



BioSpray®-10C

Surface Sanitation System

Operating and Maintenance Instructions



Read before operating.

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Thank you for purchasing this Goodway Surface Sanitization System. We appreciate your business and look forward to serving you in the future. As with all Goodway products, you can be assured that the finest quality components and workmanship have gone into this machine.

Please take a few minutes to read the following Operating and Maintenance Instructions. Please pay particular attention to the safety instructions and exercise caution when using this machine.

GOODWAY® TECHNOLOGIES CORPORATION HVAC & FACILITY MAINTENANCE SOLUTIONS

For Sales Call: 1-800-333-7467
For Service Call: 1-800-370-2855

GENERAL

The BioSpray®-10C unit is designed for intermittent use and will come with a 10 lb. capacity CO₂ tank. Continuous use for 20 minutes will result in freezing and the tank will need time to thaw.



IMPORTANT SAFETY INSTRUCTIONS

To prevent operator injury and damage to the equipment, please read and observe the following basic safety precautions:

1. Read and understand all instructions before using.
2. Keep this manual with the unit at all times.
3. Do not operate without eye protection or other necessary protective gear.
4. Consult SDS for all chemicals and for CO₂ OSHA exposure limits.
5. Consult Goodway or chemical manufacturer about mixing or using unspecified chemicals with this unit.
6. Service must be performed by qualified personnel.
7. Use only Goodway specified replacement parts.
8. If the machine does not operate properly or has been damaged or exposed to water, return it to factory for service.
9. Do not use unit with children or visitors in the immediate area.
10. Do not aim the spray toward electrical receptacles or in a direction not intended to be sanitized or disinfected.
11. Do not operate unit when fatigued or under the influence of alcohol or drugs.
12. Keep operation area clear of all persons.
13. Do not over reach or stand on unstable support. Keep good footing and balance at all times.
14. Follow maintenance instructions in manual.
15. Stay alert - watch you are doing.
16. Turn off all valves while the unit is not in use.
17. Make sure that all CO₂ cylinders are kept in an OSHA approved area and are supported so they don't tip over. Refer to OSHA section 1910.101 - Compressed Gases (General Requirements).
18. Establish if the environment is safe for operation.
19. Operate only in a well ventilated area.
20. Ensure that the CO₂ tank doesn't have a dip tube.

SAVE THESE INSTRUCTIONS

IDENTIFYING MAIN PARTS (BioSpray®-10C)



INSTALLATION/SETUP

1. Remove from packaging and inspect unit. If anything is damaged, contact Goodway Technologies immediately (800-333-7467).
2. Place the surface sanitization system on a flat surface.

Installing the CO₂ Tank (BioSpray®-10C):



1. Open the rear door



2. Detach and loosen both straps that will hold in the 10 lb. CO₂ tank



3. Carefully install new tank against brackets, on top of rubber pads on left hand side of the unit. Make sure the connector on the tank is facing to the right.



4. Attach the top and bottom strap and tighten until tank is snug and cannot move.



5. Tightly connect the hand nut to the CO₂ tank.



6. Close the rear door and latch the door.

OPERATING INSTRUCTIONS

1. Attach Goodway approved formula to spray gun. **NOTE:** To do this, carefully remove the foil seal on the top of the bottle, making sure that no debris gets into the bottle, as that will impede the spraying. Be careful not to overtighten the bottle, it only has to be snug to seal.
2. Connect the spray gun to the coil hose.
3. Connect the coil hose to the outlet connector on the top of the unit.
4. Open the CO₂ tank valve by turning it counter clockwise $\frac{3}{4}$ - 1 turn.
5. Open the regulator by turning it clockwise until the pressure reads between 24-26 PSI while in use. While not in use, the pressure may rise to 45 PSI+.
6. Spray evenly in an overlapping pattern until surface remains thoroughly wet.
7. For best results, we recommend Goodway alcohol based chemicals only.
8. Machine should always be used in upright position. Laying down on it's handle bars will cause it to freeze.

SPRAY GUN SETTINGS:



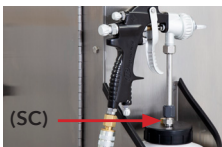
1. The top dial (**TD**) on the back of the spray gun should always be completely closed by turning the dial fully **CLOCKWISE**.



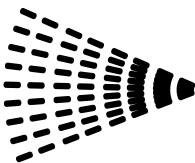
2. The bottom dial (**BD**) on the back of the spray gun controls the amount of formula to be sprayed. Before proceeding to step 3, begin by ensuring the dial is completely closed by turning the dial fully **CLOCKWISE**.



3. As listed on the siphon assembly cap (**SC**) for standard settings of a 24" spray distance at 72° F, turn the bottom dial (**BD Above**) **COUNTER-CLOCKWISE: 1.5 Turns** for Sanitization **3.0 Turns** for Disinfection



4. Open the bottom dial (**BD**) by turning it **COUNTER-CLOCKWISE** to the desired number of rotations for sanitation or disinfection (see Step 4 below). Count the number or rotations made by using the indicator mark (**IM**) located on the back of the bottom dial (**BD**).



1 SQ. FT.

SPRAYING PROTOCOL:

Do not apply near an ignition source. Spray evenly in an overlapping pattern until surface remains thoroughly wet for the desired time: At the proper setting listed in '**Spray Gun Settings**' Step 4, you should only have to make one pass in an overlapping pattern to apply enough solution to remain on the surface for the dwell time required.

INCREASING THE PRESSURE:

When increasing the pressure of this BioSpray® unit, be aware of the following:

1. The pressure may need to be increased for spraying longer distances or for the removal of bio-burdens.
2. The standard PSI rating for operation is 24-26 PSI while spraying. After intermittent use at higher pressure, the regulator should be reset to 24-26 PSI.
3. To increase the pressure, turn the regulator clockwise until you reach the desired pressure. The regulator will allow a pressure increase up to 100-120 PSI. Use ONLY intermittently at higher pressure, never continuous.
4. Increasing the pressure may also require an increase in chemical that is needed for the application. To do this, follow the spray gun settings instructions on page 6.

SHUT DOWN PROCEDURE:

1. Rinse the gun with clean water using the provided rinse bottle for 30 seconds.
2. Close the cylinder valve by turning it clockwise.
3. Squeeze the trigger of the spray gun half way to release the gas pressure in the coil hose.
4. Close the regulator by turning the valve counter clockwise.

CO₂ TANK REFILLS:

Refill or replace CO₂ tanks at any CO₂ Compressed Gas Center in your area. In some non-metropolitan areas, the best option may be an independent welding supply shop.

Do not use any CO₂ tank with a dip tube. Using a CO₂ tank with a dip tube will cause damage to the regulator.

Most CO₂ Compressed Gas Centers, including most independent welding supply shops located in virtually every community and area, will create an account for your company and provide pickup and delivery to refill or replace your tanks at little or no additional charge, or you can take your tanks to these centers to have them refilled or replaced.

Note:

Regular, industrial grade CO₂ is required for this application. Food grade CO₂ is used for human consumption, and it not required for sanitizing/disinfecting food grade surfaces.

TIP:

Depending on your usage, volume and needs, it is recommended to have an extra set of CO₂ tanks on hand, so that you can continue using your BioSpray® System while your empty CO₂ cylinders are being refilled.

WARNING:

Use only 10 lb. (BioSpray®-10C) preferably aluminum tank with a 7" diameter. If a spare tank is needed, please call Goodway Technologies at (800) 333-7467 toll-free or email us at goodway@goodway.com. Do not use any CO₂ tank with a dip tube.

OTHER OPERATING INFORMATION:

Please be advised, as part of the self-compensating regulator technology, you will hear a slight CO₂ release or "hissing" sound from the center of the knob on the self-compensating regulator from time to time. This is normal, and is a result of the regulator compensating for pressure changes in the CO₂ cylinder. This compensation, or "hissing", is very gradual and may only be audible for a short period of time and is the regulator maintaining pressure. The "hissing" is caused by the venting through a small hole in the center of this regulator.

WHEN A "HISSING" SOUND WILL OCCUR:

1. After filling cylinder and connecting to the system in a hot environment. (The temperature will rise in the cylinder, resulting in compensation).
2. After transporting unit/cylinder. (The temperature will decrease in the cylinder, resulting in compensation).
3. When CO₂ cylinder is low and almost empty. (The CO₂ is so low that pressure is changing constantly to accommodate the CO₂ release by the compensating regulator).
4. Unit sits idle for a period of time. (Environmental conditions may change, resulting in a temperature change in the cylinder).

PERSISTENT "HISSING" IS NOT NORMAL:

When the CO₂ valve is open, if there is a persistent, non-stop "hissing" sound, whether spray gun trigger is pulled or not, check the CO₂ coil hose to the spray gun for damage or leaks.

STORAGE AND MAINTENANCE

As a preventative maintenance measure, it is requested that the hoses be checked for wear and all sealing areas are checked for leaks after each use.

Also lubricate all hinges with a food grade mineral oil at least once per year.

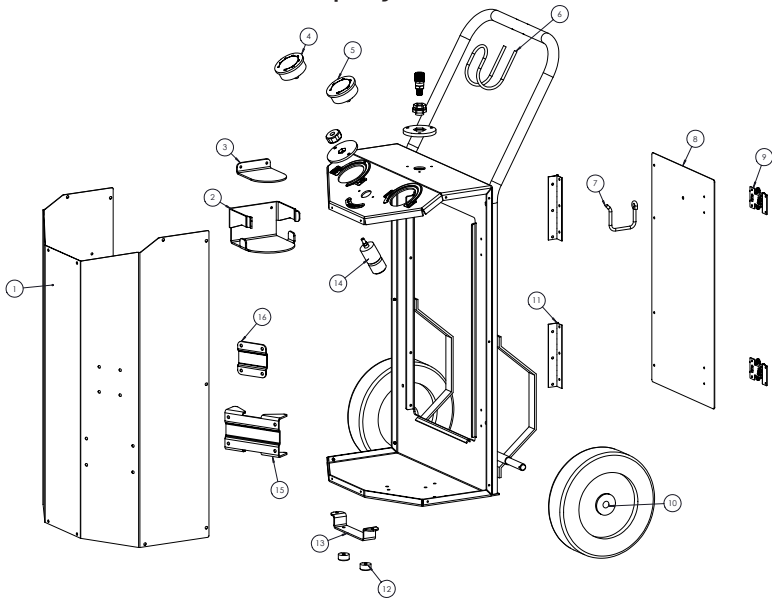
TECHNICAL INFORMATION

Operating Pressure	24-26 PSI
Working Tank Pressure	800-1000 PSI (Full Tank)
Operating Environmental Temperature	68°F +/- 20°F (20°C +/- 11°C)
Air Flow	5.4 CFM
Siphon Rate	160 mL/min (5.4oz/min)
Tank Safety Relief	3000 PSI
Regulator Safety Relief	150 PSI

TROUBLESHOOTING

Problem	Cause	Solution
Constant 'hissing' noise	Damage to spray gun or coil hose	Check both parts to be sure where the damage has occurred. Contact Goodway Technologies to acquire the proper replacement parts.
	Regulator frozen or damaged	Wait for the regulator to get back to room temperature, then continue use. Repair or replace regulator if damaged
Spray gun is sputtering	Debris in nozzle Packing nut is too loose, allowing air to leak	Remove the nozzle and spray the compressed air for 15 seconds. Tighten the packing nut, located near the trigger of the spray gun.

PARTS BREAKDOWN (BioSpray®-10C)



PARTS NUMBER (BioSpray®-10C)

Pos	Part Number	Description	Qty
1	SANI-091	Cover	1
2	SANI-096	Bottle Holder	3
3	SANI-100	Bottle Stop	1
4	SANI-014	0-160 PSI Pressure Gauge, Regulator	1
5	SANI-015	0-2000 PSI Pressure Gauge, Tank	1
6	811	Handle Hook	1
7	9672	Door Hook	1
8	SANI-092	Rear Door	1
9	SANI-009	Latch, Rear Door	2
10	6226	Wheel	2
11	SANI-101	Hinge, Rear Door	5
12	9008	Foot	2
13	SANI-099	Front Stand	1
14	SANI-016	Regulator	1
15	SANI-097	Tank Bracket	1
16	SANI-098	Stop Strap Bracket	1
17	SANI-034-ASSM*	Spray Gun Assembly	1
18	SANI-025-ASSM*	Coil Hose Assembly	1

*Not Shown



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