PumpRight Hydraulic Oil Flow Requirements

When using SufreFire 4.0 CID hydraulic motor—PN 164-FTA0994, which became the standard in 2016.

When using SureFire 4.9 CID hydraulic motor—PN 162-FTA0925—it takes 20% more oil to get the same fertilizer flow. This was the standard SureFire hydraulic motor prior to 2016.

PumpRight pumps require a constant hydraulic oil flow from the tractor. The amount of oil needed varies with pump size and speed. The chart at right shows the necessary oil flow for each pump model at varying fertilizer flows.

Use this procedure to determine the correct setting on your tractor hydraulic flow.

- 1. Run the fertilizer system in the field at the maximum rate and ground speed.
- 2. Turn down the hydraulic flow slowly while watching the pump flow (Volume / Minute).
- 3. Observe when the Volume / Minute begins to drop.
- 4. Turn the hydraulic flow back up slightly

This setting will provide the PumpRight pump just enough oil for your application rate.

If running with the bypass open (only recommended when 2 motors are operated in series) this process will minimize the oil circulated in the bypass loop, leaving more oil flow for other hydraulic functions.

Model D70 - 2 Diaphragms

Fertilizer Flow (GPM)	Pump Speed (rpm)	Hydraulic Oil Flow (GPM)
5	156	2.8
10	313	5.6
15	469	8.6

Model D115 - 3 Diaphragms

Fertilizer Flow	Pump Speed	Hydraulic Oil
(GPM)	(rpm)	Flow (GPM)
5	94	1.8
10	189	3.6
15	283	5.1
20	377	6.8
25	472	8.6

Model D160 - 4 Diaphragms

Fertilizer Flow (GPM)	Pump Speed (rpm)	Hydraulic Oil Flow (GPM)
10	135	2.5
20	270	5.0
30	405	7.3
35	473	8.6

Model D250 - 6 Diaphragms

Fertilizer Flow (GPM)	Pump Speed (rpm)	Hydraulic Oil Flow (GPM)
10	86	1.6
20	172	3.2
30	258	4.6
40	343	6.3
50	429	7.8
55	472	8.6

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