Customer Requirements
Pre-Installation Instructions

This document provides the facility with requirements to ensure correct installation and subsequent proper performance of a DSD EDGE® Endoscope Reprocessing System.

APPLICABLE DOCUMENTS
• DSD EDGE Endoscope Reprocessing System User Manual
• DSD EDGE Endoscope Reprocessing System Service Manual
• Water pre-filtration system installation instructions 50097-363. These instructions contain samples of water system installations.

CUSTOMER REQUIREMENTS
These criteria must be met to ensure proper operation of the reprocessor. It is the responsibility of the customer to provide qualified personnel to install proper ventilation, electrical and plumbing (water supply lines, and mixing valve or equivalent and drain) prior to install. It is also the customer’s responsibility to connect the DSD EDGE Reprocessor System to the water supply at time of installation.

WATER SUPPLY (POTABLE)
The incoming water supply for the DSD EDGE Reprocessor System can be connected to either the right side or rear of the cabinet by means of a movable inlet fitting. The adapter attached to the unit is a 3/8” female NPT fitting. Water connections on the pre-filtration system are 1/2” female NPT.

• The incoming hot and cold water lines must be a minimum of 1/2” (12.7 mm) diameter providing a minimum flow rate of 3.2 gallons per minute (GPM) (12 l/min) at temperature of 95°F ± 4°F (35°C ± 2°C). ON DEMAND To maintain this specific temperature of the supply water, a thermostatic mixing valve will be necessary prior to the pre-filtration system. This valve requires both hot and cold water lines for proper operation. The customer is responsible for obtaining and installing the valve or any other water tempering method. Refer to the water temperature and flow specifications to find the best match of mixing valve or other tempering method for your facility. This valve should be located no more than four (4) feet (122 cm) from the machine and easily accessible to the operator.
• The incoming water pressure at the input of the pre-filtration system must be a minimum of 40 PSI (2.75 BAR) DYNAMIC PRESSURE and not to exceed 90 PSI (6.2 BAR).
• A shut off valve and water mixing valve must be installed before the pre-filtration system. It is important that the shut off valve and water mixing valve be mounted within the operator’s reach.
• The pre-filter assembly with regulator is wall mounted and has the dimensions of 16”H x 18”W x 6”D (41 cm x 46 cm x 15 cm). The incoming water connection to the pre-filter assembly is 1/2” NPT on the left hand side. All fittings and hoses for the output of the pre-filter assembly are included.
• The mixing valve must be accessible and located as close as possible to the pre-filtration system to minimize the loss of water temperature. The thermostatic mixing valve should be no further than four (4) feet (122 cm) from the DSD EDGE Reprocessor System. The mixing valve should be followed by a thermometer (with readings in Celsius), then followed by a bypass valve to a drain. Installation of a by-pass valve will assist in accelerating the stabilization of the water temperature supplied to the machine after long periods of inactivity. The valve should be located between the thermostatic mixing valve and the pre-filtration system. The output of the valve is to the drain. Opening this valve facilitates the ability to accelerate the water heat up time, and reducing the incidence of low temperature alarms on the DSD EDGE.
• The facility is responsible for the installation of the pre-filtration system, water mixing valve and the connection of the incoming water line to the DSD EDGE Reprocessor System and pre-filtration system.
• Ensure water hardness is less than 12 gpg (200 ppm) for optimal performance.
• De-ionized water (DI water), due to its corrosive nature, is not recommended for use in MEDIVATORS reprocessors.
• Reverse Osmosis (RO water) can be used however, not necessary since potable water can be used with the MEDIVATORS reprocessors. If RO water is utilized, the pre-filter system must still be used.
• One pre-filter system per DSD EDGE Endoscope Reprocessing System.
The DSD EDGE® Reprocessor System requires a thermostatic mixing valve with a temperature range of 95°F ± 4°F (35°C ± 2°C). It is the responsibility of the facility to purchase, install and maintain this device. PRODUCT BULLETIN: SUGGESTED LIST OF THERMOSTATIC MIXING VALVES FOR MEDIATORS ADVANTAGE PLUS AND DSD EDGE ENDOSCOPE REPROCESSOR, PN 50097-480 has a list of suggested thermostatic mixing valves. This document can be found at www.medivators.com.

NOTE: An emergency eye wash valve will not meet the water temperature specifications for the DSD EDGE Reprocessor and should not be used.

- Facility water pressure can vary greatly. The majority of thermostatic mixing valves require a pressure differential of less than 10 PSI (0.70 bar) between the hot and cold water supplies for optimum operation. Therefore Medivators requires the addition of pressure regulators on each of the hot and cold water supply lines prior to entering the thermostatic mixing valves. This too is the responsibility of the facility to purchase, install and maintain these devices if they are determined to be necessary. Consult a qualified plumber to assist in determining if pressure regulators are necessary.

The MEDIVATORS endoscope reprocessors do not require backflow protection for the incoming water supply, nor is a backflow protection device installed in the reprocessor.

If building or plumbing codes require backflow protection, then please consult your local codes, standards and/or guidelines, for applicable requirements.

NOTE: Photographs at the end of this document show an example of a backflow protection device installed on the incoming water line. Medivators does not require the use of these specific devices, nor endorse any specific manufacturer or brand. The photographs are representative of what a backflow device would look like at an actual customer facility, and are for reference purposes only.

**DRAIN**

The drain connection for the reprocessor is located on the rear of the cabinet at 25” (63.5cm) from the bottom of the DSD EDGE Reprocessor System cabinet. The installation kit provided with the reprocessor includes a 1-inch elbow and 36” (92cm) of a 1-inch diameter drain hose to be mounted during installation.

- The facility drain should not be higher than 18” (46cm) from the floor and vented to ensure the proper operation and draining of the DSD EDGE Reprocessor System. The supplied drain line must have a minimum 1” OD (2.5 cm). The opening of the facility drain must be at least 2” (5 cm) in diameter to accommodate the machine drain hose, two 1/4” air tank purge line and by-pass line.
- The facility drain must be capable of draining at least 5 gallons (19L) per minute.

**ELECTRICAL SUPPLY**

The 120V 50/60 Hz reprocessors are supplied with a hospital grade, grounded plug that can be connected to any standard 15A outlet. The 230V 50/60 Hz reprocessors require a 10A outlet. (230 V machines not available in North America)

- The outlet should be placed within operator reach for easy unplugging.
- Installation of a surge protector is recommended to protect the DSD EDGE Reprocessor System from power fluctuations.
- If an active vapor management system will be utilized, a duplex outlet will be necessary.

**VENTILATION**

It is a health and safety requirement to have sufficient air changes of a minimum of 10 air changes per hour in the room to dissipate the chemical vapor.

- BTU output approximately 1000 BTU’s
SPACE AND FLOORING
The reprocessor is equipped with casters for ease in moving into position. Self contained leveling pads can then be adjusted during installation to lift the unit off the casters and level the reprocessor. For optimal user-safety and reprocessor operation, it is recommended that the DSD unit always be placed directly on the floor, and not on an elevated platform type device. Sufficient space is needed for the reprocessor and all external components such as pre-filtration, water regulator, water shut off valve and the ventilation system (if applicable)

- Reprocessor Dimensions: 46” x 36” x 21” (H x W x D) (117cm x 91cm x 53cm). The height with lid open is 65” (163cm).
- 4” (10cm) of space is required to the right side of the unit.
- Units equipped with active vapor management systems require 12” (31cm) of space to the back wall.
- Units equipped with passive vapor management systems require 8” (20cm) of space to the back wall.
- Units not equipped with ventilation system require 4” (10cm) of space to the back wall.

DSD EDGE® ENDOSCOPE REPROCESSING SYSTEM SITE REQUIREMENTS CHECKLIST
The DSD EDGE Endoscope Reprocessing System Installation Checklist is utilized to ensure the installation site meets the required specifications. If all requirements are met, the site is suitable for the installation of the reprocessor.

<table>
<thead>
<tr>
<th>Section</th>
<th>Customer Site Requirements Criteria</th>
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<tbody>
<tr>
<td>3</td>
<td>Water supply provides a minimum flow rate of 3.2 GPM (12 liters/minute)</td>
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<tr>
<td>3</td>
<td>Water supply provides minimum of 40 PSI (2.75 BAR) and not to exceed 90 PSI (62 BAR)</td>
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<tr>
<td>3</td>
<td>Water supply is capable of providing a temperature of 95°F (±4°F), 35°C (±2°C) <strong>ON DEMAND</strong></td>
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<tr>
<td>3</td>
<td>Appropriate water pre-filtration requirements have been met, based on particulate analysis results. (NOTE: this action is strongly recommended)</td>
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<tr>
<td>3</td>
<td>Incoming water supply fed through a minimum 1/2&quot; (12.7 mm) lines.</td>
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<tr>
<td>3</td>
<td>Water hardness not greater than 12 gpg (200 ppm)</td>
</tr>
<tr>
<td>4</td>
<td>Intended drain outlet no more than 18” (46cm) from the floor</td>
</tr>
<tr>
<td>4</td>
<td>Drain requirements met for the installation site (5 GPM; 18.9 liters/min)</td>
</tr>
<tr>
<td>5</td>
<td>Fused outlet within 3 feet (1 meter) of the installation site</td>
</tr>
<tr>
<td>6</td>
<td>Site adequately ventilated to meet ventilation requirements for HLD use (A minimum of 10 air exchanges per hour required)</td>
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<tr>
<td>7</td>
<td>Proposed installation area has a level floor</td>
</tr>
<tr>
<td>7</td>
<td>Installation site accommodates the unit's dimensions (H46” x W36” x D21” or 117cm x 91cm x 53cm)</td>
</tr>
<tr>
<td>7</td>
<td>Adequate space for the lids to be fully opened (64”/162cm) from floor)</td>
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<tr>
<td>7</td>
<td>Adequate wall or under-cabinet space for installation of the water pre-filtration system</td>
</tr>
<tr>
<td>7</td>
<td>Adequate space to make plumbing connections to the unit (4”/10cm) required) on right side</td>
</tr>
</tbody>
</table>
Incoming waterline must be a minimum of 1/2" (12.7 mm) supplying a flow rate of 3.2 GPM (12.1/min) the pressure must be higher than 40 PSI (2.75 bar), but not higher than 90 PSI (6.2 bar).

Water at output of mixing valve must ON DEMAND maintain a constant temperature between 33°C and 37°C for proper machine operation.

* Temperature gauge showing Celsius

* Shut Off Valve

* By pass valve to the drain. Facilitates a rapid warm up of the hot water system after extended periods of inactivity.

* Drain

* Drain

* Indicates a customer supplied item

All plumbing is the responsibility of the customer. Please refer to the installation manual for water inlet and drain specifications.
Figure 2

Example of a DSD EDGE® Endoscope Reprocessing System Water System
By signing below, the customer acknowledges that; (1) The customer has reviewed the Site Requirements for the MEDIVATORS reprocessor(s) indicated on the face of this document; (2) The customer is solely responsible for meeting each of the specifications and requirements set forth in these Site Requirements, to ensure proper installation and performance of the reprocessor(s); (3) The customer is able to meet each of these specifications and requirements; and (4) Failure of the customer to comply with these Site Requirements and any deviation from the specifications set forth herein may compromise the functionality of the reprocessor(s), and/or may cause operational issues which will not be covered by the Medivators Inc. warranty, and are hereby disclaimed by Medivators.

Facility Representative: ___________________________ Title: ___________________________

(Print)

Signature: ___________________________ Email: ___________________________ Date: ____________