



Neptune® 2

Waste Management System

Installation, Operation and Maintenance Guide

120 V Rover-ULTRA

REF 0702-001-000

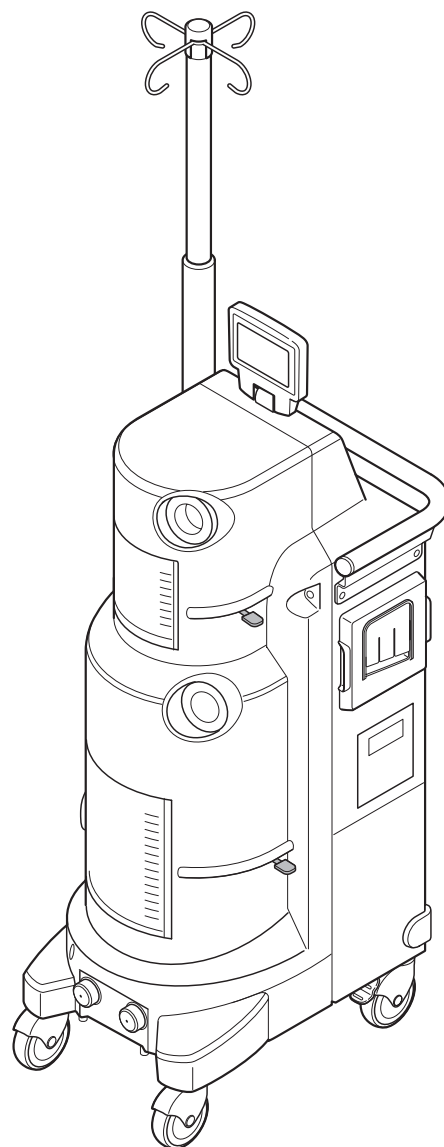
230 V Rover-ULTRA

REF 0702-002-000

Instructions For Use

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ENGLISH (EN)

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Contents

Important Information.....	4
Compliance Statements	4
Federal Communications Commission (FCC).....	4
Industry Canada (IC).....	4
For Use With	4
Indications For Use.....	4
Contraindications	4
Description	4
Accessories.....	4
User/Patient Safety.....	5
Features	6
Control Panel	7
Control Panel Display	8
Control Panel Button Label and Screen Icon Definitions.....	8
Fluid Level Display Screen Icon Definitions	8
Symbol Definitions.....	9
Instructions	9
To Prepare Rover for Collection	10
Audible Event Indicators	10
To Operate Rover During Collection.....	10
Overfill Event Indications and Actions.....	11
To Prepare Rover for Relocation After Collection.....	12
To Dock Rover for Waste Disposal.....	12
Wash Cycle Options.....	12
Cleaning	12
Periodic Maintenance.....	13
Troubleshooting.....	13
Error Messages.....	15
Storage and Handling	15
Specifications	16
Appendix	19
To Test the Rover Operation.....	19
To Test the Docking Station Operation	19
To Adjust System Settings	19
System Setting Options	20
To Use Facility Vacuum Source (optional).....	20
R&TTE Declaration of Conformity (DoC)	22

Important Information

The words WARNING, CAUTION and NOTE have special meaning and should be reviewed.

- WARNING:** Disregarding WARNING information may compromise the safety of the patient and/or healthcare staff and may result in injury.
- CAUTION:** Disregarding CAUTION information may compromise product reliability and may result in damage.
- NOTE:** NOTE information supplements and/or clarifies procedural information.



A triangle with an exclamation point alerts the healthcare professional to read and understand the accompanying instructions, especially the operating, maintenance, and safety information.

Compliance Statements

NOTE: The stated Federal Communications Commission (FCC) and Industry Canada (IC) information applies only to Rover units equipped with an enabled Stryker RF Module REF 0702-014-028. Contact Stryker regarding the RF Module feature and its availability.

Federal Communications Commission (FCC)

FCC ID: Q9R-0702014028

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: FCC regulations provide that changes or modifications not expressly approved by Stryker Instruments could void your authority to operate this equipment.

Industry Canada (IC)

IC: 4919A-014028

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment is in direct contact with the body of the user under normal operating conditions. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For Use With

The Stryker Rover (rover) is for use with the Neptune 2 Waste Management System, specifically the Neptune 2 Docking Station (docker).

Indications For Use

The Neptune Waste Management System is intended to be used in the operating room, pathology, surgical centers, and doctor’s offices to collect and dispose of surgical fluid waste as well as collect smoke generated from electrocautery or laser devices.

Contraindications

None known.

Description

The rover is a mobile unit used to suction and collect fluid waste and small debris from a surgical site in an operating room. Mobility allows the rover to be relocated to a waste disposal area where the rover’s collection canisters may be emptied.

Fluid waste is removed from the surgical site through suction tubes connected to inlet ports of manifold(s) installed in the rover. The fluid waste and small debris are collected in the canister(s) of the rover. The two canister design allows separate canister suction level measurement and volume measurement capability. However, both canisters use a single vacuum pump. A suction level decrease in either canister, due to an open port, may cause the suction level in the other canister to decrease. After collection, the rover is relocated to a docking station located in a waste disposal area. The rover interfaces with the docking station to empty the rover’s canister(s) of fluid waste. After disposal, the rover canister(s) are rinsed with clean water and Stryker-approved detergent, if desired, to facilitate cleaning.

The rover also has a height-adjustable, powered IV pole and a smoke evacuator.

Accessories*



WARNING: Use only Stryker-approved components and detergent, unless otherwise specified. Using other components may result in increased electromagnetic emissions or decreased electromagnetic immunity of the system. DO NOT modify any component or accessory.

Description	REF
Neptune Disposable Manifolds	0702-02X-XXX Series
Neptune Fluid Suction HEPA Filter	0702-034-000
Neptune Smoke Evacuator ULPA Filter	0702-040-000
Smoke Tubing, 3/8 inch x 10 feet	0702-045-023
Smoke Tubing, 7/8 inch x 10 feet	0702-045-025
PenAdapt™	0702-045-027

*If you need more information or a complete list of accessory information, contact your Stryker sales representative or call Stryker Neptune customer service at 1-800-550-7836. Outside the US, contact your nearest Stryker subsidiary.

PenAdapt is the trademark of Buffalo Filter.

User/Patient Safety*



WARNINGS:

- Only trained and experienced healthcare professionals should use this equipment. Before using any system component, or any component compatible with this system, read and understand the instructions. Pay special attention to WARNING information. Become familiar with the system components prior to use.
- The healthcare professional performing any procedure is responsible for determining the appropriateness of this equipment and the specific technique used for each patient. Stryker, as a manufacturer, does not recommend surgical procedure or technique.
- DO NOT use this system outside the scope of the defined indications for use (for example with Octopus® tissue stabilizer-type devices or Bean Bag body position-type devices).
- HIGH VACUUM and HIGH FLOW DEVICE [530 mm-Hg, 21 inch Hg, 71 kPa] – DO NOT apply high flow suction in applications that may result in severe injury or death, for example, passive chest drainage.
- DO NOT apply high flow suction or allow extended exposure of suction to tissue associated with procedures that require either no suction, low vacuum or low flow suction, for example, passive chest drainage. Failure to comply could result in injury to vital anatomical structures, and/or hemorrhage, both of which may result in serious injury and/or death.
- DO NOT use this device to provide suction to other suction powered accessories such as Pleur Evac® devices.
- DO NOT use this device with closed wound drainage systems.
- DO NOT use this device for postoperative use.
- ALWAYS consider the type of tissue associated with the surgical procedure BEFORE using this system.
- ENSURE that in low level suction applications that the appropriate suction device is used. IT IS RECOMMENDED that an alternate source of low level suction be available for low level suction applications (e.g. suctioning an airway or near vital anatomical structures).
- ENSURE the user has a clear understanding of the units of measure that are displayed. It is recommended that you set your units of measure to mm-Hg.
- ENSURE the level of suction has been checked and is appropriate for the planned procedure.
- ENSURE the device control panel can be clearly seen and is not covered by drapes or other objects.
- ENSURE that all users of this Neptune device are adequately trained on the appropriate use of the device and are fully aware of the applications for which it is intended to be used and the risks of using it improperly.
- ALWAYS close all unused ports and remove all unused tubing to maintain optimal suction levels. The suction levels of each canister are interdependent and linked to a common vacuum source. Failure to comply may result in the unexpected reduction of suction and patient injury.
- DO NOT use this system for applications that require a constant vacuum level.
- The suction level of this product relative to its vacuum limit setting may fluctuate significantly but will not exceed its limit. DO NOT use this system if vacuum fluctuation may cause patient injury. ALWAYS consider the type of surgical procedure before using this system.
- Upon initial receipt and before each use, operate the equipment and inspect each component for damage. DO NOT use any component if damage is apparent.
- Perform recommended maintenance as indicated in these instructions. Only trained and experienced healthcare professionals should maintain this equipment.
- DO NOT use this equipment in the presence of a mixture consisting of a flammable anesthetic and air or oxygen or nitrous oxide.
- Take special precautions regarding electromagnetic compatibility (EMC) when using medical electrical equipment like this system. Install and place this system into service according to the EMC information contained in this manual. Portable and mobile RF communications equipment can affect the function of this system.
- The Bloodborne Pathogens Standard provided by the United States Occupational Safety and Health Administration (US OSHA) requires all workers with exposure to “potentially infectious materials” wear the correct personal protection equipment and be offered immunization against hepatitis B. As an additional precaution, these workers should receive tetanus immunization and boosters when required.
- Handling biohazard waste is potentially dangerous. ALWAYS follow current local regulations governing biohazard waste to safely handle and dispose of surgical fluid waste.
- Filters, manifolds, suction tubing, and smoke tubing will contain surgical waste after use. ALWAYS handle these disposable accessories as “potentially infectious materials” after use. ALWAYS wear gloves and protective eye wear when removing and disposing of these disposable accessories.
- DO NOT use the system if leakage of surgical fluid waste occurs. Disconnect power immediately and call Stryker Neptune customer service.
- ALWAYS have more than one person unpack and lift this equipment off the shipping pallet.
- ALWAYS use the handle to move the rover. DO NOT push or pull the rover by grasping any receptacle or the outer surface. NEVER hang any heavy object from the rover handle.
- DO NOT allow fluid of any kind to spill directly onto the exterior surface of the electrically-powered rover.
- ALWAYS ensure the rover is providing suction (vacuum level display is greater than zero) and suction is present at the manifold ports when using an external pumping device connected to the same canister via suction tubing.
- If four or more liters of fluid will accumulate during a surgical procedure and an external pumping device will be used, like an arthroscopic pump, ALWAYS use the 20 liter canister to collect fluid waste. DO NOT use the four liter canister or both canisters at the same time. Failure to comply may cause the system to overflow if the system suction line is not removed or closed.
- ALWAYS keep hands away from the mating surfaces of the rover and docking station during the docking procedure to avoid a pinch point hazard.
- ALWAYS follow current local regulations governing procedure-specific suction levels to remove fluid waste safely from a surgical site.
- ALWAYS wear gloves and protective eye wear when performing the docking procedure.
- DO NOT use the rover until the docking station has been installed and tested properly.
- DO NOT use the rover until it has been tested properly to ensure functionality.
- DO NOT use the system with patients that are being treated with radioisotopes or hazardous chemotherapy agents.
- The canister scale and fluid volume display are not diagnostic tools. DO NOT use the scale or volume display to accurately calculate the amount of fluid loss from the patient.

* If you need more information, contact your Stryker sales representative or call Stryker Neptune customer service at 1-800-550-7836. Outside the US, contact your nearest Stryker subsidiary.

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Features (see figure 1)

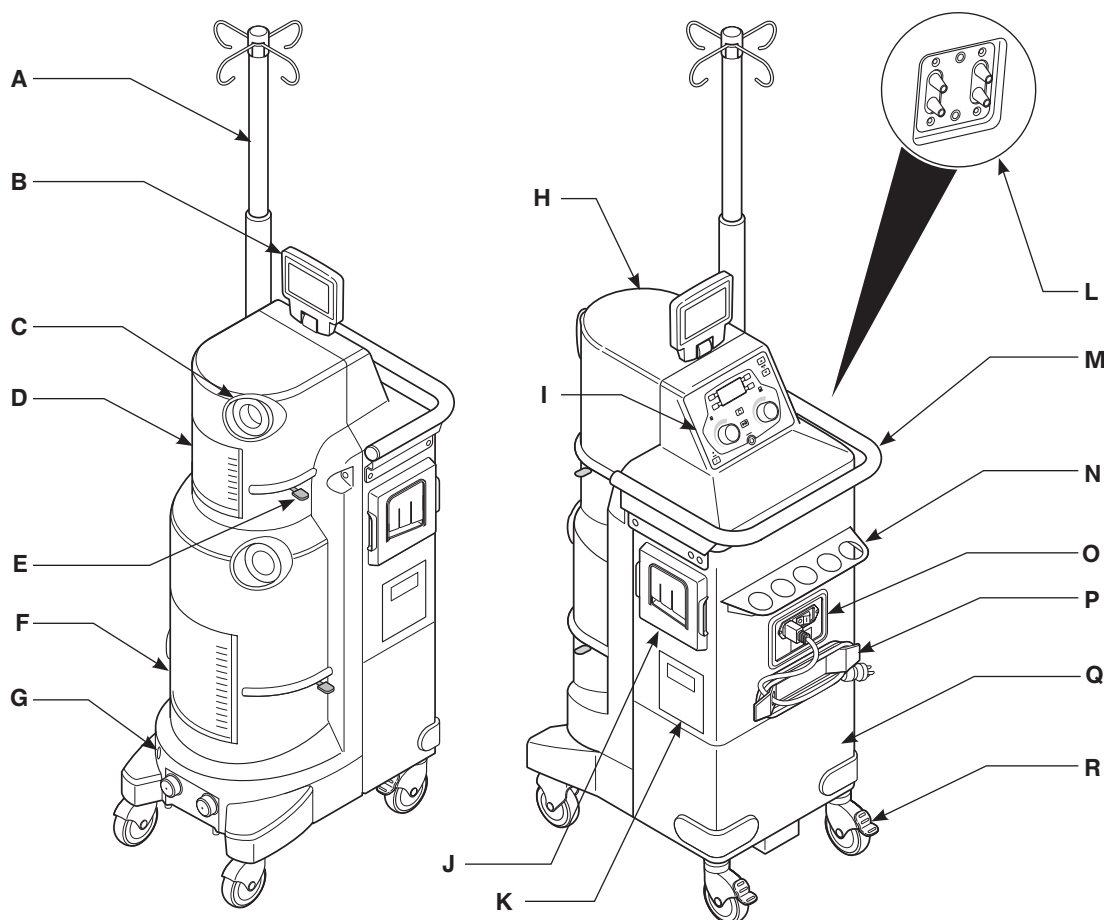


Figure 1 Feature Locations

A	Powered IV Pole - This motor-powered IV pole is capable of holding four three-liter [3000 cc] IV bags, one bag per hook.	I	Control Panel - Allows the operation of the rover using dials and push buttons. The panel also provides visual feedback through a control panel display.
B	Fluid Level Display - Provides a visual display of the fluid volume values of each collection canister. The display swivels in a 360-degree fashion and pivots for ease of viewing. The units of measurement may be changed to liters [L], cubic centimeters [cc], or milliliters [mL]. Display brightness may also be adjusted.	J	Smoke Evacuator Filter Compartment - Allows for the installation and removal of a disposable smoke evacuator filter with an Ultra Low Penetrating Air (ULPA) efficiency rating.
C	Manifold Port (two) - Allows installation of a disposable manifold into the canister. The port will close automatically when a manifold is removed. Closure prevents fluid leakage during transport and docking and prevents foreign objects from entering the receptacle.	K	Fluid Suction HEPA Filter Compartment - Allows for the installation and removal of a disposable fluid suction filter. This filter provides High Efficiency Particulate Air (HEPA) filtration of the air from the 20-liter and 4-liter canisters before the air is evacuated.
D	Small Fluid Collection Canister - Allows for the collection and containment of liquids. The four-liter canister receives fluid through an installed manifold during the collection of fluid waste. The canister contains a fluid level sensor to ensure the level does not exceed a pre-defined limit. The contents of the small canister may be emptied into the large canister.	L	Facility Vacuum Source Ports - Allow connection to a facility vacuum source if an alternate source of vacuum is required. If the ports are used, electrical power must be applied to the rover. The rover will not regulate the vacuum levels but will display vacuum and volume values and provide an audible indication if the canister fluid levels exceed their pre-defined limits.
E	Canister Access Door/Knob (two) - Each canister has its own access door controlled by its corresponding knob. These doors may be opened during operation to reveal the contents or closed during relocation to conceal the contents.	M	Handle - Allows for relocation and positioning of the rover.
F	Large Fluid Collection Canister - Allows for the collection and containment of liquids. The 20-liter canister receives fluid through an installed manifold during the collection of fluid waste. The canister contains a fluid level sensor to ensure the level does not exceed a pre-defined limit.	N	Manifold Holder - Allows for the storage of new, unused manifolds.
G	Infrared Communication Window - Allows data transfer between the dock and rover. Data transfer is necessary during the docking procedure.	O	Power Cord Receptacle/Switch - Connect facility power here using the rover power cord. Push the toggle switch to apply or remove facility power.
H	Speaker - Located inside the rover, provides audible event indicators. See the <i>Audible Event Indicators</i> table.	P	Power Cord Bracket/Cord - Store the power cord on the bracket. Use the power cord to connect the rover to facility power.
		Q	Single Vacuum Pump (not shown) - Creates suction for both canisters. If the suction level decreases in either canister, due to an open port, the suction level in the other canister may decrease.
		R	Casters (four) - Four swivel casters allow the rover its mobility. Two of the four casters have locks to prevent inadvertent movement during operation.

Features (cont'd)

Control Panel (see figure 2)

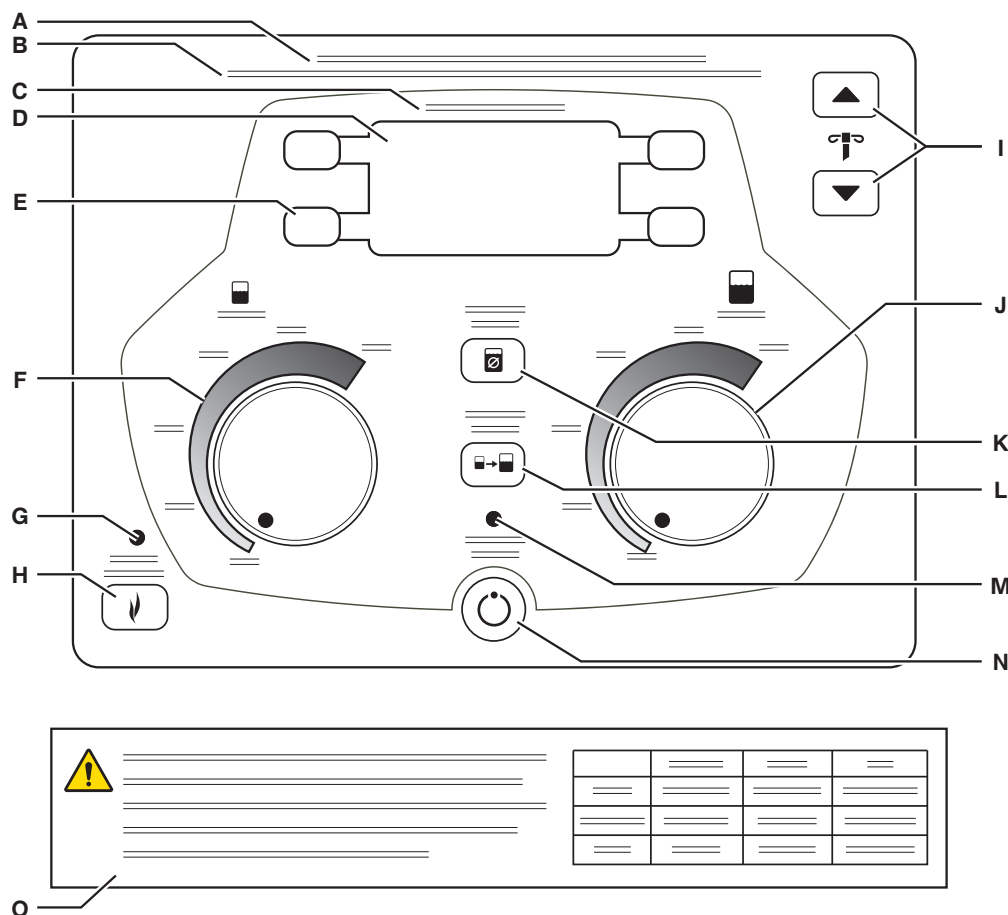


Figure 2 Control Panel

A	Max. Vacuum Limit: 21 in-Hg, 530 mm-Hg, 71 kPa - See <i>User/Patient Safety</i> for WARNING information.	I	IV Pole Height Adjust Buttons - Press the UP or DOWN arrow button to increase or decrease the height of the IV pole, respectively.																
B	The suction levels of each canister are interdependent and linked to a common vacuum source - See <i>User/Patient Safety</i> section for WARNING information.	J	20-liter Vacuum Limit Setting Dial - Turn the dial to adjust the vacuum limit level (fluid suction) of the 20-liter canister. Graduations of 20% are provided as an adjustment guide. The vacuum level status will be indicated on the control panel display as a limit SET value or real time ACTUAL value. See <i>Control Panel Display</i> .																
C	High Vacuum / High Flow - Indicates this equipment is a high vacuum, high flow medical device. See <i>User/Patient Safety</i> section for WARNING information.	K	Volume Reset Button - Press the button to reset the displayed fluid volume of both canisters to zero values.																
D	Control Panel Display - Provides vacuum level values for each canister, system status and error messages; also displays wash cycle options.	L	Empty Tank Button - Press the button to empty the contents of the small canister into the large canister.																
E	Control Panel Display Push Buttons (four) - Press the appropriate button when the display provides push button label areas.	M	Stand-by (Vacuum System) Indicator - Illuminates when the system's fluid suction capability is activated.																
F	4-liter Vacuum Limit Setting Dial - Turn the dial to adjust the vacuum limit level (fluid suction) of the 4-liter canister. Graduations of 20% are provided as an adjustment guide. The vacuum level status will be indicated on the control panel display as a limit SET value or real time ACTUAL value. See <i>Control Panel Display</i> .	N	Stand-by (Vacuum System) Button - Press the button to activate or deactivate the system's fluid suction capability.																
G	Smoke Evacuator Indicator - Illuminates when the smoke evacuation capability is activated.	O	Warning Label and Vacuum Range Adjustment Table - Read the WARNING and reference the appropriate vacuum values when adjusting the Vacuum Limit Setting Dials. The label and table are located below the control panel. WARNING: High Vacuum / High Flow [530 mm-Hg, 21 inch Hg, 71 kPa] – DO NOT apply high flow suction in applications that may result in severe injury or death, for example, passive chest drainage. <table border="1" style="margin-top: 10px; width: 100%;"> <thead> <tr> <th></th><th>mm-Hg</th><th>in-Hg</th><th>kPa</th></tr> </thead> <tbody> <tr> <td>HIGH</td><td>120 – 530</td><td>4.8 – 21.0</td><td>16.0 – 71.0</td></tr> <tr> <td>MEDIUM</td><td>80 – 115</td><td>3.2 – 4.6</td><td>11.0 – 15.0</td></tr> <tr> <td>LOW</td><td>50 – 75</td><td>2.0 – 3.0</td><td>7.0 – 10.0</td></tr> </tbody> </table>		mm-Hg	in-Hg	kPa	HIGH	120 – 530	4.8 – 21.0	16.0 – 71.0	MEDIUM	80 – 115	3.2 – 4.6	11.0 – 15.0	LOW	50 – 75	2.0 – 3.0	7.0 – 10.0
	mm-Hg	in-Hg	kPa																
HIGH	120 – 530	4.8 – 21.0	16.0 – 71.0																
MEDIUM	80 – 115	3.2 – 4.6	11.0 – 15.0																
LOW	50 – 75	2.0 – 3.0	7.0 – 10.0																
H	Smoke Evacuator Button - The smoke evacuator removes surgical smoke from a surgical site during cautery or laser surgery. The smoke evacuator has three distinct modes: manual, automatic, and off. Press the button once to access the manual mode of operation. In manual mode, the smoke evacuator will operate at the specified power setting whether smoke is present or not. Press the button a second time to access the automatic mode of operation. In automatic mode, the smoke evacuator will operate at the specified power setting if smoke is present. If smoke is not detected, the smoke evacuator will operate at a 20% power setting automatically. Press the button a third time to stop the smoke evacuator.																		

Features (cont'd)

Control Panel Display (see figure 3)

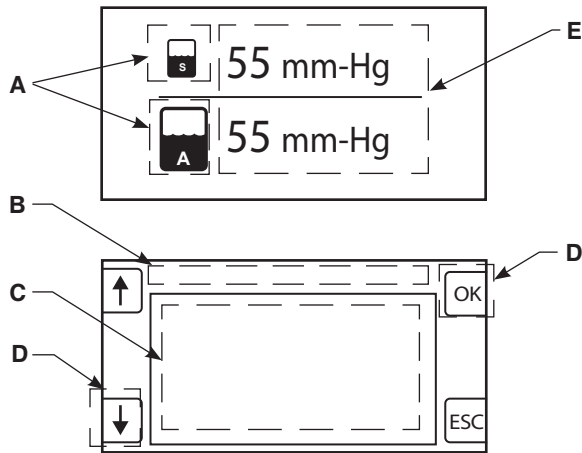


Figure 3 Control Panel Display

A	Canister Identification/Vacuum Level Status Areas - Two areas that identify the specific canister and its corresponding vacuum level status. 'S' indicates the vacuum limit SET value. The system may fluctuate significantly to a lower value, but will not exceed the limit set value. 'A' indicates the ACTUAL or real time vacuum value.
B	Title Area - Area indicates the type of message displayed, including warnings, wash cycle options, and errors.
C	Message Area - Area displays system warnings, wash cycle options, and error message information.
D	Push Button Label Areas - Four areas that correspond to the adjacent control panel display push buttons and indicate the button's function. See <i>Button Label and Screen Icon Definitions</i> .
E	Vacuum Level Areas - Two areas that provide vacuum level values for each canister (units of measurement may be changed). If the vacuum supplied through the facility vacuum ports exceeds a value of 22.5 in-Hg, the control panel display will no longer indicate a value, but will show dash marks [---].

Control Panel Button Label and Screen Icon Definitions

LABEL OR ICON	NAME	DEFINITION
	DOWN/DECREASE	Scroll down to highlight an option or decrease a value.
	UP/INCREASE	Scroll up to highlight an option or increase a value.
	ERROR INDICATOR	Access ERRORS screen to view error(s). See <i>Error Messages</i> .
	ESC	Close or ESCape a screen without accepting changes or selections and return to previous screen.
	OK	Accept changes and return to the previous screen. Select an error message and access message screen.
	RESET	Change or RESET the timer value when either the fluid suction filter or the smoke evacuator filter is replaced.
	SYSTEM SETUP	Access the System Setup screen to change system setting options.
	SELECT MARK	Icon indicates screen option is selected and applied.
	CONSULT INSTRUCTIONS FOR USE	Icon indicates the need to consult instructions for use, specifically error message information.

Fluid Level Display Screen Icon Definitions

LABEL OR ICON	NAME	DEFINITION
FULL	FULL	Icon indicates when a canister is full.
Error	ERROR	Icon indicates when a serious error has occurred. The system may not be used.
----	INDETERMINATE VALUE OR ERROR	Icon indicates the value of the volume is in transition or an error has occurred. The system may still be used.

Instructions

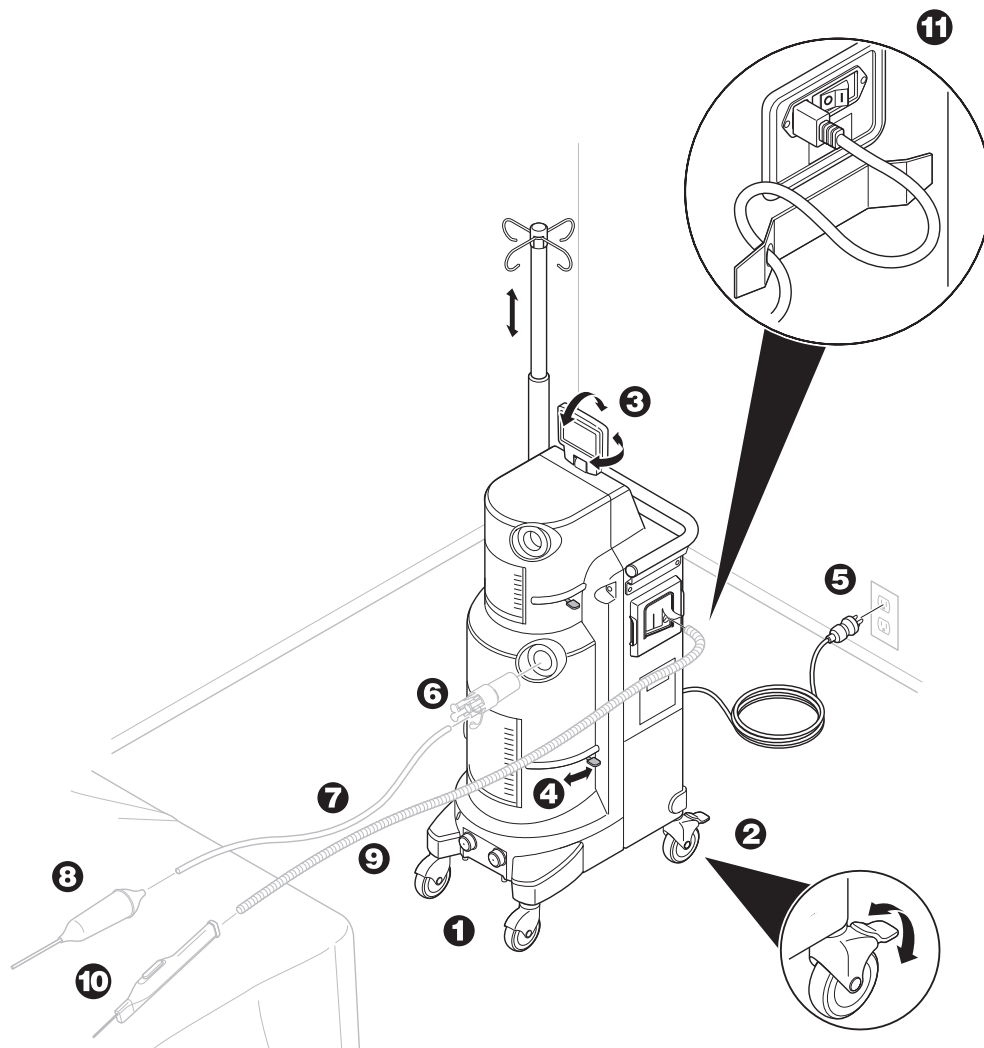


Figure 4 To Prepare Rover for Collection

Symbol Definitions

ON	OFF	4L 4-LITER	20L 20-LITER	IV POLE HEIGHT ADJUST	VOLUME RESET	EMPTY TANK	STAND-BY (FOR VACUUM SYSTEM)	SMOKE EVACUATOR

VACUUM LIMIT SETTING	MANIFOLD PORT	FLUID SUCTION FILTER COMPARTMENT	SMOKE FILTER COMPARTMENT	4L 20L FACILITY VACUUM SOURCE PORTS

Instructions

To Prepare Rover for Collection (see figure 4)



WARNING: DO NOT place the rover on a surface that exceeds the acceptable range of the inclined plane of operation. See *Specifications*.

NOTES:

- Ensure the rover has been docked, tested, and setup prior to use. If initial docking, testing, and setup are required or system settings need to change, see the *Appendix* section for instructions.
 - Ensure the smoke evacuator filter and fluid suction HEPA filter are operational before collection. See the instructions for use supplied with the filters for installation information.
 - See the *Audible Event Indicators* table for information about the audible sounds heard during the rover's operation.
 - The volume of the initial prefill fluid in the canister(s) is accounted for in the fluid level value indicated on the fluid level display. Foam does not affect this fluid level value.
1. Place the rover on a flat surface and in a convenient location within the operating room. Inspect the rover. See *Periodic Maintenance*.
 2. Lock the rover's two rear casters in place to prevent inadvertent rover movement.
 3. Orient the rover's fluid level display for optimal viewing.
 4. Open the canister access doors to allow viewing of the contents.
 5. Connect the rover to facility electrical power using the power cord.
 6. Install the disposable manifold(s) into the manifold port(s). Ensure the manifold(s) are locked into place. See the instructions for use supplied with the manifold for more information.
 7. Attach the suction tubing to the port(s) of the installed manifold(s).
 8. Attach a suction accessory to the end of the suction tubing if required.
 9. Install the smoke evacuator tubing to the smoke evacuator filter if required.
 10. Attach a smoke evacuator accessory to the end of the smoke tubing if required.
 11. Push the power switch to the ON position.
 12. Push the VOLUME RESET button on the control panel.
 13. See *To Operate Rover During Collection*.

Audible Event Indicators

TYPE	DESCRIPTION	EVENT
Button Feedback	One short beep	EMPTY TANK button pressed; Empty Tank started VOLUME RESET button pressed
Task Completion	Three short beeps	Power up initialization finished; Rover ready to use Empty Tank finished
Noncritical Error	One long beep	Error occurred that does not shut down system
Action Required	Three long beeps	Error occurred that shuts down system Volume level reaches adjustable "remaining capacity" Volume level reaches "full capacity"

To Operate Rover During Collection



WARNINGS:

- DO NOT touch or make contact with the rover and the patient at the same time.
- Follow the current local regulations governing biohazard waste to safely handle and dispose of surgical fluid waste.

NOTE: Ensure the rover has been prepared for collection properly. See *To Prepare Rover for Collection*.

1. Push the VACUUM SYSTEM button on the control panel to start fluid suction.
2. Rotate the appropriate VACUUM (LIMIT) SETTING dial to adjust the maximum suction level of the 4-liter and 20-liter canister.
3. When smoke evacuation is required, push the SMOKE EVACUATOR button on the control panel. The button has three modes of operation: manual, automatic, and off. Push the button once for manual mode, twice for automatic mode (AUTO), and a third time to stop the smoke evacuator. From the smoke evacuator screen on the control panel display, push the buttons next to the arrow icons to increase or decrease the evacuator power level as required (see figure 5).

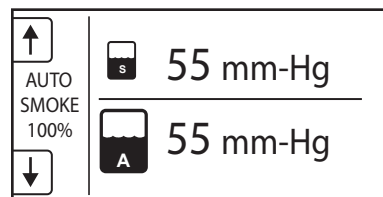


Figure 5 Smoke Evacuator Power Control Screen

4. When the IV pole requires height adjustment, push the IV pole UP or DOWN arrow buttons on the control panel to increase or decrease the pole height, respectively.

NOTES:

- To reset or zero the fluid level value on the fluid level display, push the VOLUME RESET button on the control panel. Both canister fluid level values will display a zero value. If power is lost and restored, the rover will display an accurate fluid level value.
 - If the 4-liter canister is full of fluid waste, verify the 20-liter canister has the capacity to receive the contents of the 4-liter canister. If sufficient capacity is available, push the EMPTY TANK button on the control panel. The EMPTY TANK action will continue until the 20-liter canister no longer has the capacity to receive fluid waste or 4-liter canister is empty. A maximum of three EMPTY TANK cycles are allowed between docking cycles. The number of EMPTY TANK cycles remaining is displayed when the button is pressed.
 - When pressed, the EMPTY TANK button will cause fluid suction from the 4-liter canister to stop temporarily for about 30 seconds. The vacuum level value of the small canister will fluctuate during this period. The 4-liter and 20-liter canisters will return to their previous fluid suction settings after the EMPTY TANK action is complete.
 - If a facility vacuum source is used and the EMPTY TANK button is pressed, fluid suction in both canisters will stop temporarily for 30 seconds.
5. If one or both canisters are full of fluid waste, or waste disposal is required, prepare the rover for relocation and waste disposal. See *Overflow Event Indications and Actions*, *To Prepare Rover for Relocation after Collection*, and *To Dock Rover for Waste Disposal*.

Instructions (cont'd)

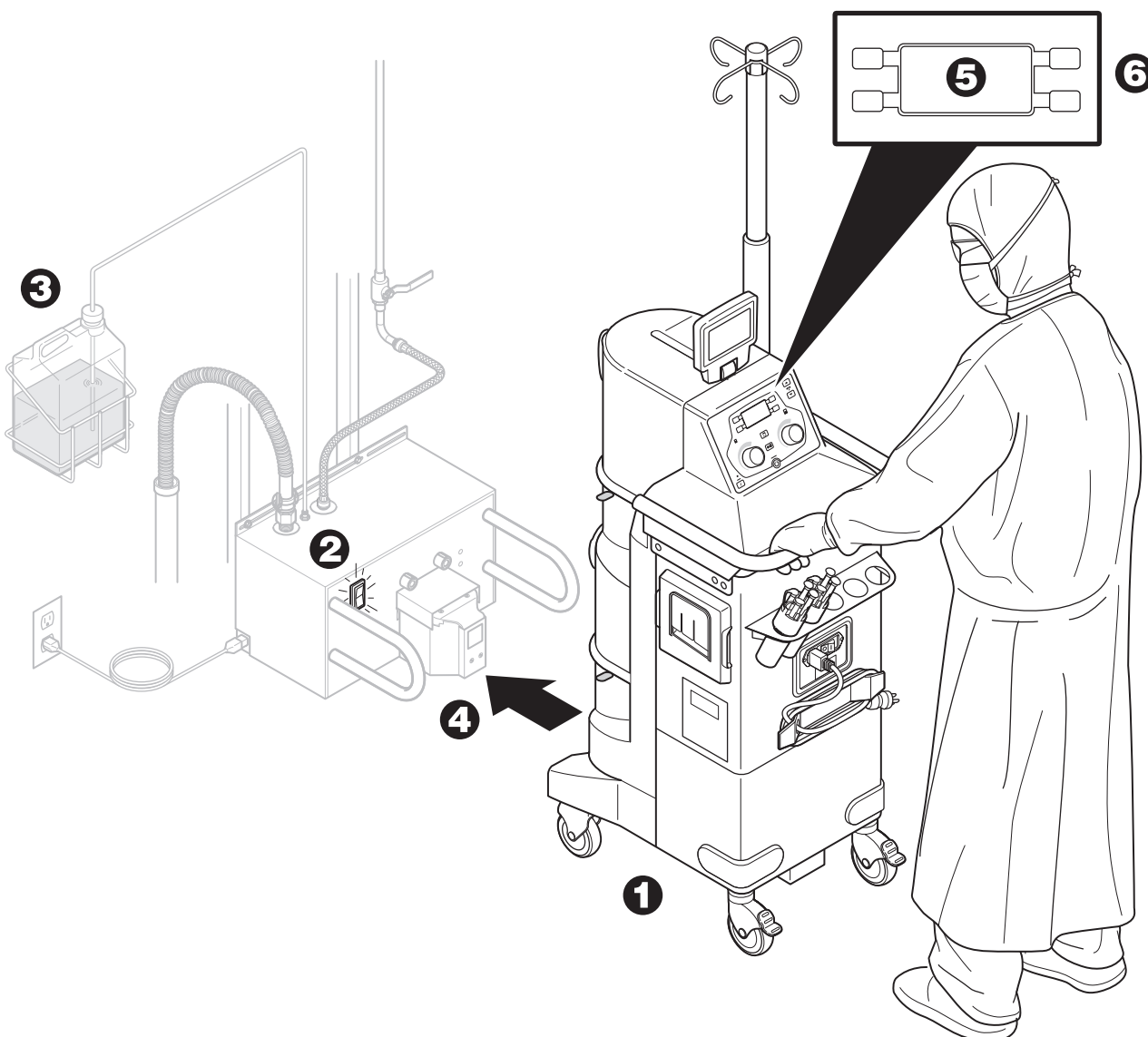


Figure 6 To Dock Rover for Waste Disposal

To Operate Rover During Collection (cont'd)

Overfill Event Indications and Actions

VOLUME CAPACITY CONDITIONS	INDICATIONS	ACTION
The volume level reaches an adjustable remaining capacity.	Three audible beeps.	The collection canister system is full. Relocate the rover and dispose of waste.
The volume level reaches full capacity.	Continuous audible beeps and the fluid level display screen flashes FULL.	Fluid suction will stop in a full canister. Remove the manifold(s) from the full canisters to prevent a possible overflow condition due to an external pressure source. Push the button next to the OK icon to stop the continuous audible beeps. Relocate the rover and dispose of waste.
If the volume level exceeds full capacity, the fluid level will cause a float to close the canister system and prevent fluid from escaping. However, the use of an external pressure source may still cause an overflow condition to occur.	Fluid suction will not work.	Relocate the rover and dispose of waste.

Instructions

To Prepare Rover for Relocation After Collection

1. Remove all disposable accessories, including suction nozzles, suction tubing, manifolds, and smoke evacuator tubing with any attachments from the rover. See the instructions for use supplied with the disposable accessories for proper handling and disposal procedures.

NOTE: If raised, the IV pole will decrease its height automatically when power is removed from the rover to ensure proper clearance during relocation.

2. Push the power switch to the OFF position.
3. Disconnect the rover from facility electrical power and remove the power cord. Wrap the power cord around the cord bracket.
4. Using the knobs, close the canister access doors to conceal the contents.
5. Clean the rover. See *Cleaning* section.
6. Unlock the two rear casters of the rover.



WARNING: ALWAYS remove the disposable accessories before relocating the rover. ALWAYS use the handle to retain control of the rover during relocation.

7. If the canisters are full or the rover contains fluid waste and will not be used within two hours, use the rover handle to push and relocate the rover to the docking station. See *To Dock Rover for Waste Disposal*.
8. If the canisters are not full and the rover will be used within two hours, use the rover handle to push and relocate the rover to the desired location. See *To Prepare Rover for Collection*.

NOTE: The rover does not have to be connected to facility power when not in use.

To Dock Rover for Waste Disposal (see figure 6)

1. Place the rover in front of the docking station.
2. Ensure the power switch on the docking station is in the ON position and illuminated.

NOTE: Before docking the rover, always allow the docker to warm up for at least 60 seconds after applying power to the docker.

3. Ensure the Stryker-approved detergent bottle is connected, has enough detergent to perform a wash cycle, and the end of the inlet tube is located at the bottom of the bottle.



WARNING: Keep hands out and away from the front of the docking station when attaching the rover.

4. Push the rover toward the docking station and between the guides until the rover and docking station attach automatically.
5. Verify the Select Cycle screen appears on the control panel display (see figure 7).

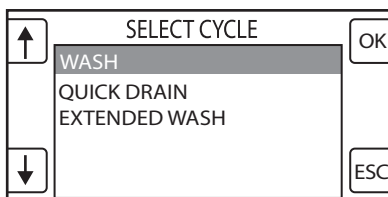


Figure 7 Select Cycle Screen

NOTES:

- From the Select Cycle screen, the rover may be detached by pushing the button next to the ESC icon. The "Wash" or "Extended Wash" cycles may be stopped by pushing the button next to the ESC icon.
 - During the first rover docking procedure, the information on the control panel display may appear inconsistent. The procedure may also take a few more minutes than specified in the *Wash Cycle Options* table. Both conditions are normal and temporary.
 - If a specific wash cycle is not selected within ten seconds, the "Wash" cycle (see *Wash Cycle Options*) will be performed automatically.
6. From the Select Cycle screen, push the buttons next to the arrow icons to scroll and highlight the appropriate wash cycle. Push the button next to the OK icon to select the highlighted cycle.

Wash Cycle Options

CYCLES	DESCRIPTION	TIME (approx.)
Wash	Cycle drains the contents, applies detergent to the interior walls of both canisters, and rinses the detergent with water.	5 minutes
Extended Wash	Cycle drains the contents, applies detergent to the interior walls of both canisters, and rinses the detergent with water. Three wash cycles occur and five minutes of soak time occurs between each cycle.	50 minutes
Quick Drain	Cycle drains the contents of both canisters.	2 minutes

7. After the cycle is complete, the Docking Complete screen will appear on the control panel display (see figure 8). Push the button next to the OK icon to detach the rover from the docking station. Pull the rover away from the docking station.

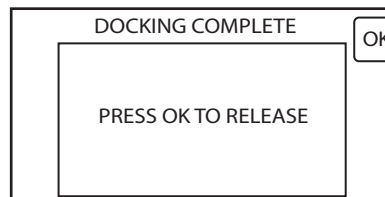


Figure 8 Docking Complete Screen

NOTE: Liquid or prefill will remain inside each canister after a cycle is complete. Prefill contains a specified amount of detergent for initiating the break down of fluid waste collected during the rover's next use.

8. Clean the docker. See *Cleaning* section.
9. If the rover will be used again, use the rover handle to push and relocate the rover. See *To Prepare Rover for Collection*. If the rover will no longer be used, use the rover handle to push and relocate the rover to a storage area.

NOTE: If this is the rover's first docking procedure, ensure the rover is tested and setup prior to use. See the Appendix section for instructions.

Cleaning

CAUTION: DO NOT use glutaraldehyde or similar chemical cleaners on the rover or docker.

1. Wipe the external surfaces of the rover and/or docker with a soft cloth dampened with a non-abrasive, hospital disinfectant.
2. Thoroughly wipe the infrared communication windows to ensure the rover and docker can communicate and function properly.
3. Inspect the rover. See *Periodic Maintenance*.

Periodic Maintenance

INTERVAL	ACTIVITY
Prior to each use and after each cleaning	Inspect the collection canister(s) and smoke evacuator filter cover for cracks, the two casters for failed locks, and the infrared communication window for damage or obstructions. Ensure there are no cuts in the power cord and no bent pins in the power cord receptacle. DO NOT use the equipment if damage is apparent.
Six months	Replace the fluid suction HEPA filter. Inspect the docker plumbing connections and hoses for leaks. Repair any plumbing to stop leakage as required. Replace leaking hoses as required.
As required	Check the level of the detergent in the dispensing bottle. Replace the bottle of detergent as required.

Troubleshooting*

PROBLEM	CAUSE	ACTION
Rover Operation		
The rover does not power up and the power switch is in the ON position.	Power cord is not connected or is not connected securely.	Connect the power cord or ensure the power cord is connected securely.
No vacuum pump action after the VACUUM SYSTEM button is pressed.	Solid or liquid material has entered the vacuum pump.	Remove the rover from use. Contact Stryker service.
	Collection canisters are full.	Dock the rover.
The rover's fluid suction is insufficient.	The fluid suction HEPA filter requires replacement.	Replace the fluid suction HEPA filter. See the instructions for use supplied with the filter.
	The vacuum limit setting dials are adjusted too low.	Adjust the vacuum limit setting dials to increase fluid suction.
	Unused manifold ports are open on either canister.	Close all unused manifold ports on each canister.
The rover's suction capability is lost.	The vacuum pump is damaged.	Remove the rover from use. Contact Stryker service.
The rover's vacuum level (fluid suction) cannot be adjusted or cannot reach the maximum level.	The vacuum pump or sensor is damaged.	Remove the rover from use. Contact Stryker service.
	Unused manifold ports are open on either canister.	Close all unused manifold ports on each canister.
A filter error appears on the control panel display.	The fluid suction HEPA filter has exceeded its useful life.	Replace the fluid suction HEPA filter.
	The smoke evacuator filter has exceeded its useful life.	Replace the smoke evacuator filter.
The rover is releasing a strong odor.	The fluid suction HEPA filter has exceeded its useful life.	Replace the fluid suction HEPA filter.
	Docker does not dispense detergent during the cleaning cycle. Bottle of detergent is empty.	Replace the bottle of the detergent. See the label instructions on the Stryker-approved detergent.
The smoke evacuator fails to operate after activation (smoke evacuator button is pushed).	The smoke evacuator is damaged.	Remove the rover from use. Contact Stryker service.
A smoke evacuator error appears on the control panel display.	The smoke evacuator filter is damaged.	Replace the smoke evacuator filter.
	The smoke evacuator filter is not installed.	Install the smoke evacuator filter. See <i>instructions for use</i> supplied with filter.
	The smoke evacuator filter is installed incorrectly.	Install the smoke evacuator filter again. See <i>instructions for use</i> supplied with filter.
IV pole height cannot be increased.	IV pole is supporting too much weight.	Remove excessive weight from IV pole.
	IV pole motor is overheated.	Wait ten minutes. Press appropriate IV pole height adjust button.
Fluid does not drain from the small canister into the large canister after pressing the EMPTY TANK button.	A fluid waste clog exists at the bottom of the small canister.	Remove the rover from use. Close all used and unused manifold ports. Turn both Vacuum Limit Setting dials to the maximum value. Press the EMPTY TANK button. Contact Stryker service if the clog persists.
An error occurs during EMPTY TANK procedure.	More than three EMPTY TANK procedures have been attempted.	Dock the rover.
	The contents of the small canister cannot fit into the large canister.	Dock the rover.
	The rover was unable to prefill the small canister	Dock the rover.
Sporadic electrical interference is experienced.	Electrical noise is present.	Turn off all the electrical equipment in the room.
		Relocate the electrical equipment to maximize the distance between the equipment. Increase spatial distance.
		Plug equipment into different outlets.

*DO NOT service this equipment. If you require service, contact your Stryker sales representative or call Stryker Neptune customer service at 1-800-550-7836. Outside the US, contact your nearest Stryker subsidiary.

Troubleshooting

PROBLEM	CAUSE	ACTION
Docking Operation		
The rover will not dock or an error occurs during docking.	The docker is not receiving facility water.	Ensure water inlet hose is connected correctly. Ensure the facility water supply valve is open. Dock the rover.
	Communication between the rover and docker is interrupted.	Pull the rover away from the docker. Remove and apply power to the docker. Wait 60 seconds. Dock the rover.
Docker does not dispense detergent during the cleaning cycle.	Bottle of detergent is empty.	Replace the bottle of the detergent. See the label instructions on the Stryker-approved detergent.
	The end of the detergent inlet tube is not immersed in the detergent.	Push the end of the detergent inlet tube to the bottom of the detergent bottle.
	The detergent inlet tube is not connected securely to the detergent inlet port of the docker.	Connect the detergent inlet tube to the detergent inlet port of the docker securely.
An error occurs during docking and the rover cannot be removed from docker.	The fluid connectors prevent the removal of the rover from the docker.	Remove and apply power to the docker. Wait 10 seconds. Pull the rover away from the docker.

Error Messages*

CODE	MESSAGE	ACTION	CODE	MESSAGE	ACTION
0.X	SYSTEM ERROR	CALL SERVICE	8.X	LEVEL SENSOR ERROR	CALL SERVICE
1.X	MEMORY ERROR	CALL SERVICE	9.0	IV POLE ERROR	CALL SERVICE
2.2	SYSTEM ERROR	CALL SERVICE	9.1	IV POLE ERROR	REDUCE POLE LOAD WEIGHT
3.0	DOCKER COMM ERROR	REMOVE ROVER - CYCLE DOCKER POWER - WAIT 60 SECONDS - DOCK ROVER AGAIN	9.2	IV POLE ERROR	WAIT 10 MIN - RETRY POLE
3.1	COUPLING ERROR	REMOVE ROVER - CYCLE DOCKER POWER - WAIT 60 SECONDS - DOCK ROVER AGAIN	10.0	SMOKE EVAC ERROR	CALL SERVICE
3.2	COUPLING ERROR	CALL SERVICE	10.1	SMOKE EVAC ERROR	CALL SERVICE
3.3	OFFLOAD ERROR	REMOVE MANIFOLDS FROM CANISTERS - DOCK ROVER AGAIN	10.2	NO SMOKE FILTER	SMOKE FILTER NOT DETECTED - REPLACE SMOKE FILTER
3.4	OFFLOAD ERROR	CALL SERVICE	11.X	VOL DISPLAY ERROR	CALL SERVICE
3.5	PREFILL ERROR	CHECK FACILITY WATER SUPPLY-DOCK ROVER AGAIN	12.0	LEVEL SENSOR ERROR	CALL SERVICE
3.6	PREFILL ERROR	CHECK FACILITY WATER SUPPLY-DOCK ROVER AGAIN	12.1	LEVEL SENSOR ERROR	CALL SERVICE
3.7	COUPLING ERROR	CALL SERVICE	12.2	LEVEL SENSOR ERROR	CALL SERVICE
3.9	COUPLING ERROR	CALL SERVICE	12.4	TEMP SENSOR ERROR	CALL SERVICE
3.12	DOCK INCOMPLETE	DOCK ROVER AGAIN	12.5	TEMP SENSOR ERROR	CALL SERVICE
3.13	DOCKER NOT READY	REMOVE ROVER - CYCLE DOCKER POWER - WAIT 60 SECONDS - DOCK ROVER AGAIN	12.6	LEVEL SENSOR ERROR	CALL SERVICE
4.0	LARGE CAN FULL	SMALL CANISTER VOLUME WILL NOT FIT IN LARGE - DOCK ROVER WHEN ABLE	12.7	LEVEL SENSOR ERROR	CALL SERVICE
4.1	VACUUM ERROR - SM	CALL SERVICE	13.0	VACUUM ERROR - LG	CALL SERVICE
4.2	EMPTY TANK ERROR	CALL SERVICE	13.1	VACUUM ERROR - LG	CALL SERVICE
4.3	EMPTY TANK ERROR	DOCK ROVER TO REMOVE DEBRIS FROM SMALL CANISTER	13.2	VACUUM ERROR - LG	CALL SERVICE
4.4	PREFILL ERROR	PREFILL TANK IS EMPTY - DOCK ROVER	13.3	VACUUM ERROR - LG	CALL SERVICE
4.5	PREFILL ERROR	PREFILL TANK IS EMPTY - DOCK ROVER	13.4	VACUUM ERROR - LG	CALL SERVICE
5.0	FILTER EXPIRED	REPLACE FLUID SUCTION HEPA FILTER	13.5	VACUUM ERROR - LG	CALL SERVICE
5.1	FILTER EXPIRED	REPLACE SMOKE FILTER	13.6	VACUUM ERROR - LG	CANISTER IS PRESSURIZED EXTERNALLY-TURN ON VACUUM SYSTEM
6.0	EMPTY TANK ERROR	CALL SERVICE	13.7	VACUUM ERROR - LG	CALL SERVICE
6.1	EMPTY TANK ERROR	CALL SERVICE	13.8	VACUUM ERROR - LG	CALL SERVICE
7.0	LEVEL SENSOR ERROR	CALL SERVICE	13.10	VACUUM ERROR - LG	CALL SERVICE
7.1	LEVEL SENSOR ERROR	CALL SERVICE	13.11	VACUUM ERROR - LG	CALL SERVICE
7.2	LEVEL SENSOR ERROR	CALL SERVICE	14.X	VACUUM ERROR - LG	CALL SERVICE
7.7	PREFILL ERROR	CHECK FACILITY WATER SUPPLY - DOCK ROVER AGAIN	15.1	VACUUM ERROR - SM	CALL SERVICE
7.8	PREFILL ERROR	CHECK FACILITY WATER SUPPLY - DOCK ROVER AGAIN	15.2	VACUUM ERROR - SM	CALL SERVICE
			15.3	VACUUM ERROR - SM	CALL SERVICE
			15.4	VACUUM ERROR - SM	CALL SERVICE
			15.5	VACUUM ERROR - SM	CALL SERVICE
			15.6	VACUUM ERROR - SM	CANISTER IS PRESSURIZED EXTERNALLY-TURN ON VACUUM SYSTEM
			15.7	VACUUM ERROR - SM	CALL SERVICE
			15.8	VACUUM ERROR - SM	CALL SERVICE
			15.10	VACUUM ERROR - SM	CALL SERVICE
			15.11	VACUUM ERROR - SM	CALL SERVICE
			16.X	VACUUM ERROR - SM	CALL SERVICE

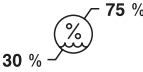
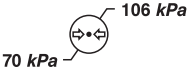
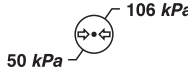
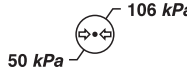
Storage and Handling

CAUTION: ALWAYS call Stryker Neptune customer service at 1-800-550-7836 before transporting or storing this equipment in freezing conditions. Failure to comply will cause the expansion of frozen internal fluid to damage the equipment.

To ensure the longevity, performance, and safety of this equipment, use the original packaging when storing or transporting this equipment.

*DO NOT service this equipment. If you require service, contact your Stryker sales representative or call Stryker Neptune customer service at 1-800-550-7836. Outside the US, contact your nearest Stryker subsidiary.

Specifications¹

Model:	Neptune 2 Rover-ULTRA		
REF:	0702-001-000	0702-002-000	
Electrical Power Requirements:	120 V ~, 60 Hz, 12.0 A, single phase 20 V $\overleftrightarrow{=}$ 3 A during docking procedure; rover receives power from docking station	230 V ~, 50 Hz, 9.0 A, single phase 20 V $\overleftrightarrow{=}$ 3 A during docking procedure; rover receives power from docking station	
Size:	19 inch [48.3 cm] width 23 inch [58.4 cm] depth 102 inch [259 cm] height (IV pole up) 70 inch [177.8 cm] height (IV pole down)		
Vacuum Range:	50 to 530 mm-Hg [2 to 21 in-Hg, 7 to 71 kPa] (measured with all ports closed)		
Vacuum Measurement:	$\pm 5\%$ of full scale (± 1.05 in-Hg)		
Weight:	300 lbs. [136 kg] - collection empty 353 lbs. [160 kg] - collection full		
Volume:	24-liter capacity (combination of 4 and 20 liter canisters)		
Volume Measurement:²	4-liter canister - ± 50 mL 20-liter canister - ± 150 mL		
Inclined Plane of Operation:	± 2.5 degrees		
Equipment Type:	 Class I, Type CF Applied Part		
Enclosure Protection:	IPX0 Ordinary Equipment		
Infrared Communication Windows:			
Protective Earth Ground:			
Approval:	 CSA International CAN/CSA-C22.2 No. 601.1 M90: 2003 BS EN 60601-1: 1997 UL 60601-1: 2003  AS/NZS 4268: 2008 N 17693		
Environmental Conditions:	Operation Temperature Limitation:  Humidity Limitation:  Atmospheric Pressure Limitation: 	Storage and Transportation (before initial use)   	Storage and Transportation (after initial use)   

¹Specifications are approximate and may vary from unit to unit or by power supply fluctuations.

²Volume measurements specified do not account for fluid evaporation or an inclined plane of operation that exceeds the specified range.

Specifications

Guidance and manufacturer's declaration - electromagnetic emissions		
The Neptune 2 ULTRA Rovers, REF 0702-001-000 and REF 0702-002-000, are intended for use in the electromagnetic environment specified below. The customer or the user of the Neptune 2 ULTRA Rover should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The Neptune 2 ULTRA Rover uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. The Neptune 2 ULTRA Rover is suitable for use in all establishments other than domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF emissions CISPR 11	Class A	
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

Frequency of Transmission:	2405 MHz - 2480 MHz [in 5 MHz increments]	Bandwidth per Channel:	3 MHz, Spread Spectrum [16-ary quasi-orthogonal]
Modulation:	Offset Quadrature Phase-Shift Keying [O-QPSK]	Effective Radiated Power (ERP):	953μW [maximum]

Guidance and manufacturer's declaration - electromagnetic immunity			
The Neptune 2 ULTRA Rovers, REF 0702-001-000 and REF 0702-002-000, are intended for use in the electromagnetic environment specified below. The customer or the user of the Neptune 2 ULTRA Rover should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the Neptune 2 ULTRA Rover, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.67 \sqrt{P}$ $d = 1.67 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.33 \sqrt{P}$ 800 MHz to 2.5 GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m) Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m 80 MHz to 2.5 GHz	

NOTE 1: At 80 MHz and 800 MHz the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Specifications

Guidance and manufacturer's declaration - electromagnetic immunity			
The Neptune 2 ULTRA Rovers, REF 0702-001-000 and REF 0702-002-000, are intended for use in the electromagnetic environment specified below. The customer or the user of the Neptune 2 ULTRA Rover should assure that it is used in such an environment.			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±2, 4, 6 kV contact ±2, 4, 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% U_T (>95% dip in U_T) for 0.5 cycle 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec	95% Reduction (10 ms) 60% Reduction (100 ms) 30% Reduction (500 ms) 95% Reduction (5 s)	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Neptune 2 ULTRA Rover requires continued operation during power mains interruptions, it is recommended that the Neptune 2 ULTRA Rover be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m @ 50 Hz CRT 1 A/m	Power frequency magnetic fields should be at levels characteristics of a typical location in a typical commercial or hospital environment.

NOTE: U_T is the a.c. mains voltage prior to application of the test level.

Recommended separation distances between portable and mobile RF communications equipment and the Neptune 2 ULTRA Rover			
The Neptune 2 ULTRA Rovers, REF 0702-001-000 and REF 0702-002-000, are intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Neptune 2 ULTRA Rover can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Neptune 2 ULTRA Rover as recommended below, according to the maximum output power of the communications equipment.			
Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $d=1.67\sqrt{P}$	80 MHz to 800 MHz $d=1.67\sqrt{P}$	800 MHz to 2.5 GHz $d=2.33\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.2	1.2	2.3
10	3.7	3.7	7.4
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Appendix

To Test the Rover Operation

NOTE: Before using the rover, perform an initial docking procedure. Failure to comply will result in pre-fill errors and prevent the rover from functioning properly. See *To Dock Rover for Waste Disposal*.

1. Connect the rover to facility electrical power using the power cord. Thread the appropriate plug of the power cord through the strain relief hole before connecting the cord to the rover (see figure 9).

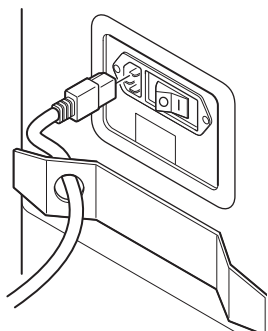


Figure 9 Power Cord Strain Relief

2. Push the vacuum system button to start the vacuum pump.
3. Adjust the vacuum limit setting dial of the canister to be tested to the maximum vacuum level. Ensure the value displayed on the control panel changes and eventually reaches the maximum vacuum level. If not, see *Troubleshooting* section.
4. Repeat steps 2 and 3 to test the other canister.
5. Push the up and down arrow buttons that control the IV pole. Ensure the IV pole functions correctly. If not, see *Troubleshooting* section.
6. Push the smoke evacuator button. From the smoke control screen, push the buttons next to the arrow icons to adjust the smoke evacuator power. Ensure smoke evacuation functions correctly. If not, see *Troubleshooting* section.

NOTE: See *To Adjust System Settings* to review the default settings and make changes if required.

To Test the Docking Station Operation

NOTE: Ensure the rover is functioning properly. See *To Test the Rover Operation*.

1. Install a disposable manifold into the rover and attach a suction tube to one manifold port. Ensure all the other manifold ports are capped.
2. Connect the rover to facility power and push the power switch to the ON position.
3. Push the vacuum system button to start the vacuum pump.
4. Place the attached suction tube into a sink or bucket of water. Rotate the vacuum limit setting dial to suction about two liters of water into each canister.
5. After each canister is filled, push the power switch to the OFF position. Remove the rover from facility power. Remove the disposable manifold and suction tube.
6. Place the rover in front of the docking station. Push the rover into the docking station using the guides for alignment purposes until attachment occurs automatically.
7. From the Select Cycle screen on the control panel display, push the button next to the arrow icons to scroll and highlight the desired Wash cycle. Push the button next to the OK icon to select the cycle.

NOTE: If a cycle is not selected, the Wash cycle will be selected as the default cycle.

8. During the Wash cycle, inspect all the docking station plumbing and connections for any leakage. If leakage occurs, repair as required.
9. After the cycle is complete, pull the rover away from the docking station.

To Adjust System Settings

1. Verify the power switch is in the OFF position.
2. Ensure the power cord is connected between the rover and facility power.
3. Push the control panel display button and the power button to ON simultaneously (see figure 10).

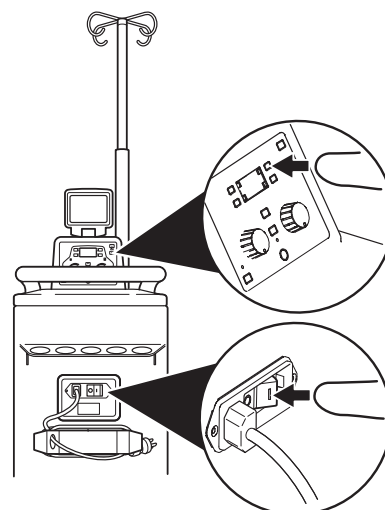


Figure 10 To Access System Setup

Appendix (cont'd)

To Adjust System Settings (cont'd)

4. Continue to push the display button until the Neptune 2 splash screen appears. The system setup screen will appear after the splash screen (see figure 11).

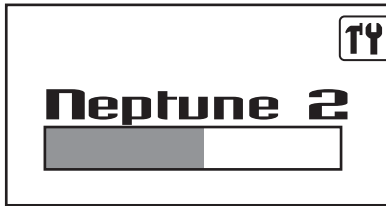


Figure 11 Neptune Splash Screen

5. From the System Setup screen, push the buttons next to the arrow icons to highlight the appropriate system setting (see figure 12).

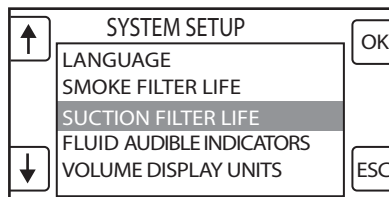


Figure 12 System Setup Screen

6. From the System Setting screen, push the buttons next to the arrow icons to highlight or adjust the appropriate setting option (see figure 13). See *System Setting Options* table for available setting options.

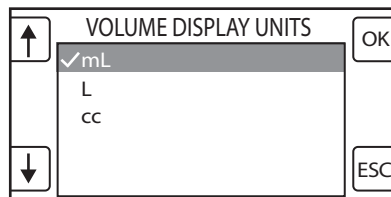


Figure 13 Sample System Setting Screen

7. Push the button next to the OK icon to select the appropriate system setting option. Push the button next to the ESC icon to cancel the selection and exit the screen.

NOTE: To reset the smoke filter timer or HEPA filter timer, see the instructions for use supplied with the filter for more information.

System Setting Options

SETTINGS	OPTIONS	FACTORY DEFAULT
Volume Display Units	mL [milliliter] L [liter] cc [cubic centimeters]	mL
Volume Display Brightness	0 - 100%	75%
Fluid Audible Indicators	4L canister 20L canister	600 mL (remaining capacity) 2000 mL (remaining capacity)
Vacuum Display Units	in-Hg [inches of mercury] mm-Hg [millimeters of mercury] kPa [kilopascals]	in-Hg
Vacuum Display Brightness	0 - 100%	75%
Vacuum Display Contrast	0 - 100%	70%
Smoke Filter Life	RESET TIMER TO ACCEPT	80 hours
Suction Filter Life	RESET TIMER TO ACCEPT	500 hours
Language	English French [Français] German [Deutsch] Italian [Italiano] Spanish [Español] Portuguese [Português] Polish [Polski]	English
Error History	N/A	N/A

To Use Facility Vacuum Source (optional)



WARNING: Ensure power is applied to the rover and the power switch is in the ON position when using a facility vacuum source with the rover. Applied power to the rover will ensure over-fill protection. Failure to comply may result in patient and/or healthcare staff injury.

NOTE: ALWAYS ensure the stand-by (vacuum system) indicator is not illuminated and the stand-by (vacuum system) button is OFF. Failure to comply will close the facility vacuum ports and prevent the use of the facility vacuum.

Appendix

To Use Facility Vacuum Source (cont'd)

1. Verify the rover is connected to facility power and the power switch is in the ON position (see figure 14).

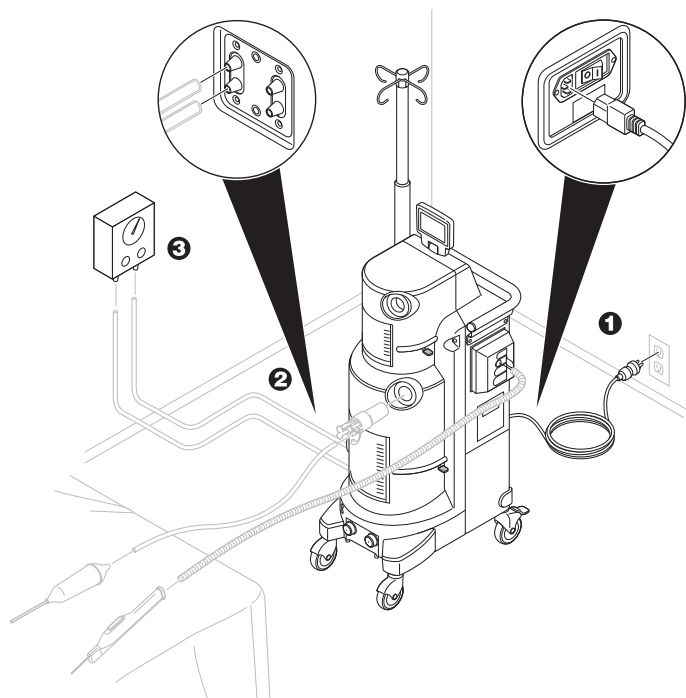


Figure 14 To Connect Facility Vacuum Source

2. Attach 0.25 inch [6.4 mm] inner diameter suction tubing between the facility vacuum source and the facility vacuum ports on the rover.
3. Apply and regulate the vacuum level provided to the rover from the facility vacuum source regulator.

R&TTE Declaration of Conformity (DoC)

We, **Name of company:** Stryker Instruments
Address: 4100 East Milham Avenue, Kalamazoo, Michigan 49001-6197
Authorized Representative: Jean-Yves Carentz
Contact Detail of Authorized Representative: Stryker France, ZAC Satolas Green Pusignan,
Av. de Satolas Green, 69881 MEYZIEU Cedex, France

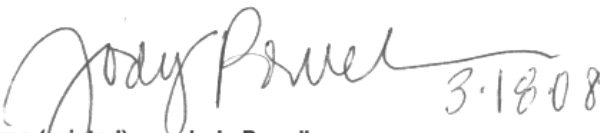
declare under our sole responsibility that the product:

Product Name: Neptune 2 Waste Management System Rover - ULTRA
Trade Name: Stryker Instruments
Type or Model: REF 0702-002-000 Rover ULTRA 230 V
Complies With: BS EN 60601-1-2:2001, EN 301 489-17 v1.2.1 (2002-04), EN 300 328 v1.7.1 (2006-10), EN 301 489-17 v1.3.1 (2002-08)

to which this declaration relates is in conformity with the *essential requirements and other relevant requirements* of the R&TTE Directive (1999/5/EC).

Supplementary information: None
Notified Body involved: TUV Rheinland Product Safety (GmbH)
Technical file held by: Stryker Instruments
Place and date of issue (of this Doc): Kalamazoo, Michigan USA, March 2008

Signed by or for the manufacturer:


Name (printed): Jody Powell
Title: Senior Manager, Regulatory Affairs

Hereby, Stryker Instruments, declares that this Short Range Device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

ES/DE/FR/IT/NL 0702-002-713
JA/ZH/KO 0702-002-717
SV/DA/FI/PT/NO 0702-002-730
PL/JEL 0702-002-750



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