



**DANGER**

Follow proper lockout procedure before servicing  
this equipment!

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### Closed Loop System Daily Check List

- 1) Check and clean (if necessary) settling drums/weirs. Ensure gravity return lines are free from settled solids and water flows freely from drums/weirs to the Ebbco Inc. Closed Loop Filtration System.
- 2) Start the Filter Pump Running
- 3) Lift the lid off of the Closed Loop System tank and inspect the water quality on the clean side of system tank. The water within the clean tank must be 100% clean at all times. The water quality may appear cloudy or have a foamy layer after initial startup or after filter service to vessels # 1 or # 2. This is normal and should clear itself up within a short period of time. **\*DO NOT START THE FEED PUMP UNTIL CLEAN TANK IS CLEAR AND TDS METER READING IS WITHIN THE PROPER RANGE!**
- 4) Turn the chiller to the local position. This will turn on the chiller.
- 5) **Filter # 1 Bag Vessel:** Check the surrounding inlet and outlet pressure gauges. The differential should not exceed a 30 PSI drop from the inlet gauge to the outlet gauge. Once a 30 PSI differential is reached, the red service beacon light on top of the electrical panel will flash continuously. This is indication that the bag filter in vessel # 1 must be changed (observation of gauge readings at start-up will give an indication if the bag filter is close to requiring maintenance).
- 6) **Filter # 2 Hurricane Vessel:** Change the filter cartridge inside of vessel # 2 when pressure differential reaches 30 PSI (see Maintenance Section of the manual for proper procedure).
- 7) **Filter # 3 D.I. Vessel:** Check the TDS (Total Dissolved Solids) Meter on the electrical panel. The TDS Meter is factory set with a set point of 40-100 parts per million (ppm). The TDS level will rise as the waterjet resin depletes. The yellow service beacon on top of the electrical panel will flash continuously when the ppm level no longer returns within the preset range. The TDS level may spike after changing filters or water, giving a false yellow signal. This is normal. Observe the TDS Meter. It should show steadily dropping PPM level. The waterjet resin bag must be replaced if the yellow beacon light does not stop flashing and the ppm level does not fall to its proper range.
- 8) Inspect the reservoir again as the system is running. Water from the clean tank must be overflowing into the dirty tank. Water in the clean tank must be clean at all times. Sending dirty water to your High-Pressure Pump will result in serious pump failure. The water may appear cloudy or have a foamy layer upon initial startup or after servicing a filter element. This is considered normal and should sort itself out over time.
- 9) Check the UV Sterilizer Light. A bright glow should be visible in the clean tank.
- 10) Observe the makeup water float assembly in the dirty tank. Observe that the water level is constantly 10 – 14 inches deep and maintained at the present float height. Makeup water should only enter the reservoir when the float assembly is in the low position, which is less than 8". Check the float and valve for proper operation if makeup water is not keeping the water level constant.
- 11) Start the Ebbco Inc. High-Pressure Feed Pump and observe the monitoring pressure gauge; it should read approximately 90 PSI. The Ebbco Inc. High-Pressure Feed Pump will drop 2-4 PSI after the operator starts the waterjet high-pressure pump.
- 12) Replace the cover on the Closed Loop System tank.
- 13) **Filter # 4 Final Filter Vessel:** Change the filter cartridge when there is a pressure drop of 30 PSI from the surrounding monitoring inlet and outlet pressure gauges, or every 200 hours\*.
- 14) \* The material being cut and the abrasive being used will affect the filter life.
- 15) Push the stop button on both of the pumps to turn the system off. Turn the chiller selector switch to the off position to shut off the chiller.

#### Warning:

**Do not add any chemicals, chlorine, oils, mop water or any other liquids to any of the Waterjet components. This includes but is not limited to worktables, Closed Loop Filtration Systems, Settling Weirs, etc. Doing so will greatly reduce filter life and may cause catastrophic system failure, on top of voiding all warranties.**

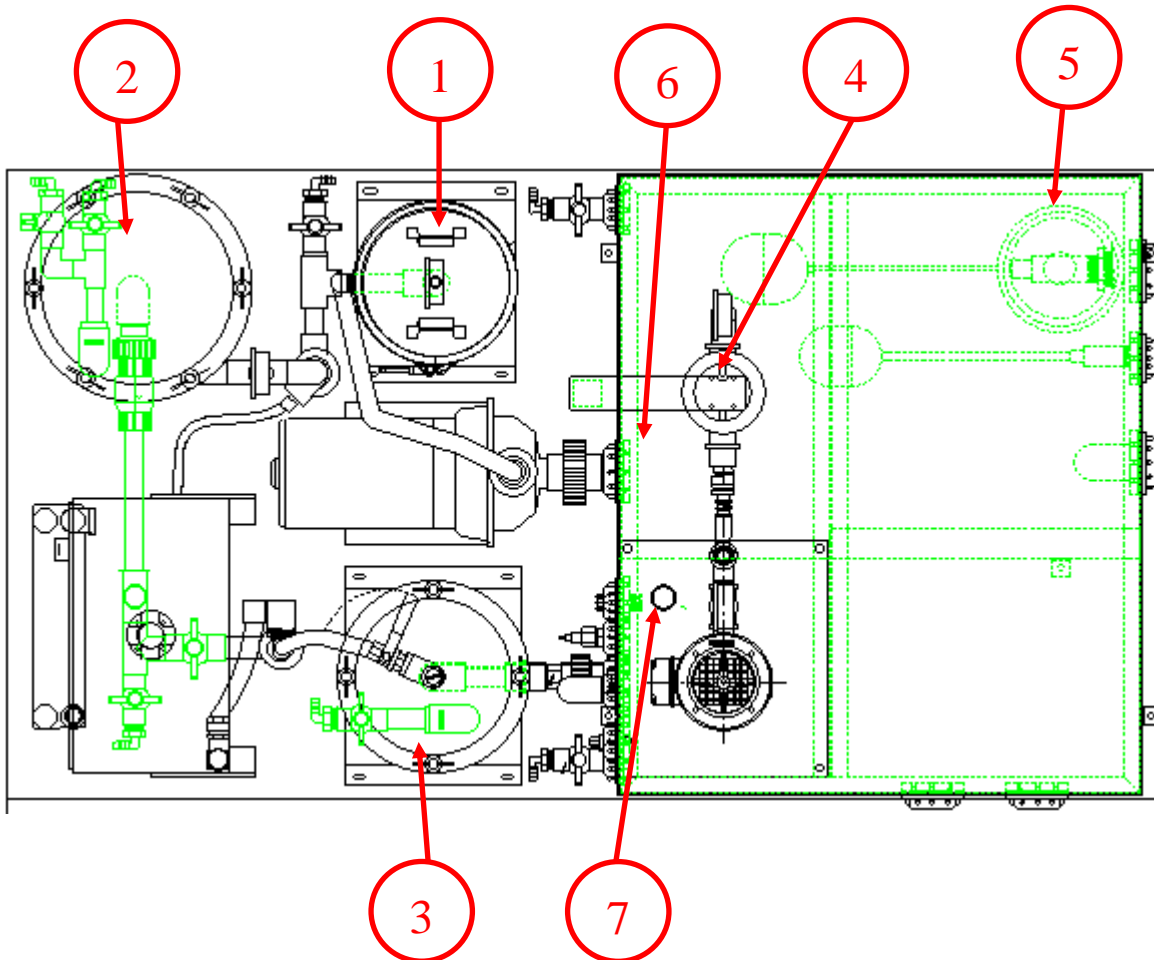
#### Note:

**Ebbco Inc. branded Filter Cartridges, Filter Bags, and Resins must be used in order to obtain maximum performance. Performance cannot be guaranteed unless approved consumables are used.**

Over for system layout and replacement parts list



**Plan View**



Service Point	Service Interval*	Action	Component To Be Serviced	Ebbco Inc. Replacement Part #
1	10 PSI Outlet Pressure or red service beacon	Note 4	Bag Vessel # 1	Bag Filter: WJF-1-G2PS-EA Seal Kit: WJF-0833-ORL-BC
2	30 PSI Inlet/Outlet Pressure Diff.	Note 5	Hurricane Vessel # 2	Filter Cartridge: WJF-HR-930-Q 0.35 Seal Kit: WJF-SK-2
3	TDI above 100PPM Yellow Service Beacon	Note 6	D.I. Vessel # 3	Resin Bag: WJF-CLS-WJR-100-PKG Seal Kit: WJF-SK-3 Resin Coupon: WJF-WJR-ERC-1
4	30 PSI Inlet Outlet Pressure Diff.	Note 12	Final Filter Vessel # 4	Filter Cartridge: WJF-801-0.35 Seal Kit: WJF-801-ORL
5	20	Clean	Inlet Pre-Filter Bag # 5	WJF-PFB-150
6	20	Clean	Pump Suction Strainer	WJF-FP-SCRN
7	See note 9	Note 9	UV Sterilizer	WJF-UV-15
8	VARIES	Clean	Chiller Intake (Not Shown)	Clean Intake Screen
2	Each Filter change	Apply	Hurricane Vessel Wax	WJF-STW

For Service and Replacement Parts Contact:

**\* Average service hours based upon metal cutting applications. Other processed materials may cause variations for required service intervals.**

**EBBCO INC.**

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Ebbco Inc. ref # 211-019-40-CLS-141-40 TDS-UV

05/07/13

Over for system daily maintenance list...