Technical Bulletin #13 Removing water ingress, if it has passed through the IDS filter regulator

The IDS is fitted with a small but adequate Primary Filter Regulator, the Primary Filter Regulator is factory fitted with an Auto drain bowl. The bowl is designed to trap any water content and eliminate condensation in the incoming Air supply to the IDS.

NOTE: It is recommended upon IDS installation that an externally fitted Filter Regulator is also fitted to the Air compressor or incoming Air supply to the IDS, especially if the Air supply is to be drawn from another machine running close-by.

Periodically the Bowl will need to be checked to see if it requires cleaning as usually the water trapped inside may contain a brown residue. In the event of the IDS being subjected to an excess of water into the incoming Air supply the Filter Regulator may not be able to trap all the sudden water content. Subsequently the water could then pass through the Pneumatics of IDS causing general failure. In this case the Pneumatics will have to be stripped down and drained of any access water.

Warning!

NOTE: PLEASE ENSURE THAT THE **"EMERGENCY STOP SWITCH"** HAS BEEN **DEPRESSED /ENABLED** ON THE IDS AND THE AIR SUPPLY HAS BEEN ISOLATED / REMOVED BEFORE ATTEMPTING TO CARRY OUT ANY WORK ON THE IDS!

Figure 1. Control Chassis Cabinet. Where both the Primary and Secondary Filter Regulators can be found.

Note: The exact location of the Primary and Secondary Filter Regulators within the Control Chassis may vary slightly between IDS models or build standard variants of IDS. If you are in any doubt as to their location, please refer to the IDS Manual where the exact location will be clearly indicated.

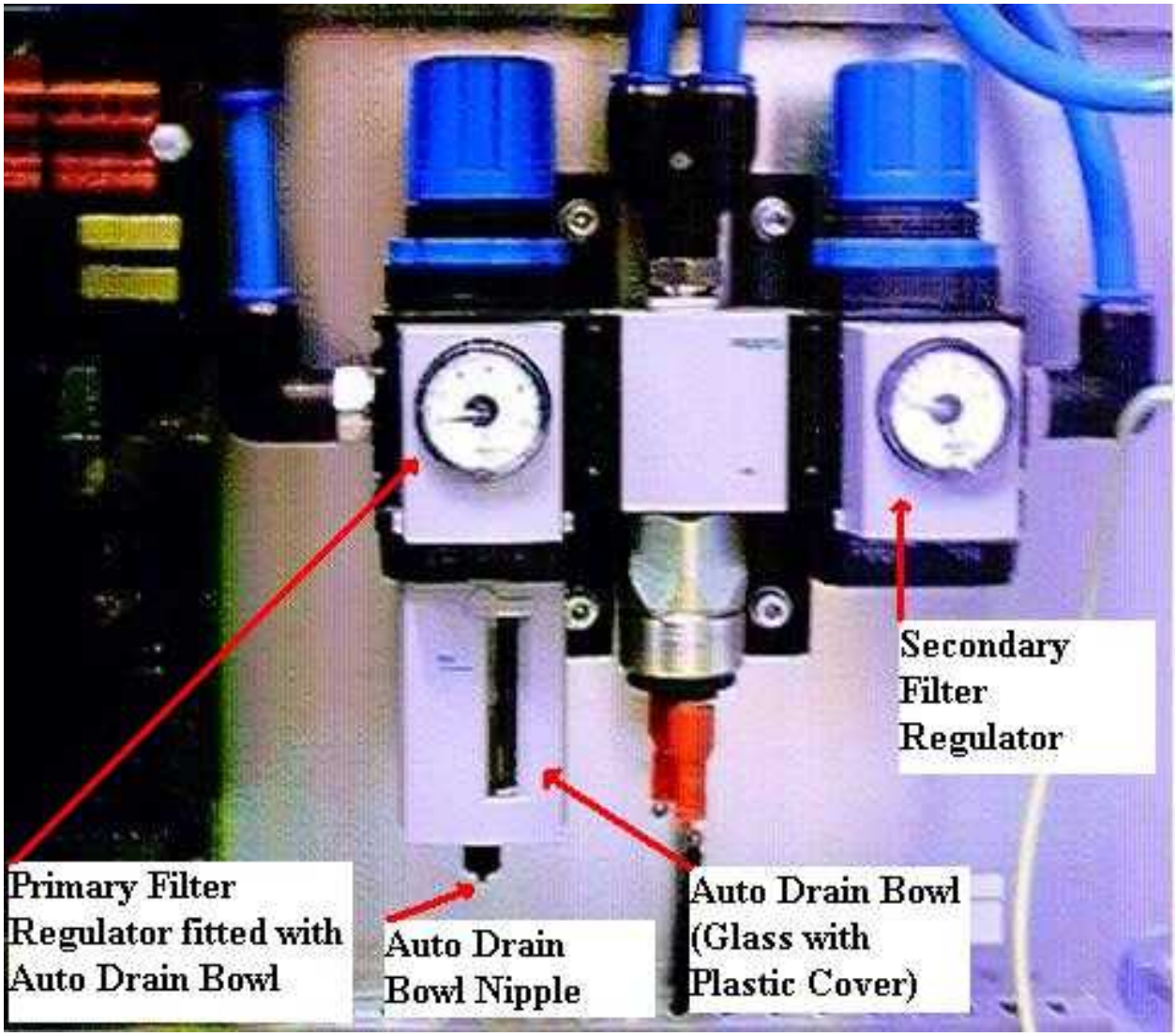

Figure 1.

Step 1.

1. With the Air Supply turned off it is possible to remove the Drain Bowl fitted to the Primary Filter Regulator.
2. Turn the Bowl a quarter turn by hand, in an anti-clockwise direction and gently remove the Drain Bowl.
3. Empty the Bowl of any contaminants.
4. The outer plastic cover can also be removed from the Glass bowl for cleaning.
5. Clean the drain nipple at the base of the Glass Bowl. Ensure that there are no foreign bodies inside it that may cause the Auto drain to fail.
6. Repeat the above stages in reverse order, to fit the Drain Bowl to the Primary Filter Regulator.

It may also be necessary to remove the Solenoid Dump Assembly Valve if the contaminated water has passed through both the Primary and Secondary Filter Regulators, normally in this case Air can be heard continuously exhausting outwards from the exhaust port attached to the Dump Assembly Valve. To remove the Solenoid Dump Assembly Valve please follow Step 2.

Step 2.

1. With the Air Supply turned off it is possible to remove the Solenoid Dump Assembly Valve.
2. Remove three M3 Allen Key bolts that secure the Valve Assembly as shown in Figure 2.

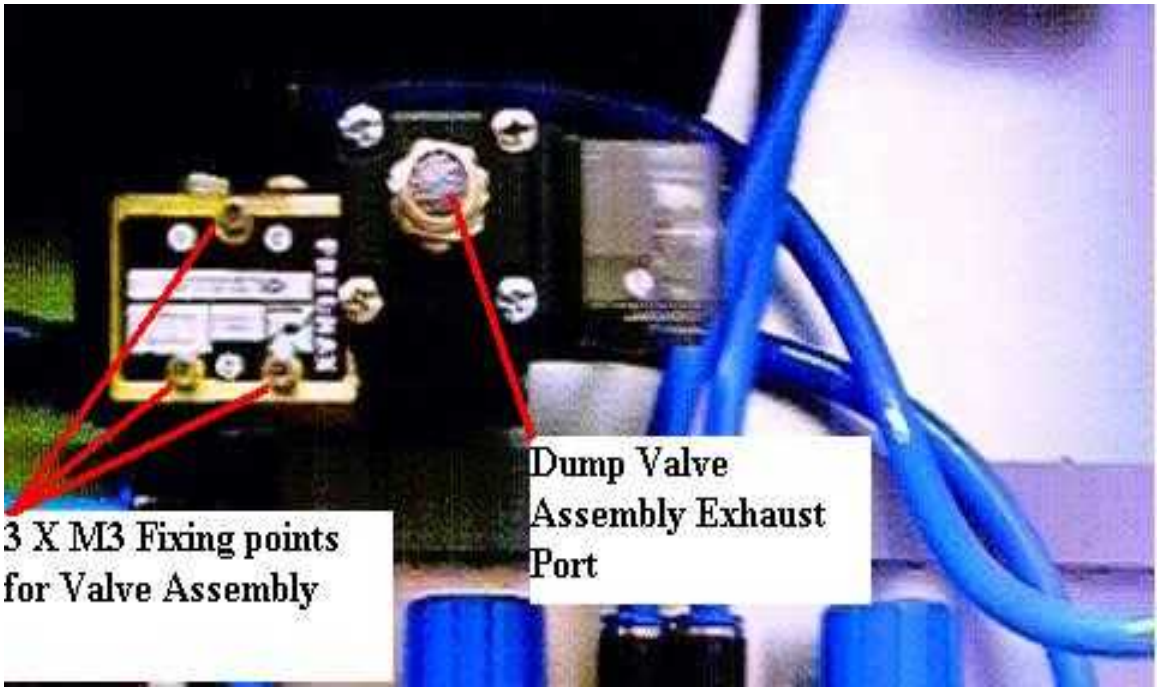

Figure 2. Showing the three M3 fixing points for the Valve Assembly and Exhaust Port

3. Remove the 5mm Air-pipe that is connected to the push fit connector located at the top of the Valve Assembly
4. Remove both the 5mm Air-pipes that are connected to the push fit connectors located at the bottom of the Valve Assembly
5. Remove the two M3 Allen Key bolts that are located at the left hand side end of the Valve Assembly
6. Carefully disassemble the Valve Assembly as shown in Figure 3.

NOTE: Observe caution when removing the 2 x M3 bolts on the left hand side of the Valve, as a compressed spring is behind the cover panel.

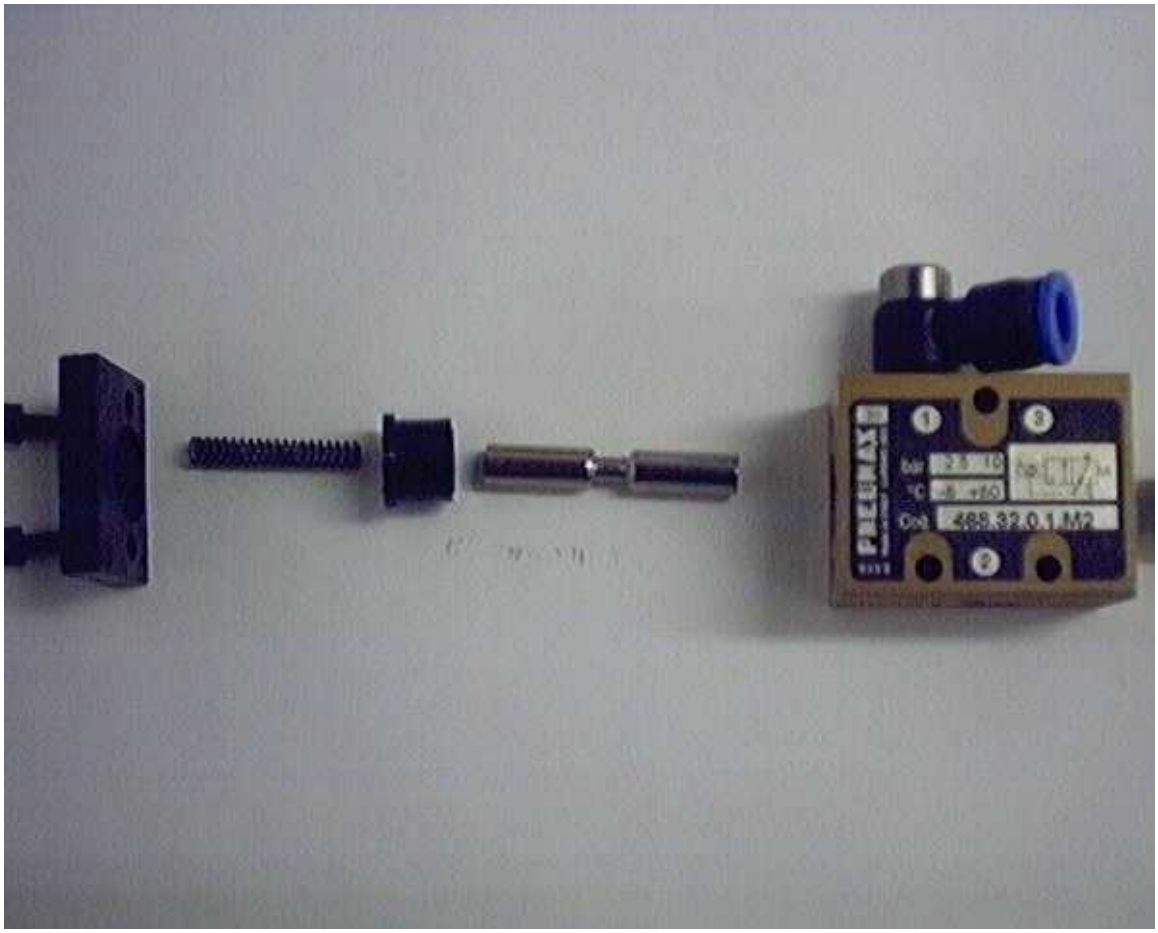

Figure 3. Details the left hand side of the Valve Assembly

7. Clear out the contaminated Water from the Valve Assembly, this can be done using a dry cloth or tissues or by driving the water out using a lubricant such as WD-40
8. Re-assemble the Valve Assembly as shown in Figure 3.
9. If it is necessary, remove the right hand side of the Valve. This is done by again removing 2 x M3 bolts located on the right hand side of the valve as shown in Figure 4.

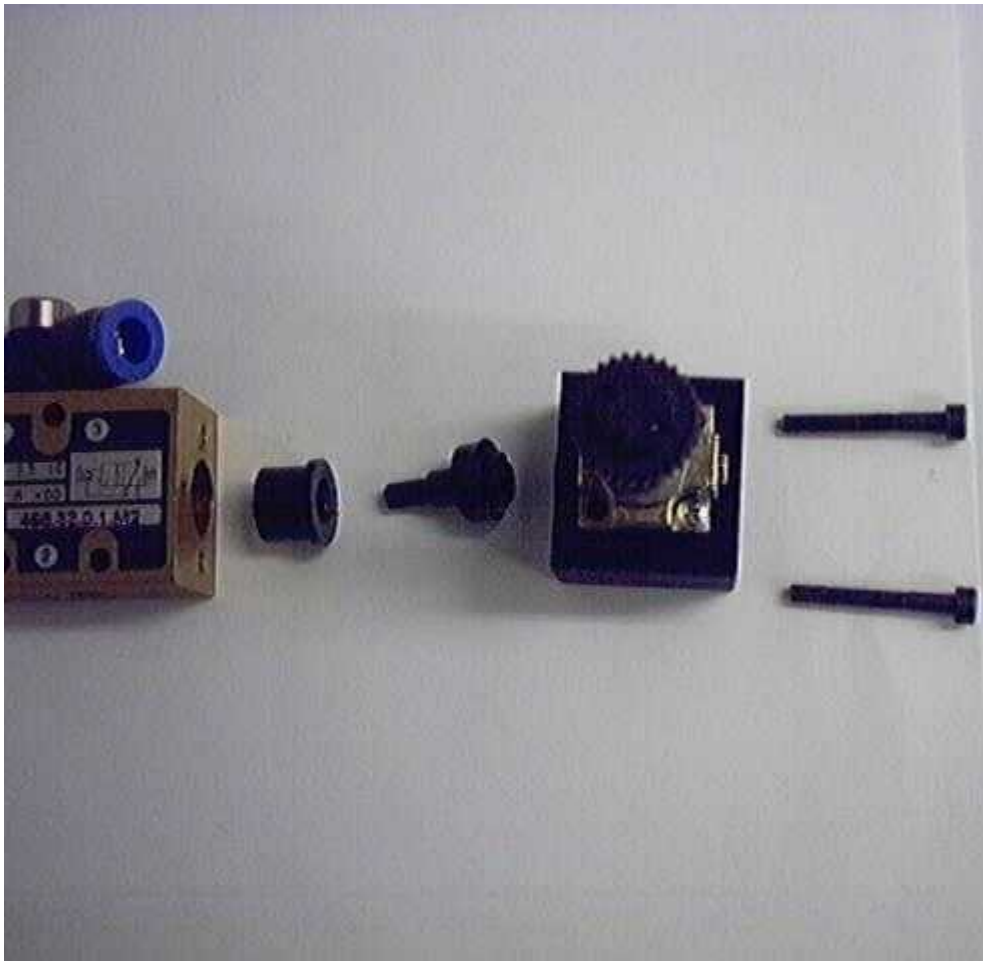

Figure 4. Details the right hand side of the Valve Assembly

10. To re-fit the Valve Assembly repeat the above steps in reverse order

If water contamination has passed this point of the IDS, it may be necessary to replace some of the splice valves, or in some cases the whole Valve Block Assembly.

If the IDS is fitted with the optional Air Knife to each Valve, then there is also a risk that there may also be water contamination into the larger Valve Assembly and Filter Regulators fitted to the IDS.
This assembly is located in the left hand side of the PC cabinet of the IDS, on the opposite side of the machine from the Control Chassis Cabinet. Please follow the same steps as above, to clear any possible water contamination from reaching the Air Knife valve block.