

## **Regeneration of Drierite Granules**

The Indicating Drierite, found in the canister on the top right rear corner of the P-87 and P-97, is a desiccant made of calcium sulfate (97%) and cobalt chloride (3%). Drierite is non-toxic and can be handled with few precautions. This material is used to remove water vapor from the air-cooling supply system. As it absorbs more moisture, it becomes pink in color and must eventually be "regenerated" (dried) or replaced with new indicating desiccant.

- Before proceeding, turn off the puller and unplug the power cord. To remove the canister from the puller, you must first remove the brown plastic top by loosening the three screws that secure it to the baseplate. Next, slide the input (left) and output (right) air tubes off their white plastic connectors on the canister. Finally, the two black plastic hold downs which secure the canister to the baseplate can be released by forcing one half of the connector out of the other half at the point where they meet. Remove the canister and unscrew the aluminum end cap, being careful not to lose the black rubber-sealing ring that forms the airtight seal within the cap.
- With the cap off, remove the spring, the aluminum keeper and the first filter and second filter. The far aluminum keeper can be kept in place. Pour the Drierite out onto a glass or metal tray, spreading it evenly, one granule deep, and heat it for one hour at 200°C. Pre-dry both filters at 100°C for 30 minutes just prior to assembly.
- ♦ Before refilling the plastic canister, the Drierite granules should be cooled in a tight container. After cooling, install the Drierite, keeper, and filters into the canister in the order they were removed. First install the filter against the keeper which was left in the canister. If this keeper was removed, slide it in first insuring that it lays flat against the plastic shoulders at the far end of the canister. With the far keeper and filter in place, pour in the new or regenerated Drierite. Next insert the second filter followed by the keeper and the spring. Check that the rubber seal is in the proper position and, if you wish, apply a thin layer of vacuum grease on to the rubber seal to insure a tight fit. There is no need to over tighten the cap, but a good seal is needed to prevent air leaks.
- Reinstall the canister on the puller, with the aluminum cap oriented to the left, and the air tube connections to the front. Slide the black plastic hold-downs inside one another and squeeze them together to firmly hold the canister in place.
- At this point, connect the air-input tube (larger tube, left-hand side) and stop. Do not install the output tube. Plug in and turn on the puller. With the puller on, the pump will remain active and air will blow through the canister, flushing out any loose granules and dust. It is critical to avoid dust being blown into the output tube where it might clog either the air solenoid or the air jet. Continue the purging procedure for 3 minutes, after which you may reconnect the output tube on the right, and replace the brown plastic cover.
- If the pump runs continuously or "sputters" after this procedure, you most likely have an air leak. With an air leak, the filament will heat up during a ramp test, but will not heat up when you try to execute a program. Please check for any holes in the tubing, the tubing connections and ensure that the cap to the canister is seated correctly with the threads and that the cap is on tight.

For additional assistance, please do not hesitate to contact us via phone or email.

