1. SCOPE

This procedure details how to upgrade a one-way desiccant system to a closed loop desiccant system on off-the-head desiccant boxes and head-mounted systems.

2. OFF-THE-HEAD DESICCANT BOX UPGRADE

1. Power down the machine.
2. Open up the cable track leading to the head. Add the 4m length of hose to the track. Leave enough hose to go around to the front of the head. You need to leave about 12" of extra hose in the fanbox for future head changes (about an inch has to be cut off at the barb fitting at the head every time the head is replaced).
3. Assemble the brass fittings to the head as per the assembly drawing (50-1862C-A-AD or 50-1863C-A-AD; as far as fittings are concerned these two assemblies are identical). Tuck the new hose out of the way around the head so it doesn't interfere with anything at home position.
4. Close up your cable track and tie down the new hose along cable tray.
5. Open the fanbox access panel to access desiccant box. If there is no 10mm - 1/4 NPT straight fitting around the back near the bottom, open desiccant box and remove it from bracket (if the fitting is already there, then you don't have to take the box off the bracket).
6. Add the 10mm - 1/4 NPT straight fitting as per the assembly drawing. Press the new 10mm hose into the fitting - this is the return line to the desiccant box from the head.
7. On the top of the desiccant box there is a small assembly consisting of an elbow with a fitting, connected to a filter, and a reducer union to 10mm. Remove the assembly from the 10mm hose and replace the 1/4" elbow on the top of desiccant box with the 10mm elbow from the kit.

8. Insert the 10mm hose into the 10mm elbow. This is the input line to the head; it has the dry air.

9. Screw the box back on the bracket and replace the desiccant bag. Close everything up. Check to see that the head in the home position doesn't hit **or catch** any new hose. Tie down any suspicious looking hoses.

10. Power up the machine and type SET HEAD VB 2 in procomm. This will display the head humidity. The RH level should drop from 34% to 24% in about 10 minutes. Once the RH is under 30% the machine is ready.

3. HEAD-MOUNTED DESICCANT BOX UPGRADE

1. Power down the machine.

2. Assemble fittings to the head as per the assembly drawing (50-1862C-A-AD or 50-1863C-A-AD; as far as fittings are concerned these two assemblies are identical). Note that the kit contains parts to convert the desiccant system for the TS4/8 (50-1861C-A) and will not be required.

3. Between drum and head disconnect 6mm hose from elbow connected to filter tube stub. Remove filter and associated fittings as one unit from the desiccant box leaving 6mm hose attached to head. Filter and fittings have to be removed as one unit as the fittings cannot be removed from the filter tube stubs.

4. Screw replacement fitting (55-0627, FTG, AIR, STRAIGHT, M6 MALE, 6MM TUBE) into desiccant box where filter was just removed. Insert 6mm hose leading to head into replacement fitting.

5. On the surface of the head away from the drum, locate the M6 hole plugged with a button head screw. Remove the M6 screw and replace with M6 to 1/8" hose barb elbow (55-0630, ELBOW, M6, MALE, 1/8" HOSE BARB, BRASS). Reuse or replace the O-ring used to seal the M6 as required.

6. Locate the unplugged M6 hole on the desiccant box end furthest from the drum and insert a M6 to 6mm elbow (55-0628, ELBOW, AIR, M6, MALE, 6MM TUBE). Insert one end of the 90mm length of 6mm hose (56-3287 TUBE, AIR, 6MM OD, BLK, NYLON) from the kit into this fitting and connect the other end to the hose barb elbow installed in step 5.

7. Open desiccant box and replace desiccant bag. Close everything up. Check to see that the head in the home position doesn't hit **or catch** any hose. Tie down any suspicious looking hoses.

8. Power up the machine and type SET HEAD VB 2 in procomm. This will display the head humidity. The RH level should drop from 34% to 24% in about 10 minutes. Once the RH is under 30% the machine is ready.