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**G. DUNDAS CO., INC.**

**OPERATOR'S INSTRUCTION MANUAL**

**1920 WASTE GAS SCAVENGER**

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10/05/94 REV

## 1920 WASTE GAS SCAVENGER

### GENERAL DESCRIPTION

The WASTE GAS SCAVENGER is designed for use with vacuum (suction) waste gas disposal systems. This method applies continuously open relief ports to provide positive and negative pressure relief.

The reservoir canister will accommodate varying waste gas flow rates from the patient breathing system.

The WASTE GAS SCAVENGER incorporates two 19mm hose terminals (see Figures 1 and 2). These ports are to connect to 19mm hoses from the breathing system Adjustable Pressure Limiter (APL) valve and the Ventilator Relief Valve (VRV).

An adjustable stem valve regulates the waste-gas exhaust flow, which is indicated on an uncalibrated flowmeter.

NOTE: Any operator of an anesthesia machine incorporating this WASTE GAS SCAVENGER should read and fully understand this manual.

### SET UP AND INSTALLATION

The scavenger assembly mounts on the left rear leg of the anesthesia machine by two mounting machine screws. The scavenger assembly is mounted so that the barbed vacuum fitting points toward the rear of the anesthesia machine.

Connect one end of the two scavenger hoses to the two 19mm hose terminals on the scavenger assembly. Connect the other end of one scavenger hose to the APL Valve and one end of the other to the Ventilator Relief Valve. Connect a DISS vacuum hose to the barbed hose fitting at the rear of the WASTE GAS SCAVENGER assembly. See Figures 1 and 2.

### OPERATING INSTRUCTIONS

Regulate the waste gas exhaust flow by adjusting the Stem Valve on the scavenger assembly as follows:

1. Attach all hoses as described above and verify that the waste gas disposal system is active.
2. Open the Stem Valve two or three turns CCW and vary the setting until the flowmeter reads midway between minimum and maximum flow.

The setting may require adjustment depending upon the fresh gas flow rate. Too low a suction flow rate will result in waste gas contamination of the operating room through the relief ports at the top of the reservoir canister. Too high a suction flow rate will needlessly deplete the waste gas disposal system's suction capacity and may also cause noise.

The valve setting may be adjusted if necessary during a case. For example, a shared suction disposal system may provide a varying suction flow rate, depending on the number of users at any given time.

### POSITIVE AND NEGATIVE PRESSURE RELIEF

If the waste gas flow rate from the patient breathing system exceeds the disposal systems suction flow rate the canister reservoir initially accommodates the excess. After waste gas fills the canister it will then exit through the relief ports. This prevents pressure from building up within the patient breathing system.

If the disposal system gas flow rate exceeds the waste gas flow rate from the patient breathing system the disposal system will draw room air through the relief ports to maintain a pressure balance and prevent the free flow of gas from within the absorber canister or ventilator.

### MAINTENANCE AND CLEANING

1. All hoses attached to the WASTE GAS SCAVENGER should be examined periodically for evidence of damage or excessive crimping.
2. Visually inspect the flowmeter housing for evidence of any foreign material in the flow channels. Disassembly of the unit by unqualified personnel is not recommended for safety reasons.
3. The float ball can be removed for cleaning by removing the top hex cap. Clean with alcohol and reassemble.
4. The flow control valve may be removed (by turning CCW) and the valve stem examined for contamination. The valve stem may be carefully rinsed with alcohol, lubricated lightly with silicone lubricant and replaced. See Figure 1.

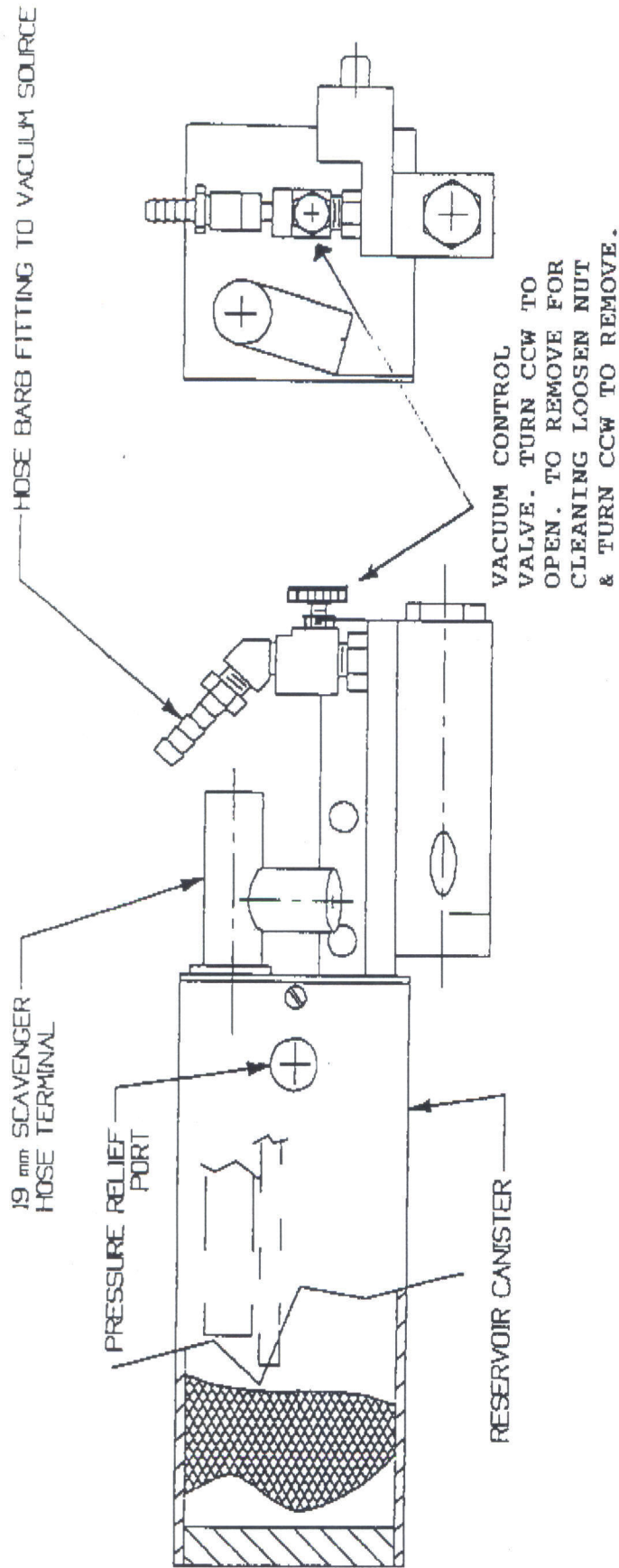


FIGURE 1

|               |        |                     |
|---------------|--------|---------------------|
| G. DUNDAS CO. | DATE   | 4-29-93             |
|               | BY     | G. WHITING          |
|               | NUMBER | 011920              |
| TITLE         |        | WASTE GAS SCAVENGER |
| SCALE         |        | 1/2                 |

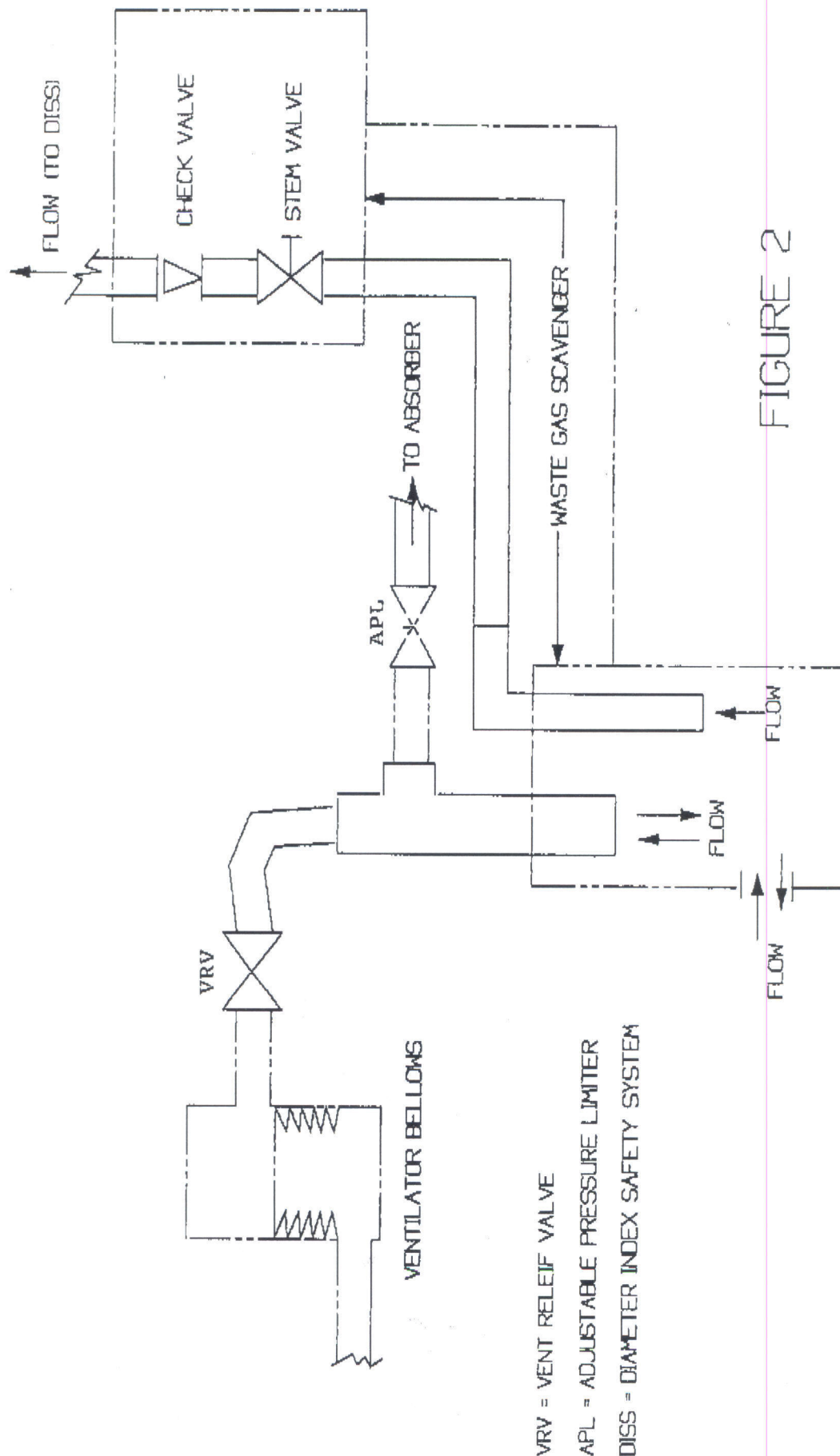


FIGURE 2

G. DUNDAS CO.

DATE 5-3-93

BY G. WHITING

NUMBER

011920

TITLE

WASTE GAS SCAVENGER

SCALE

NONE

