Unblocking Nozzles (Hot-melt)

THESE INSTRUCTIONS ARE INTENDED AS A GUIDE TO UNBLOCKING NOZZLES ON HOTMELT GLUING SYSTEMS. ALTHOUGH THEY ARE COMPLETE, GREAT CARE SHOULD BE TAKEN TO ENSURE YOU ARE ALWAYS SAFE WHEN WORKING WITH HOT EQUIPMENT AND MOLTEN ADHESIVES. IF IN ANY DOUBT, DIS-CONTINUE AND EMPLOY EXPERIENCED PERSON(S) TO COMPLETE THE WORKS.

Hotmelt systems are pressurised systems. NEVER OPEN THE SYSTEM without first relieving all pressure from the system. In most cases, hotmelt units are NOT fitted with a glue pressure gauge – DO NOT confuse the air pressure gauge to be a glue pressure gauge. Always wear suitable personal protective clothing and equipment. In this case this should include long sleeves, safety goggles or mask and thick gloves.

Steps to unblock a nozzle

1. Read the safety information above and the entire guide before commencing any work. Never remove a nozzle without first relieving the pressure from within the system.

2. Disconnect the air supply to the tank, this can be achieved by turning the air regulator on the front panel of the hot melt unit to Zero (0).

   NOTE: Although the air is now off, the glue pressure in the system remains.

3. Purge all pressure from the gluing system (step 1).

   Do this by purging all gluing valves connected to the system until the glue completely stops coming from the nozzle.

   NOTE: If the only gluing valves available to purge are those which are blocked, it is unlikely that you will be able to purge the system of its pressure using this method.

4. Purge all pressure from the gluing system (step 2).

   Slowly, and in a controlled manner, loosen (*do not disconnect*) a hose fitting from its connection point at the rear of the tank (*this is a swivel fitting & will require two suitable spanners for this part*). If glue pressure is present, the glue will start to ooze out of the loosened fitting. If this occurs, do not loosen any further, wait for the glue to stop coming and then loosen a further ½ turn to ensure all glue pressure is exhausted.

5. Hang the gluing valve (*with the blocked nozzle*) in a manner so that it is easy to access the nozzle, although keep the gluing valve pointing towards the floor and place a cardboard box directly underneath the valve.

6. Slowly, and in a controlled manner, loosen (*do not disconnect*) the nozzle from the valve. If glue pressure is present, the glue will start to ooze out of the loosened fitting. If this occurs, do not loosen any further, wait for the glue to stop coming and then loosen a further ½ turn to ensure all glue pressure is exhausted.

7. Prepare a suitable nozzle clearing tool (*as supplied in the Leary Toolbox*) and keep close by.

8. Remove the nozzle from the valve and hold with thick gloves, using paper towel (*not rags*) quickly remove as much hot glue from the back of the nozzle as possible. Then without delay, use the nozzle clearing tool to push the blockage out of the nozzle from the back to the front.

   Please note: This step must be completed with haste, as it can only be completed whilst the nozzle is hot and the glue molten. If the glue becomes solid you may have to refit the nozzle for a short period to reheat it. Alternatively, if you have access to a hot air gun, the nozzle can be heated in a vice and cleaned that way.

   

   NOTE: All parts of the valve (including the nozzle) will be extremely hot. When removing the nozzle, take care as glue may drip out of the valve whilst the nozzle is not fitted.

9. Before refitting the clean nozzle, re-tighten the hose connection at the rear of the tank (*this is a swivel fitting & will require two suitable spanners*). Then, once you have confirmed that the valve is securely mounted and facing downwards with a cardboard box directly beneath it, slowly introduce air pressure to the tank using the air regulator on the front of the unit.

   This will start the pump (air powered pump) in the unit and hot molten glue will flow from the open ended gluing valve. This step will help to flush out any loose particles from the system.

   Continue for 10-30 seconds or until the glue runs clean from the open valve. Turn off the air to the tank using the air regulator on the front of the unit.

10. Refit the nozzle.

11. Turn the air-pressure back up to 3-4 BARS on the air regulator on the front of the unit. Test the gluing valve for good jetting.

12. Repeat process if nozzles blocks again.