INSTRUCTION BULLETIN Machine: 830

No. 3749 Machine: 830 Published: 9-95/00 System: HYDRAULICS

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation Instructions for Kit number 760125

SYNOPSIS / PROBLEM:

This kit contains the parts needed to install a water/hydraulic oil filter on the model 830 sweeper. The hydraulic fluid should be changed at 800 hour intervals as prescribed in the maintenance schedule in the operators manual (MM332) and the service manual (MM333). The fluid is formulated for usage in marine applications and will absorb and hold small amounts of moisture without damaging the components of the hydraulic system. If the hydraulic fluid has a milky appearance, it probably indicates the presence of slight amounts of moisture in the fluid. If this is the case, the following procedure should be utilized to remove traces of moisture from the system and prevent more moisture from getting into the tank.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS:

(Estimated Time to complete: 3 hours)

PREPARATION:

(Refer to FIG. 1)

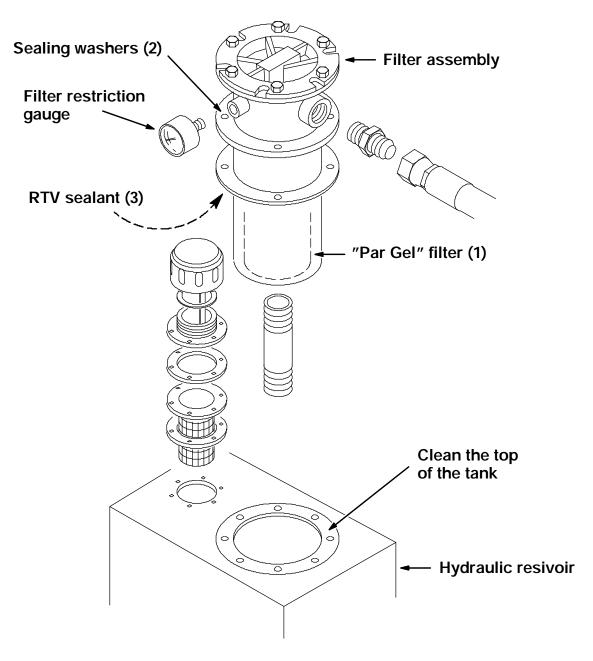
FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

- 1. Drain the hydraulic oil reservoir. The capacity is 18 US gallons.
- 2. Remove the hydraulic tank inlet filter at the top of the tank. (Refer to Fig. 1)
- 3. Remove the four bolts retaining the filter assembly to the tank. (Refer to Fig. 1)
- 4. Remove the filter assembly and gasket from the hydraulic tank. (Refer to Fig. 1)
- 5. Clean the gasket and then coat one side with the RTV provided in this kit. (Refer to Fig. 1)
- 6. Clean the top surface of the hydraulic tank. (Refer to Fig. 1)

REASSEMBLY OF FILTER UNIT:

(Refer to FIG. 1)

- 1. After the RTV has set to a skin that is **not** sticky, reassemble the filter unit with the RTV side of the gasket down on the tank surface. (Refer to Fig. 1)
- 2. Install the four sealing washers (2) under the retaining bolts. Use the flat washers (5) between the bolt and sealing washers. Tighten the bolts enough to ensure a good seal but not too much to force the gasket out of place. (Refer to Fig. 1)
- 3. Install a special "Par Gel" filter in the filter housing. (Refer to Fig. 1)
- NOTE: This filter is only designed to remove moisture from the system, not function as a fine particle filter. It should not be left in place after the moisture removal operation.
 - 4. Reinstall the top of the filter housing. (Refer to Fig. 1)



MOISTURE REMOVAL OPERATION:

(Refer to FIG. 1)

- 1. Fill the hydraulic reservoir with the proper Tennant hydraulic fluid.
- 2. Start the engine. DO NOT OPERATE THE ENGINE ABOVE IDLE SPEED.
- 3. Turn on the vacuum fans.
- 4. Cycle the hopper lift to maximum height and back down.
- 5. Turn on the side brushes and the vario brush if so equipped.
- 6. Lift and lower each component to cycle fluid from the lines to the reservoir.
- 7. To purge the propelling system, set the engine speed to 1500 rpm and propel slowly for 1-2 minutes.
- 8. The filter restriction gauge should start out in the low range and increase to the "Red" range as the filter absorbs moisture. (Refer to Fig. 1)
- 9. When the filter restriction gets into the "Red" range, replace the filter with another "Par Gel" unit and repeat steps 1 thru 8. (Refer to Fig. 1)
- 10. A typical machine may require up to 5 or 6 filter changes to remove the residual moisture that may be present.
- 11. When the fluid becomes clear again, replace the "Par Gel" filter with a standard particle filter (4). (Refer to Fig. 1)
- 12. Replace the cartridge filter in the propelling system with a new one (part # 762125).
- 13. Refill the resivoir to the proper level. (Refer to Fig. 1)

BILL OF MATERIALS FOR HYDRAULIC FLUID/WATER FILTER KIT 760125

Ref.	TENNANT Part No.	Description	Qty.
1	762129	Par Gel filter	6
2	14963	Washer, sealing	4
3	60737	RTV sealant	1
4	762124	Filter, standard	1
5	32485	3/8 in. flat washer	4

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