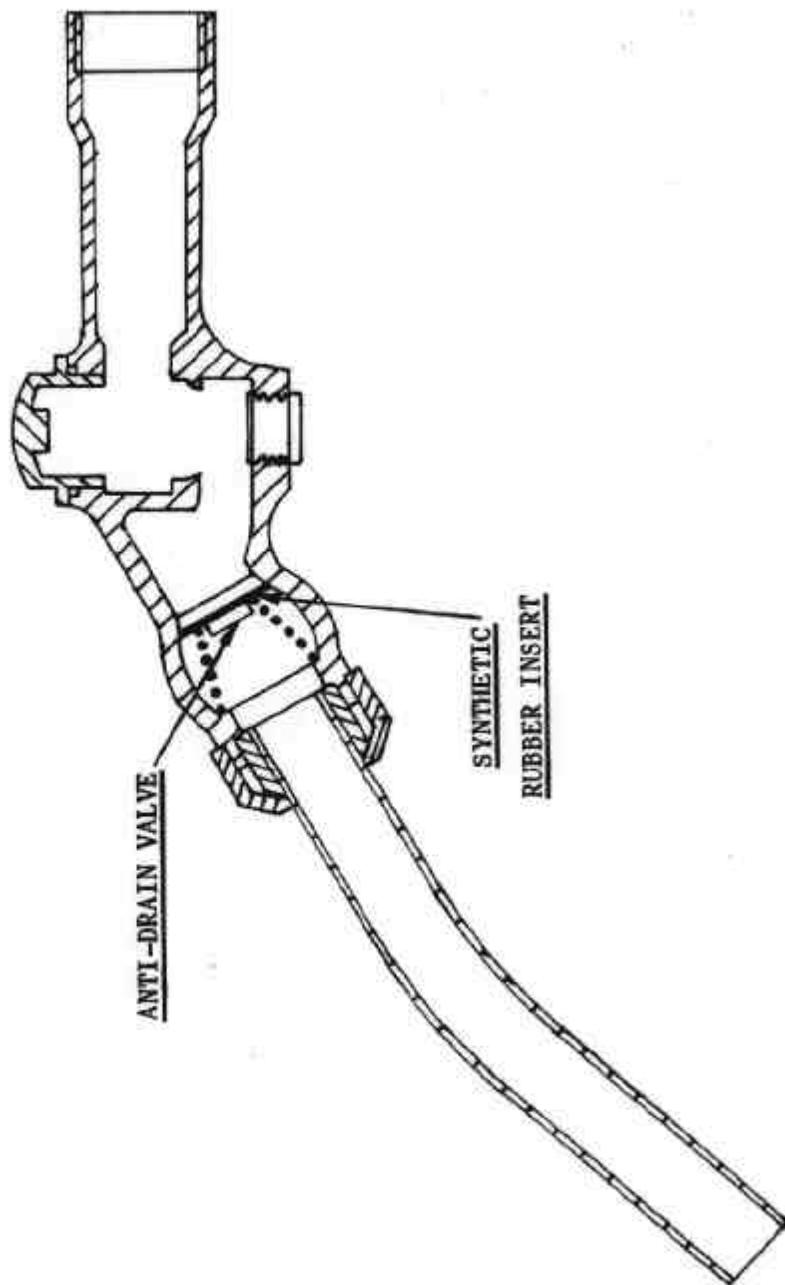
FIGURE 5/6B/19 - 8



Modified Wayne P6561 Nozzle

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FIGURE 5/6B/19 - 9



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