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3M Performance Spray Gun

Tips and Tricks

2020



Tips, Tricks, and Common Mistakes

3M™ Performance Spray Gun

1. Nozzle spins when connecting to spray gun
2. Locking collar interferes with the fluid connection
3. PPS™ Series 2.0 connection leaks
4. Control knobs are difficult to rotate
5. Locking collar is difficult to rotate
6. Too much fluid flow
7. Adjusting the spray gun
8. When to change nozzles



1. Nozzle spins when connecting to spray gun

Before attaching or detaching nozzles, make sure that the air supply is removed or closed

- To keep the needle from pushing the atomizing head forward during assembly, pull the trigger while sliding the nozzle onto the gun body as seen on the photo on the right
- If the trigger cannot be pulled, be sure to back out the fluid knob sufficiently to allow ample trigger travel



2. Locking collar interferes with the fluid connection

- *Before attaching or detaching nozzles, make sure that the air supply is removed or closed*
- *Be sure to rotate the locking collar all the way to the stop which will end with the wings of the collar in an “X-configuration” as seen in the photo to the right*

NOTE: If the locking collar becomes damage, it can be replaced. A spare locking collar comes with the spray gun kit and is included in the rebuild kit



3. PPS™ Series 2.0 connection leaks

- Ensure that the spout of the atomizing head properly engages under both catches of the PPS™ Series 2.0 lid and is fully rotated to ensure that all 4 connection points are secure
- If one catch is *not* properly connected, this can result as a leak or air intrusion while spraying



4. Control knobs are difficult to rotate

- If you notice that either control knob (shaping air or fluid knob) becomes hard to adjust, this is an indication that they need to be re-lubricated
- The shaping air knob should be rotated as far out as possible with lubrication applied toward the control nut then rotate inward to fully close the shaping air
- Fluid can be done the same way or fully removed to lubricate the entire knob before reinserting

NOTE: Always use paint safe spray gun lubricants



5. Locking collar is difficult to rotate

The locking collar can be removed from the spray gun in order to clean the track that it rides on

- To remove the collar, rotate the collar to the stop in the “+-configuration” and pull it away from the gun body (This is the position where a nozzle can be accepted)
- After cleaning, reverse the process for reassembly
- Note that a spare collar is included in the kit or additional can be ordered



6. Too much fluid flow

- Adjust the Fluid control knob, by turning it clockwise to reduce the amount of material coming out of the spray gun. This will change the maximum amount of trigger travel
- Alternatively the Atomizing head can be changed to a smaller tip size
 - Example: 1.8 to a 1.4 atomizing head

NOTE: When down-sizing atomizing heads, you also will get smaller paint/coating droplets and finer atomization.



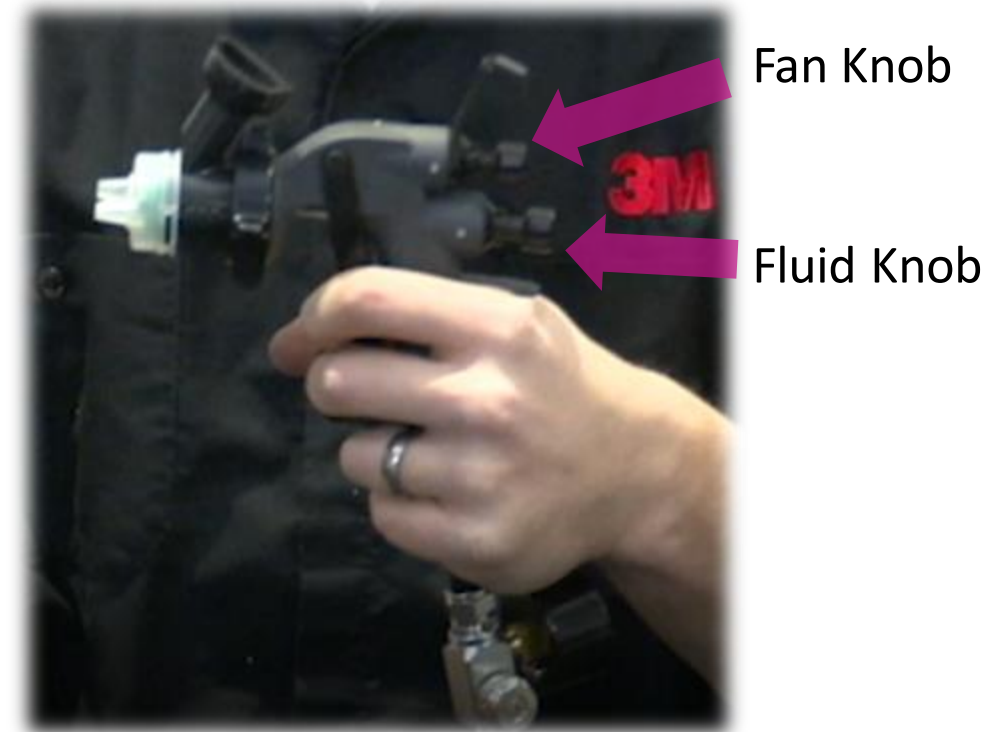
Fluid Knob

7. Adjusting the spray gun

Start by closing both the Fan and Fluid control knobs by turning them Clockwise until they come to a stop

- Open, the Fan control knob 2 rotations
The hash mark on the face of the control knob is a starting point for rotation once closed
- Open the Fluid control knob 4 rotations
- Adjust Air flow gauge to 20psi during 1st stage air only or full trigger air and fluid

NOTE: These are only starting points. Adjust the spray gun as needed. Fan control – turn clockwise for less fan or counterclockwise for more fan. Fluid control – turn clockwise for less fluid and adjust air flow as needed.



8. When to change nozzles

- An indication to change nozzles is any degradation of pattern performance or leakage at either the needle tip or near the trigger
- Typical life of nozzles is about ~6-10 uses for medium-sized jobs when properly cleaned between uses

NOTE: Nozzle life is highly variable based on many factors such as material usage and care in cleaning

