

Hanvey Grooming Conversion Training



Conversion Topics

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Diesel Particulate Filter



Diesel Particulate Filter (DPF) Regeneration

1. The vehicle will trigger a regeneration cycle when the sensor hits 100% or higher. Below are common ways to identify a regen cycle without looking at the sensor.
 - The vehicle's engine will sound “rougher”, especially while at lower speeds and RPM.
 - Metal “pinging” noises are common and can be heard in the cab and outside the vehicle.
 - A slight burning smell is common when outside the vehicle during and shortly after a regen cycle.

Diesel Particulate Filter (DPF) Regeneration

2. Typically, the regeneration (regen) or “burn-off” process will complete its cycle regardless of the driving conditions as long as the vehicle is moving (20 to 25 minutes). Highway speeds are not necessary for the regeneration process. Higher speeds result in a faster “burn-off”.
3. The vehicle can be put into “park” once a regen cycle has begun. However, when parked, the regeneration cycle will pause after a few minutes and resume once the vehicle moves again. It is strongly recommended that the vehicle is not turned off until the process completes. Turning off the vehicle will cancel the regeneration.

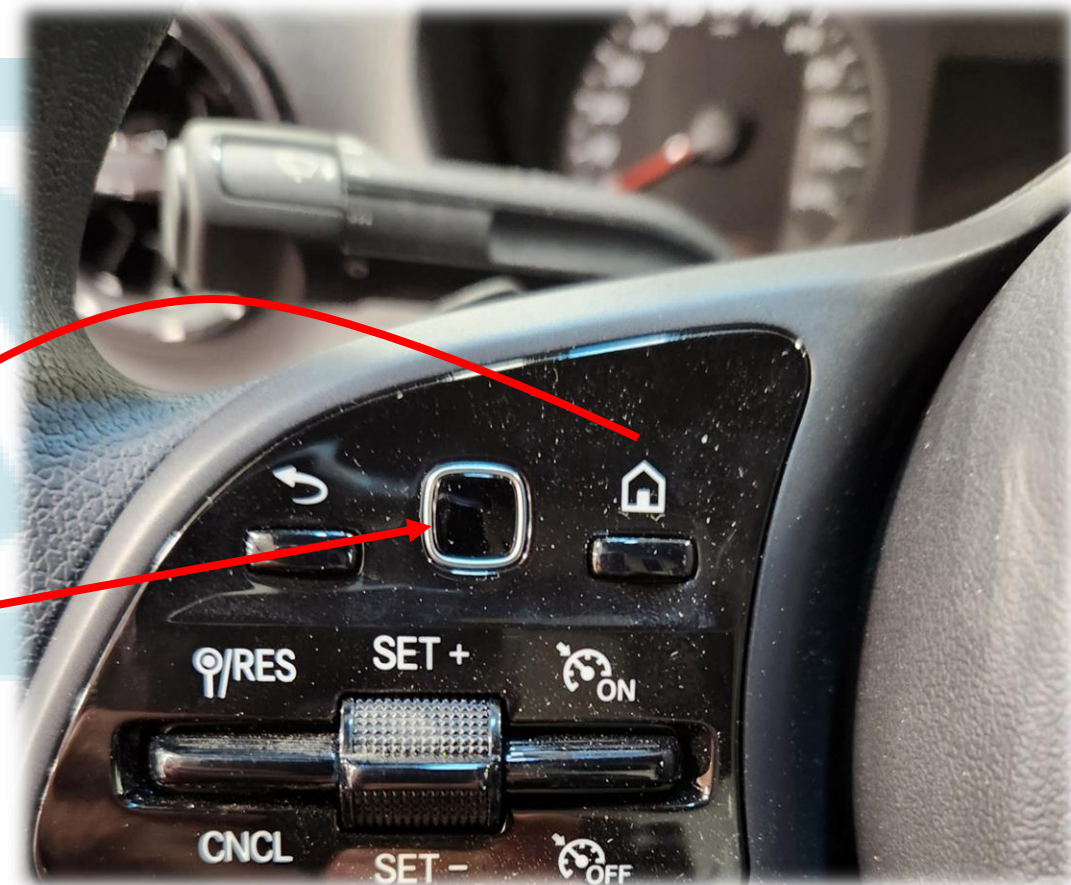
Diesel Particulate Filter (DPF) Regeneration

4. Turning off the vehicle when the vehicle is in an active “burn-off” regen cycle may cause a check engine light (amber) to appear if it happens often. Frequent cancellation of the “burn-off” process by turning off the vehicle can lead to a clogged DPF that requires a manual regen cycle at your Mercedes dealership.
5. Simply driving the vehicle on the highway does not trigger a regeneration cycle. The cycle will start after the DPF reaches at least 100% regardless of whether or not you are driving on the highway.

Diesel Particulate Filter (DPF) Status Check

To check the status of your Particulate filter to identify when your van will perform a Regeneration to clean the Particulate filter.

1. From the left side of your steering wheel, press the home button.
2. Using the trackpad, scroll to the service menu.



Only available in 2019 and newer models.

Diesel Particulate Filter (DPF) Status Check

3. Press the trackpad to enter the Service menu.
4. Scroll down using the trackpad to locate the Particulate Filter.
5. Press the trackpad to enter the Particulate Filter option.



Only available in 2019 and newer models.

Diesel Particulate Filter (DPF) Status Check

This screen will indicate what percentage your filter is at. Regeneration cannot begin until the load condition of the diesel particulate filter is at least 100%.



Only available in 2019 and newer models.

Regeneration Caution!

Caution!

- Failure to heed advice could cause damage.
- Repetitive canceling of the regeneration could cause harm.
- Regeneration takes 20-25 minutes to complete.
- Turning off the vehicle when the vehicle is in an active “burn-off” regen cycle may cause a check engine light (amber) to appear.

Exhaust Gas Recirculation Valve (EGR)

- The EGR valve can become clogged over time. Regular intervals of long-distance or highway driving can mitigate EGR valve clogging.
- Common EGR valve symptoms to be aware of:
 - Van Idling Roughly, or erratic idle RPM.
 - Sluggish acceleration.
 - Engine knock.
 - Check Engine light

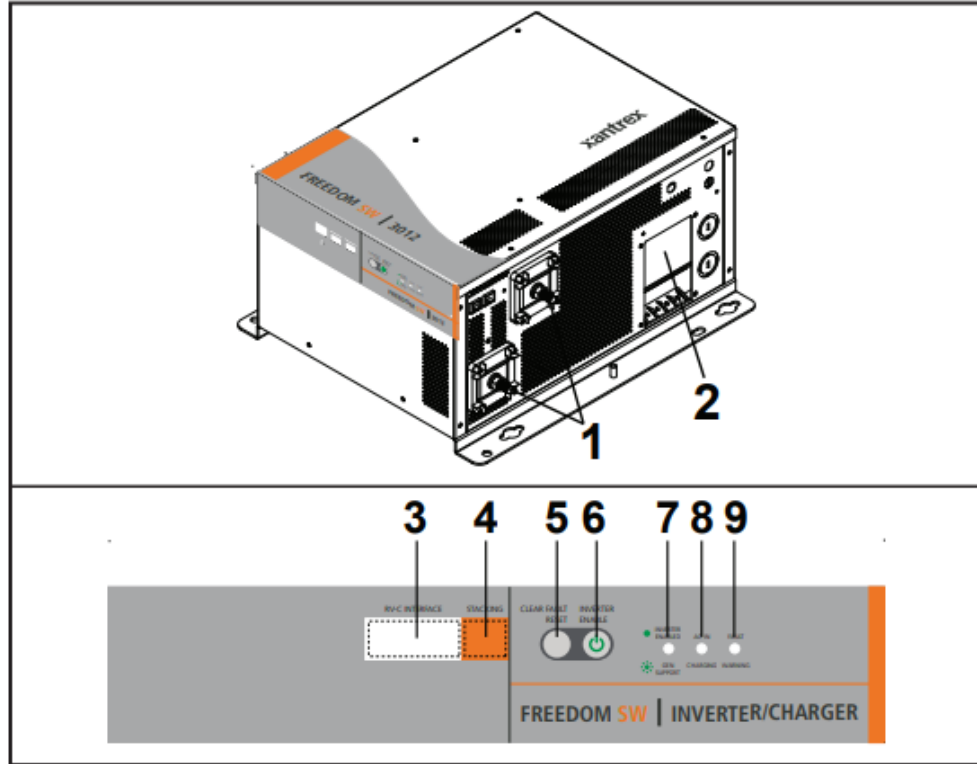
Xantrex Inverter and Inverter Panel



Xantrex Inverter Topics

- [Xantrex Inverter Overview](#)
- [Xantrex Inverter Panel Overview](#)
- [Xantrex Inverter On/Off Remote Overview](#)
- [Xantrex Inverter Panel Hanvey Settings](#)
- [Xantrex Inverter Panel Checking Amps](#)
- [Xantrex Inverter Maintenance](#)
- [Troubleshooting Xantrex Inverter](#)

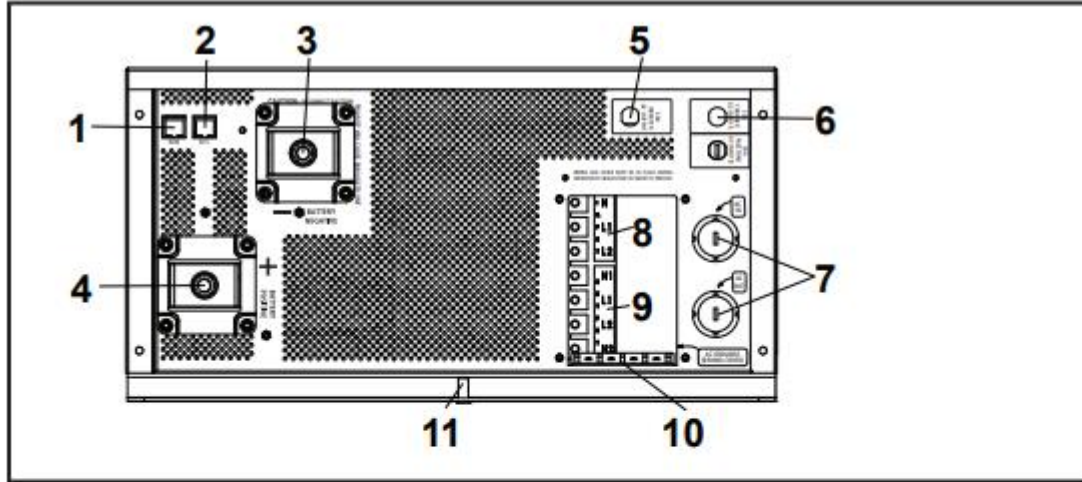
Xantrex Inverter Overview



Item	Description
1	DC terminals
2	AC wiring compartment access panel with compartment cover on.

Item	Description
3	RV-C INTERFACE ports are used to connect RV-C devices including a RV-C system device controller, if available.
4	STACKING port is used to connect two inverter/chargers together for stacked operation. This is required only for stacking in series.
5	CLEAR FAULT RESET button is used to clear any active faults if pressed momentarily. If held down for more than three seconds, the unit will reset (reboot) itself.
6	INVERTER ENABLE button is used to enable or disable the inverter.
7	INVERTER ENABLED indicates the invert mode is enabled. This is different from the inverter being "on". When enabled the inverter can be on or off. When disabled, the inverter is always off. If AC is present and invert mode is enabled, this LED remains illuminated even though AC power is being passed through. GEN SUPPORT LED flashes intermittently when the inverter is in generator support mode and is assisting the generator.
8	When AC is present and qualified, the AC IN LED will turn on solid indicating also that AC is passing through. CHARGING LED flashes intermittently when the Freedom SW-RVC is in charge mode and is producing DC output to charge your batteries.
9	FAULT LED turns on solid if a fault condition occurs and flashes intermittently when a WARNING condition is active.

Xantrex Inverter Overview



Item	Description
1	Remote (REM) jack provides connection for the Freedom SW-RVC remote panel. See <i>Freedom SW-RVC On/Off Switch</i> on page 20.
2	Battery temperature sensor (BTS) jack provides connection for the battery temperature sensor (supplied).

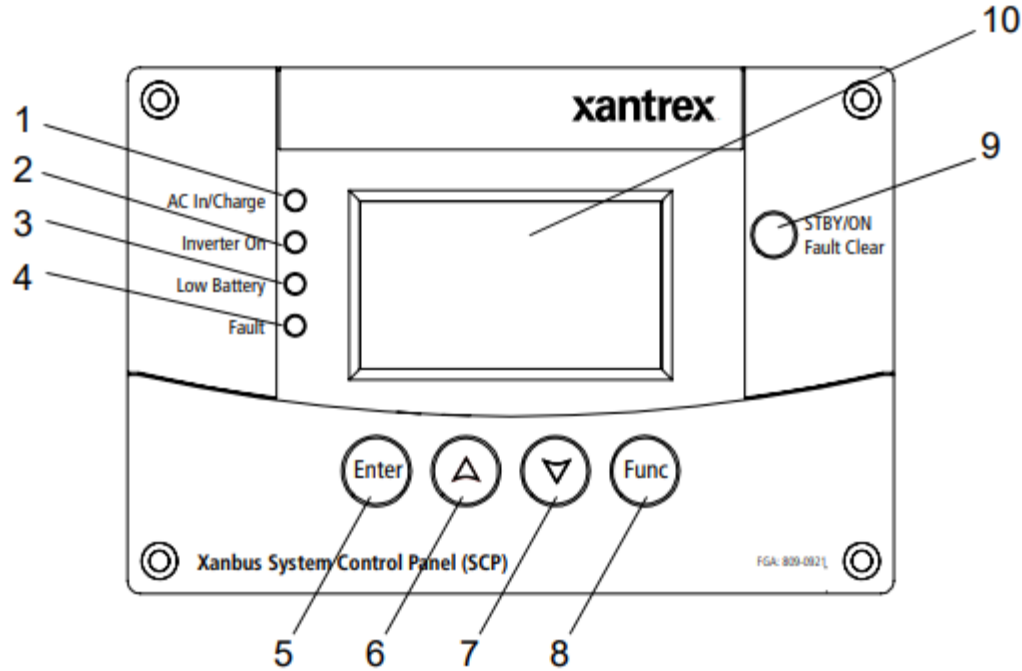
Item	Description
3	Negative (-) DC terminal (black). Use a qualified personnel for connecting cables.
4	Positive (+) DC terminal (red). Use a qualified personnel for connecting cables.
5	AC Output circuit breaker reset button
6	AC Input circuit breaker reset button.
7	AC knockouts provide access for AC cables (both input and output wiring).
8	AC Input screw-type terminal block . Use a qualified personnel for connecting wires.
9	AC Output screw-type terminal block . Use a qualified personnel for connecting wires.
10	AC Ground terminals along the tab at the bottom of the opening to the AC wiring compartment access panel. Use a qualified personnel for connecting wires.
11	Chassis DC ground lug connects the chassis of the Freedom SW-RVC to your system's chassis DC grounding point. Use a qualified personnel for connecting wires.

Xantrex Inverter Panel Overview

- The main Inverter Control Panel is located above the driver's seat inside the cab of the van.



Xantrex Inverter Panel Overview



Item	Description
1	AC In/Charge light (green) indicates qualified AC is present at the input of an inverter/charger or charger.
2	Inverter On light (green) indicates an inverter is using energy from batteries to provide AC to your appliances.
3	Low Battery light (yellow) indicates that a low battery voltage condition exists in the system.
4	Fault light (red) indicates a device on the network is experiencing a fault and requires user attention and intervention.
5	Enter button 1. Confirms selection of a menu item 2. Displays the next screen
6	Up arrow button 1. Scrolls up one line of text 2. Increases a selected value
7	Down arrow button 1. Scrolls down one line of text 2. Decreases a selected value
8	Func button 1. Cancels selection of a menu item 2. Displays the previous screen
9	STBY/ON Fault Clear button puts all devices in the system into Safe mode. Hold for five seconds to activate Safe mode. Press momentarily to clear active faults.
10	Screen shows menus, settings, and system information.

Xantrex Inverter On/Off Remote Overview

- In the grooming area of the van you will have an On/Off remote for your inverter.

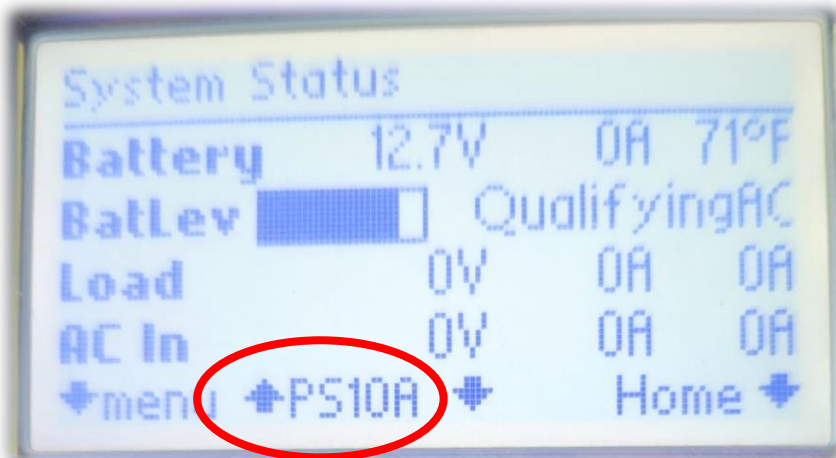
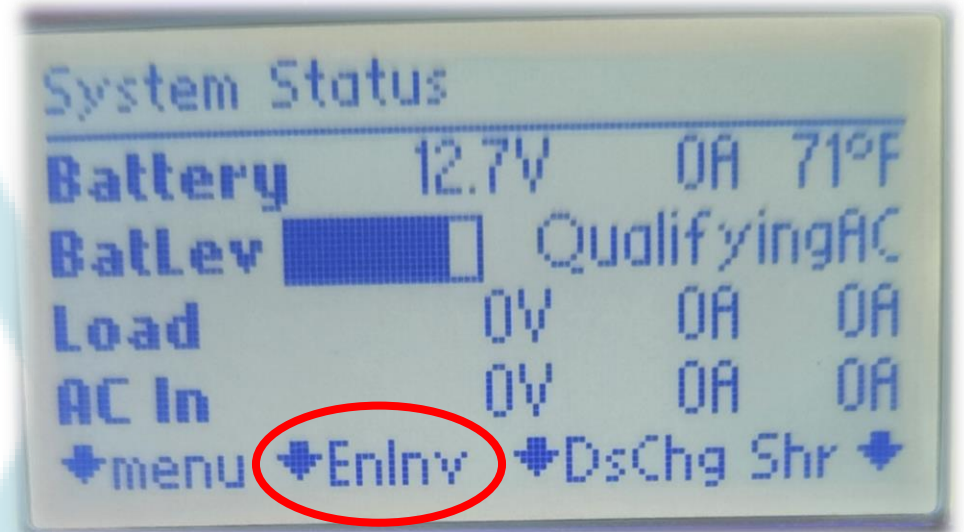


Xantrex Inverter Panel Hanvey Settings

- There may be times that you will need to check or adjust the Hanvey settings on your power Inverter.
- Reason for checking the inverter settings:
 - Batteries completely dead
 - Power or ground cables disconnected from the inverter or batteries.
 - Replace the inverter.
 - User making changes to the inverter settings.

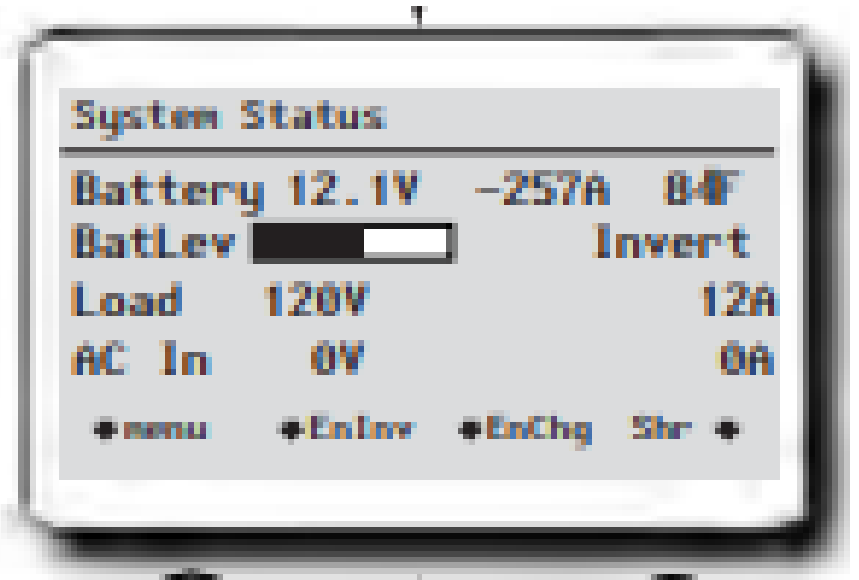
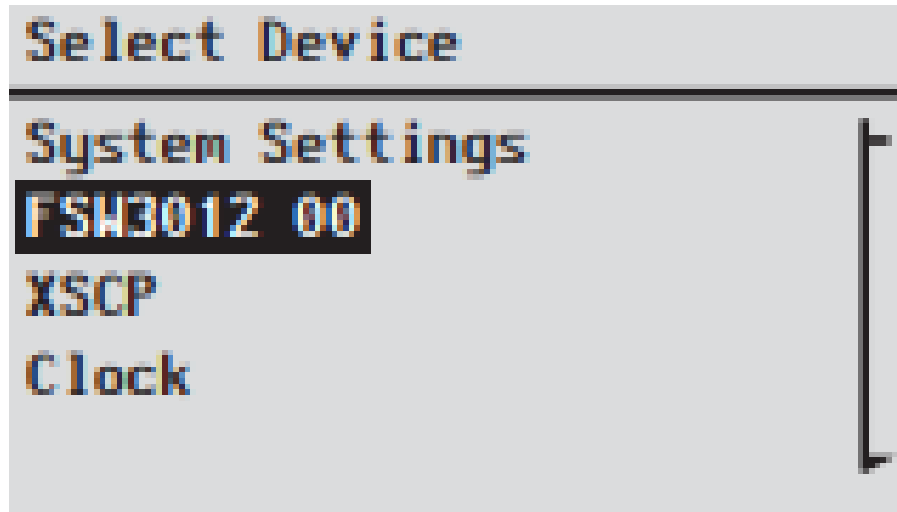
Xantrex Inverter Panel Hanvey Settings

- From the System Status menu to the right of the menu option, you will see either EnInv, DisInv or PS and a number.
- If the option is displayed EnInv/DisInv, press the Func button one time to display PSxxA.
- Press the Up/Down arrow until you see PS10A (or PS15A if your van has no tank warmer).



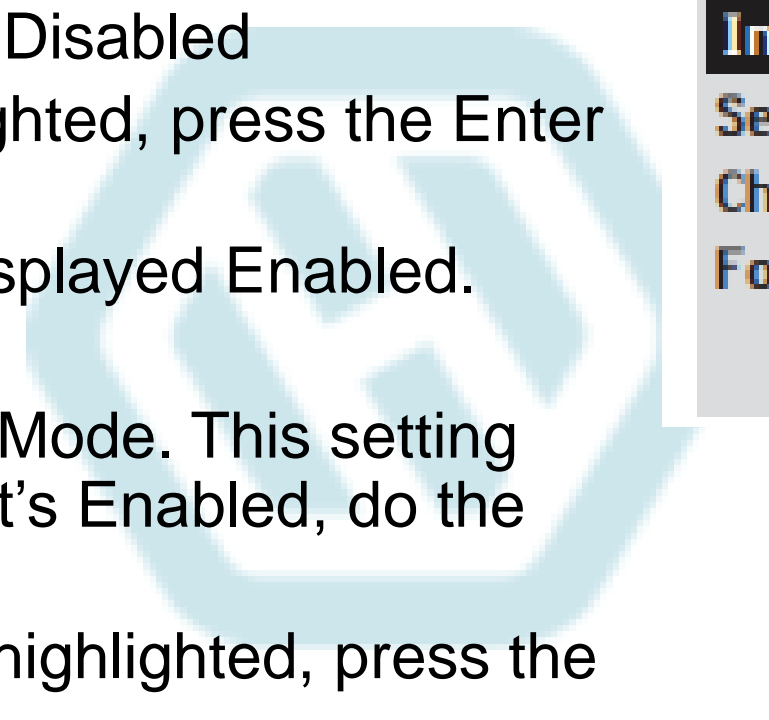
Xantrex Inverter Panel Hanvey Settings

- From the System Status menu, Press the Enter button
- Using the down arrow button, scroll down to FSW3012 and select enter.



Xantrex Inverter Panel Hanvey Settings

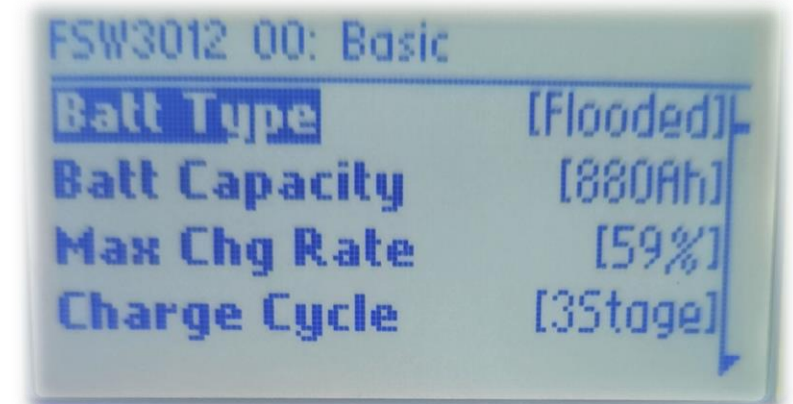
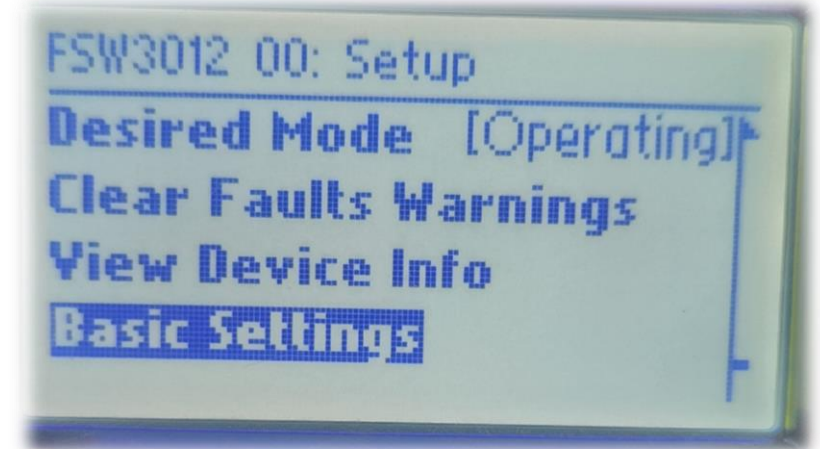
- Arrow down to highlight Inverter
- If Inverter is displaying Disabled
 - With Inverter highlighted, press the Enter button.
 - Arrow down until displayed Enabled.
 - Press Enter button.
- Arrow down to Search Mode. This setting should be Disabled. If it's Enabled, do the following.
 - With Search Mode highlighted, press the Enter button.
 - Arrow down until displayed Disabled.
 - Press Enter button.



FSW3012 00: Setup	
Inverter	[Enabled]
Search Mode	[Disabled]
Charger	[Enabled]
Force Chg	

Xantrex Inverter Panel Hanvey Settings

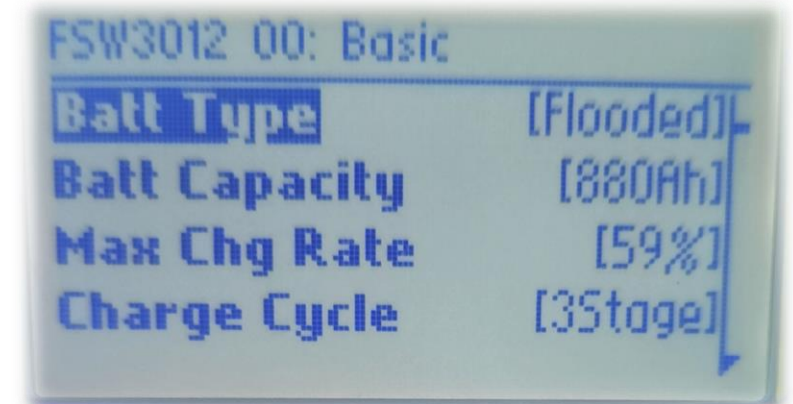
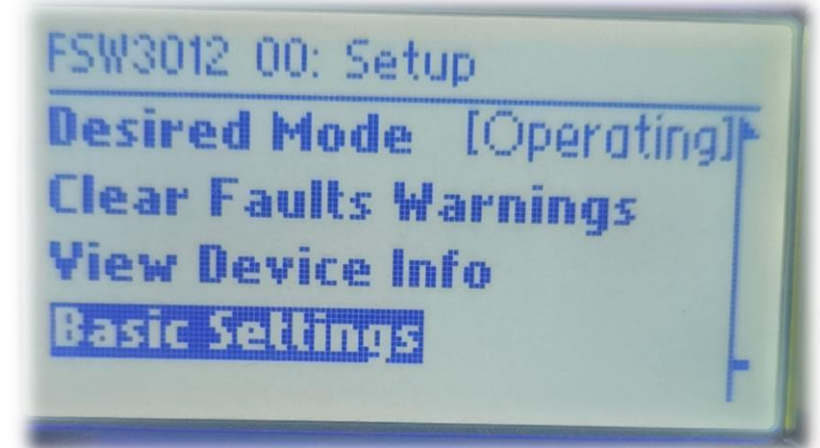
- Arrow down to Basic Settings, and press Enter.
- Battery Type = Flooded
- Battery Capacity = 840AH
 - Arrow down to Battery Capacity and highlight.
 - Press Enter
 - Hold down the Up arrow and stop at 840AH
 - Press Enter



Xantrex Inverter Panel Hanvey Settings

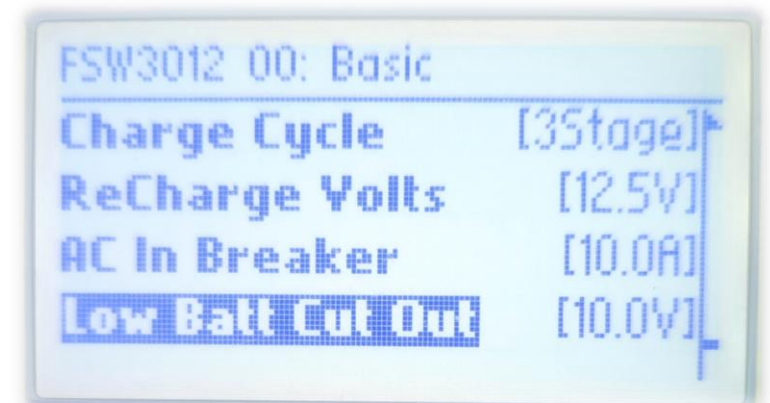
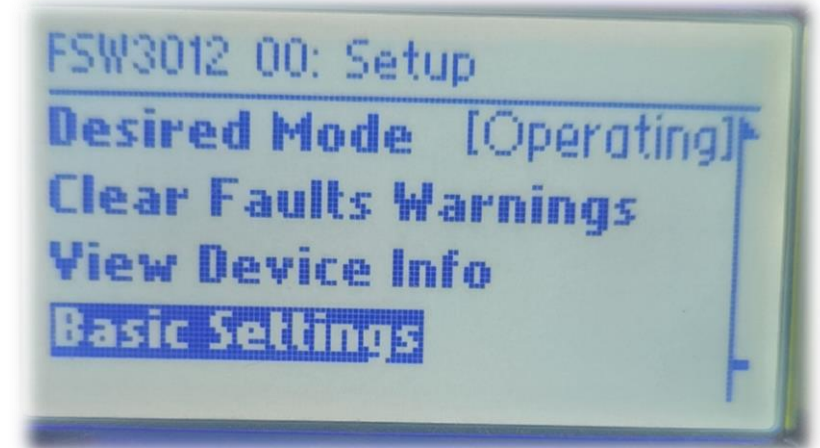
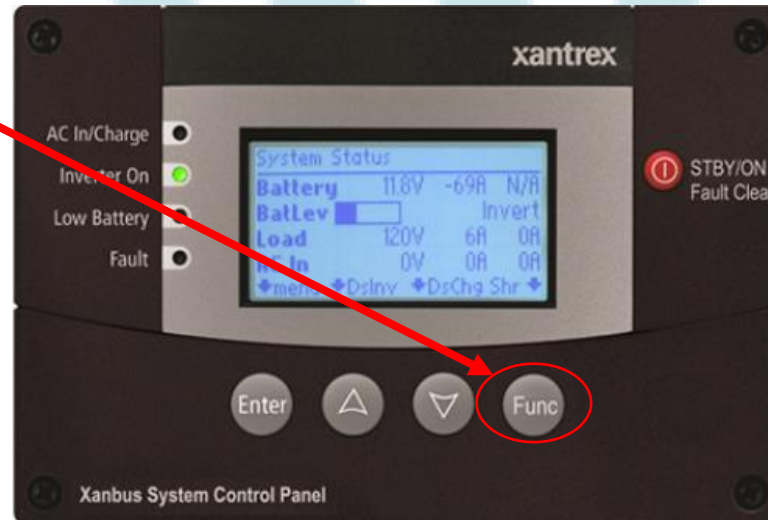
- Max Charge Rate = 59%
 - Arrow down to Max Charge Rate and highlight.
 - Press Enter
 - Down arrow until you get to 59% and stop.
 - Press Enter

- Charge Cycle = 3Stage



Xantrex Inverter Panel Hanvey Settings

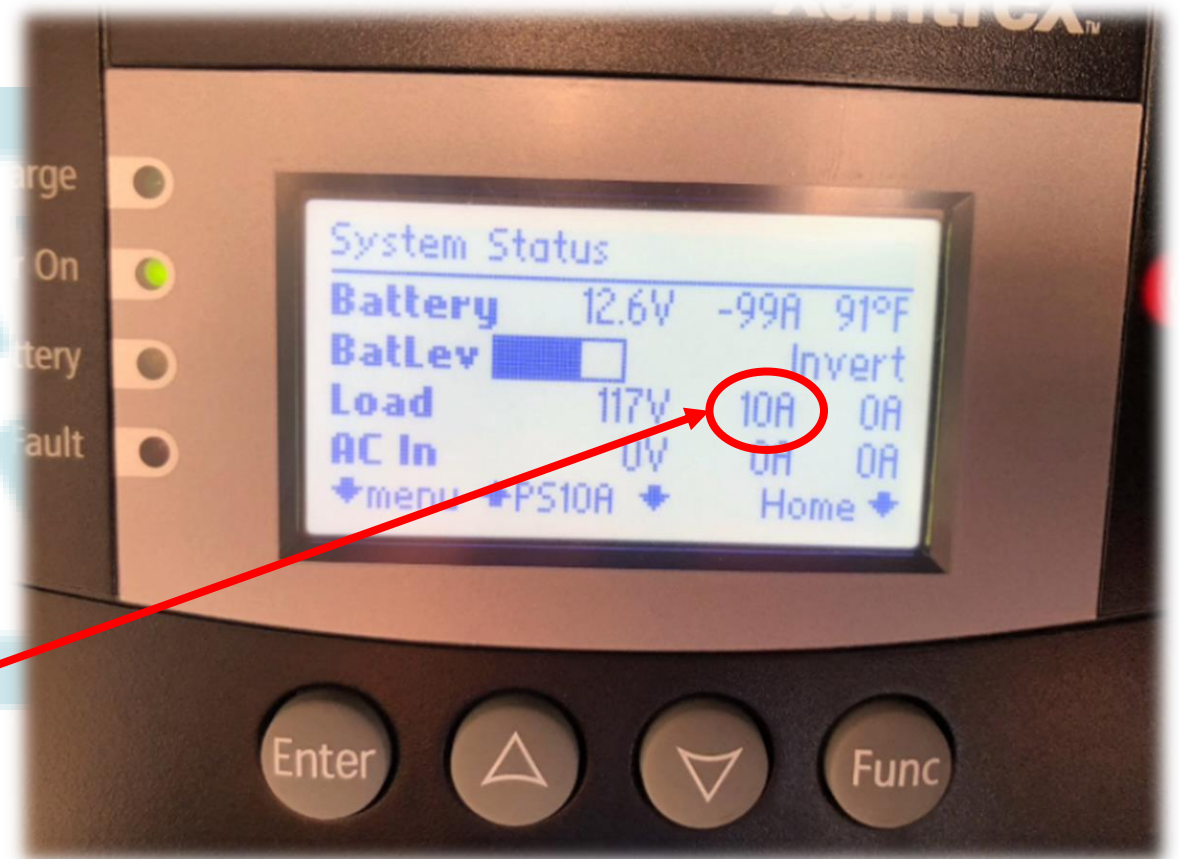
- ReCharge Volts = 12.5V
- AC In Breaker = 10.0A
- Low Battery Cut Out = 10.0V
- Press the Func button 3 times to get back to the Home Screen.



Xantrex Inverter Panel Checking Amps

Amperages can be verified by looking at your inverter panel. This reading will give you better clarity into how many amps your equipment is using. Hanvey vans are rated for a maximum amp draw of 15-amps.

- Turn on one piece of equipment at a time.
- Look at the inverter panel, this area will display the number of amps that the equipment is using.



Xantrex Inverter Maintenance

The blue filter on the Inverter needs to be removed monthly and cleaned. To clean you can wash with mild soap and water or vacuum/blow the filter clean.



Troubleshooting Xantrex Inverter

<u>Problem</u>	<u>Possible Solution</u>
The Inverter panel is blank	<ol style="list-style-type: none">1. At the Inverter check and make sure the white CAT5 cable is plugged into the inverter.2. Check the 300-AMP fuse with the multi-meter to determine if the fuse is blown.
Fault Code F1/AC Output under voltage	<ol style="list-style-type: none">1. Check the inverter Hanvey settings.
Fault Code F2/AC Output over voltage	<ol style="list-style-type: none">1. Check the inverter Hanvey settings.
Fault Code F44/Battery Over Temperature	<ol style="list-style-type: none">1. Check battery water levels in all batteries.2. Check all battery connections for tightness and free from corrosion/debris.3. Check the Battery Temperature Sensor (Blue cable) is connected to the inverter.
Fault Code F47/DC under voltage (Undervoltage means there is not enough charge on the batteries)	<ol style="list-style-type: none">1. Check battery water levels in all batteries.2. Check all battery connections for tightness.3. Check the condition of all batteries to ensure they are not bad. Have batteries checked under a load. Battery voltage should be around 6 volts.4. Plug in the van and verify it's charging.
Fault Code F49/DC over voltage	<ol style="list-style-type: none">1. Clear the fault and restart the inverter.

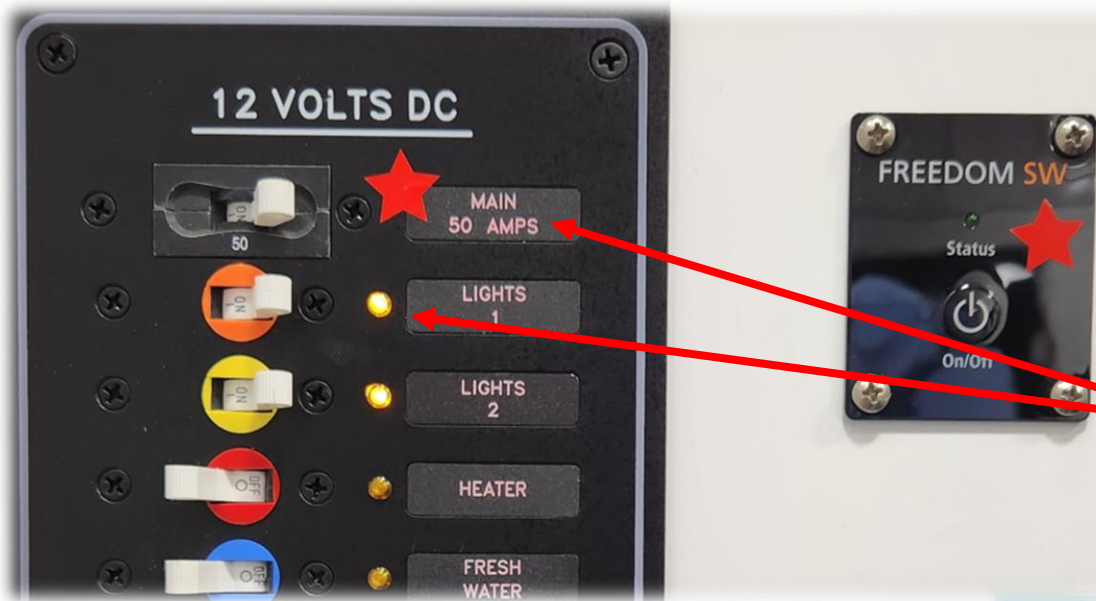


12 Volt DC Panel – Main Power Switch Panel

12Volt DC Panel Topics

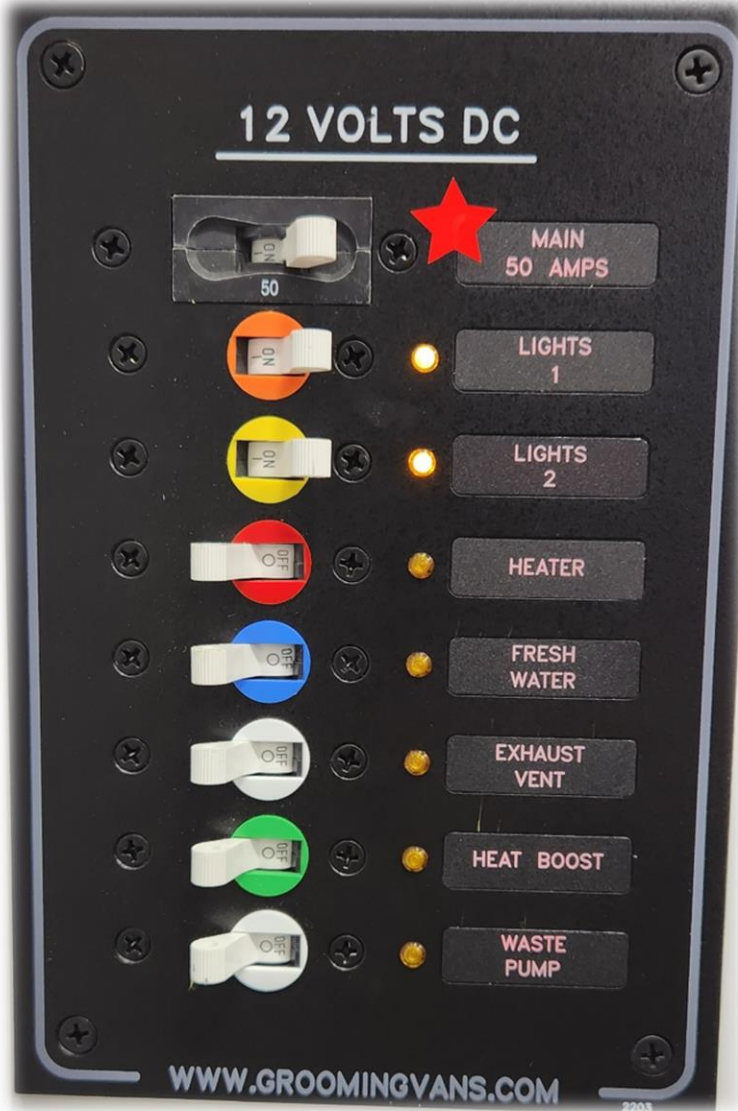
- [12 Volt DC Panel Overview](#)
- [12 Volt DC Panel Layout](#)
- [12 Volt DC Panel Switch On/Off Light](#)
- [12 Volt DC Panel Operation](#)
- [Troubleshooting 12 Volt DC Panel](#)

12 Volt DC Panel Overview



- The 12 Volt DC panel does not require the inverter to be powered on.
- All items listed on the 12 Volt DC panel will operate regardless if the inverter is On/Off.
- In order for any item on the 12 Volt DC panel to operate, that items switch plus the Main switch must be turned to the On position.

12 Volt DC Panel Layout



- Main Panel On/Off Switch
- Lights 1 – 2 Rear Lights
- Lights 2 – 2 Front Lights (170 wheelbase 3 Front Lights)
- Heater – Heater for the grooming area
- Fresh Water – For the water pump
- Exhaust Vent – Rear powered/active Roof Vent
- Heat Boost – Boost pump to move coolant
- Waste Pump – For Waste/Drain pump to drain under tub

12 Volt DC Panel Switch On/Off Light



- When a switch is turned in the On position, the yellow light to the right of the switch will be illuminated.
- When a switch is turned in the Off position, the yellow light to the right of the switch will not be illuminated.
- If the switch is in the On position and the LED is not illuminated the Main switch is in the Off position.

12 Volt DC Panel Operation



- When using the 12 Volt DC Panel, it is recommended that the following switches are in the On position and remain in the On position. No need to turn them to the Off position.
 - Lights 1
 - Lights 2
 - Fresh Water – Turn off if there is active water leaking.
 - Exhaust Vent
 - Waste Pump
- At the end of the workday, just turn the Main switch to the Off position.
- User can leave this panel turned on between grooms.
- Leave all these individual switches on at all times.

Troubleshooting 12 Volt DC Panel

<u>Problem</u>	<u>Possible Solution</u>
None of the lights on the panel will come on.	1. Check the Main power switch is in the On position.
The main power switch is On, but one of the item switches will not turn on.	1. Ensure the item switch is staying in the On position and not tripping. 2. On the rear of the switch, with your voltage multimeter, check to make sure you have 12 volts on the switch.
The main power switch and the Light switch are in the On position, but the lights will not turn on.	1. Unscrew the light from the ceiling, unplug the quick disconnect plug, and check for 12 volts.
The main power switch and the Heater switch are in the On position, but the heater will not turn on.	1. At the Heater, unplug the yellow wire from the heater and check for 12 volts on the black wire coming from the green wiring harness
The main power switch and the Freshwater switch are in the On position, but the Freshwater pump will not turn on.	1. At the Freshwater pump, unplug the quick disconnect plug, and check for 12 volts. If 12 volts is present swap with spare.
The main power switch and the Exhaust Vent switch are in the On position, but the fan is not running.	1. Press the On button on the Exhaust Vent fan. 2. Remove the Exhaust Vent trim ring and check the power switch on the vent for 12 volts.

Troubleshooting 12 Volt DC Panel

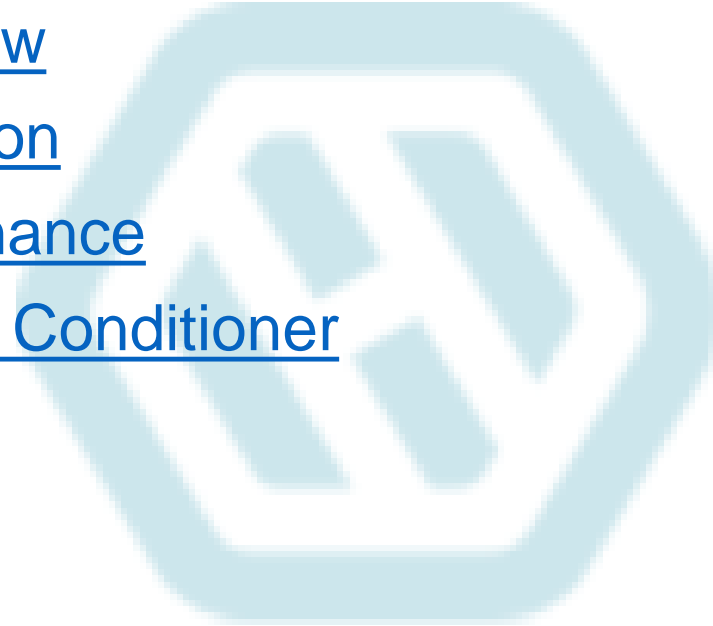
<u>Problem</u>	<u>Possible Solution</u>
The main power switch and the Heat Boost switch are in the On position, but the Heat Boost pump is not running.	<ol style="list-style-type: none">1. Remove the freshwater tank, unplug the quick disconnect at the heat boost pump and check for 12 volts.
The main power switch and the Waste pump switch are in the On position, but the waste pump will not turn on.	<ol style="list-style-type: none">1. Press the black Air Bulb to the left of the tub to turn the Waste pump on.2. Unplug the Waste pump quick disconnect plug and check for 12 volts. If 12 volts present swap with spare.
When turning on a switch, it will not stay in the On position.	<ol style="list-style-type: none">1. Move the switch to the On position slowly. It may take several tries to get it to stay.

Air Conditioner



Air Conditioner Topics

- [Air Conditioner Overview](#)
- [Air Conditioner Operation](#)
- [Air Conditioner Maintenance](#)
- [Troubleshooting the Air Conditioner](#)



Air Conditioner Overview

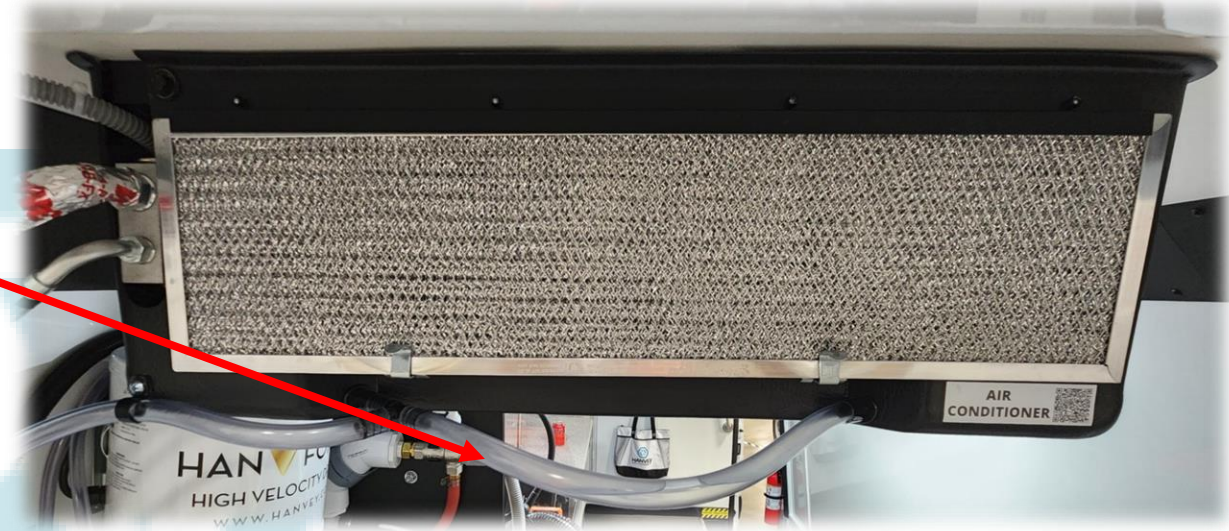
Your Hanvey van is equipped with a 30,000 BTU Air Conditioner. This Air Conditioner is totally independent of your Mercedes cab Air Conditioner. The Air Conditioner is also a dehumidification system.



Air Conditioner Overview

Condensation drain line.

- The condensation drain lines are used to drain any condensation that builds up in the Air Conditioner cover.
- The drain lines are gravity fed and the unit will drain underneath the van.
- It is normal for a little water to sit in the drain lines.



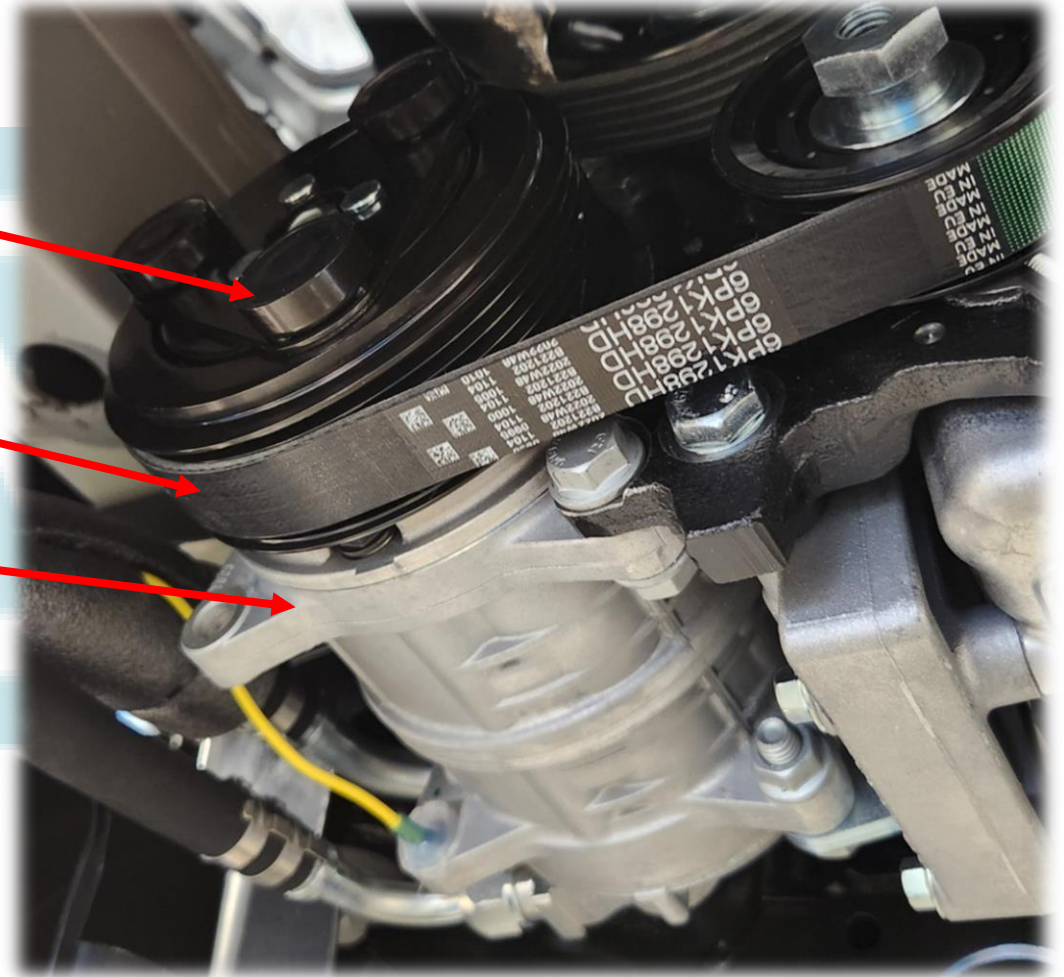
Air Conditioner Overview

Compressor Clutch

Compressor Belt

Compressor

- The Compressor is located underneath the van at the front behind the bumper on the passenger side of the van.



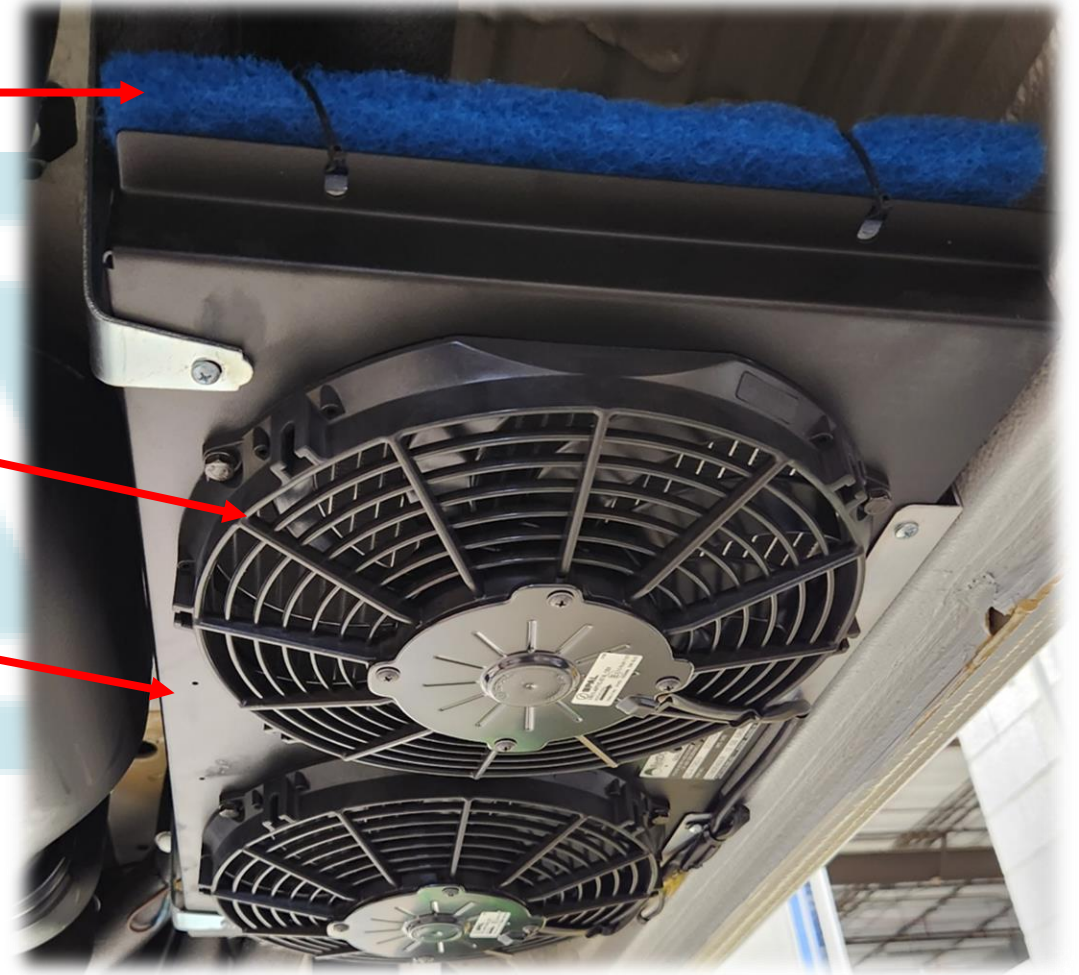
Air Conditioner Overview

Condenser Filter

Condenser Fan

Condenser

- The Condenser is located underneath the van on the driver's side of the van.



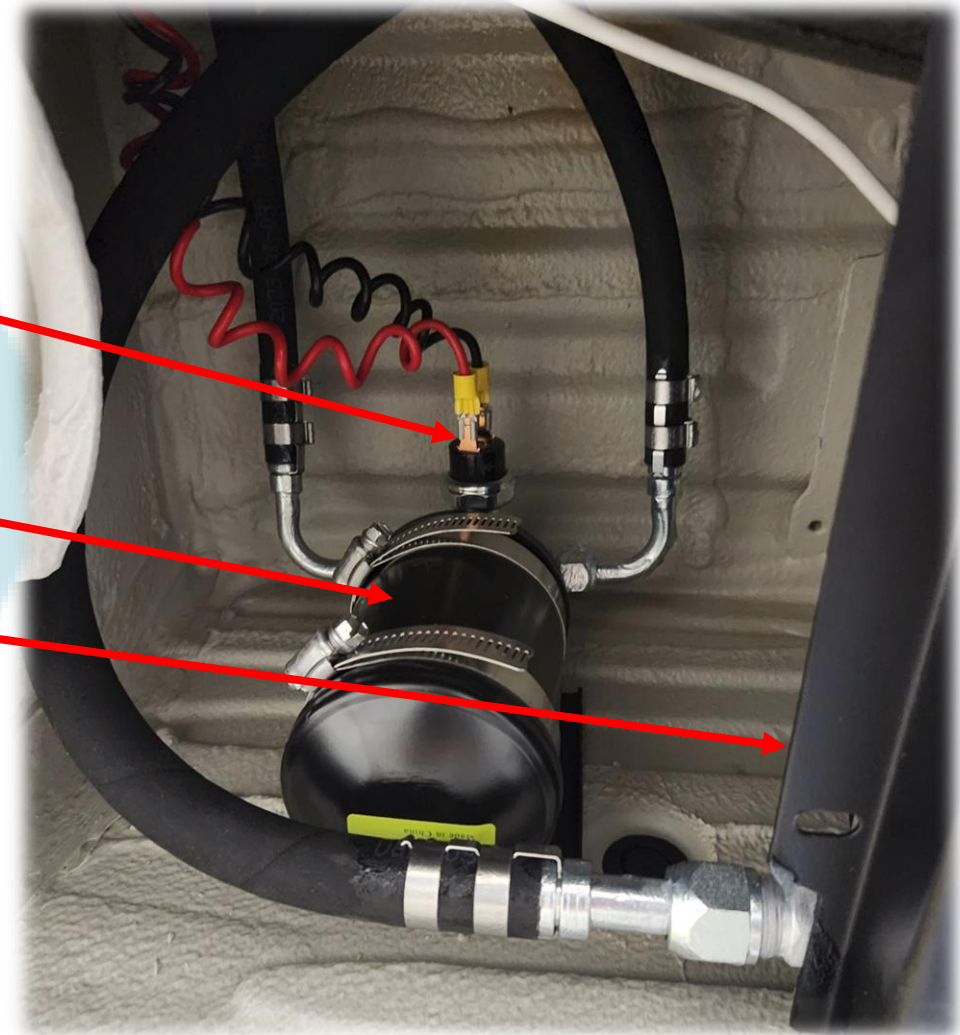
Air Conditioner Overview

High-Pressure switch

AC Dryer

Condenser

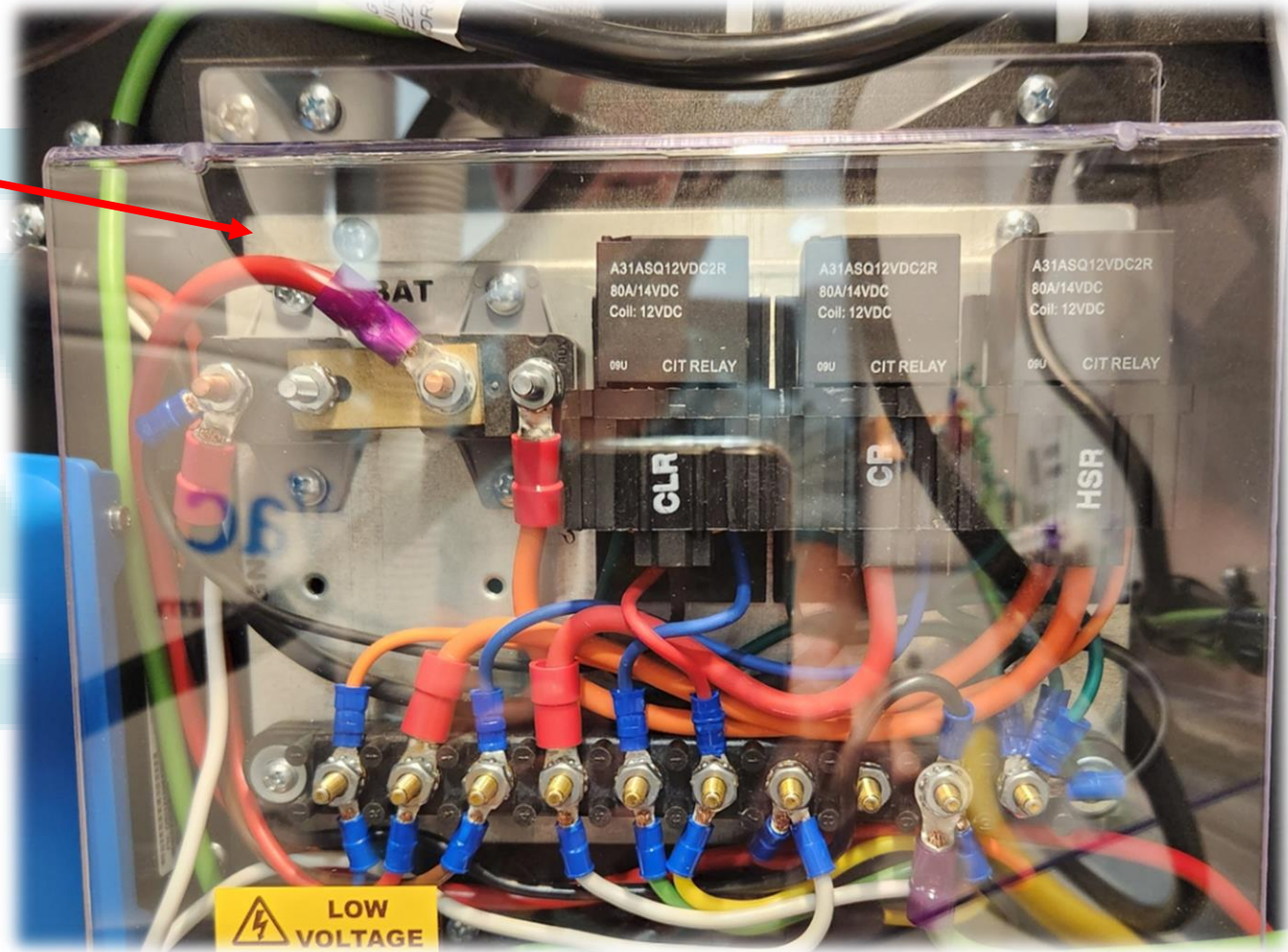
- The AC Dryer and High-Pressure switch are located underneath the van on the driver's side of the van and to the left of the Condenser.



Air Conditioner Overview

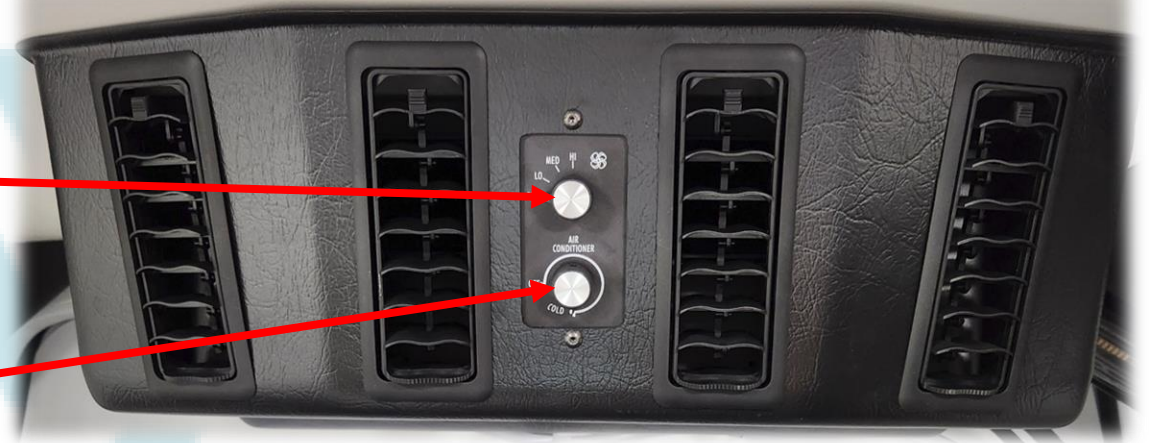
AC Power Board

- The AC Power Board is located in the rear of the van on the passenger side of the van.



Air Conditioner Operation

- To use the grooming van Air Conditioner, your van engine must be turned on and running.
- The top knob is your Air Conditioner On/Off and speed switch.
- The bottom knob is your thermostat to control how warm or cold the air is going to be blowing out of the unit.
- Four vents on the front of the Air Conditioner to control airflow direction.



Air Conditioner Maintenance

The silver filter on the rear of the unit needs to be cleaned weekly. The coils need to be cleaned monthly or seasonally.

- Remove the filter by pulling down the two tabs.
- Remove the filter and spray air/water through the filter to clean the filter out.
- You can also spray the filter with Windex and let it soak for 10 minutes and then rinse with water (if previous cleaning is sufficient).
- While the filter is off the unit, from the front side of the Air Conditioner take your dryer hose and blow the unit out.



Air Conditioner Maintenance

Once you have the filter removed and the unit blown out.

- Spray the coils with Windex.
- Let the Windex stay on the coils for 5 minutes.
- With a cloth, wipe from top to bottom, do not wipe side to side.
- Once the entire coil has been wiped down, wipe across the bottom of the cover to remove hair.
- It is not recommended to use a force dryer to blow air into the rear of the coil fins as it could push any trash into the fins and become impacted.

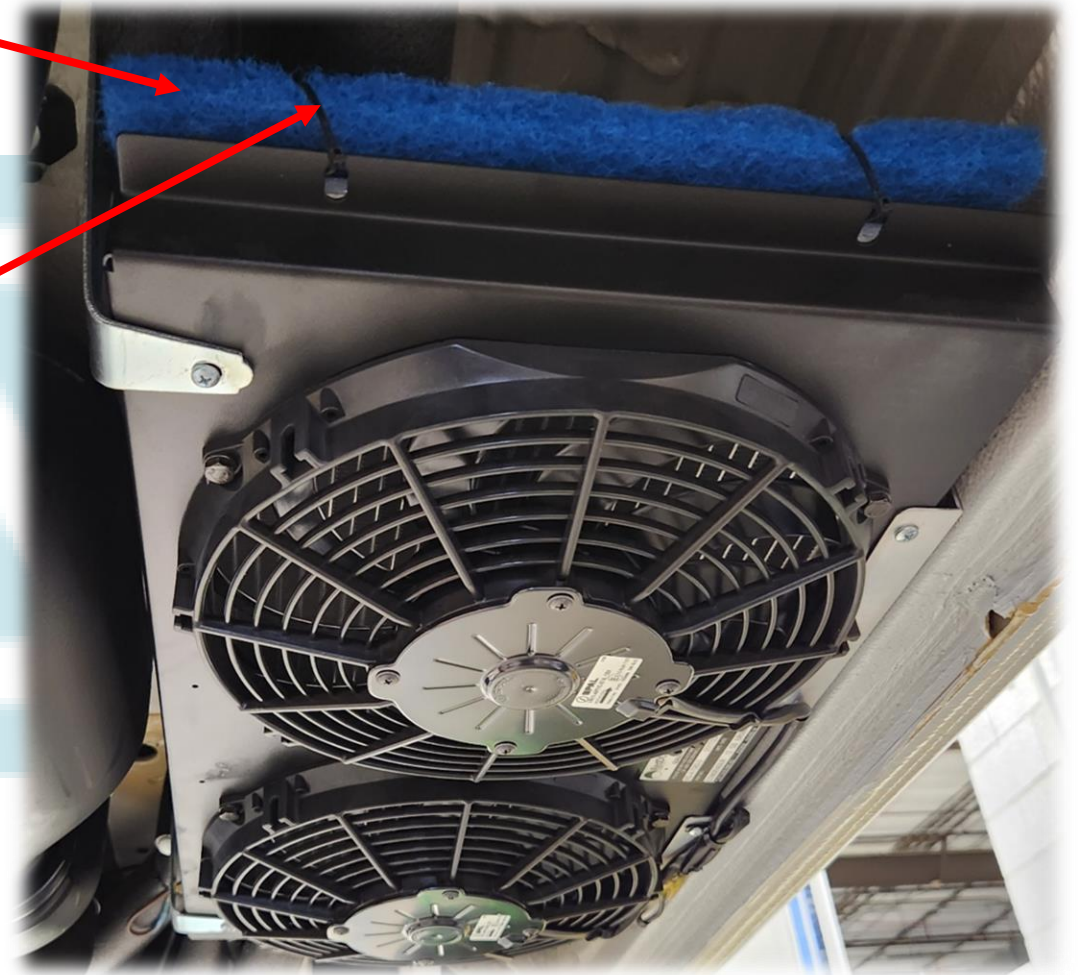


Air Conditioner Maintenance

The blue filter on the Condensing fans underneath the van needs to be cleaned monthly.

Pull the filter toward the end of the filter that has the zip ties.

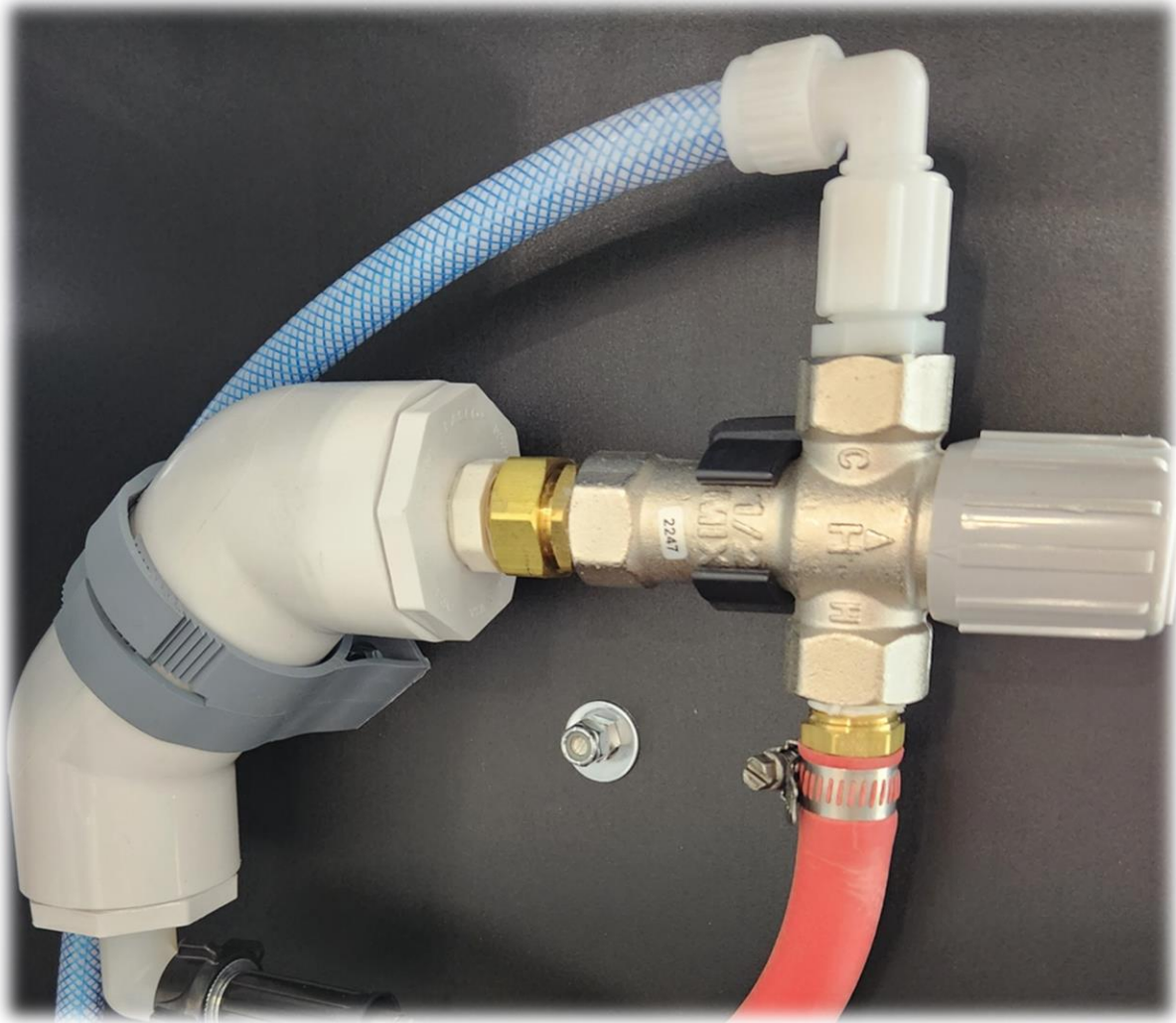
Use soapy water and rinse or a shop vac to vacuum clean.



Troubleshooting Air Conditioner

<u>Problem</u>	<u>Possible Solution</u>
When I turn on my Air Conditioner nothing happens.	<ol style="list-style-type: none">1. Make sure your van is running/turned on.2. Is the blower inside the grooming area running? If not, contact tech support.3. Are the fans underneath the van running? If not, contact tech support.
My Air Conditioner is on but not blowing cold air.	<ol style="list-style-type: none">1. Is the blower motor, condensing fans, and compressor clutch all working? If yes, you may be low on freon. Freon is R-134 and 2.8 pounds of freon.
My unit inside the grooming area keeps freezing up.	<ol style="list-style-type: none">1. Have your freon levels checked. Freon is R-134 and 2.8 pounds of freon.
Condensation is dripping from the bottom of the unit.	<ol style="list-style-type: none">1. Check the drain hose on the back of the unit for any blockages.2. Remove the silver filter on the rear of the unit and check the drain holes in the cover for hair blocking the holes.

Water Mixer



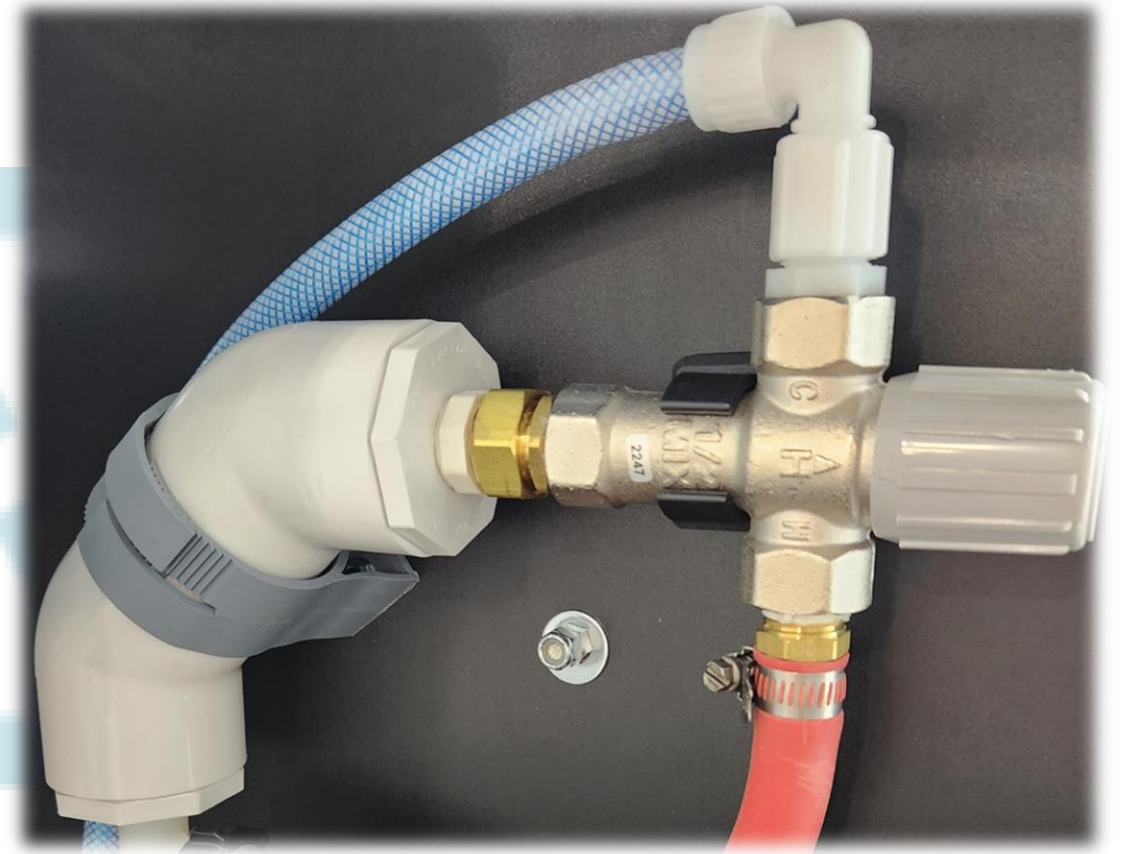
Water Mixer Topics

- [Water Mixer Overview](#)
- [Water Mixer Layout](#)
- [Water Mixer operation](#)
- [Troubleshooting Water Mixer](#)



Water Mixer Overview

The Hanvey Water Mixer mixes cold and hot water together to give you a proper grooming water temperature.

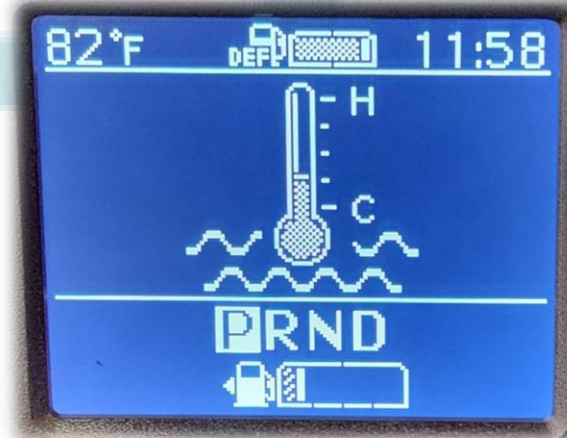


Water Mixer Overview

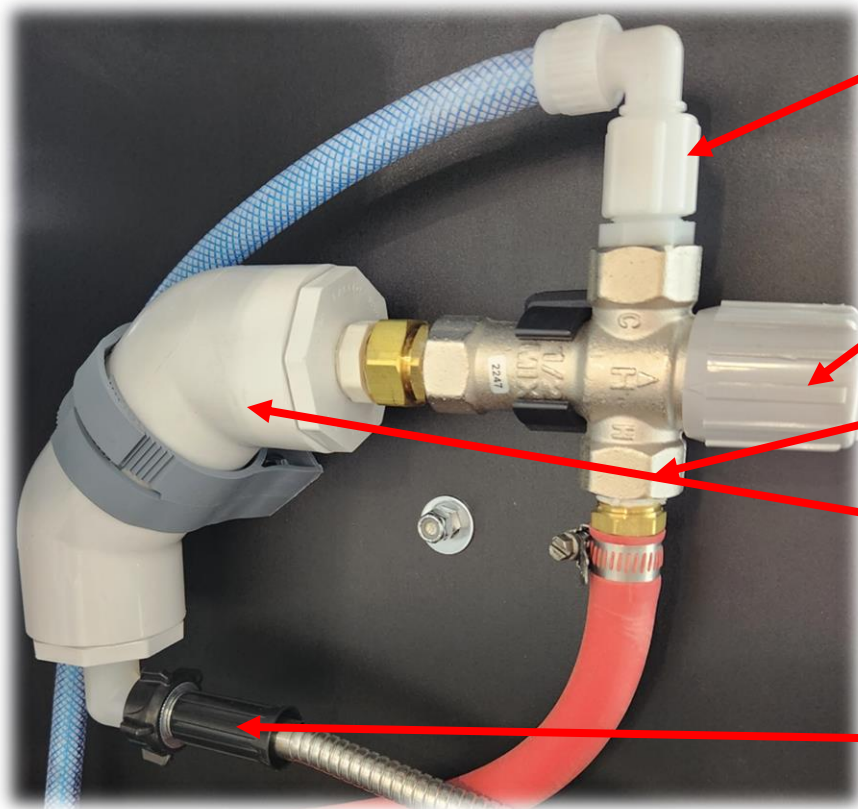
Hot water is produced by having the van's engine coolant at maximum/optimal operating temperature.

On 2019 and newer Sprinter vans you can go to the Service menu, Coolant, and review the current engine coolant temperature.

If the engine is not hot your water will only get as hot as the water in your tank. using the Hanvey overnight tank warmer will help warm the tank for the day's first stop.



Water Mixer Layout



Cold water

Control valve

Hot water

Mixing PVC reservoir

Supply to spray nozzle

Water Mixer Operation

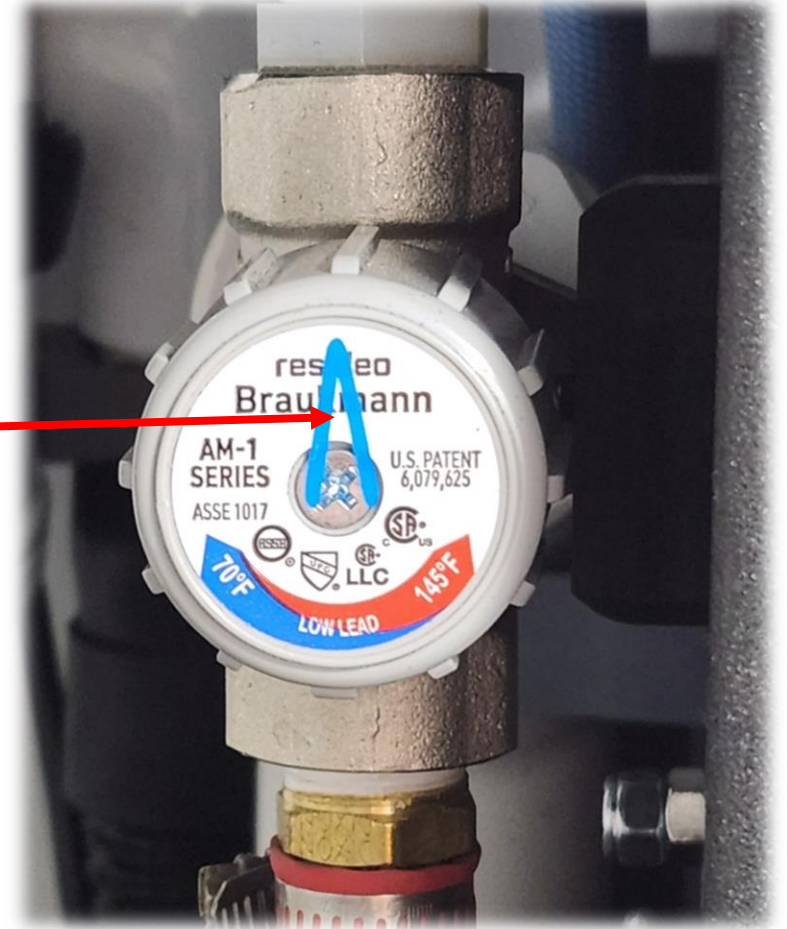
Turning the Water mixer knob to the right (clockwise) will mix more cold water.

Turning the water mixer knob to the left (counter-clockwise) will mix more hot water.

If you notice the arrow is pointing at 12 o'clock, this should be the starting water temperature for warm water.

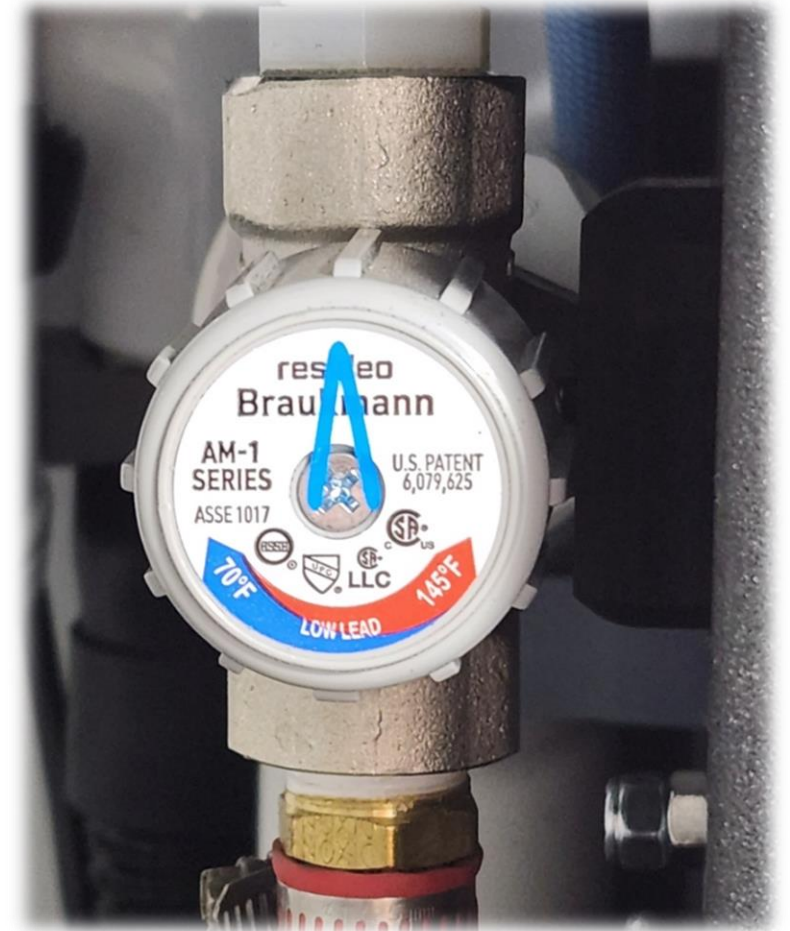
If you want warmer/hotter water turn the knob so the arrow points to 9 o'clock.

If you want colder water turn the knob so the arrow points at 1 o'clock.



Water Mixer Operation

CAUTION... turning too far left can overwhelm the on-demand heating system causing the water to get colder instead of hotter.



Water Mixer Operation

The Water Mixer comes preset to a warm water temperature setting. This setting can be changed if desired.

Changing the temperature of the water once the van's engine coolant is up to temperature.

1. Turn the knob clockwise to the coldest setting.
2. With the spray nozzle, start spraying water. Do not release the water nozzle until you are satisfied with steps 3-5.
3. Turn the Water Mixer knob counter-clockwise very slowly in small increments and stop turning after the small turn.
4. Wait 5 to 10 seconds, if too cold, turn the knob counter-clockwise in small increment turns and recheck the water temperature.
5. Repeat step 4 until you reach the water temperature you desire.



Troubleshooting Water Mixer

<u>Problem</u>	<u>Possible Solution</u>
I don't have any hot water.	<ol style="list-style-type: none">1. Is your vans engine cold? If yes, start the engine on the van and let run for 10 minutes.2. Do you have heat in the cab of the van? If no, check the coolant level under the hood of the van.3. Do you have heat in the cab of the van? If yes, check for leaks at the heat exchanger in the rear of the van. Touch all four hoses to see if they are hot.4. Turn the Boost pump to the On position.
When using the spray nozzle, no water comes out	<ol style="list-style-type: none">1. Is the freshwater pump in the On position on the 12-volt DC panel?2. Do you hear the Fresh water pump running?3. Did you have freezing temperatures the night before? If it is then the water mixer is most likely frozen.4. Do you have water in the freshwater tank?
My van froze and the Water Mixer has burst.	<ol style="list-style-type: none">1. Take a picture of the Water Mixer and call Hanvey for a replacement.2. You can bypass the PVC mixer by removing the burst PVC part from the mixing valve. Remove the freshwater rinse hose from the PVC mixer and connect the freshwater rinse hose to the back of the mixing valve.

Troubleshooting Water Mixer

<u>Problem</u>	<u>Possible Solution</u>
<p>I turn the knob on the Water Mixer and the water temperature does not change.</p>	<ol style="list-style-type: none"><li data-bbox="1309 294 2440 372">1. Is your van's engine cold? If yes, start the engine on the van and let run for 10 minutes.<li data-bbox="1309 379 2440 594">2. Is your van's engine cold? If not, check the hot water hose at the bottom of the Water Mixer. If it is hot, then the spring inside the mixing valve could be stuck. Take a hammer and tap the side of the mixing valve to unstick the spring. If that does not work then call Hanvey for a replacement mixing valve.<li data-bbox="1309 601 2440 773">3. If you have hard/soft water in your area or well water, all of these can leave deposits in your water system, reducing the system's effectiveness. Contact support for help with cleaning these parts in your water system.



Grooming Tub



Tub Topics

- [Tub Overview](#)
- [General Tub Process](#)
- [Tub Layout](#)
- [Tub Maintenance](#)



Tub Overview

The Hanvey stainless steel tub is designed to handle all dog types, from small to large dogs.

Each tub is equipped with features to help keep your dog safe and in place during the bathing cycle. A bathing board for smaller dogs to keep the dog at a comfortable height for washing.

The tubs are made for your dog to walk from the grooming table straight into the tub.

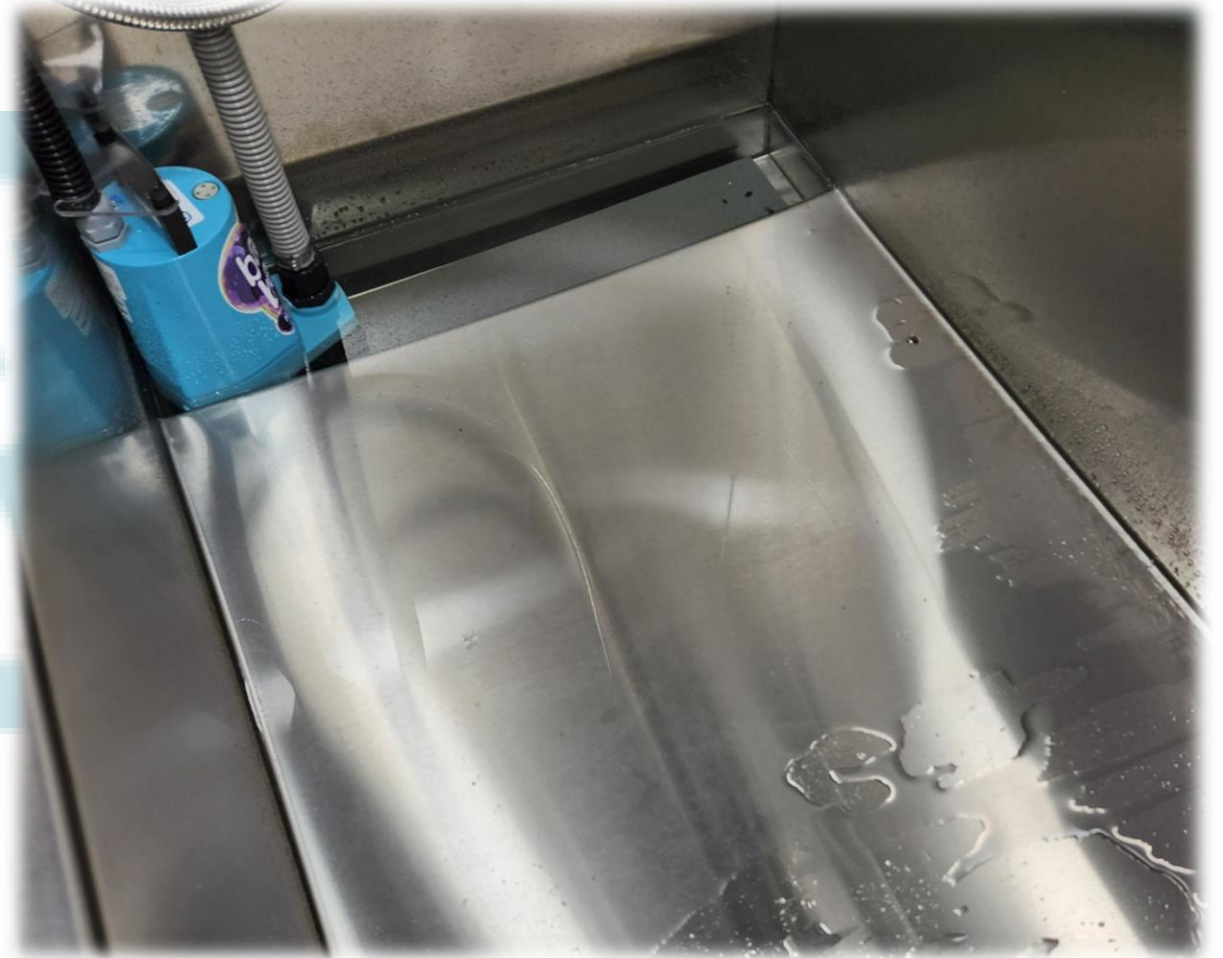
Your van will come equipped with either a 42" wide tub (standard) or a 52" wide tub (170 Big Dog Upgrade).



General Tub Process

To operate the Tub

1. Add water to fill the bather reservoir.
2. Add one pump of product to the tub.
3. Place the dog in the tub.
4. Wash dog with bather.
5. Rinse the dog.
6. Drian the tub.



Tub Layout

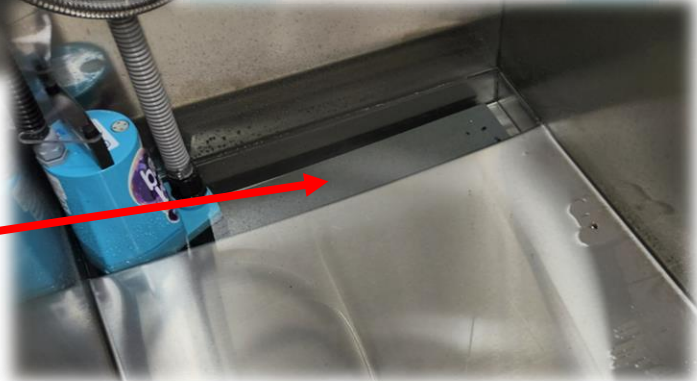
- Tub



- Bather



- Bather Reservoir



Tub Layout

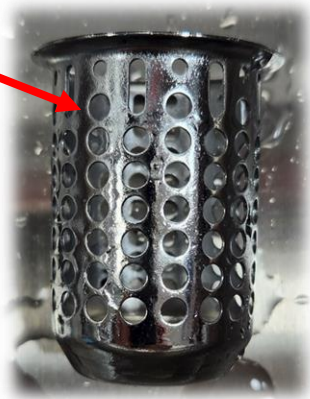
- Tub Drain



- Bathing Board



- Drain Basket



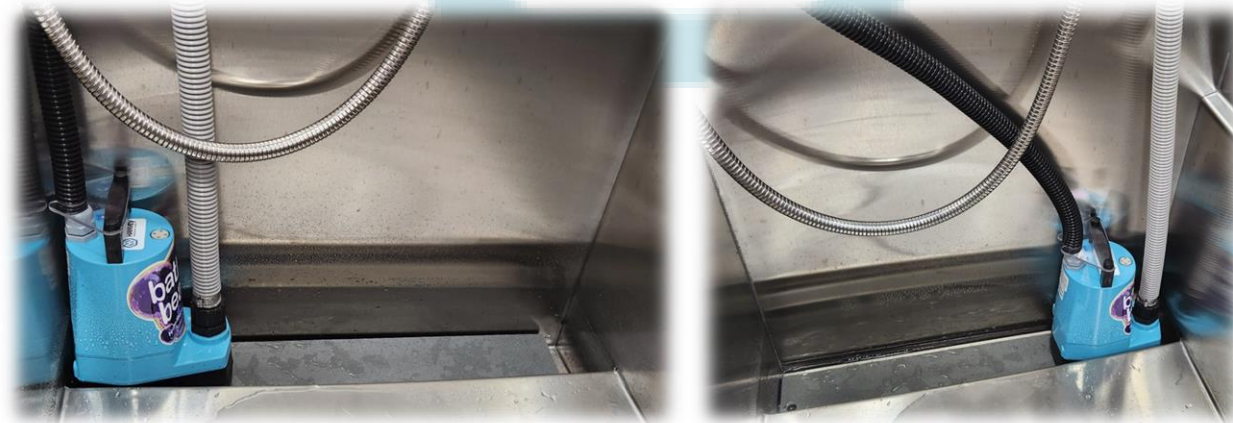
- Tub Divider

Tub Layout

- Water Level - Minimum

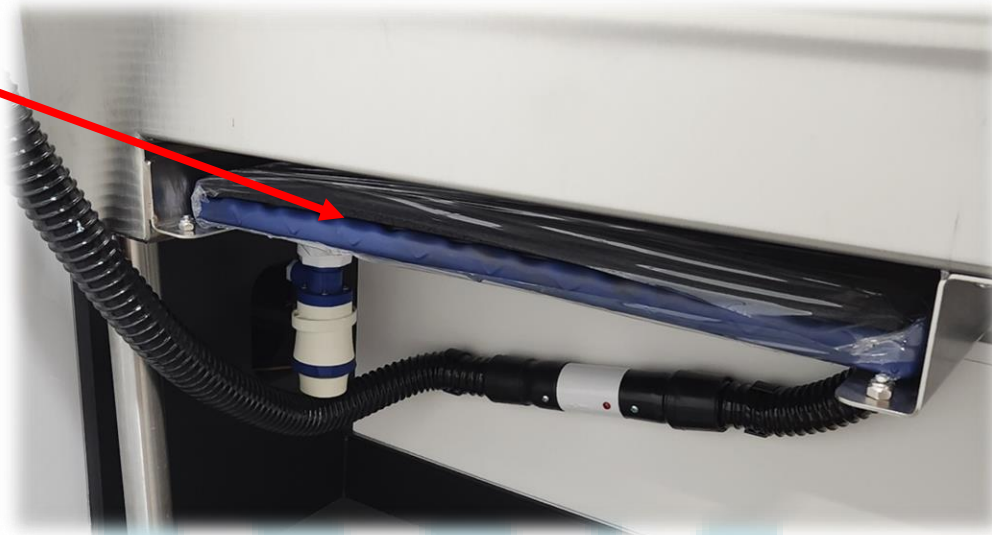


- Bather Location

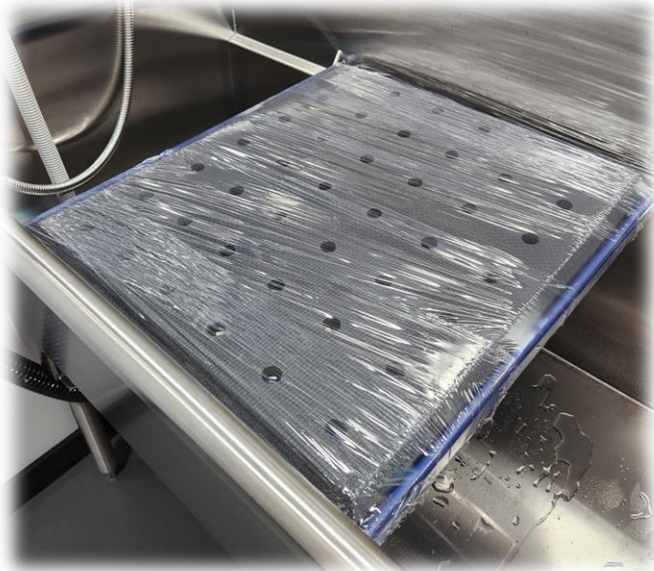


Tub Layout

- Small Dog Shelf Storage



- Small Dog Shelf



- Restraint Anchor



Tub Maintenance

The Tub can be cleaned with mild soap and water or a stainless-steel cleaner. Do not use any type of Metal brush, soft plastic brushes would be fine. Only use a soft cleaning cloth or magic eraser.



Shampoo Pumps



Shampoo Pump Topics

- [Shampoo Pump Overview](#)
- [Shampoo Pump Operation](#)
- [Shampoo Pump Layout](#)
- [Shampoo Pump Maintenance](#)
- [Troubleshooting Shampoo Pump](#)



Shampoo Pump Overview

Each Hanvey van comes equipped with two Shampoo pumps and two product holders. A third Shampoo pump and holder can be added for an additional charge. The pumps work with the Bathing Beauty system.

One pump for shampoo and one pump for conditioner.



Shampoo Pump Operation

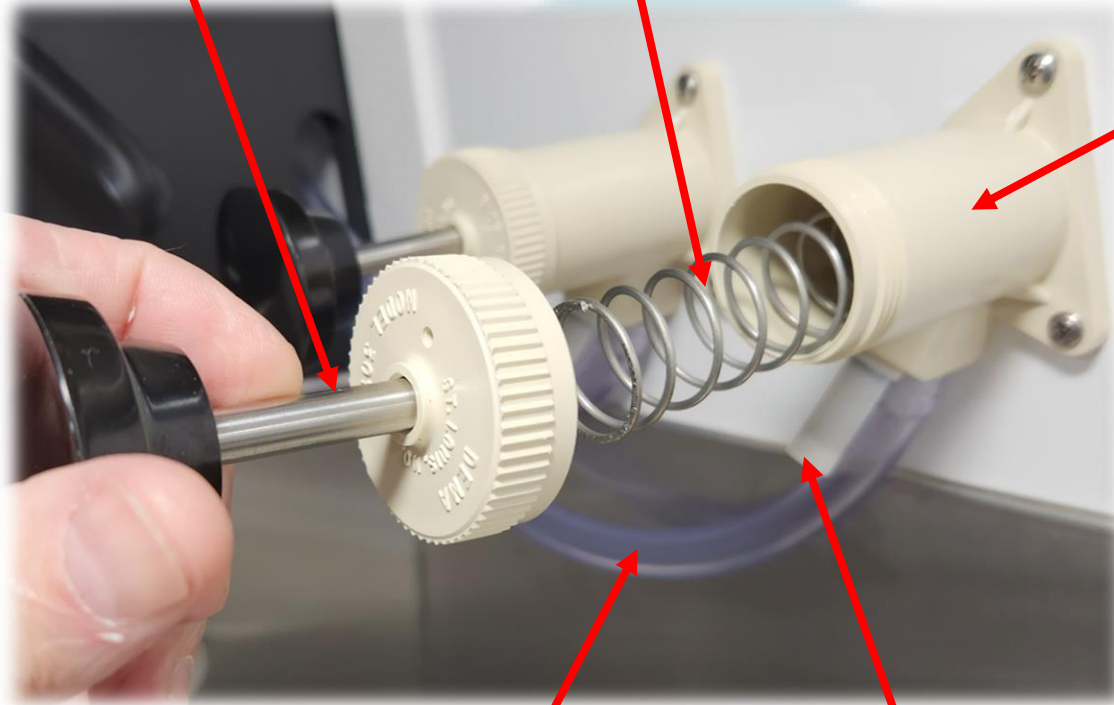
To operate the shampoo pump, insert the clear hose into your products, push the knob into the pump and the product will come out of the pump going into the tub. The pump will dispense 1 ounce of product with each push of the pump.



Shampoo Pump Layout

- Push knob and cap

- Spring



- Pump Main Body

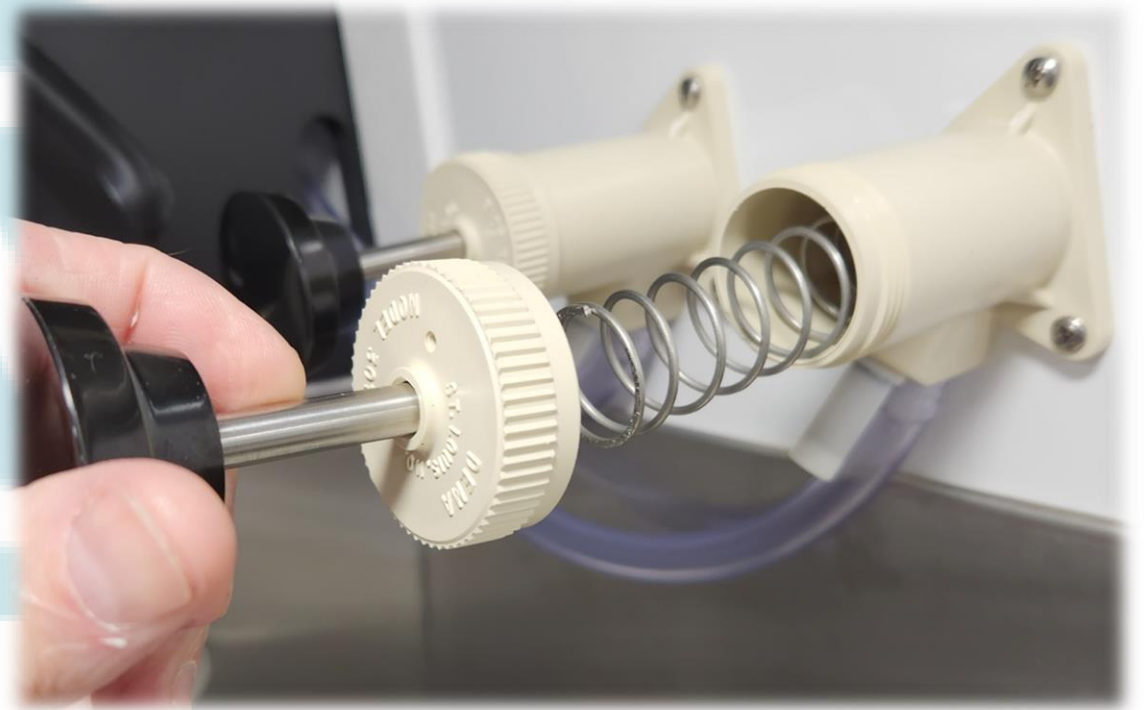
- Supply Hose

- Dispensing nozzle

Shampoo Pump Maintenance

The Shampoo pump can be taken apart for cleaning and to ensure the pump is operating correctly.

1. Keeping one hand on the knob, turn the white cap counter-clockwise to loosen it.
2. CAUTION!!!! The pump is spring-loaded. Make sure you keep the push knob in one hand while slowly removing the white cap.
3. Remove the spring and inspect for damage.
4. Reinsert the spring and screw cap clockwise back onto the main body.



Troubleshooting Shampoo Pump

<u>Problem</u>	<u>Possible Solution</u>
I push the pump knob into the pump, but no product comes out of the nozzle.	<ol style="list-style-type: none">1. Check your product in the Shampoo holder and ensure you have product in the jug.2. Is the clear hose pushed all the way down in your product jug?
I push the pump knob in, but it gets stuck.	<ol style="list-style-type: none">1. Check the dispensing nozzle tip for dried or build-up of the product.2. See the Shampoo Pump Maintenance section for inspecting the spring inside the pump. If the spring is broken, replace the pump.3. Inspect the supply hose for clogs.
The push knob and cap will not stay screwed onto the main body of the pump.	<ol style="list-style-type: none">1. Inspect the threads, if bad replace the pump.
The clear hoses is clogged with product, how do I clear it out?	<ol style="list-style-type: none">1. Remove the clear hose from the pump and the product jug. Place the clear hose in hot water for a few hours to loosen the clog. You may need to blow in one end of the hose to clear the clog.

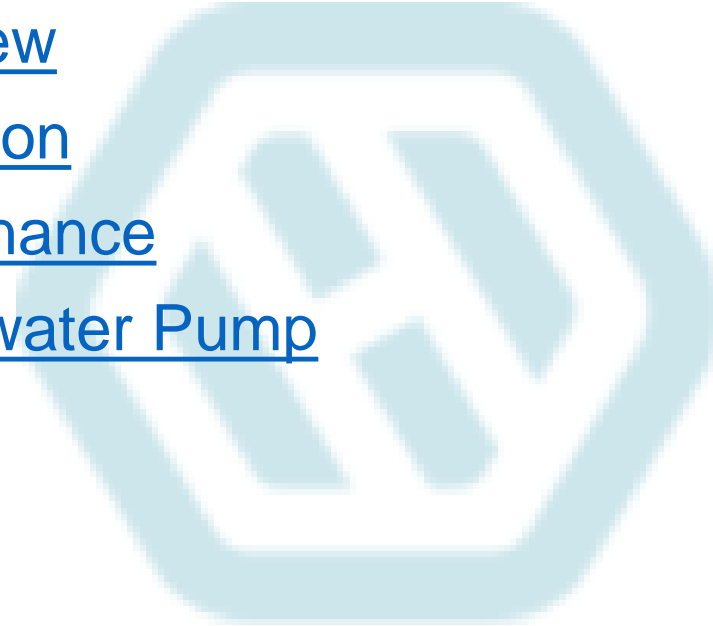


Bathing Beauty



Bathing Beauty Topics

- [Bathing Beauty Overview](#)
- [Bathing Beauty Operation](#)
- [Bathing Beauty Maintenance](#)
- [Troubleshooting Freshwater Pump](#)



Bathing Beauty Overview

The Hanvey Bathing Beauty Power Pet Wash System is designed to make bathing easier.

This system is designed to be submerged in your Hanvey grooming tub.

Each Bathing Beauty comes equipped with one Bathing Beauty pump, one rinse hose, and a nozzle.



Bathing Beauty operation

Before using the Bathing Beauty, ensure the Inverter is on. Use the Inverter remote to turn the Inverter on.

The green status light indicates the Inverter is on.



Bathing Beauty operation

Before turning the Bather on, ensure you have water filling the recessed area of the Hanvey grooming tub (this is the minimum water level) completely full of water.

Inadequate water levels will result in burning up the Bathing Beauty. The more water you have in the tub, the cooler the Bathing Beauty will run.



Bathing Beauty operation

To turn On the Bathing Beauty, press the black air bulb labeled Bathing Beauty with the palm of your hand.

To turn Off the Bathing Beauty, Press the same air bulb with the palm of your hand.



Bathing Beauty operation

The spray nozzle is equipped with a valve to control the water pressure. The highest pressure is for deep cleaning and the lowest is for cleaning puppies around the face or ears.



Lowest pressure



Highest pressure

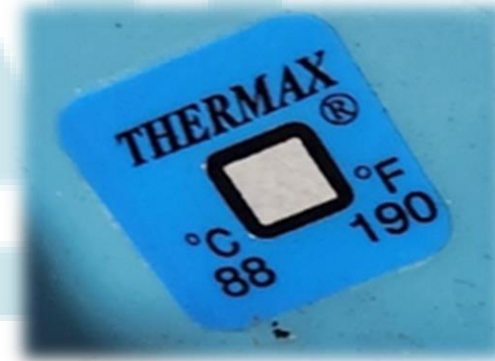
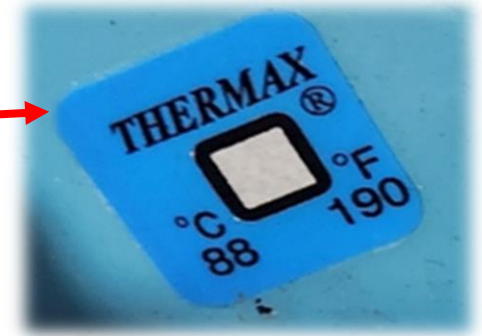


Valve

Bathing Beauty operation

Each Bathing Beauty is equipped with a thermal temperature sensor. Inadequate water levels in the tub will cause the Bathing Beauty to overheat.

When overheating occurs the temperature sensor will change color (Black) and the Bathing Beauty will shut down.



Normal operating temperature

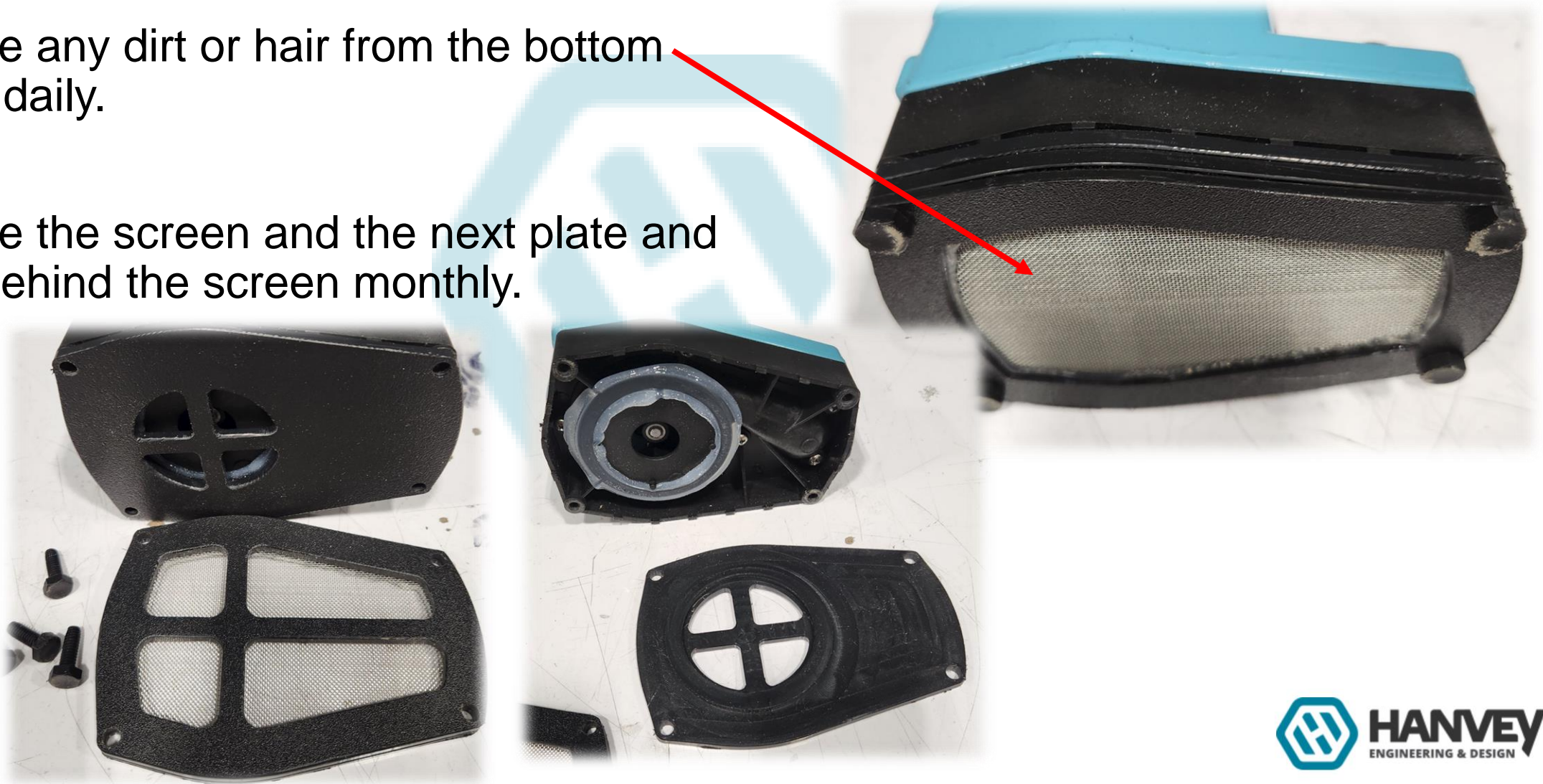


Overheated operating temperature

Bathing Beauty Maintenance

Remove any dirt or hair from the bottom screen daily.

Remove the screen and the next plate and clean behind the screen monthly.



Troubleshooting Bathing Beauty

<u>Problem</u>	<u>Possible Solution</u>
When I press the air bulb, the Bathing Beauty will not turn on.	<ol style="list-style-type: none">1. When you press the air bulb, do you hear a click? Check the blue rubber hose in the rear of the van, make sure the blue hose is plugged into the air switch.2. Check the thermal temperature sensor on top of the Bathing Beauty.
I hear the air switch click, but the Bathing Beauty will not turn On.	<ol style="list-style-type: none">1. In the rear of the van, find the air switch with the blue rubber hose, open the air switch box and check to ensure all connections are connected.2. Check the voltage at the air switch.3. Verify that the GFI plug for the Bathing Beauty has not tripped.
Bathing Beauty is running, but very little water is coming out of the nozzle.	<ol style="list-style-type: none">1. Check the screen on the bottom of the Bathing Beauty, clean it if needed.2. Remove the nozzle hose from the Bathing Beauty and check the hose for any blockage.3. Remove the nozzle hose from the Bathing Beauty and check the discharge port for any blockages.

Freshwater Pump Hose Spray Nozzle



Freshwater Pump Topics

- [Freshwater Pump, Hose, and Spray Nozzle](#)
- [Freshwater Pump operation](#)
- [Troubleshooting Freshwater Pump](#)



Freshwater Pump, Hose, and Spray Nozzle

Every Hanvey van comes equipped with two Freshwater pumps, one Freshwater hose, and one spray nozzle. One main Freshwater pump and one backup Freshwater pump.



Freshwater Pump operation

To ensure proper use of the Freshwater pump, make sure your freshwater tank is filled with water.

- To use the Freshwater pump, the 12-volt DC panel main power and the Freshwater source for the pump must be in the on position.



Freshwater Pump operation

Once the pump is in the on position, you may hear the pump run for a few seconds until the pump is fully primed.

Each time you press the spray nozzle the pump will run until you release the spray nozzle and the pump will stop running.



Troubleshooting Freshwater Pump

<u>Problem</u>	<u>Possible Solution</u>
The main power switch and the Freshwater switch are in the On position, but the Freshwater pump will not turn on.	1. At the Freshwater pump, unplug the quick disconnect plug, and check for 12 volts. See video.
The Freshwater pump is running and won't prime.	<ol style="list-style-type: none">1. Is there water in the freshwater tank?2. Check the connections at the Freshwater pump, and make sure they are tight.3. Check the suction line connection on the freshwater tank.4. Inspect the spray nozzle for tightness.5. Make sure the Freshwater hose is not damaged.
The Freshwater nozzle and hose are leaking at the connection	<ol style="list-style-type: none">1. Remove the spray nozzle, inspect the rubber gasket
Metal Freshwater hose is leaking	<ol style="list-style-type: none">1. Check the connection of the hose inside the black sleeve. See video.
Freshwater hose has a hole in the hose.	<ol style="list-style-type: none">1. Replace the hose.
Leak from PEX fitting	<ol style="list-style-type: none">1. Verify gasket is present and in good condition.2. Verify fitting is tight.
PEX hose is kinked or flat	<ol style="list-style-type: none">1. Replace hose.

Drain Pump



Drain Pump Topics

- [Drain Pump Overview](#)
- [Drain Pump operation](#)
- [Air Bulb operation](#)
- [Troubleshooting Drain Pump](#)



Drain Pump Overview

The Hanvey Drain pump is designed to pump wastewater from the grooming tub and discharge the wastewater into the gray water tank in the rear of the van.

The Drain pump is located underneath the grooming tub.

Each Hanvey van comes equipped with two Drain pump cartridges. One was installed underneath the tub and one in the rear of the van.



Drain Pump Operation

The main power source for the Drain pump is located on the 12-volt DC panel. It is labeled “Waste Pump”. When the light is illuminated the power is On.



The Drain pump has an On/Off air bulb located near the tub.

To drain the tub, make sure the “Waste Pump” switch is in the On position, then press the black air bulb.

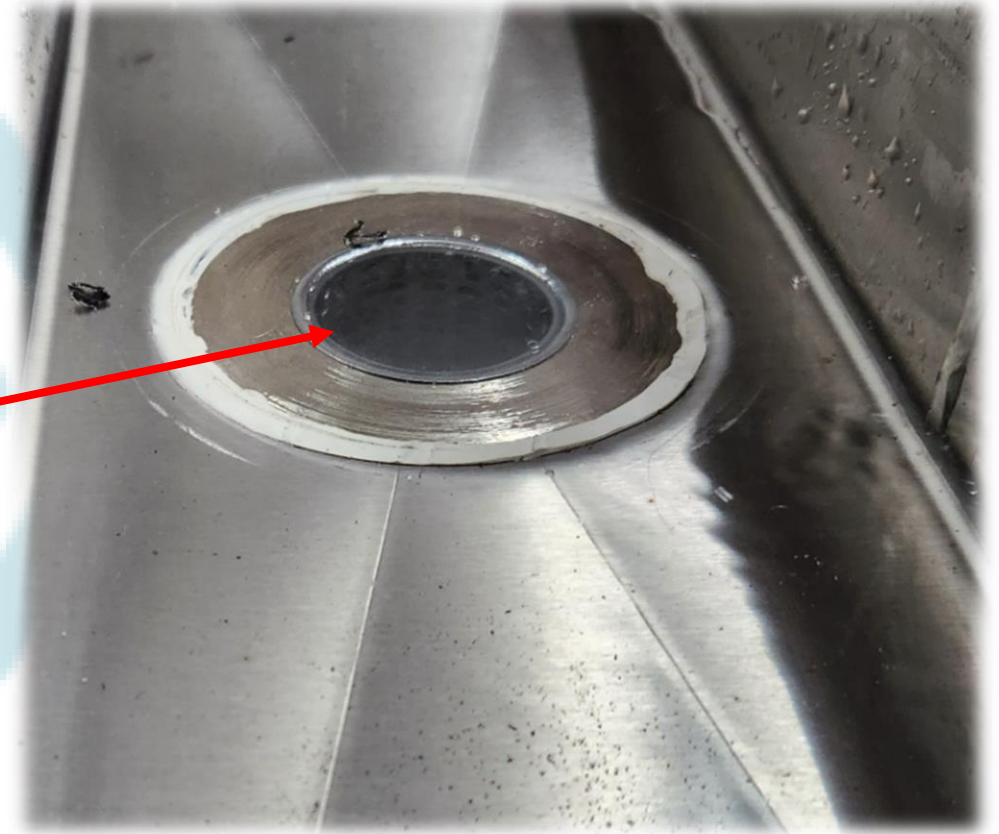
Once the tub is drained, press the black air bulb to turn the Drain pump Off. You do not need to turn the Drain pump Off on the 12-volt DC panel.



Drain Pump Operation

You will notice that when you have drained the tub and removed the bather board at the bottom of the tub, there is still a small amount of water remaining in the tub.

This is by design, the water remaining in the bottom of the tub is there to keep any odors from the wastewater tank from backing up into the tub.

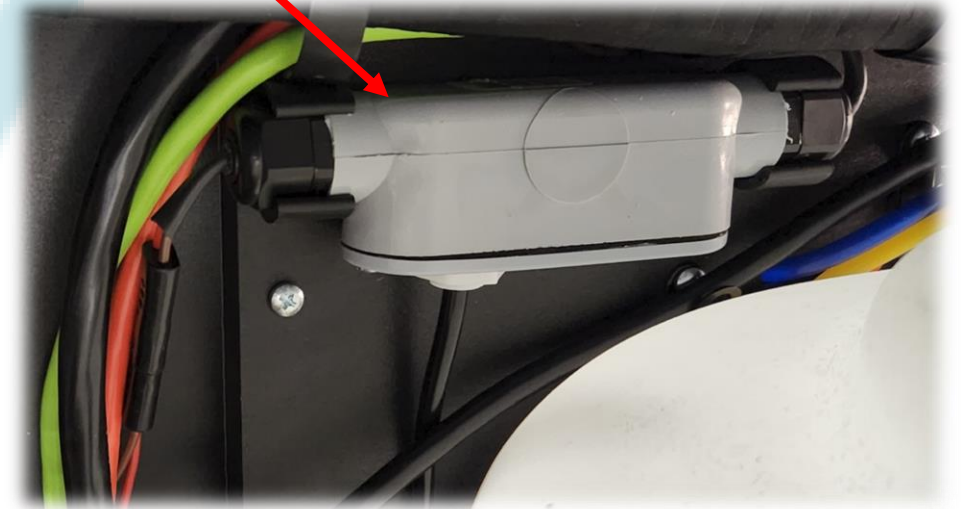


Air Bulb Operation

Pressing the black air bulb sends a puff of air through the black rubber hose to the air switch to turn the Drain pump On/Off.

The air switch is located in the rear of the van, directly over the wastewater tank mounted to the wall.

The Air Bulbs are installed as safety devices that prevent wet hands from coming into contact with electrical switches that could cause a shock hazard.



Troubleshooting Drian Pump

<u>Problem</u>	<u>Possible Solution</u>
When I press the air bulb, the Drain pump will not turn on.	<ol style="list-style-type: none">1. Is the Waste pump switch turned to the On position on the 12-volt DC panel?2. When you press the air bulb, do you hear a click? If no click, then the aluminum nipple that the black tube attaches to may be clogged. Try removing the black tube and feel for air when pressed. If no click, check the black rubber hose in the van's rear at the air switch, and ensure the black hose is plugged into the air switch.
I hear the air switch click, but the Drain pump will not turn On.	<ol style="list-style-type: none">1. At the Drain pump underneath the tub, disconnect the quick connection for the pump and check the voltage. If you have voltage but the pump is not running, replace the drain pump.2. In the rear of the van, find the air switch with the black rubber hose, open the air switch box, and check to ensure all connections are connected.3. Check the voltage at the air switch.
When turning on the Waste pump switch on the 12-volt DC panel, the light does not come on.	<ol style="list-style-type: none">1. In the rear of the van on the electrical side of the van. Locate the 12-volt DC panel and check the voltage on the breaker for the Waste pump. With the switch in the On position and the main power switch in the On position, check the right side of the breaker. If no voltage, replace the breaker.
When I press the air bulb, it's hard to the touch and will not press.	<ol style="list-style-type: none">1. Remove the air bulb from the wall and remove the black rubber hose. Clean the opening on the air bulb.

High-Velocity Force Dryer



High-Velocity Force Dryer Topics

- [High-Velocity Force Dryer Overview](#)
- [High-Velocity Force Dryer Operation](#)
- [High-Velocity Force Dryer Maintenance](#)
- [Troubleshooting the High-Velocity Force Dryer](#)

High-Velocity Force Dryer Overview

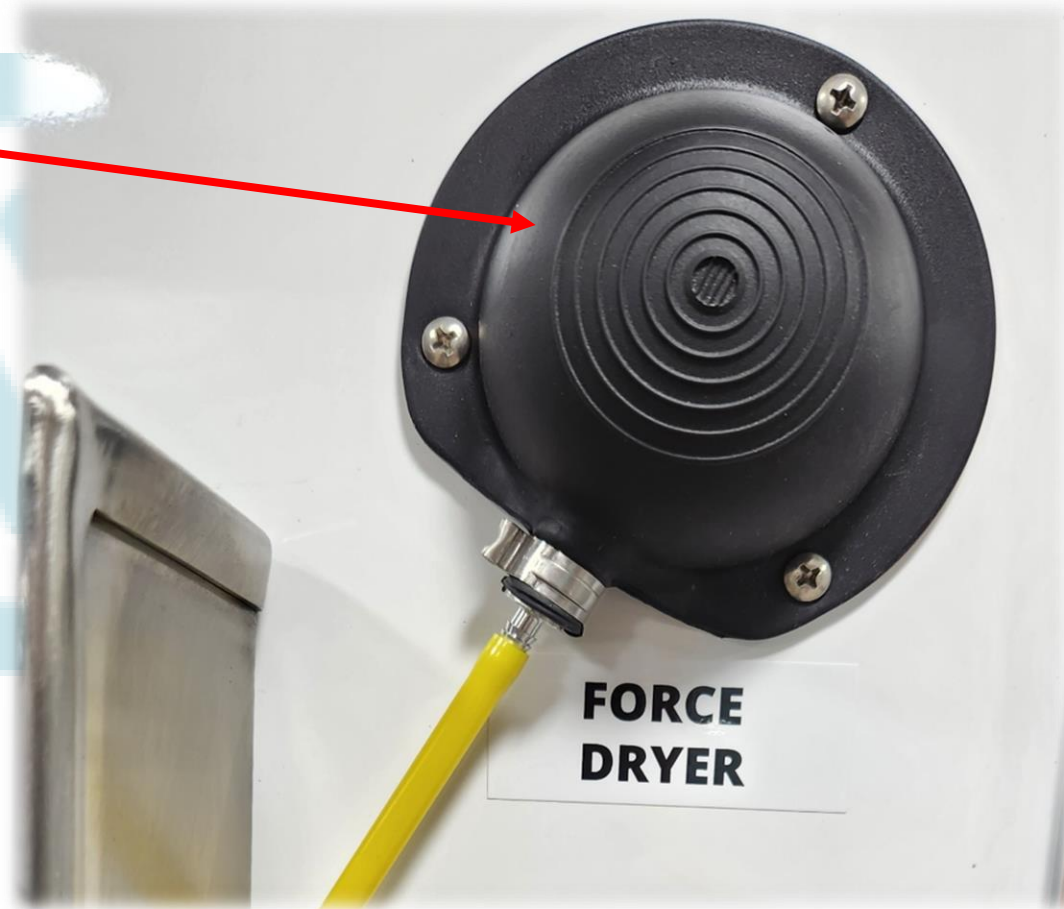
The High-Velocity Force Dryer is a variable-speed dryer that produces high-velocity airflow for quicker drying times.



High-Velocity Force Dryer Overview

On/Off Air Bulb

- The On/Off Air Bulb is the main power source to turn the High-Velocity Force Dryer on and off.
- Pressing the air bulb sends a puff of air to the air switch that is located in the rear of the van in Breaker Box 2.
- The air bulb is safe to use with wet hands.



High-Velocity Force Dryer Overview

Reset button

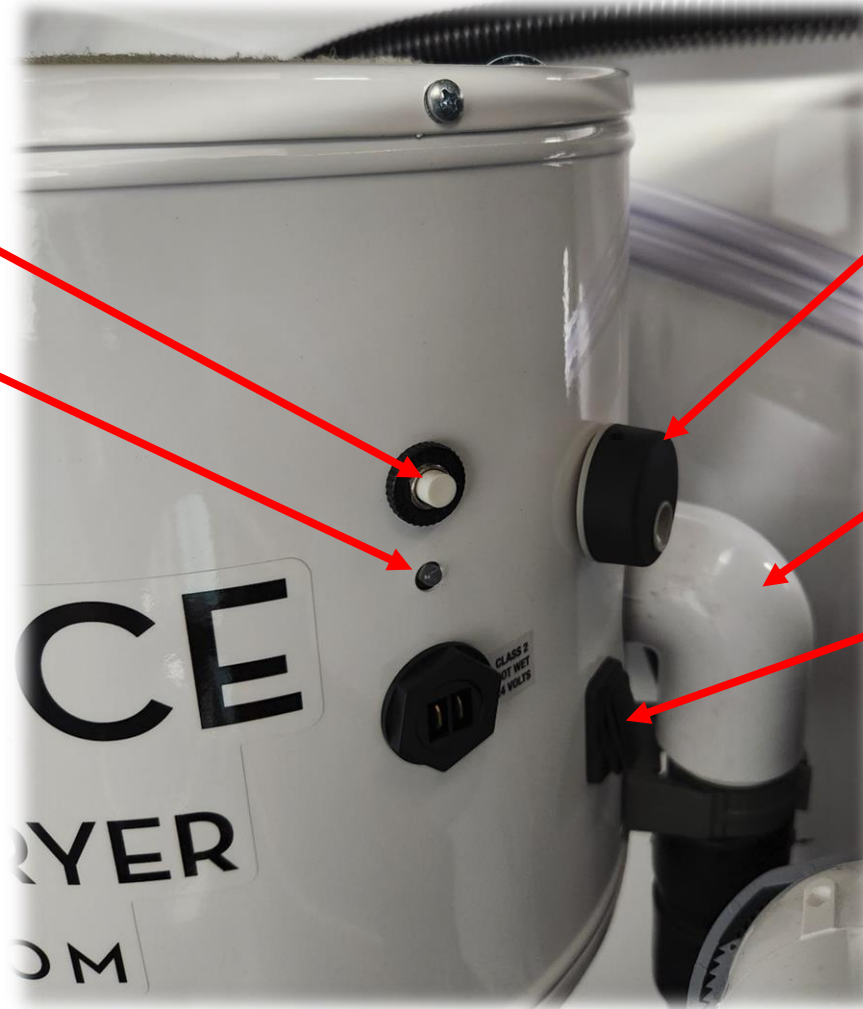
Power On LED

Variable Speed
controller

Dryer Hose connection

3-Position Switch:

- Variable Speed/Up
- Off/Center
- Full Speed/Down



High-Velocity Force Dryer Overview

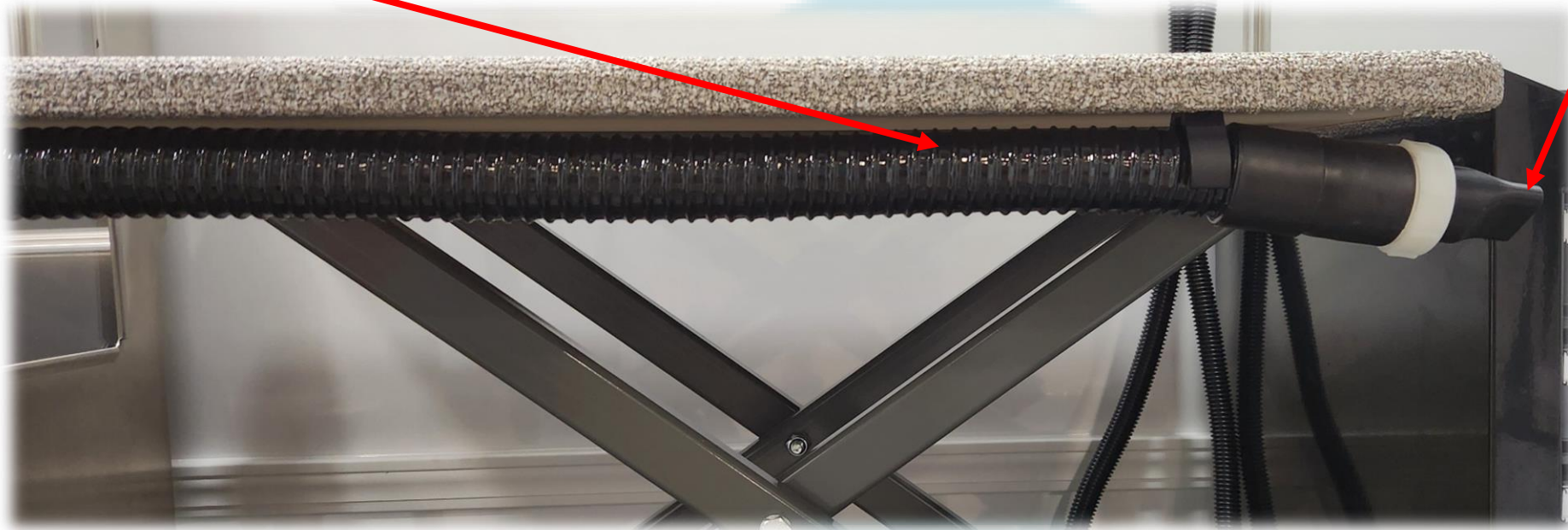
Top and Bottom filter



High-Velocity Force Dryer Overview

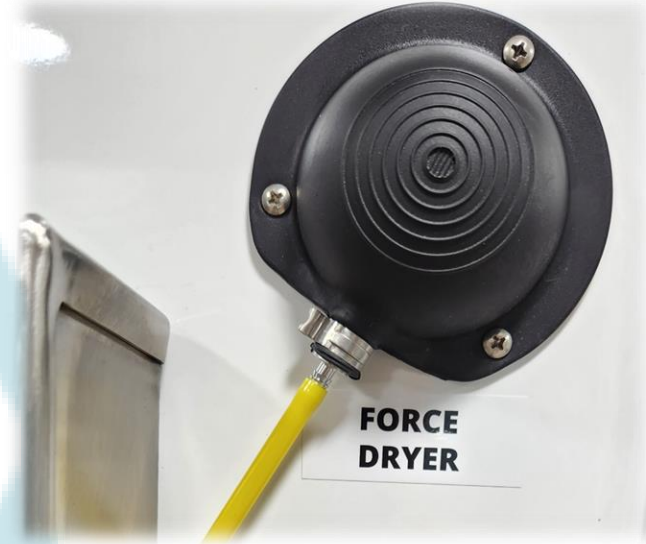
Dryer Hose

Nozzle



High-Velocity Force Dryer Operation

- To turn on the High-Velocity Force Dryer, the inverter must be in the On position.
- Press the High-Velocity Force Dryer air bulb to turn the dryer on/off.
- The dryer has a rocker switch that has three position settings
 - Center position, the dryer is turned off.
 - Up position, maximum speed.
 - Down position, variable speed, use the variable speed knob above the 3-position switch to control the speed.



Center position



Up position

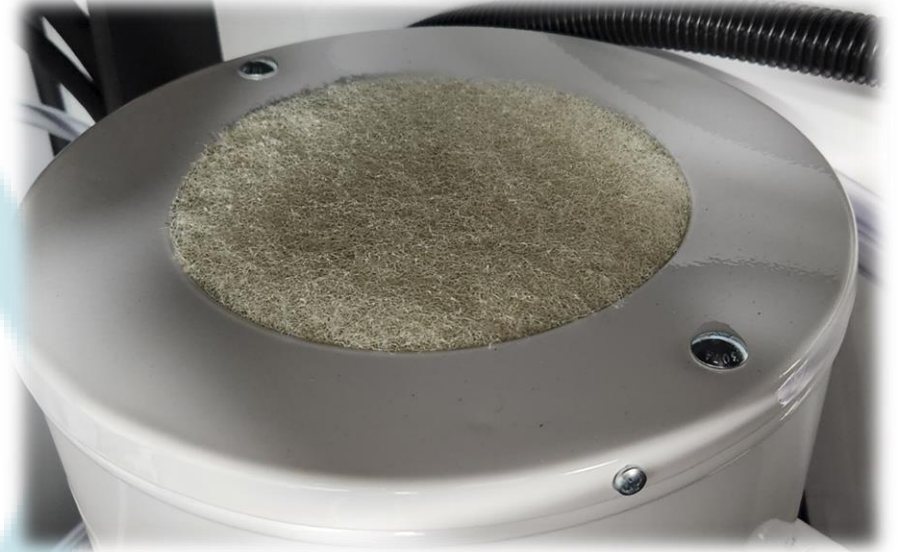


Down position

High-Velocity Force Dryer Maintenance

The dryer has a top and bottom filter that needs to be vacuumed off weekly.

*****DO NOT REMOVE THE FILTERS*****



Troubleshooting High-Velocity Force Dryer

<u>Problem</u>	<u>Possible Solution</u>
When I press the air bulb, the dryer will not turn on.	<ol style="list-style-type: none">1. Is the inverter turned to the On position?2. Is the green light turned illuminated on the dryer? If no, press the reset button on the dryer.3. Check the red rocker switch on Breaker Box 2 in the rear of the van. Is the red light illuminated? If no, reset the switch.4. Check the rocker switch on the dryer. If its position is in the middle the dryer is in the Off position, turn the switch up or down.
Dryer is on and the green light is on but no air coming from the dryer.	<ol style="list-style-type: none">1. The brushes may need to be replaced. Contact support.
The dryer is on but makes a strange noise and smells like it's burning.	<ol style="list-style-type: none">1. Turn the dryer off and contact support.

Fluff Dryer



Fluff Dryer Topics

- [Fluff Dryer Overview](#)
- [Fluff Dryer Operation](#)
- [Fluff Dryer Maintenance](#)
- [Troubleshooting the Fluff Dryer](#)



Fluff Dryer Overview

The Hanvey Fluff Dryer is a low-power dryer beneficial for dogs with dryer sensitivities. This dryer can be used with the high-velocity dryer to speed up drying times.



Fluff Dryer Overview

On/Off Air Bulb

- The On/Off Air Bulb is the primary power source for turning the Fluff Dryer on and off.
- Pressing the air bulb sends a puff of air to the air switch in the rear of the van in Breaker Box 1.
- The air bulb is safe to use with wet hands.

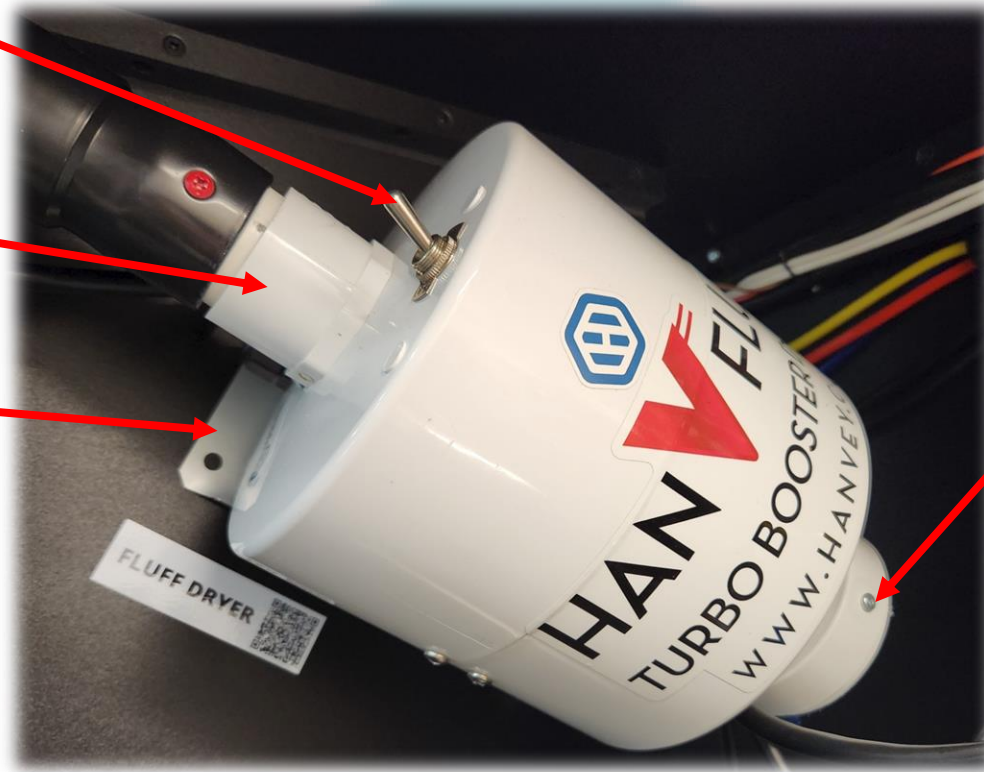


Fluff Dryer Overview

Power On/Off switch

Air outlet port

Mounting Bracket

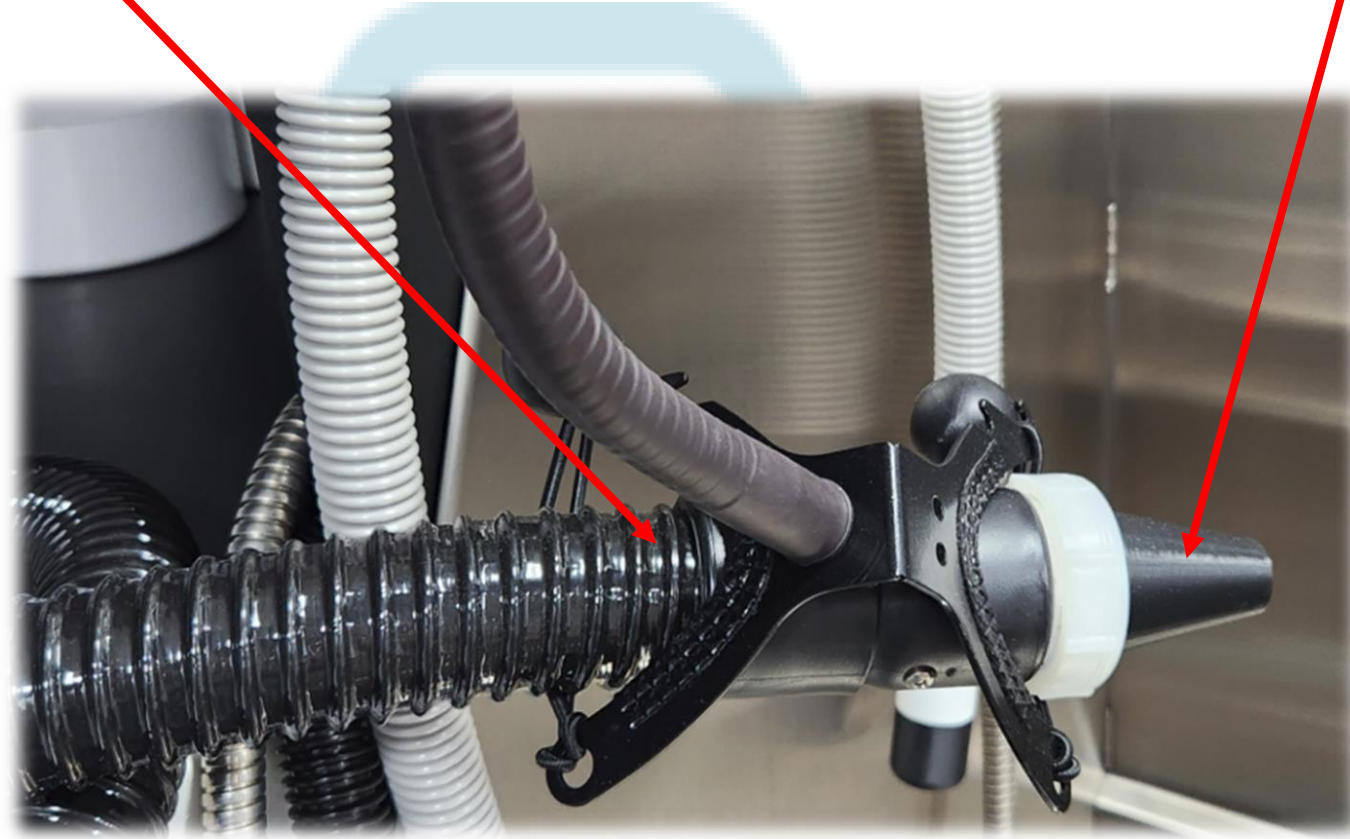


Air intake and filter

Fluff Dryer Overview

Dryer Hose

Nozzle



Fluff Dryer Operation

- To turn on the Fluff Dryer, the inverter must be in the On position.
- Press the Fluff Dryer air bulb to turn the dryer on/off.
- The dryer has a switch that is mounted on the dryer. This switch needs to be left in the On position.



Fluff Dryer Maintenance

The dryer has a small blue filter on the rear of the dryer at the air intake. Pull this filter out of the unit and clean monthly.



Troubleshooting Fluff Dryer

<u>Problem</u>	<u>Possible Solution</u>
When I press the air bulb, the dryer will not turn on.	<ol style="list-style-type: none">1. Is the inverter turned to the On position?2. Is the power switch on the dryer in the On position?3. Check the red rocker switch on Breaker Box 1 in the rear of the van. Is the red light illuminated? If no, reset the switch.
The dryer is on but makes a strange noise and smells like it's burning.	<ol style="list-style-type: none">1. Turn the dryer off and contact support.





Grooming Table



Grooming Table Topics

- [Table Overview](#)
- [Table Operation](#)
- [Table LIPSystem Overview](#)
- [Adding Extensions to LIPSystem](#)
- [Table Maintenance](#)
- [Troubleshooting Table](#)



Table Overview

Hanvey grooming vans come equipped with a grooming table. Hanvey offers two different table-manufactured tables. Comfort Grooming tables and Ascot Grooming tables.

Both tables are also offered in two different tabletop sizes, 36" or 42"



Ascot



Comfort Groom

Table Operation

Table operation is performed via the foot controls to raise or lower the table.



Comfort Groom



Ascot

Table LIPSystem Overview

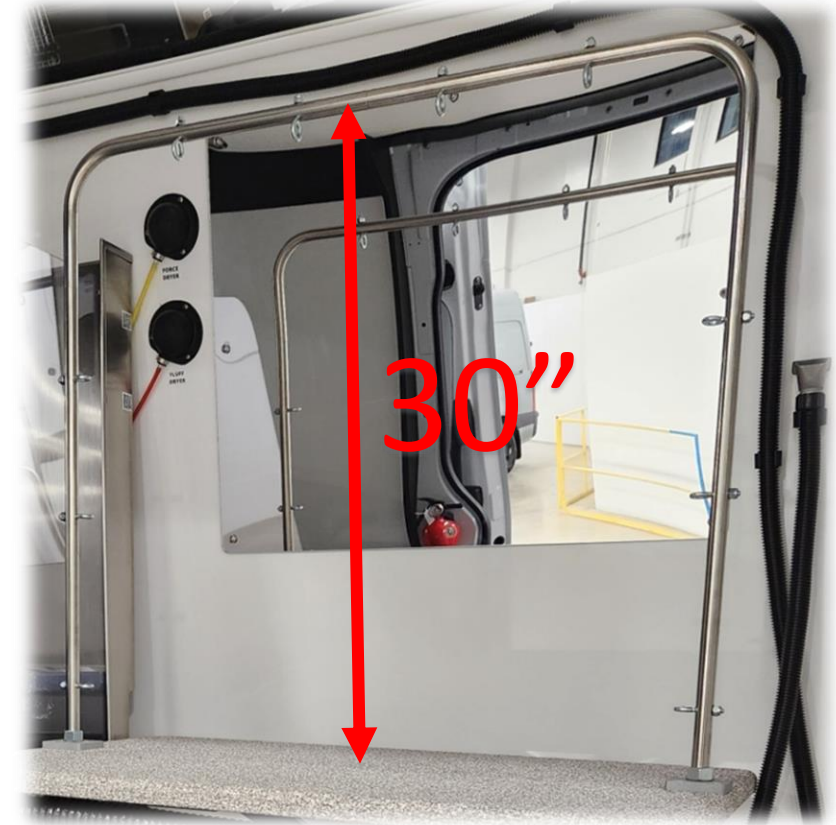
Every table comes equipped with a Hanvey LIPSystem and LIPSystem extensions.

What is the LIPSystem? LIPSystem (Linked Internal Positioning System) is a full-length grooming arm designed to help the groomer position the dog and keep the dog safe while grooming.



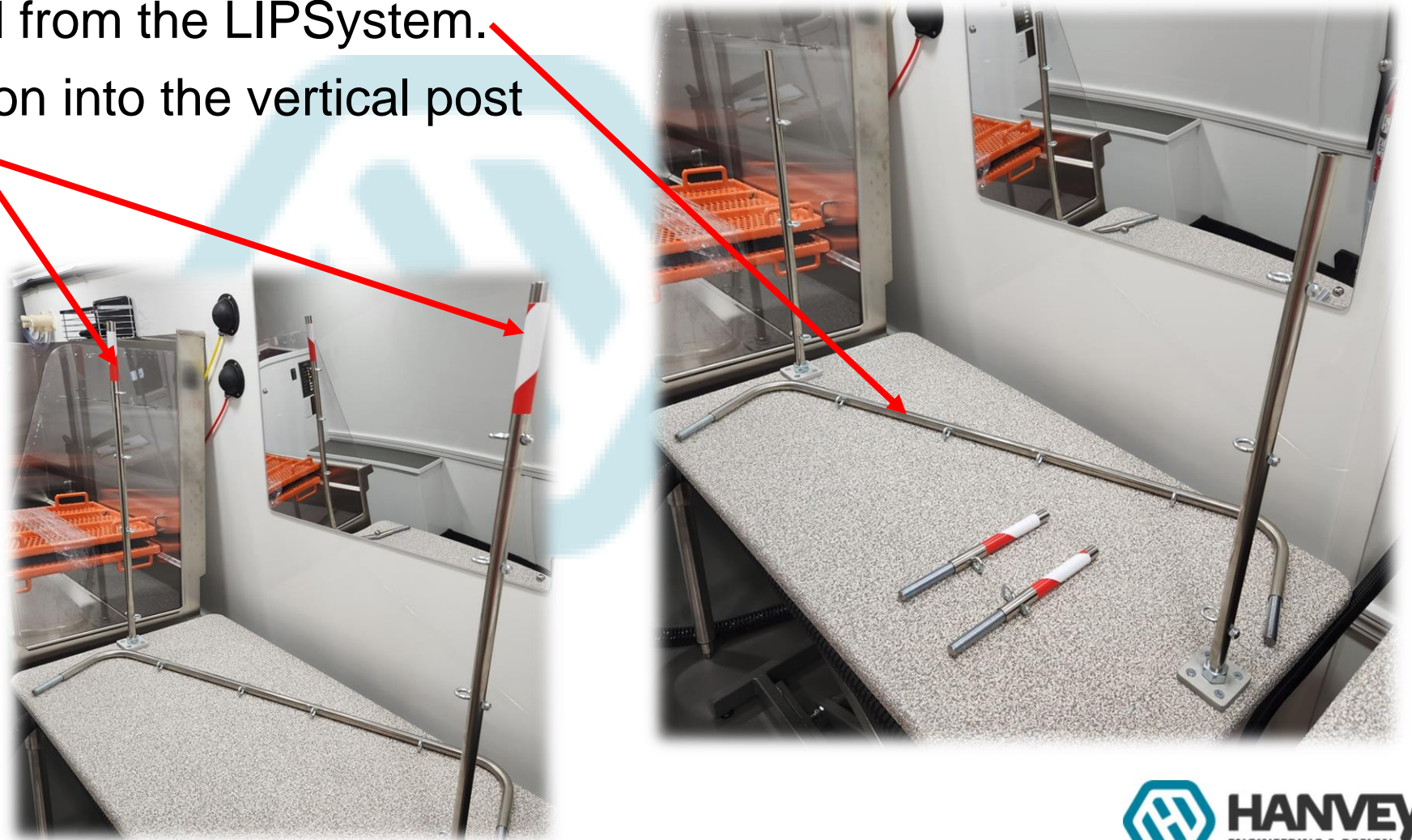
Table LIPSystem Overview

- The LIPSystem has a height of 30" from the tabletop.
- LIPSystem comes with two 7" extensions to increase the total height of the LIPSystem to 37" for larger dogs.



Adding Extensions to LIPSystem

- Remove the top rail from the LIPSystem.
- Insert each extension into the vertical post of the LIPSystem.



Adding Extensions to LIPSystem

- Add the top rail into each vertical post/extension.



Adding Extensions to LIPSystem

******CAUTION******

If you have the LIPSystem extension installed on your table, watch the top of the LIPSystem and stop the table before the top rail hits the ceiling. With the extensions installed on your table, you can cause damage to the ceiling of the van.

Damage to the ceiling, table, and motor caused by raising the LIPSystem into the ceiling is NOT covered under warranty.

Table Maintenance

Monthly maintenance is required on your grooming table.

- Inspect all moving parts.
- Clean table and moving parts.
- Apply axle grease to all bearing contact locations.

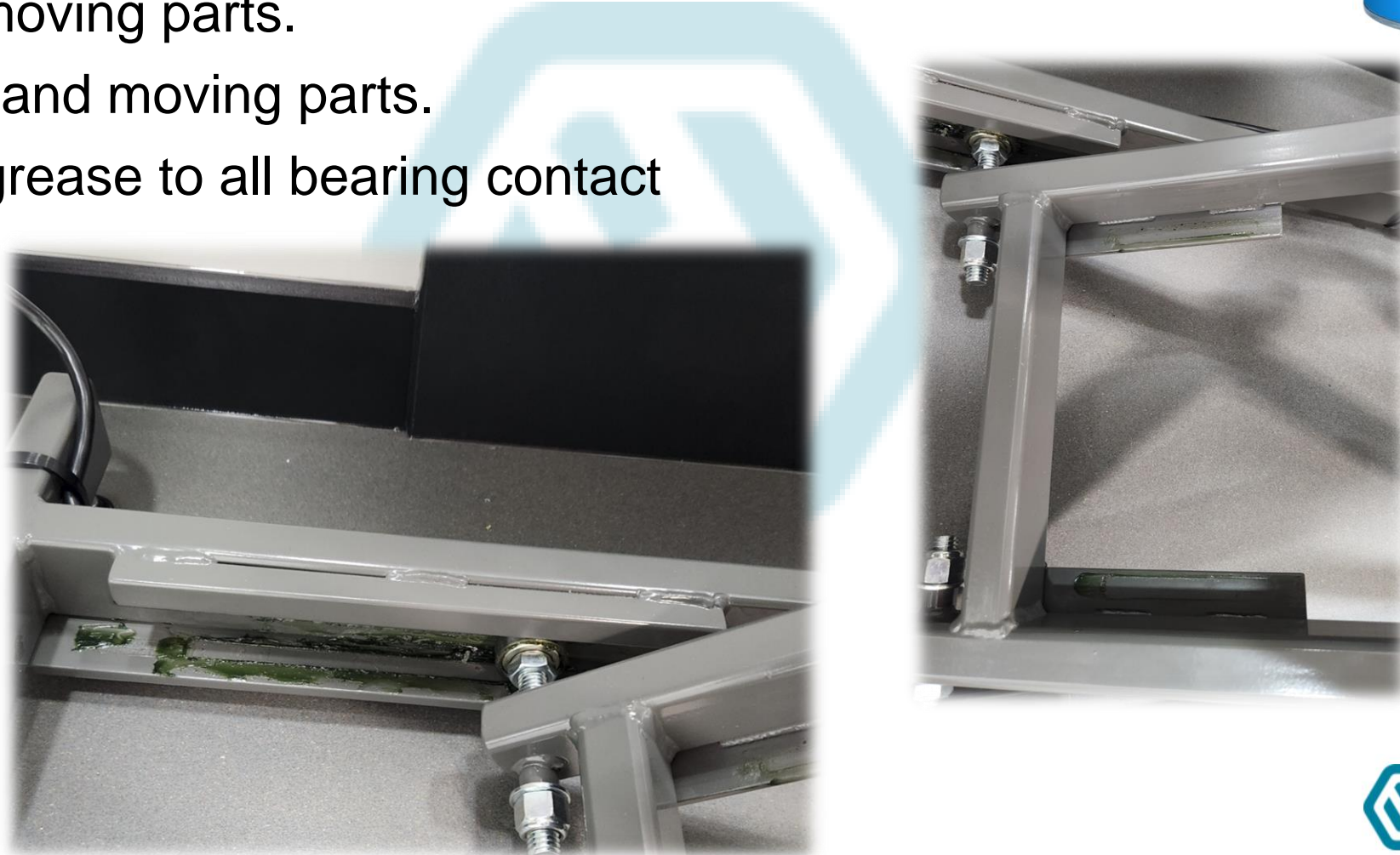


Table Maintenance

- Inspect all electrical table wiring for exposed copper wires or crushed wiring.
- Inspect and clean the actuator as needed.
- Inspect the screws holding the tabletop to the frame.



Troubleshooting Table

<u>Problem</u>	<u>Possible Solution</u>
When I press the Up or Down on the table, the table will not move.	<ol style="list-style-type: none">1. Is your inverter in the ON position?2. Check under the tub, on the wall, and ensure the table is plugged into the cord beneath the tub.3. Check Breaker one in the rear of the van. Is the red light on in Breaker one? If no, press the rest to turn the breaker on.
When I raise my table to the highest position, the LIPSystem top rail damaged my ceiling	<ol style="list-style-type: none">1. Do you have the extensions installed on the table? See the section for Adding Extensions to LIPSystem.
How do I claim warranty repair on my table?	<ol style="list-style-type: none">1. All warranty on your table has to go through Hanvey. Please call Hanvey for warranty repairs.
My vertical post on the LIPSystem keeps turning.	<ol style="list-style-type: none">1. Using an adjustable wrench, position the vertical post to the desired position and tighten the hex nut at the bottom of each vertical post.



Mobile HairVac



Mobile HairVac Topics

- [Mobile HairVac Overview](#)
- [HairVac Operation](#)
- [HairVac Maintenance](#)
- [Troubleshooting HairVac](#)



Mobile HairVac Overview

The Hanvey Mobile HairVac is a clipper vac-style vacuuming system. As you groom, the cut fur is vacuumed away for an easy cleanup.

The Mobile HairVac system comes equipped with a remote full variable speed controller for volume and airflow.

Clipper attachments are available for a wide selection of clippers.



HairVac Remote Overview

HairVac variable speed remote:

- Variable speed controller
- On/Off Switch
- QR code



HairVac Hose Overview

- Suction Hose
- Clipper Nozzle
- Swivel hose end



HairVac System Overview

- HairVac – located in the rear of the van
- Suction Hose



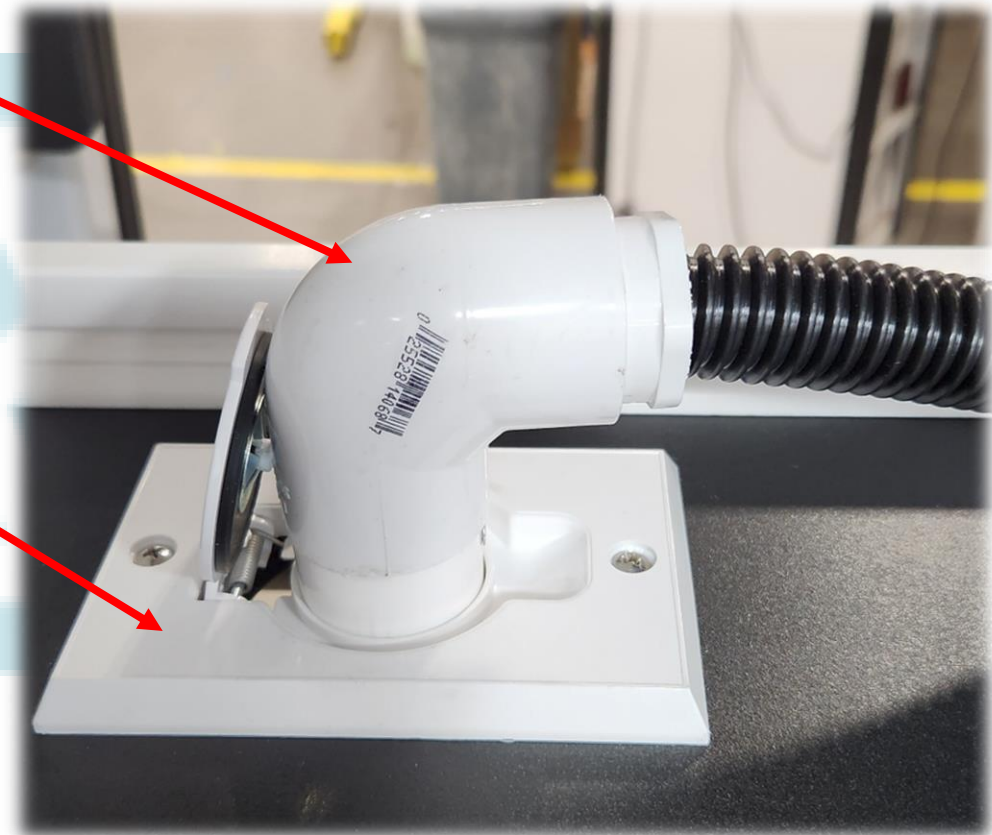
HairVac System Overview

- Variable Speed remote cable
- Power cord



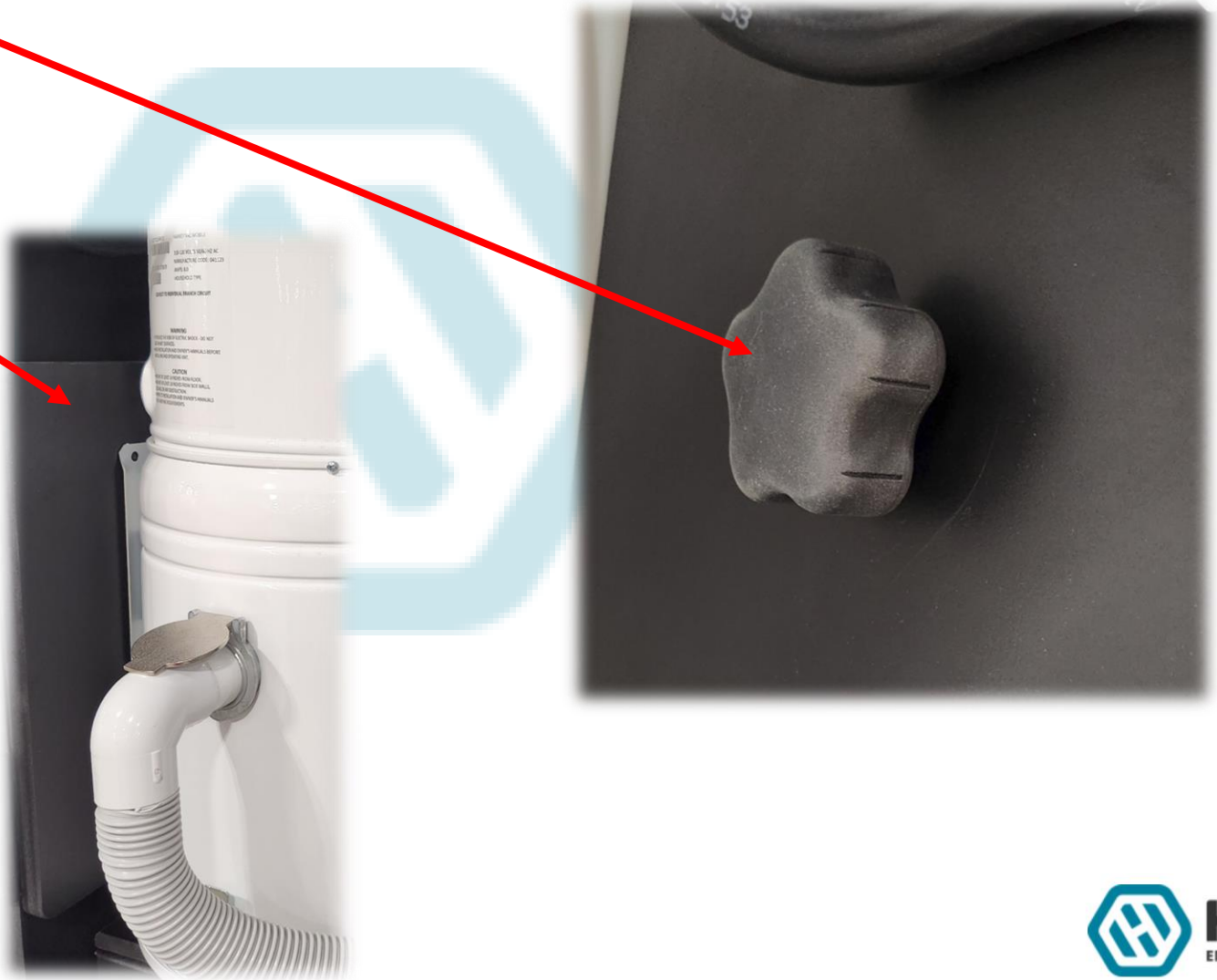
HairVac System Overview

- Suction hose to clipper nozzle
- Suction port



HairVac System Overview

- Taxi board release knob
- Taxi board



HairVac Operation

To turn on the HairVac, flip the switch to the On position. The switch is located on the variable speed HairVac remote located to the right of the grooming table.

Once the HairVac is running, you can use the variable speed knob to control how much suction the HairVac is operating at. Low suction to high suction.



HairVac Maintenance

- The HairVac canister should be emptied every other day to weekly depending on usage.
 - To empty, losing the taxi board release knob.
 - Remove the extension hose from the HairVac.
 - Swing the HairVac out past the battery box.
 - Place a trash can underneath the HairVac.
 - Release the HairVac latch and let the hair fall into the trash.



HairVac Maintenance

- Your HairVac has a Hepa filter installed inside the HairVac. This filter should stay installed and using a shop vac, vacuum this filter every month.
- Each time you open the HairVac, wipe down the lid gasket and remove any hair or nails that may be stuck to the gasket.



Troubleshooting HairVac

<u>Problem</u>	<u>Possible Solution</u>
When I turn on the HairVac, the suction is really low.	<ol style="list-style-type: none">1. Turn the speed of the HairVac up using the variable speed knob.2. Check the clipper hose for a clog.3. Check the clipper hose at the suction port and make sure the 90-degree elbow is completely seated.4. Check the suction hose at the HairVac in the rear of the van.5. Check the HairVac lid and ensure it has a good seal.
When I turn on my HairVac, nothing happens, it will not turn on.	<ol style="list-style-type: none">1. Check the variable speed white remote cable at the HairVac and ensure it is plugged into the HairVac.2. Check the power cord of the HairVac, and ensure it's plugged into breaker box 1.3. Make sure the red light is illuminated on breaker box 1.
I have no suction.	<ol style="list-style-type: none">1. Check the clipper hose for a clog.2. Check the clipper hose at the suction port and make sure the 90-degree elbow is completely seated and there are no clogs.3. Check the suction hose at the HairVac in the rear of the van.4. Check the HairVac lid and ensure it has a good seal.

Roof Vents



Roof Vents Topics

- [Roof Vents Overview](#)
- [Roof Vents Operation](#)
- [Roof Vents Maintenance](#)
- [Troubleshooting the Roof Vents](#)



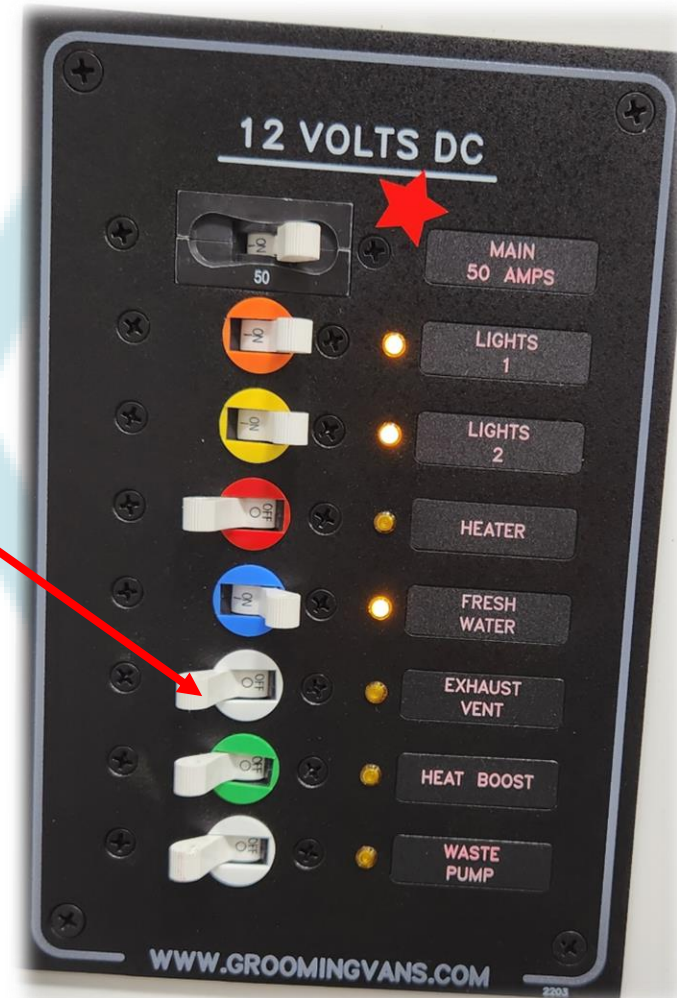
Roof Vents Overview

The Hanvey vans come equipped with two roof vents. One vent is a powered vent and the other is a passive vent. Open both vents and turn on the powered vent to cycle fresh air throughout the conversion.



Roof Vents Overview

Main Power switch for powered Exhaust Vent

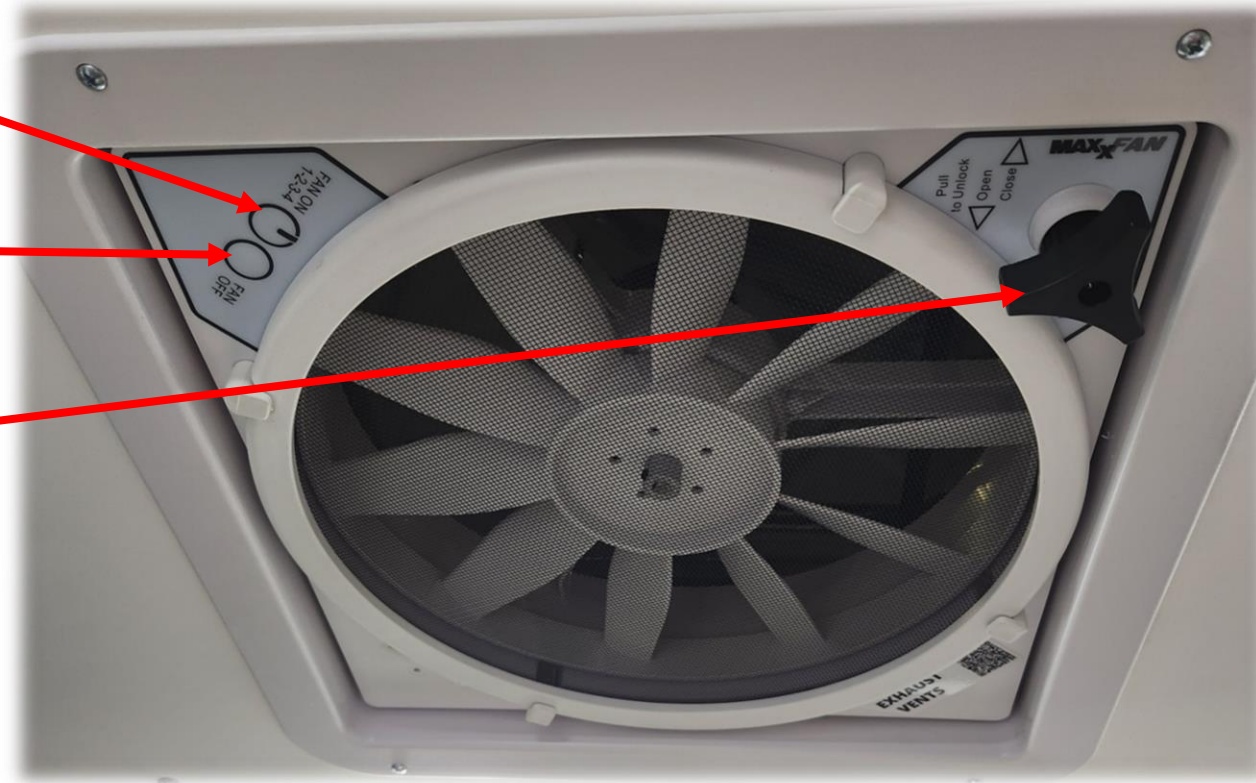


Roof Vents Overview

On/Speeds

Off

Open/Close
Roof Cap



Roof Vents Operation

- To turn on the Powered Roof Vent, turn on the main power at the 12-volt DC panel.
- Pull the knob down to unlock.
- Turn the knob to open the roof cap.
- Press the On/Speed button to start the fan and set the desired speed.
- For maximum airflow, open the passive vent.



Roof Vents Maintenance

- Remove the screens from both vents and clean them monthly.
- Wipe down fan blades leading edge monthly.



Troubleshooting Roof Vents

<u>Problem</u>	<u>Possible Solution</u>
When I press the On button on the roof vent, the fan does not come on.	1. Check the main power switch for the exhaust vent on the 12-volt DC panel is in the On position.
The main power on the 12-volt DC panel is on and I press the On button on the roof vent, but the fan does not come on.	1. Contact support for help checking the voltage of the fan motor.
I hit the vents dome/caps on a low underpass.	1. Contact support to access damage.