Operation and Maintenance Manual for GENTEC® Model 881VR Continuous/Intermittent Suction Regulators

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CAUTION: United States Federal law restricts this device to sale by or on the order of a physician.

IMPORTANT SAFETY INSTRUCTIONS.

READ AND UNDERSTAND THESE INSTRUCTIONS COMPLETELY BEFORE OPERATING THIS EQUIPMENT.

If you do not understand any of these instructions, or if you have any questions regarding the use of this product, please contact your facility's training manager, your supervisor, the medical equipment dealer from whom the product was purchased, or the manufacturer before operating the equipment.

Do not attempt to repair this device if you have not been properly trained. Doing so may create a hazardous situation that may result in death or serious injury. Attempted repair by anyone other than a duly authorized repair/service center of Genstar Technologies Co., Inc. voids any and all warranties, express or implied.

Carefully inspect and test this product before each use to ensure proper operation. Do not use the product if there are signs of damage or if it does not pass the initial suction test.

Should this product require repair or service that will require shipping the product to another location, bear in mind that United States Federal law restricts the shipping of contaminated products. Refer to DOT regulations for additional information.

Genstar Technologies Co., Inc. (GENTEC®) manufactures continuous/ intermittent digital suction regulators in two ranges, 0 to 160mmHg (881VR-160) and 0 to 300mmHg (881VR-300). These suction regulators provide three modes: CONT (continuous regulated vacuum), OFF (no vacuum) and INT (intermittent regulated vacuum). Please take a few minutes to familiarize yourself with the product by reviewing Figure 1 on the next page.

The mode is selected by moving the lever at the top of the regulator to the left (CONT) for continuous suction, the center (OFF) to turn off the regulator, or the right (INT) for intermittent suction.

The **CONT** mode provides continuous regulated suction levels as set by the user. The suction level is set by occluding the suction tubing, then adjusting the regulator knob on the front of the suction regulator to achieve the desired suction level, up to the designed range. Suction is increased by turning the regulator knob clockwise, decreased by turning it counter-clockwise.

The **OFF** mode turns off the suction regulator, allowing no suction at the tubing. The **INT** mode provides intermittent regulated suction levels as set by the user. The suction level is set by occluding the suction tubing, then making sure the

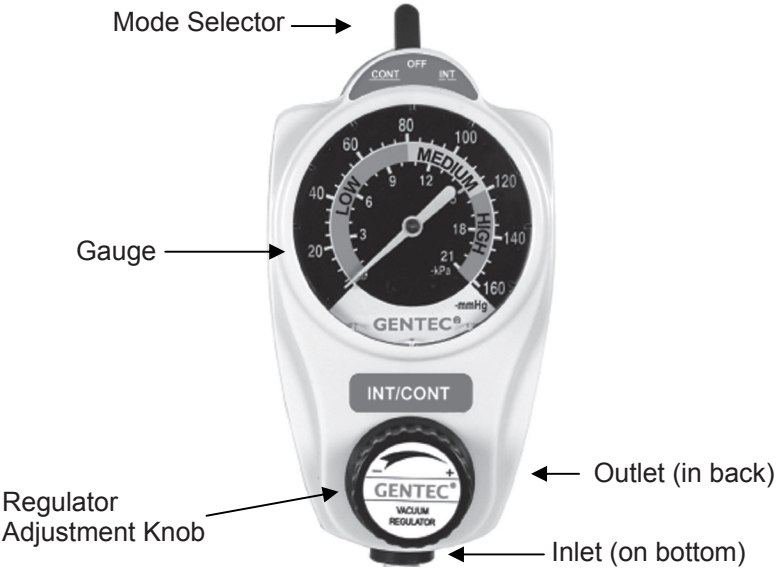


Figure 1 - Main Features

regulator is in the ON cycle. This could take up to 10 seconds. When the regulator begins the ON cycle, adjust the regulator knob on the front of the suction regulator to achieve the desired suction level, up to the designed range. Suction is increased by turning the regulator knob clockwise, decreased by turning it counter-clockwise.

A suction filter or vacuum trap assembly (GENTEC catalog #880VT) should be used to prevent aspirate from entering the suction regulator. Typically, the suction catheter is connected to the suction tubing, which is then connected to the inlet fitting on the suction canister.

The canister can be connected directly to the suction regulator via DISS connection, or, as is recommended, connected to a filter or vacuum trap, which is then connected to the suction regulator via direct, threaded connection, suction tubing, or DISS connector (see Figure 2).

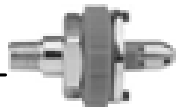
The appropriate outlet connector (located on the back of the suction regulator) must be used for connection to the wall inlet. The use of converting adapters (e.g., DISS connection to Ohio connection) should be avoided. If the suction regulator is connected via tubing or hose assembly to the wall inlet (as occurs when the suction regulator is attached to a mobile stand), a minimum inside hose diameter(ID) of 5/16” (7.9mm) should be used to prevent loss of flow.

Possible Inlet Fittings

DISS Male

Hose Barb

Possible Back Fittings



Ohio/Ohmeda

Chemetron

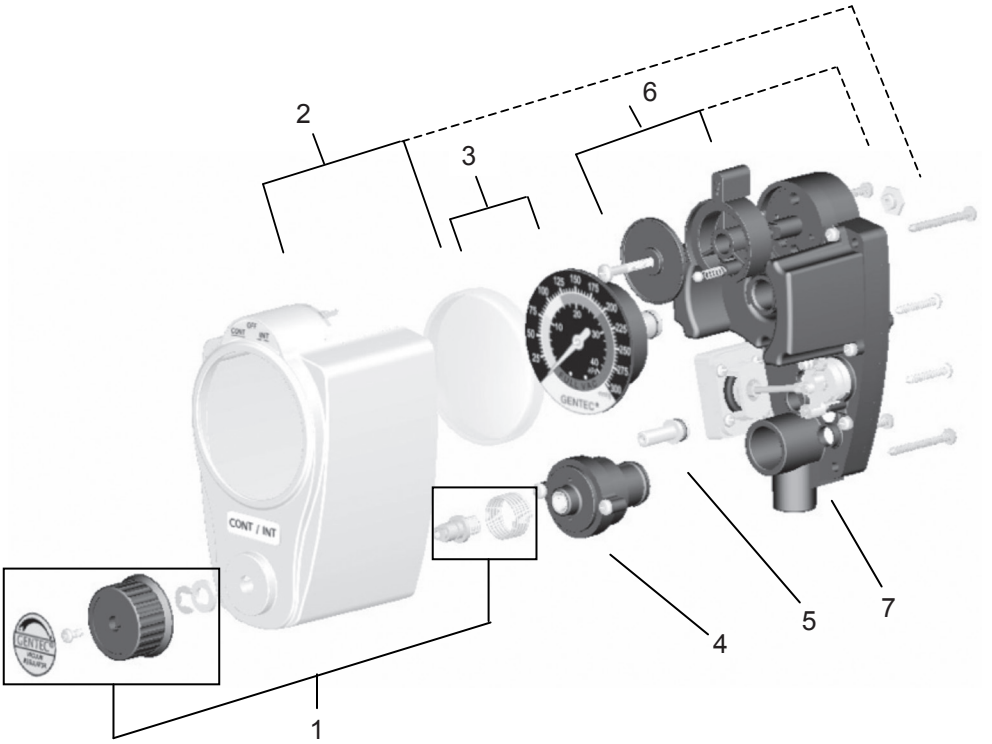
DISS Nut & Nipple

DISS Hand-Tight

Puritan-Bennett

Hose Barb

Vacuum Trap Assembly or Fitting Only



No.	Part Number	Part Number	Description	Qty/ Kit
1	204880010	881VR-K01	Adjustment Knob Assembly	1
2	204880020	881VR-K02	Front Cover Assembly, 0-160hhHg	1
	204880021	881VR-K02B	Front Cover Assembly, 0-300hhHg	1
3	204880050	881VR-K05	Gauge, 0-160 mmHg (Lens included)	1
	204880053	881VR-K05A	Gauge, 0-300 mmHg (Lens included)	1
	204880057	882VR-K05B	Gauge, 0-760 mmHg (Lens included)	1
3a	204880040	881VR-K04	Lens/Gauge Cover	20
4	204880030	881VR-K03	Regulator Assembly, 0-160 mmHg	1
	204880033	881VR-K03A	Regulator Assembly, 0-300 mmHg	1
	204880037	882VR-K03B	Regulator Assembly, 0-760 mmHg	1
5	204880060	881VR-K06	Relief Valve, 0-160 mmHg	1
6	204880070	881VR-K07	Mode Selector Knob Assembly for 3 Mode	1
	204880072	882VR-K07	Mode Selector Knob Assembly for 3 Mode	1
7	204880100	882VR-K10	Back Body	1

#	Problem	Probable Cause		Corrective Measures
1	The vacuum gauge needle does not move off “0” when regulator is connected to vacuum source.	The regulator is in the “OFF” mode, or is not fully in the “CONT” or “INT” position.		Move the mode selector to the “CONT” or “INT” position.
		The suction regulator is in the “INT” position, and has started in the “OFF” cycle.		Wait 8-10 seconds for the “ON” cycle to start.
		The adjustment knob is in the fully counter-clockwise, closed, position.		Turn the adjustment knob clockwise to open.
		The collection bottle or suction tube is leaking.		Check the collection bottle and tubing for leaks.
2	The vacuum regulator gauge shows a reading but there is no suction at the tubing.	The collection bottle is too full, causing the float to shut off the suction.		Empty the collection bottle.
		The filters or suction tubing are clogged.		Change the filters and tubing.
3	Under the regulator cannot reach the specified suction level (i.e., 120mmHg or 240mmHg, depending upon model).	Suction source cannot provide sufficient suction.		Increase source equipment vacuum settings.
		Regulator Internal Problems	Relief valve (F) is damaged.	Replace relief valve.
			O-ring on vacuum gauge (B) is damaged.	Replace o-ring.
			O-ring in regulator assembly (E) is damaged.	Replace o-ring.
			Regulator assembly (E) is damaged.	Replace regulator assembly.
			Mode selector assembly (H) is loose.	Tighten or replace mode selector assembly.
4	Under REG mode the suction is too strong and cannot be reduced	Gas assist port (6) is clogged.		Clean gas assist port.

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Doc. No.: GR-MAN-MED881VR0417 Rev. Level: V2