

# **TURBO TANK 2.0**

## **Commercial Grade**

### **Portable HVACR Rinsing Sprayer**



**Model No. 4781-00**



Scan for Product  
& Warranty Info.

- **High Flow Portable HVAC Coil Rinsing Sprayer**
- **Extremely Portable – NO MORE SEARCHING for Water Connections**
- **Optimal 150 psi Water Pressure – Rinse Quickly and Effectively**
- **High-Capacity Li-Ion Rechargeable Battery**
- **Improved Brass Hardware for Commercial Grade Durability**
- **Perfect for Wall Splits, Air Handlers, Condensers, and Rooftop Units**

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# CONGRATULATIONS!

Thank you for your purchase of Nu-Calgon's Turbo Tank 2.0 Commercial Grade Portable HVACR Rinsing Sprayer. We have designed this product to make your daily HVACR maintenance work easier and more effective. No more searching for hard to access water connection or lugging around long water hoses. This is specially designed to be used to rinse air cooled coil after a Nu-Calgon cleaner has been applied independently. We are very proud of this product, and we hope that you are equally satisfied with the quality and performance.

Thank you for your support in choosing Nu-Calgon products!

## OPERATING INSTRUCTIONS

Please read these instructions and warnings carefully before using your Turbo Tank 2.0 HVACR Rinsing Sprayer.

### **WARNING:**

Small parts may cause choking hazard

### **IMPORTANT SAFETY INSTRUCTIONS**

When using the Turbo Tank 2.0 HVACR Rinsing Sprayer, these basic precautions should always be followed:

1. DO NOT FILL THE TURBO TANK HVACR RINSING SPRAYER WITH ANY NU-CALGON COIL CLEANER OR OTHER LIQUID OTHER THAN CLEAN WATER. SERIOUS INJURY MAY OCCUR. ALSO, CLEANERS CAN DAMAGE THE SPRAYER AND WILL VOID THE WARRANTY.
2. ALWAYS APPLY NU-CALGON COIL CLEANER SEPARATELY IN A PUMP-UP SPRAYER OR WITH AN AEROSOL CANISTER. COIL CLEANER CAN ALSO BE APPLIED USING THE COIL GUN (PN: 4774-0 AVAILABLE SEPARATELY) ATTACHED TO THE TURBO TANK WITH THE INCLUDED ADAPTER. THE TURBO TANK HVACR RINSING SPRAYER IS MEANT TO BE A RINSING TOOL AND ONLY TO BE USED WITH CLEAN WATER.
3. CONNECT THE TURBO TANK HANDLE WITH THE SUPPLIED BRASS CONNECTOR TO NU-CALGON'S COIL GUN (PN: 4774-0) TO USE NU-CALGON COIL CLEANERS. NEVER POUR COIL CLEANER INTO THE TURBO TANK ITSELF.
4. STUDY THE PRODUCT THOROUGHLY BEFORE OPERATING IT. BE FAMILIAR WITH ITS OPERATING CONTROLS.
5. DO NOT OPERATE THE PRODUCT UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.
6. DAMAGED HIGH-PRESSURE HOSES CAN BURST AND CAN CAUSE A POTENTIALLY HAZARDOUS SITUATION AND OR INJURY. HIGH PRESSURE HOSES SHOULD NOT BE KINKED, CRUSHED, TWISTED, OR DAMAGED IN ANY WAY. SHOULD THIS OCCUR, REPLACE THE HIGH-PRESSURE HOSE.
7. ONLY USE WATER BETWEEN 40°F TO 105°F.

## WARNING

### TO REDUCE THE RISK OF INJURY:

1. ONLY use the SUPPLIED charger for the supplied battery. Only use the SUPPLIED 18VDC adaptor when using the Turbo Tank 2.0 HVACR Rinsing Sprayer with wall power. Any other device may cause damage to your machine.
2. Do not pull the cord, carry the unit by the cord, use the cord as handle, or pull the cord around sharp edges. Keep the cord away from heated surfaces.
3. Use only Nu-Calgon's recommended accessories and replacement parts. Do not use with a damaged cord or plug. Do not use the Turbo Tank 2.0 HVACR Rinsing Sprayer if it is damaged, dropped into water, or when it is not working as it should.
4. This is NOT a toy. Close attention is necessary when used near children.
5. Keep the nozzles free of obstructing objects. Do not use the Turbo Tank 2.0 HVACR Rinsing Sprayer when the nozzle clogged; keep free of dust, lint, hair, and anything that may reduce or obstruct flow.
6. Keep hair, loose clothing, fingers, and all body parts away from moving machine parts.
7. Do not use without the water filter in place.
8. Turn off all controls before unplugging.
9. Using improper voltage may result in damage to the motor and possible injury to the user. The proper voltage is listed on the cover plate.
10. Do not direct the water jet toward the unit itself, electrical parts, or towards other electrical equipment.
11. Do not alter the original diameter of the spray head nozzle.
12. DISCHARGE residual pressure before disconnecting the Turbo Tank HVACR Rinsing Sprayer hose.
13. Before using the Turbo Tank 2.0 HVACR Rinsing Sprayer, CHECK that the screws are fully tightened and that there are no broken or worn parts.
14. DO NOT USE with any chlorine-based type cleaners, detergents or any coil cleaner.
15. Do not fill the water container with anything but clean water or your warranty will be VOID.
16. Never submerge the machine in water.
17. Do not allow the system to freeze. Always empty and store indoors. Freezing will damage the pump and water lines.
18. Do not remove cover plate or attempt to disassemble your machine. This will void all warranty and may cause serious injury.
19. Do not spray water directly at the eyes or mouth.

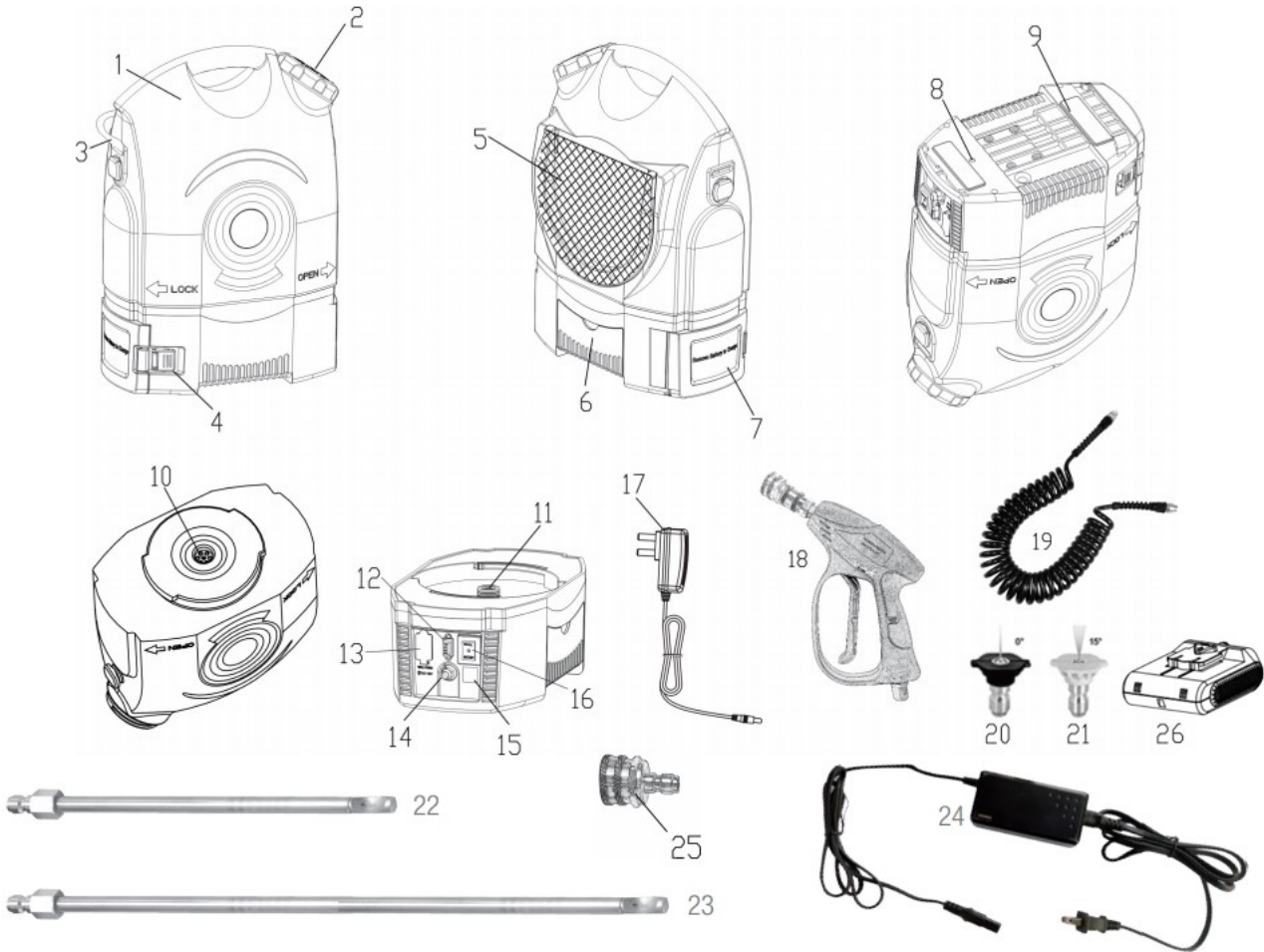
## LIMITED WARRANTY

Nu-Calgon will warrant the product for a period of 12 months from the date of purchase to be free of defects in material or workmanship. Keep your original sales invoice to validate the warranty period.

If the product should become defective within the warranty period, we will repair or replace any defective parts free of charge. **Return the sprayer to a Nu-Calgon authorized wholesaler to initiate the process of repairing or replacing the defective part. Typically, the sprayer can be remedied in the field - do not send back to Nu-Calgon without prior authorization.**

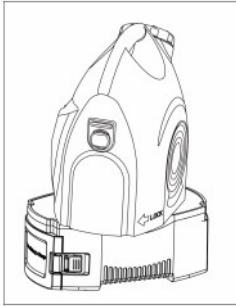
The warranty does not include usual wear and tear, damage resulting from accident or unreasonable use of the product, unauthorized repairs or parts that does not belong to the product. The sprayer is designed for clean water only. The use of any coil cleaner will void warranty since it will damage the wetted parts of the sprayer.

## PARTS DIAGRAM

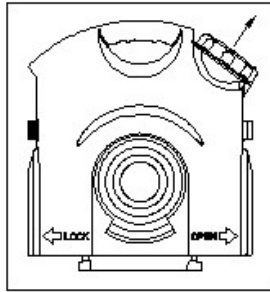


- |                              |   |
|------------------------------|---|
| 1. Water tank                | 15. Instructions QR Code                                    |
| 2. Lid                       | 16. Power Switch  |
| 3. Adjustable Shoulder Strap | 17. Battery Charger (4781-02)                               |
| 4. Battery Cover Clasp       | 18. Commercial Spray Gun (4778-21)                          |
| 5. Mesh Storage Compartment  | 19. Self-Recoil Hose (4778-20)                              |
| 6. Cover for AC/DC Adaptor   | 20. Red Straight Nozzle (4778-13)                           |
| 7. Battery Cover Door        | 21. Yellow 15° Nozzle (4778-14)                             |
| 8. Drain Hole                | 22. Mini-Split 90° spray wand (4778-10)                     |
| 9. Rubber Pad                | 23. 39-inch 90° spray wand - Available Separately (4778-11) |
| 10. Tank Water Outlet Valve  | 24. 18VDC-120VAC Wall Adapter (4781-04)                     |
| 11. Base Water Inlet         | 25. Coil Gun Adapter (4778-26)                              |
| 12. 10A Fuse (4781-03)       | 26. Lithium Battery Pack (4781-01)                          |
| 13. 18v Wall Adapter Inlet   |   |
| 14. Hose Inlet               |   |

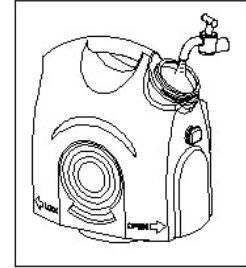
# ASSEMBLY PROCEDURE



Take off the water tank

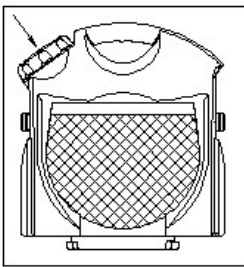


Turn lid counterclockwise to remove.



Fill tank with fresh water.

**IMPORTANT:** Temperature should be 40°F to 105°F



Replace the lid by turning clockwise to secure it in place. Reattach water tank to base following the reverse steps.



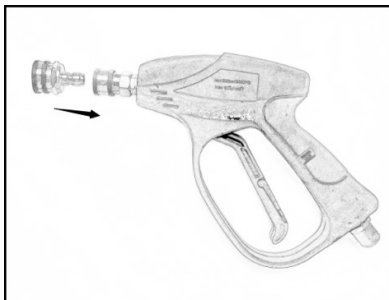
**ATTACH Spray nozzle:**

Connect spray nozzle by pulling back on the quick connector and fully inserting the nozzle and fully releasing the quick coupling



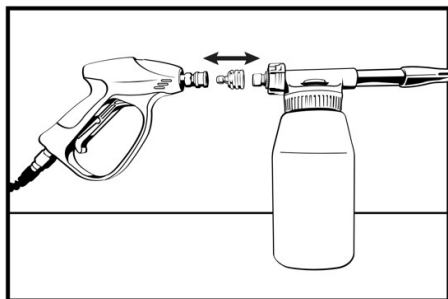
**OPTION: MINI-SPLIT WAND**

Connect the spray wand by pulling back on the quick connector and fully inserting mini-split wand (for cleaning the blower) and fully releasing the quick coupling.



**OPTION: COIL GUN ADAPTER**

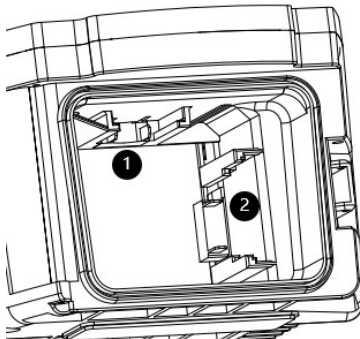
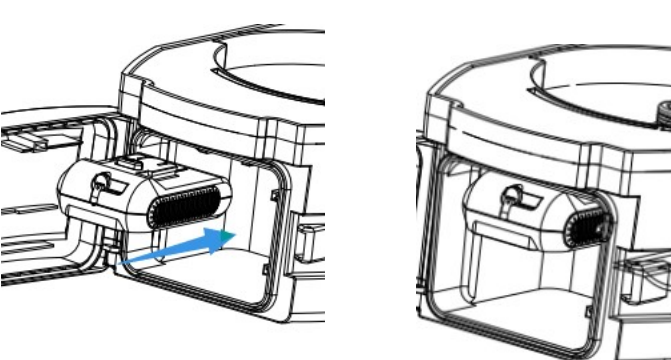
Connect the Coil Gun adapter by pulling back on the quick connector and fully inserting the adapter.



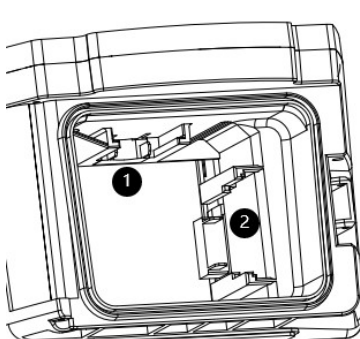
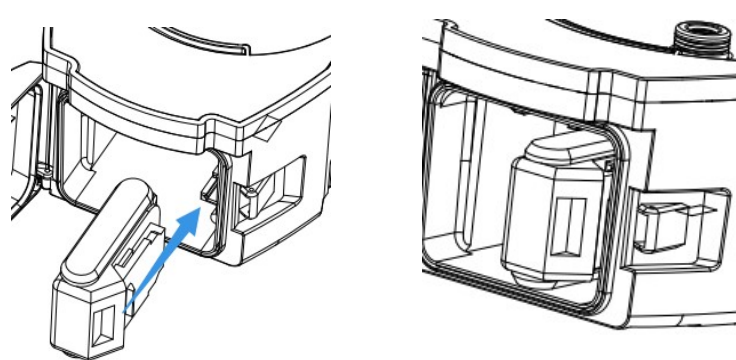
**ATTACH THE NU-CALGON COIL GUN (SOLD SEPARATELY, P/N 4774-0)**

Connect the Coil Gun to the female end of the Coil Gun Adapter. Fill the Coil Gun bottle with a Nu-Calgon coil cleaner and rotate the dial on the mixing head to select the desired mixing ratio.

## INSTALLING THE SUPPLIED BATTERY

 <p>#1 - This port is for the supplied Turbo Tank Lithium battery.</p> <p>#2 - The Turbo Tank 2.0 is compatible with other 18-21V batteries including Milwaukee® and DeWalt®.*</p>	 <p>The supplied battery arrives with a 30% charge. Please charge the battery completely before first use.</p> <p>Mount the supplied battery pack into the #1 battery interface of the machine.</p>
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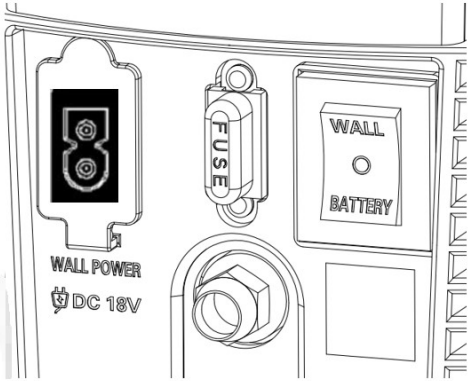
## INSTALLING ALTERNATE 18-21V BATTERIES

 <p>#1 - This port is for the supplied Turbo Tank Lithium battery.</p> <p>#2 - The Turbo Tank 2.0 is compatible with other 18-21V batteries including Milwaukee® and DeWalt®.*</p>	 <p>Mount other brand battery pack into the #2 battery interface of the machine.</p>
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*\*This product is not manufactured or distributed by Milwaukee® or DeWalt®.*



# OPERATION

 <p>P/N 4781-04</p>	 <p>P/N 4781-01</p>
<p><b>FOR USE WITH DC 18V WALL POWER</b></p> <ol style="list-style-type: none"><li>1. Plug the 120VAC - 18VDC wall adapter into the Wall Power plug hole.</li><li>2. Press <b>WALL</b> on the power switch to turn on.</li></ol>	<p><b>FOR USE WITH RECHARGEABLE BATTERY PACK</b></p> <ol style="list-style-type: none"><li>1. Install battery the pack into battery case compartment.</li><li>2. Press <b>BATTERY</b> on the power switch to turn on.</li></ol>

With normal use, air can get trapped in the hose. We recommend the following steps to purge air out of your system and get the maximum amount of pressure from your new Turbo Tank 2.0 HVACR Rinsing Sprayer.

**PURGE AIR FROM THE SYSTEM:** To purge air, turn the unit on "WALL" or "BATTERY." Point the nozzle into water tank and squeeze lever until steady stream of water exits the hose.

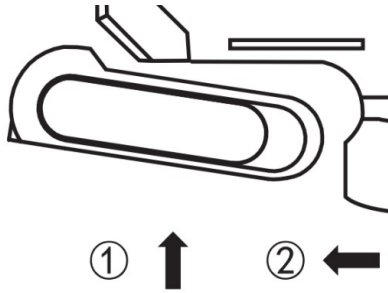
**FOLLOW THESE STEPS AFTER EACH TIME YOU REFILL YOUR TANK:**

1. Fill the tank with water and cap tank.
2. For 18V AC/DC adaptor Use: Connect into 18V AC/DC power port. Turn unit on "WALL."  
For Internal Sprayer Battery: Insert a charged battery and switch the unit to "BATTERY."
3. Turn the power on and run for approximately 30 seconds or until a steady stream of water is present.
4. Connect the yellow or red nozzle, mini-split wand, Coil Gun (sold separately), or 39" wand (sold separately) to spray gun.

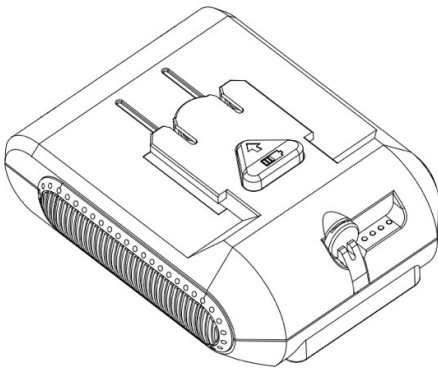
## CHARGING THE BATTERY

**WARNING: DO NOT OPERATE SPRAYER WHILE CHARGER THE BATTERY**

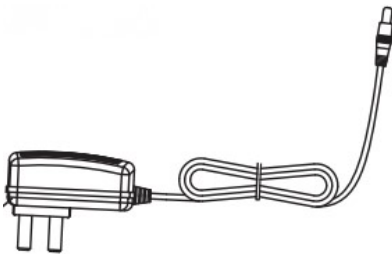
(1) ① Lift the battery pack up ② Then pull the battery pack out.



(2) Check the battery power status by holding the on/off switch on the battery pack. If the battery level is less than 50% (less than 2 LED lights on), please recharge it before using.



(3) Charge the battery pack (2500mAh) for 3.5 - 4 hours with the supplied charger. A new fully charged battery will run the sprayer for approximately 45 minutes. Ambient conditions will affect the operation time. Consider purchasing a separate battery if more daily sprayer use in battery mode is required.



## AUTOMATIC SHUTOFF

### THE AUTOMATIC SHUTOFF FEATURE:

When the handle lever is released, the dynamic pressure sensor shuts the motor pump off automatically. When the trigger is pressed, the pressure drop automatically activates the motor and pressure is increased once again with a slight delay. To ensure the correct automatic shutoff operation, the time interval between trigger release and engagement must not be less than 5-10 seconds.

### SHUTTING DOWN YOUR PORTABLE HVAC SPRAYER:

1. Place the switch in the OFF position.
2. Pull trigger on spray gun to relieve any water pressure in hose or spray gun.

## GENERAL MAINTENANCE

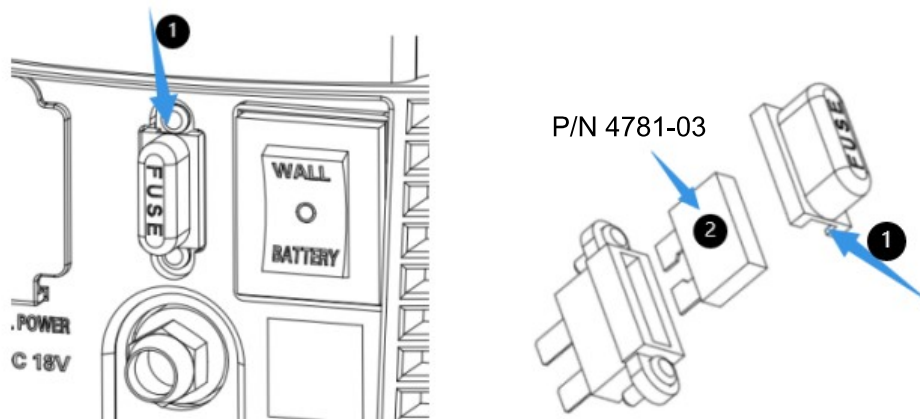
### FOR DEVICE:

**WARNING:** ALWAYS DISCONNECT THE PLUG FROM THE POWER SUPPLY BEFORE ANY MAINTENANCE IS STARTED.

1. **WATER FILTER SCREEN:** Inspect the water filter screen before filling tank with water. Clean the water filter screen when necessary.
2. **NOZZLE CLOGGED:** A clogged nozzle will cause the operating pressure to be too high, causing the portable sprayer to surge. If this happens turn unit off and unplug the pressure sprayer:  
Unplug the power supply, pull the handle lever to relieve pressure, remove the nozzle from the handle.
  - Flush assembly backwards with water or compressed air.
  - If pressure is still too high, repeat steps 1-2.
3. **LUBRICATION:** No lubrication is required for this pump. Silicone grease may be added to hose connector O-rings if connecting becomes difficult.
4. Add some silicone grease to the metal part of the spray nozzle if it has not been used for a long period of time.

## REPLACING THE FUSE

The Turbo Tank Sprayer is equipped with a 10A fuse located beside the power switch. Please check it if the sprayer does not power on.



Use a screwdriver to take off the cover of the fuse (NO.1) and replace with a new fuse NO.2.

**NOTE:** There is a SPARE FUSE located on the inside of the battery door.

## **BATTERY MAINTENANCE**

1. Try to maintain a fully charged battery so the sprayer is ready for use. We recommend charging the battery fully after each use to ensure the maximum battery life. Before the first use, charge for 3-4 hours.
2. Please note that the battery's charge will reduce over time if stored without use. Ideally, charge the battery at least once every three months to ensure it remains in a fully charged state.
3. Check the battery clamps regularly to ensure they are not loose, corroded, or defective.
4. Please always store the Battery/Sprayer/Power Pack away from high temperatures, flammable or explosive goods.
5. To prevent electrical shock, please use an insulated tool or glove when fixing or performing maintenance.
6. Please contact your local Nu-Calgon distributor or Nu-Calgon if there is any defect of the battery. Do not disassemble the battery yourself.
7. Do not clean the battery by using solvents, as it may damage the battery.

## **STORING OF THE PORTABLE HVAC SPRAYER**

Your Turbo Tank 2.0 HVACR Rinsing Sprayer should be stored in such a way to protect it from freezing. Do not store this unit outdoors or in areas where temperatures will fall below 32°F. This can cause extensive damage to this unit and void the warranty. Before storing, follow these shut down instructions:

### **DRAIN WATER FROM MACHINE:**

1. Turn off the switch, squeeze the lever to release pressure. Remove the nozzle and squeeze handle lever to drain the water. Empty the water from the tank. Turn the unit on and run it for approximately 30 seconds without the nozzle while engaging the handle lever.
3. Lower one end of the hose, engage the lever on the handle and allow the water to drain from the hose.
4. Remove and place the spray gun and power cord in the mesh storage compartments.
5. If the unit must be stored under freezing condition, or will be stored for more the 30 days, a pump winterizer/protector or a non-toxic RV anti-freeze can be used to prevent freezing and reduce mineral deposits.

### **ADD ANTI-FREEZE AS FOLLOWS:**

1. Pour approximately 3/4 gallon (3 liters) of RV anti-freeze into tank.
2. Connect high pressure hose, nozzle, and power cord.
3. Turn unit on, squeeze lever until a steady stream of RV anti-freeze is present.
4. Turn unit off. Squeeze handle lever to release pressure.
5. Remove and place the spray gun and power cord in the mesh storage compartment

## **USING THE TURBO TANK SPRAYER AFTER STORING WITH ANTI-FREEZE:**

1. Drain RV anti-freeze. (Follow steps 1 and 2 from Drain Water from Machine)
2. Run 1 tank of fresh water through system before using and ensure that all anti-freeze is purged from the system.

**WARNING: USE ONLY RV ANTIFREEZE. OTHER FORMULATED ANTI-FREEZE PRODUCTS FOR HVAC APPLICATIONS CAN DAMAGE PUMP AND VOID WARRANTY.**

## **FAQ**

### **THE PORTABLE HVAC SPRAYER DOESN'T WORK?**

- Check if the battery is attached properly and press the battery status button to check the LED power gauge.
- If using the 18V AC/DC adaptor, check if the power cord is attached properly and the LED turns on.
- Check the fuse beside the power switch.

### **NO WATER SPRAYS OUT WHEN STARTING THE WATER PUMP?**

- Check if the nozzle is clogged.
- Check if the water inlet or outlet is clogged.
- Check if the water inlet filter screen on the base unit is clogged.
- Check if the water hose is bent.

### **WATER IS LEAKING WHEN I REMOVE THE TANK TO FILL?**

- Small amounts of water leaking onto the base is normal when disconnecting the valve between the tank and the base

### **SPECIFICATIONS:**

- Pressure (PSI): 150
- Volts: 18V(DC)
- Power: 72W
- Hose: 4.5meter
- Power Cord: 3.0 meter
- Capability: 17 Liter
- G.W.: 7.8kg
- Dimension: 355 x 230 x530mm

**IMPORTANT:** Consult Nu-Calgon literature for other details. Contact Nu-Calgon for any warranty related concern. In most cases, the Turbo Tank can easily be repaired in the field.

## Troubleshooting Procedures

