



# Blue Dye Leak Detection

If the Fix-A-Leak was not successful, it's time to try a "dig-out". We'll have to locate the offending plumbing fitting, dig it out, and replace it with a new piece. Blue Dye can help. It is added into the spa water and as it seeps into the insulating foam, the blue dye helps identify the general area of the leak. There are a few things to know about this process before you try it:



- A.** Blue Dye" is a poultry dye used to detect cracks in eggs. The dye is easily bleached out of the water, so be sure the spa cover has been open for several hours and all the chlorine has dissipated.
  - B.** The dye does not bleach out of concrete or wood quite so easily, so this is not such a good option if you are concerned about the surface underneath the spa.
  - C.** As the dye seeps into the insulating foam, it begins to spread out over time. The longer the time between application and dig-out, the larger the blue spot can become. This can make it less effective in guiding you to the general area of the leak.
  - D.** It's an imperfect method, but can still be a good indicator of where to start looking for the leak.
1. Mark the current water level in the spa.
  2. Make a note of the water level drop over a 24 hour period. (If it drops over 3-4", you won't need the dye to locate the leak).
  3. Fill the spa back to the middle of the tile line.
  4. Turn heater temperature to about 65 degrees.
  5. Remove filter(s).
  6. Turn jet pump(s) on high speed.
  7. Locate filter canister that is drawing water at the fastest rate.
  8. Slowly pour entire contents into that canister.
  9. With spa cover closed, run jet pump(s) for about 2 hours.
  10. If the drop in water level at Step 2 was 1" or less, let the spa run for 48 hours. If the drop was 1-3", let it run about 24 hours.
  11. After the appropriate time, drain the spa, locate the blue spot, and begin to dig in that general area. Because the dye seeps into the foam, it will not identify the exact leak location, but is a good indicator of where to start digging.

