

MITYVAC HANDLE RE-CONNECTION

Note: This applies to both plastic & metal body pumps.

Please read complete instructions before you begin.

Generally, when your Mityvac handle "breaks", it has not actually broken, but has merely become detached. Most often the cause for this is a signal that the air piston is in need of lubrication. The actuating, or moving half of the handle is held in place only by a small metal cross-pin, and spring tension. When the piston does not move freely, the spring tension can be lost momentarily, allowing the pin to slip out of place. When this occurs, the hand pump has not broken or been damaged, it simply needs to be re-assembled, and the piston lubricated. The following directions will show you how.



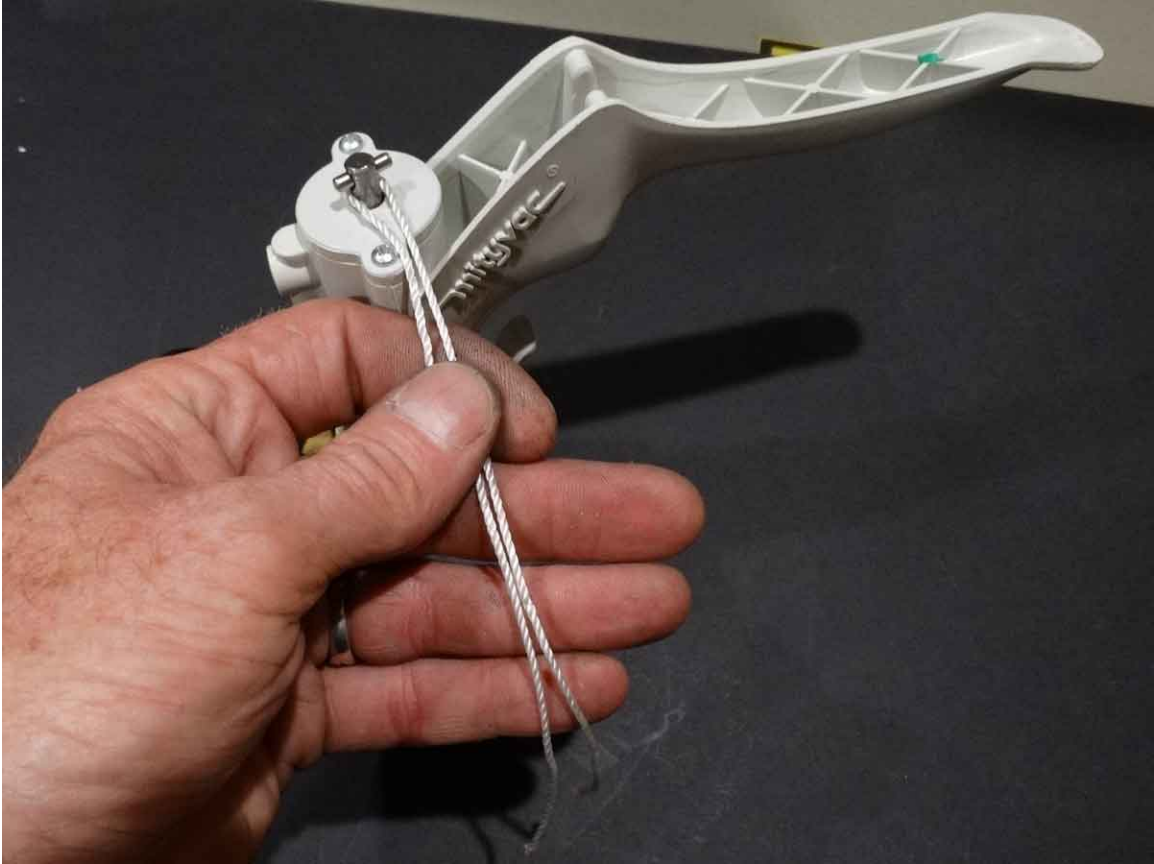
1. Things you'll need: The parts of your hand pump, and a piece of string. A nylon construction string works nicely,



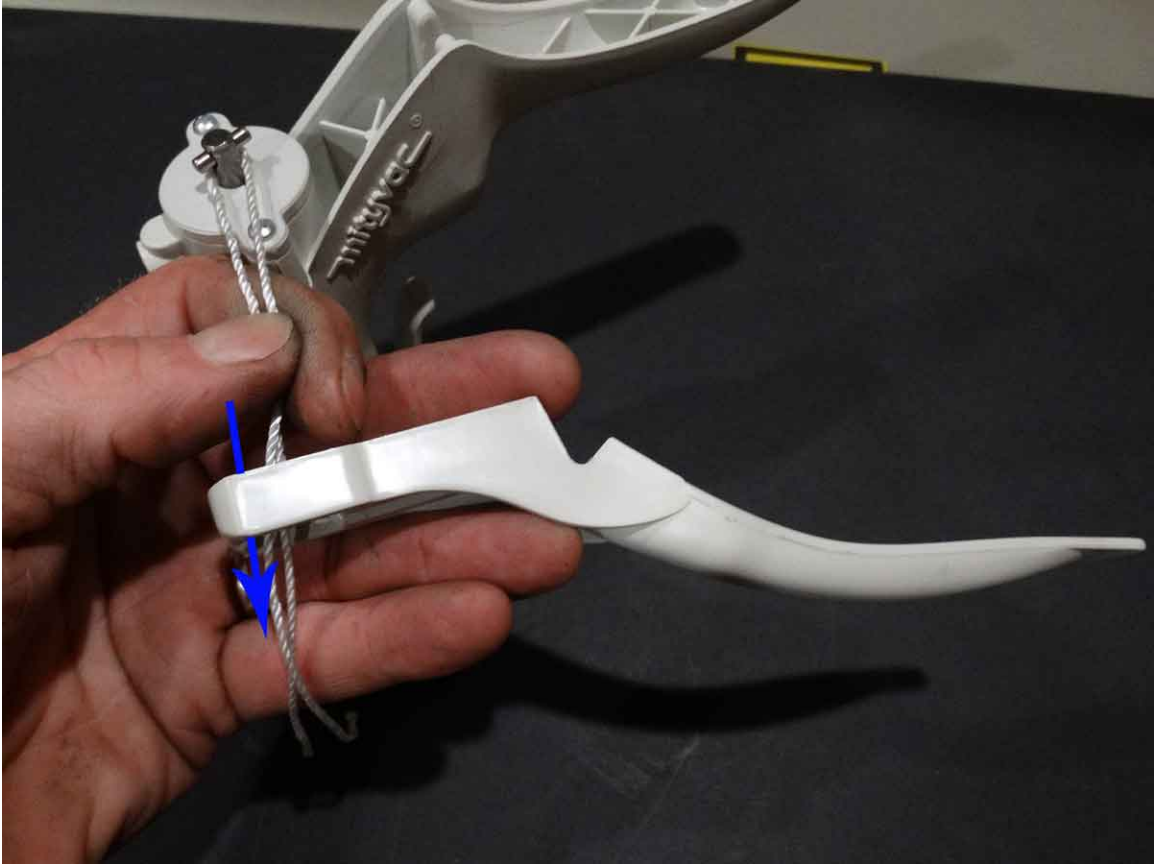
2. Cut a piece of string around 12" long.



3. Re-insert the cross-pin into the piston shaft, and rotate the shaft so that the pin is parallel (in line with) to the handle.



4. Fold your string in half, looping around the shaft beneath the pin.



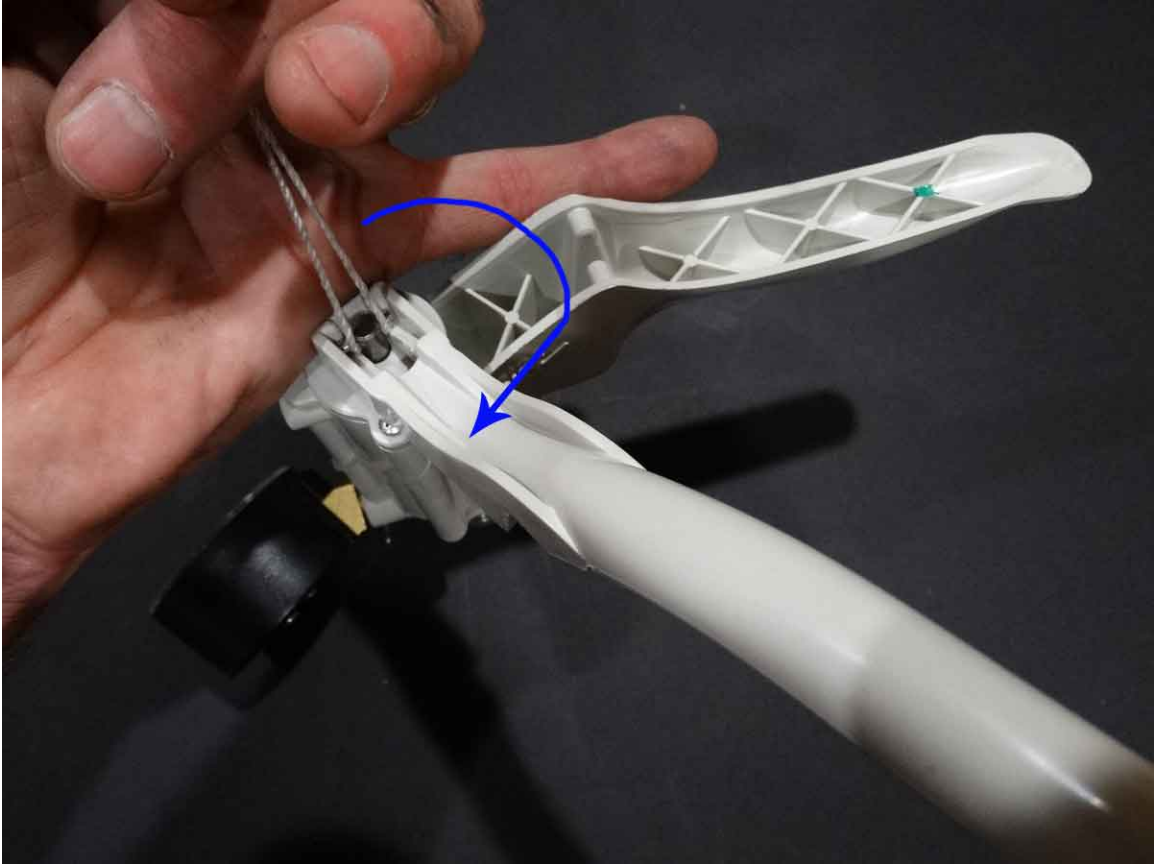
5. Thread the ends of the string through the slot in the moving handle as shown, entering from the back of the handle.



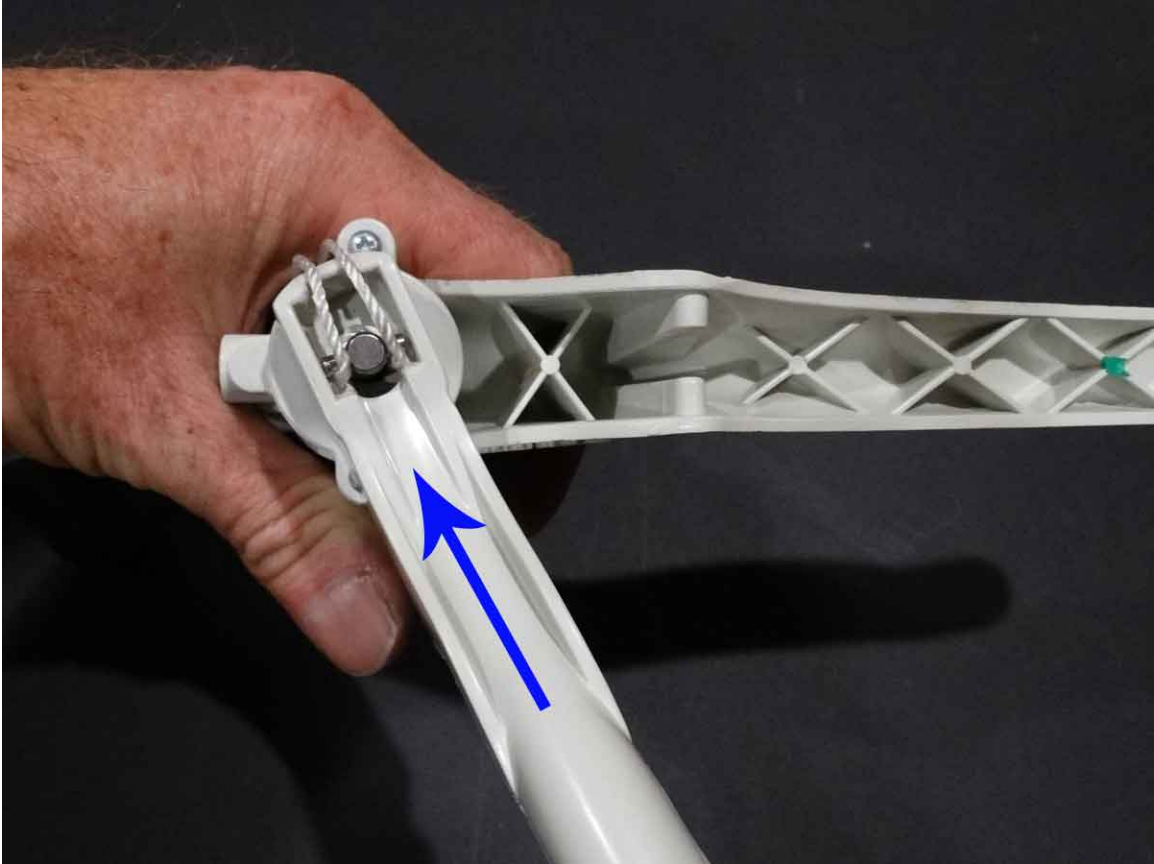
6. Seat the moving handle in place at it's pivot notch.



7. Tilt the top edge of the moving handle down over the pin and shaft, then pull straight upwards so the pin and shaft end extend past the handle a little ways.



8. Now tilt the moving handle up off of the pivot notch, and rotate until the pin is perpendicular (cross-wise) to the handle.



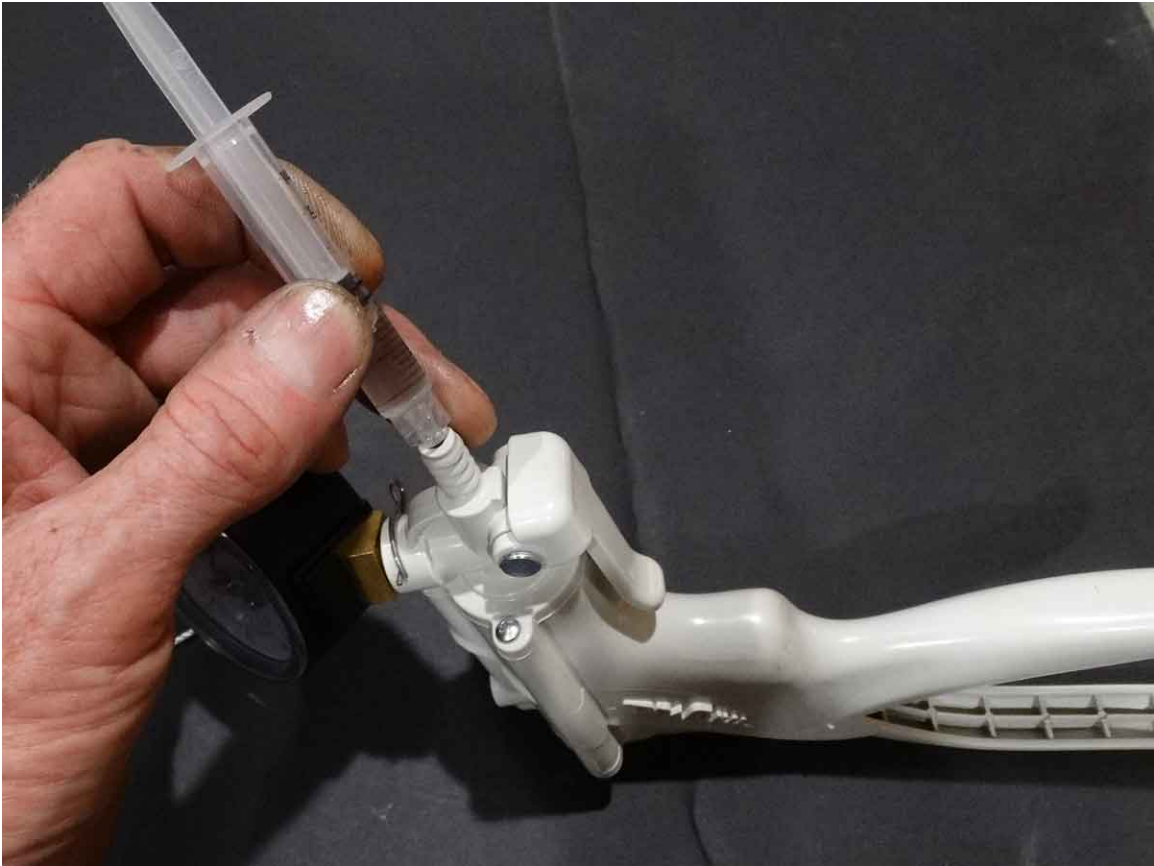
9. Slide the handle upwards so that the pin and shaft are at the bottom of the slot opening. While maintaining 'upward' pressure to keep the pin & shaft at the bottom of the slot, rotate the handle back around into place, tilting the handle up/outwards just enough to clear the pivot point, then allow it to drop in place on the fixed pivot point.



10. Now, loop the ends of your string back through the same side of the slot that they are threaded upwards through, i.e. so that they do not wrap over top of the pin. Depending on how you pulled your handle through, this may be above the shaft, or below it. Pull both ends through until no loop remains outside the handle, then hold one end of the string tight while triggering the handle a few times; this will dislodge the string from under the pin so it can be removed.



11. To lubricate the piston, you want a small amount of a ***light vegetable-based oil***. Do NOT use a petroleum based or silicone lubricant, as these will damage the internal seals!



12. Place 6-10 drops of oil down the nozzle on the front of the hand pump, where your connecting hose attaches. While holding the hand pump in an upward position (aimed at the ceiling), trigger the handle 10-12 times *slowly*.



13. A few drops placed on the back of the shaft also wouldn't hurt. Operate the handle again several times to help distribute the oil inside the pump. Wipe off any excess oil that remains, and you are done.