OPTOFORM® 80 - Changing Hydraulic Filters

Both primary and secondary filters should be replaced after each year of use. The primary hydraulic filter must be cleaned or replaced when the intake vacuum exceeds 12,7cmHg (5"Hg). Monitor the vacuum gauge on the hydraulic pump once a month to verify that the primary filter is not becoming restricted.

Note: One of each filter element is provided in the Basic Spare parts kit. Extra elements can be ordered from PRECITECH, INC.

The primary filter is an Arrow 9052T cartridge-type that is mounted to the oil reservoir. The secondary filter is a Parker 15-CN cartridge-type that is mounted to a crossmember above the oil reservoir.

New filters are stocked by PRECITECH, INC. and should be ordered using the following part numbers.

Filter	Type	Precitech #	Mfg. #
Primary	90u Element	166-0012 Arrow	EK9052-90
Secondary	10u Element	166-0006 Parker	925385
Bowl Seal	Viton	166-0007 Parker	V72143

WARNING - Hydraulic Filter Purge Valve - Do not operate this valve when the Hydrostatic Power Unit (Pump) is ON. Damage to the pump drive electronics can occur.

Procedure

1. Turn the E STOP switch ON (out) and the Master Disconnect switch and Control Key Switch OFF and let the oil pressure drop to zero. Follow your employers LOCK OUT-TAG OUT procedures.
2. Place the plastic drain pan under the Primary Filter and turn the Ball Valve OFF between the reservoir and the filter.
3. Hold the top of the filter housing with a 1 3/8" wrench and remove the plug on the bottom with a 1 1/2" wrench. Save the two springs and lower the porous-bronze filter element into the pan temporarily.
4. Clean the plug thoroughly and replace the O-ring with the new one in the filter kit (apply a film of oil to the O-ring first). Replace the flat gasket inside the housing only if the original drops out.
5. Clean the springs and install them on the new filter element. Reassemble the plug and new filter element (open end up) and thread them back into the housing. Use the wrenches to tighten the plug in the housing. CAUTION - Do not over tighten.

6. Place the pan under the secondary filter and remove the filler-breather cap on the reservoir.

7. Loosen the bowl with a 1 inch wrench. Remove the bowl by hand, being careful not to drop the bowl seal into the pan. Save the oil remaining in the bowl by emptying it into the reservoir. Set the bowl aside and replace the filler-breather cap on the reservoir.

8. Pull the old filter element down from its mount and drop it into the pan temporarily.

9. Inspect the bowl seal and replace it if necessary (apply a film of oil to the new seal prior to replacement).

10. Lubricate the gasket on the new filter element with a film of oil and push the element onto its mount.

11. Clean the bowl thoroughly and thread it back into its base. Use the wrench to tighten the bowl to the base until it is snug. CAUTION - Do not over tighten.

12. Switch the Filter Valve to PURGE.

13. Turn the Master Disconnect and the Control Key Switch to ON and circulate oil through the new filter elements for 5 minutes.

14. Turn the Master Disconnect and the Control Key Switch to OFF and switch the Filter Valve to OPERATE.

15. Turn the Master Disconnect and the Control Key Switch to ON and verify that the hydrostatic system is at working pressure. Confirm that there are no leaks around the filter seals.

16. Remove the drain pan. Dispose of the oil and the old filters according to applicable environmental procedures.