

## Earthway S15 and S25 pump cleaning

If in the event of the drive wheel seizing up and the wheel not turning or being very stiff to push the likelihood is the pump is seized or semi seized due to debris jamming the fins of the pump. This can be easily rectified by cleaning the pump. To thoroughly clean the pump, follow these steps. (*Note the S15 has a blue pump and the S25 white or black*)

1. Remove the pump cover by unscrewing the 3 Philips head screws. Pull the cover along the pipes so it is out of the way. Gently pull the pump towards you so the pump comes off its drive shaft. (*pictures 1, 2 and 3*)



2. Undo the two black zip clips holding the two pipes onto the pumps moulded hose tail ends. These are easily undone by using a flat head screw driver to get behind the clips and ease them off. Keep the clips safe for reconnecting the pipes. (*picture 4*)



3. Pull the pipes off the moulded hose tails you may need to twist them as you pull, to ease them off. **IMPORTANT** Make sure you note which pipe goes to each hose tail so you replace them in the correct order. (*see pictures 5 and 6 and 7, note pipe and pump can be marked with a felt pen for easy reassembly as shown*)



4. Place the pump on a flat work surface and undo the silver plate or bolt using an 8mm spanner. Then undo all the 8 Phillips screws the pump should then come apart. (pictures 7, 8 and 9 **note** The white pump has a silver pressure plate and the blue a single bolt)



5. Thoroughly wash the 2 gears and the gear casing, hot soapy water is best. If you have some grease available greasing the black O ring seal before reassembly is beneficial. (pictures 10, 11, picture 12 showing after cleaning)



6. Reassemble the gears and casing, relocating and tighten the 8 screws first followed by the silver pressure plate or the bolt. Do not overtighten the plate S25 or the bolt on the S15 Ensuring the gears are in the correct position and the two halves of the casing are correctly aligned, the two bevels together as in the below (picture 13)



7. Reload the reassembled pump onto the drive shaft ensure the pump is positioned correctly. Reattach the two pipes inlet and outlet (Making sure you have the inlet pipe to the inlet and the outlet pipe to the outlet) and reattach the zip clips, tightening the zip clips tight with a pair of pliers. (picture 15)



8. Relocate the pump case cover with the 3 Phillips screws. *(picture 16)*



Fill the tank with at least 10 litres of clean water and run through the pump and spray out of the nozzle. It will be easier to remove the nozzle to begin with to speed up this process. This rinse will thoroughly clean the pipes. **Note.** The sprayer maybe hard to push initial if there is further debris from the pipes going through the pump, but it should free up as any remaining debris is exited at the nozzle

The reassembly and cleaning process of the pump is now complete

If the S15 or S25 sprayer is still not working after the pump clean, please check the drive wheel pins are in working order. Simply remove the drive wheel split pin and pull the wheel off the axle shaft. Check the 3 drive pins are clean and their recesses in the wheel where the pins locate are debris free. Spray some WD40 into the recesses in the drive wheel. Relocate the wheel back on to the axle and push the pins back into the 3 recesses. Push the wheel on fully and relocate the split pin to hold the wheel on.

#### **Tips to minimise the risk of pump blockage in future**

Products that are thick, gluey or impure are not recommended for use with the S25 or S15. It is important that good housekeeping is practiced when putting material into the tank. Make sure no impurities are allowed to enter the tank. After use it is most important to clean the sprayer thoroughly as certain types of product can coagulate as they dry in the pipes. To minimise the risk of this thoroughly rinse out the tank and then run it through the tank at least 5 litres of water. To speed up the process you can remove the nozzle to achieve increased speed of flow.