## **Evolv Equipment Troubleshooting Tips**

Technical	Likely/possible causes	What to do
Issue		
The spray gun is not spraying solution	<ol> <li>The solution cartridges may be old, dirty, or faulty.</li> <li>The back of the fluid nozzle is gunked with old solution and is limiting spray. If not removed and cleaned on a regular basis this will occur.</li> <li>(Suggest once every 1-2 weeks).</li> <li>One or both springs on the trigger mechanism may have broken. The trigger mechanism will not work correctly.</li> <li>The fluid coupler may be faulty. It will need to be replaced. Sometimes the gun may spray water but not solution.</li> <li>There may be a loss of air pressure from a crack or hole. It could be on the gun, the hose, or inside the Sidekick's air blower. Because the solution is thicker than water, water may spray through the gun with less pressure, but not solution.</li> <li>The solution may be bad or expired.</li> </ol>	<ol> <li>Find out if the gun can spray using any different cartridges. If the customer has old, dirty, or faulty cartridges, they may need new cartridges (300456).</li> <li>Has the customer removed and cleaned the fluid nozzle (300454)? If not, advise use of nozzle tool to remove and clean the fluid nozzle with warm water. Water should not be poured directly into the gun for cleaning. Ensure that the fluid nozzle screws back in correctly.</li> <li>Check the air flap inside the heat port. When you pull the trigger, the flap should move up and down. If the springs are broken, it will not move. Open the gun casing to verify and replace springs if needed (201353).</li> <li>Ask the customer to use the purge tool (101012) on the gun. If the fluid coupler (201361) is damaged, the customer may not even be able to get water to go through and will encounter lots of resistance. Make sure that they hold down the trigger while purging, and that the tool is correctly clicked in to the fluid coupler behind the green release button.</li> <li>The customer can turn the machine on and see if they feel any air leaking from the hose. Have them check from where the hose is attached to the Sidekick, all the way along it to the base of the gun. Most likely the equipment will need to be sent in. In warehouse, check the nozzle body, heater cartridge, hose and air blower for any signs of cracks/air leakage. If you feel a lot of air escaping, it may result in such a loss of pressure that the gun will not spray. Replace/repair the cracked parts. The machine may also be turning off after running for a while if this is the case.</li> <li>Check the lot number and expiration date. Solution can also go bad from temperature changes. It should be stored around room temperature. Offer replacement solution.</li> </ol>
The spray gun is leaking	<ol> <li>The fluid nozzle is not screwed in correctly and is leaking from around the green air collar.</li> <li>The seals in the fluid nozzle are worn down and the gun is leaking from the green air collar.</li> <li>The fluid coupler may be damaged or worn down. It may need replacement.</li> </ol>	<ol> <li>Confirm that the fluid nozzle is correctly screwed in completely. It should be flush against the nozzle body, but not overtightened.</li> <li>Remove the fluid nozzle to inspect the seals. To look at the black viton seal (201350) inside the nozzle you may need a pair of retaining ring plyers. If seals look warped, oddly shaped or torn, they need replacing.</li> <li>The seal in the fluid coupler may be damaged and the solution is not passing through correctly. Replace the fluid coupler.</li> </ol>

## 4. The solution cartridge may be cracked or 4. Try to identify if the leak is coming from the solution cartridge. Check where the damaged if the leak is coming from the back of adhesive holds the green and clear plastic together. If it is leaking, the customer will The spray gun is the gun. need to replace the cartridge. leaking 5. The nozzle body may be cracked or damaged. 5. If a severely cracked nozzle body (100757) is causing solution to leak, the whole The customer will not be able to see this unless body will need to be replaced. Customer will need to ship in equipment, and the gun they open the spray gun casing. will need to be disassembled and reassembled onto a new nozzle body. 6. The 3-piece item that is pressed in to both the 6. Identify this by purging the gun without the plastic housing on. There will be a clearly, visible leak from the area. Replace the 3-pc component (201364) and ensure nozzle body and the fluid inlet may be damaged or incorrectly pressed. The customer will not be all parts are seated tightly and correctly. able to see or change this part. The spray gun is 1. The needle behind the fluid nozzle is 1. Remove the fluid components from the nozzle body so that it may be cleaned becoming stuck after the trigger is pulled. (This (fluid nozzle, needle and needle base, actuator pin, and compression spring). The spraying is likely due to gunked-up solution/poor customer will only be able to reach the fluid nozzle and the needle. When resolution even maintenance). assembled after cleaning, the actuator pin should move back and forth freely when when the 2. The seals may be worn down on the fluid the trigger is pulled and released. trigger is not 2. Examine the white O-rings (201495) on the fluid nozzle and replace if they are nozzle. This may appear more as an inconsistent pulled sputtering than a full spray. torn/worn. Check the black viton seal inside as well. 3. The threading of the front of the nozzle body 3. Inspect the area to see if the fluid nozzle sits correctly. The threading on the where the fluid nozzle sits may be damaged. It inside of the nozzle body could be damaged or worn down and the fluid nozzle will may have been screwed in incorrectly after not sit as it should. A new nozzle body is needed. being cleaned. 4. Verify that all other steps have been taken for repairs. Test the equipment with 4. The solution being sprayed was not designed both Evolv solution and customer's non-Evolv solution if available. Technically, the for the Evolv system. If the viscosity is too thin, equipment's warranty does not cover the use of non-Evolv solution in the spray gun. it may be able to move past the needle without It may have different effects on the seals and parts that wear them down faster, or it the needle being pulled back by the trigger. may spray when its not supposed to. The Sidekick 1. The power cord is not plugged in to the 1. Check power cord and ensure it is correctly plugged in to the outlet. outlet. 2. On the Sidekick, the breaker (510538) is behind the cabinet. Pull cabinet out and does not turn 2. The breaker on the Sidekick tripped and is no look for the blue switch located on the roof of the inside area. Make sure the switch on (no lights at longer in the 'ON' position. The machine will not is turned ON. On the Mini, the switch is located on the back. Customer should also all) be able to turn on. (It can trip during power check breakers in the building. shortages or outages, if too many items plugged 3. Open the Sidekick and test it the machine using a different power cord assembly. in to one outlet, or if the building breakers If it works on a different power cord, replace the damaged power cord. (Otherwise tripped). proceed with testing other components). 3. The power cord assemble has failed. 4. Equipment will have to be opened and inspected at Evolv warehouse. Ensure all 4. If the cord is plugged in and works, the wires are properly attached/soldered starting at the power cord all the way to the Power Control Board. Use the testing station to help identify likely failed parts (test breaker (RCBO) is in the correct position, and

separately: power cord, EMI filter, PCB, LED touchpad, etc).

the outlet works for other equipment, but the

Sidekick still does not turn on, then it may be a

deeper electrical issue.

The Sidekick shuts off during a tan	<ol> <li>The spray gun is not properly attached to the hose. The air shuts off and the Sidekick has two flashing red light on the touch pad. This will happen only with the heat on, the Sidekick can spray air without heat without having the gun attached.</li> <li>There is a large air leak in the hose or the air blower. The machine overheats trying to make up for lost air and shuts-off. The hose and/or the outside of the Sidekick may get extremely hot (more than usual).</li> <li>The air brushes inside the air blower are worn out. The brushes may take 4-7 years to wear down, depending on level of business.</li> <li>The heater cartridge may have been damaged in the spray gun. It could be leaking air, or the electrical components may no longer work.</li> </ol>	<ol> <li>Make sure that the cuff on the hose is correctly screwed on to the bottom of the spray gun. If it is not attached correctly, the wires cannot make a complete circuit and the heating element can't turn on.</li> <li>The Sidekick will need to be opened and inspected at the warehouse. The hose may need to be properly re-attached or replaced. The air blower will need to be inspected to see if repairs can be made to any cracks or leaking areas. If not, replace the air blower assembly.</li> <li>The Sidekick and air blower must be opened in order to check the air brushes. Replace the air brushes if they are worn away.</li> <li>Open the spray gun and examine the heater cartridge for any cracks. The heater cartridge (510425) can be used in a new garolite tube to make a new heater cartridge assembly (300478). Alternatively, the entire assembly can be replaced for a new one. If there is no crack, the heater cartridge may be faulty or broken, and need replacing.</li> </ol>
The cartridge does not click into the spray gun	<ol> <li>The green release button may not be pressed in. If it is not pressed in, you will not be able to insert the cartridge or purge tool to the fluid coupler.</li> <li>The fluid coupler may be screwed in incorrectly.</li> </ol>	<ol> <li>Press in the green release button before inserting the cartridge. The metal mechanism of the fluid coupler will move to the right to make space for the cartridge.</li> <li>Ensure the fluid coupler has been screwed into the fluid inlet exactly 7 rotations from the position it should be sitting when inside the gun.</li> </ol>