SERVICE BULLETIN: TURBO LINER INC.

Procedure for rebuilding the solvent cup assembly Super-Maxi, MH-II & Guardian A6 12/17/2007

CAUTION!! Before any work of any kind is performed, make sure the power and air supplies are shut off and all of the pressure has been blead off the system. Proper hand and eye protection must be worn at all times.

This document will take you through the steps for rebuilding or replacing the felt packing's and seals in and on the Solvent Cup Assembly.

The first thing is to make sure all pressure is bled of the system. Next you will need to remove any cover plates (if any) that may be present to expose the proportioning pumps. If all pressure is bled from the system it is not always necessary to remove the feed hose from the pump to perform this procedure. This procedure can be performed without removing the pump completely from the machine. Once the pump has been unbolted from the machine you can remove the solvent cup. If a buildup of A-side is present you may have to clean it off the top of the solvent cup to allow the removal of the snap ring. Once the solvent cup is removed you may start the disassembly. First lightly clamp the cup assembly in a padded vise. Using a flat tipped screw driver remove the packing retainer from the top of the solvent cup, this exposes the felt packing's. Using a #2 flat tipped screw driver in the center of the felt push down firmly (a small hammer can be used to set the screw driver into the felt) so that it penetrates the felt packing about a ¼". With a rocking motion slowly peal the felt from the inside of the solvent cup. Repeat this procedure on the next 3 felt wipers. Turn the solvent cup upside down so that the upper pump seal is exposed. Remove the o-ring from the bottom side of the housing. Use a flat screw driver to carefully pry the seal (do not scar the Solvent cup housing as this is a sealing surface) so that the seal will pop up and out of the solvent cup housing. Clean the solvent cup housing to a new like appearance, a hand wire brush will help with cleaning the outside. On the inside a red scotch bright pad may be used to clean the inside of the solvent cup. Use acetone to help clean and polish the inside of the cup. Now inspect the upper part of the pump shaft for scratches or gouges. If scratches are present you could dress them up with a scotch bright pad or ultra fine emery cloth. We would suggest that the upper pump shaft be replaced if this condition is found to avoid any issues down the road. Once all parts are cleaned you are ready for assembly. First thing you will want to do is start soaking the felt packing's in DOP/pump lube. Pour some DOP into a small cup, insert the felt packing's (see figure 2) and allow them to soak (soaking the felt packing's will help prevent them from tearing or wearing upon initial startup) while you install the upper pump seal. The upper seal is what they call a chevron seal they are designed so that when pressure is applied to them they expand outward creating a tighter seal around the shaft. With the bottom of the solvent cup facing up insert the seal with the metal side of the seal facing up (see Figure 1) press the seal into the solvent cup until fully seated into the housing. Install the o-ring in the groove around the base of the housing. Turn the solvent cup over so the top is facing up and install the 4 felt packing's and the packing retainer. Use a pair of snap ring pliers to install the snap ring in the groove at the top of the housing. You may need to press down on the plastic packing retainer to expose the snap ring groove. Now that you have rebuilt the solvent cup assembly, reassemble the solvent cup back onto the proportioning pump and reinstall the pump (don't forget the spacer) on the machine. If you did remove the pump completely from the machine and feed hose it is necessary that you purge the system (cycle the machine to get any air out of the system) this process can be found in the user manual for your machine. If you do not have a manual a copy can be downloaded form the dealers section of our web site at www.turboliner.com.

Figure 1

Figure 2