770, 870 Tractors

Service Manual

9-79322

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Section

12

DETAILED SPECIFICATIONS

770-870-970 AND 1070 TRACTORS

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Rec. Form 9-79282

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ENGINES

4 Cylinder

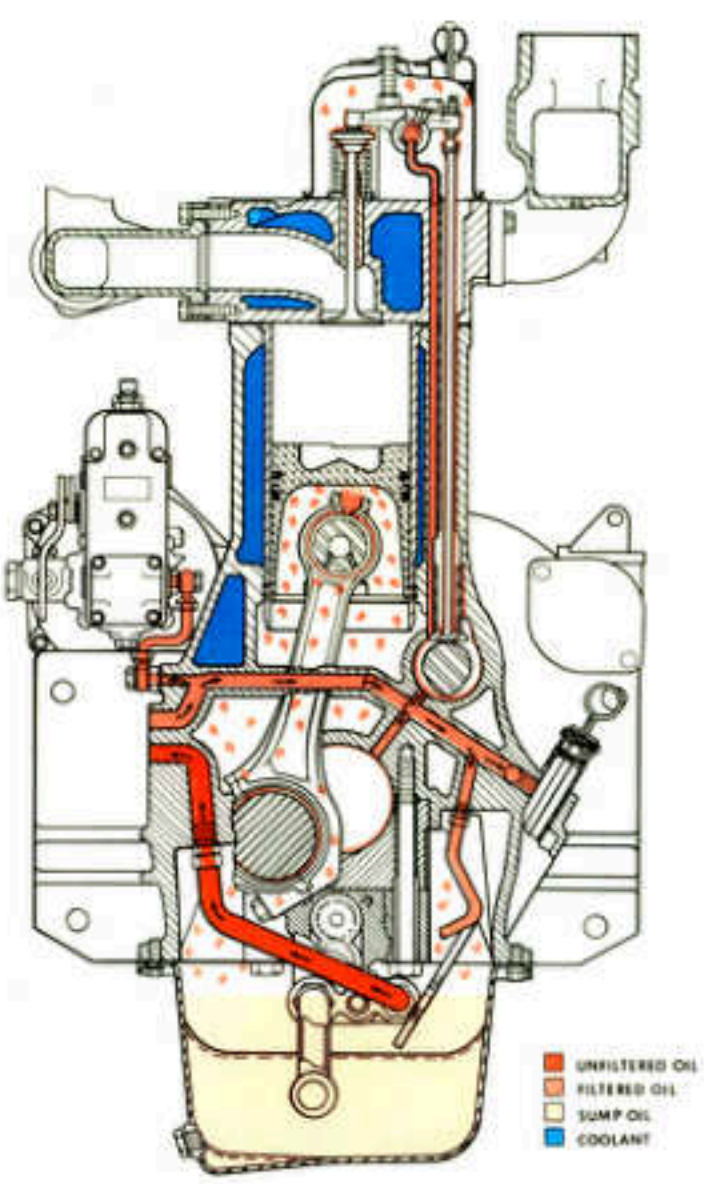
NOTE All dimensions are given in inches. Specifications apply to all engines unless noted.

		Maximum Limit Including Wear
CYLINDER SLEEVES		
I.D. of sleeve (336B)	4.6250 to 4.6260	.005
(267B)	4.1250 to 4.1260	.005
(301B)	4.3750 to 4.3760	.005
(251B)	4.0000 to 4.0010	.005
Sleeve out-of-round		.006
Clearance to bottom of piston skirt (336B, 267B)	.0040 to .0060	
(301B)	.0030 to .0050	
(251B)	.0025 to .0045	
Taper		.001
PISTONS		
Type	Cam Ground	
Material	Aluminum Alloy	
O.D. at bottom of skirt; 90° to piston pin (336B)	4.620 to 4.621	
(301B)	4.3710 to 4.3720	
(251B)	3.9965 to 3.9975	
(267B)	4.1200 to 4.1210	
I.D. of piston bore (336B)	1.8000 to 1.8002	.001
(301B and 251B)	1.3586 to 1.3589	.001
(267B)	1.4997 to 1.4999	.001
Width of 1st ring groove (267B)	.097 to .098	
(251B and 301B)	.096 to .097	
Width of 2nd ring groove (336B)	.097 to .098	
(301B)	.0955 to .0965	
(267B and 251B)	.096 to .097	
Width of 3rd ring groove (251B)	.096 to .097	
(336B,267B and 301B)	.2505 to .2515	
Width of 4th ring groove (251B)	.251 to .252	
PISTON RINGS		
No. 1 Compression (336B)	Chrome Keystone Type	
(251B,267B and 301B)	Chrome Face	
Width (336B)	.1140 to .1145	
(251B,301B and 267B)	.0930 to .0935	
End gap in 4.625 I.D. sleeve (336B)	.015 to .025	
4.000 I.D. sleeve (251B)	.013 to .023	
4.125 I.D. sleeve (267B)	.013 to .023	
4.375 I.D. sleeve (301B)	.013 to .025	

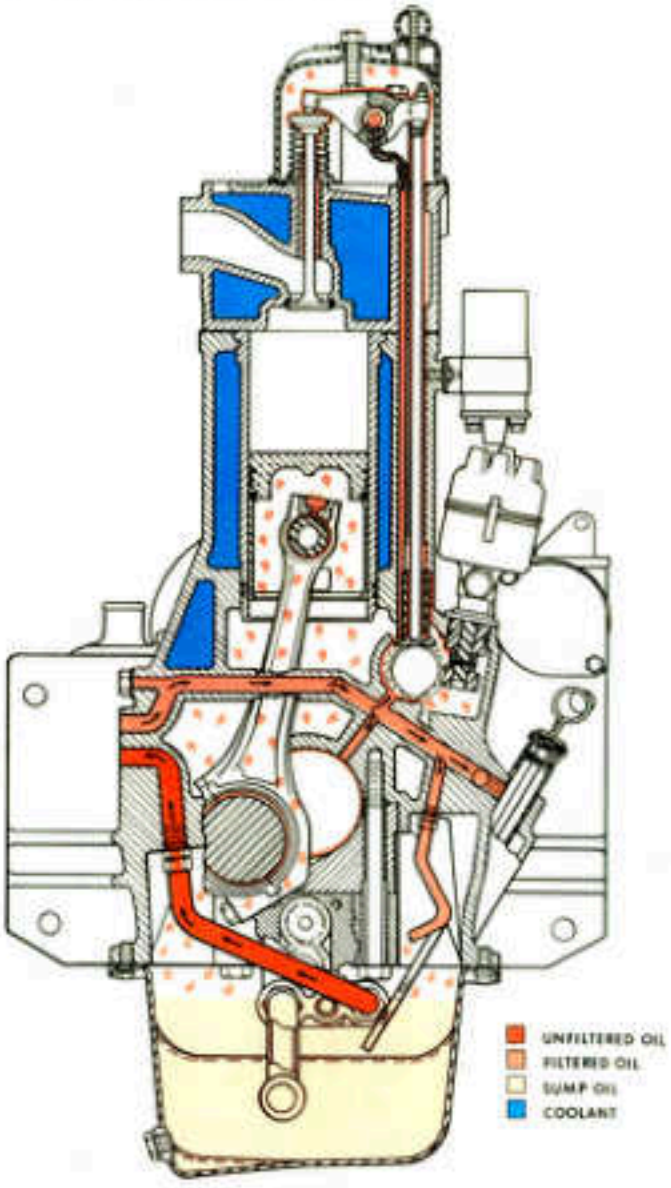
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ENGINE LUBRICATING OIL AND COOLANT SYSTEMS

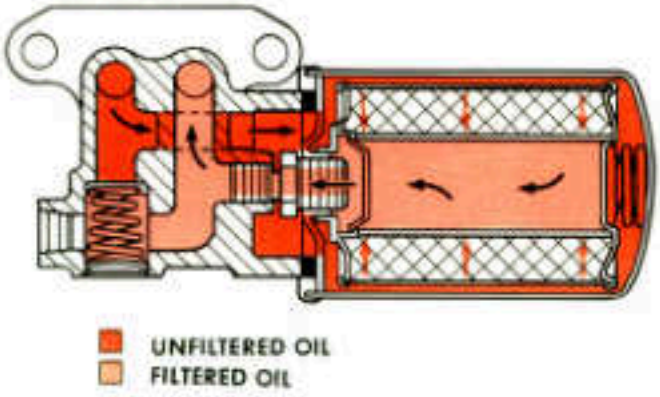
PRESSURE AND SPRAY TYPE LUBRICATING OIL SYSTEM



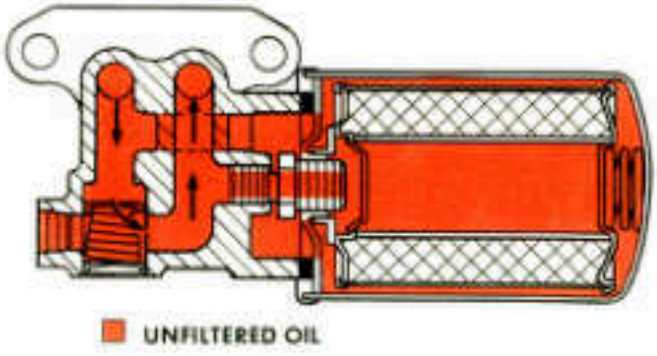
DIESEL ENGINE



SPARK IGNITION ENGINE



CLEAN OIL FILTER

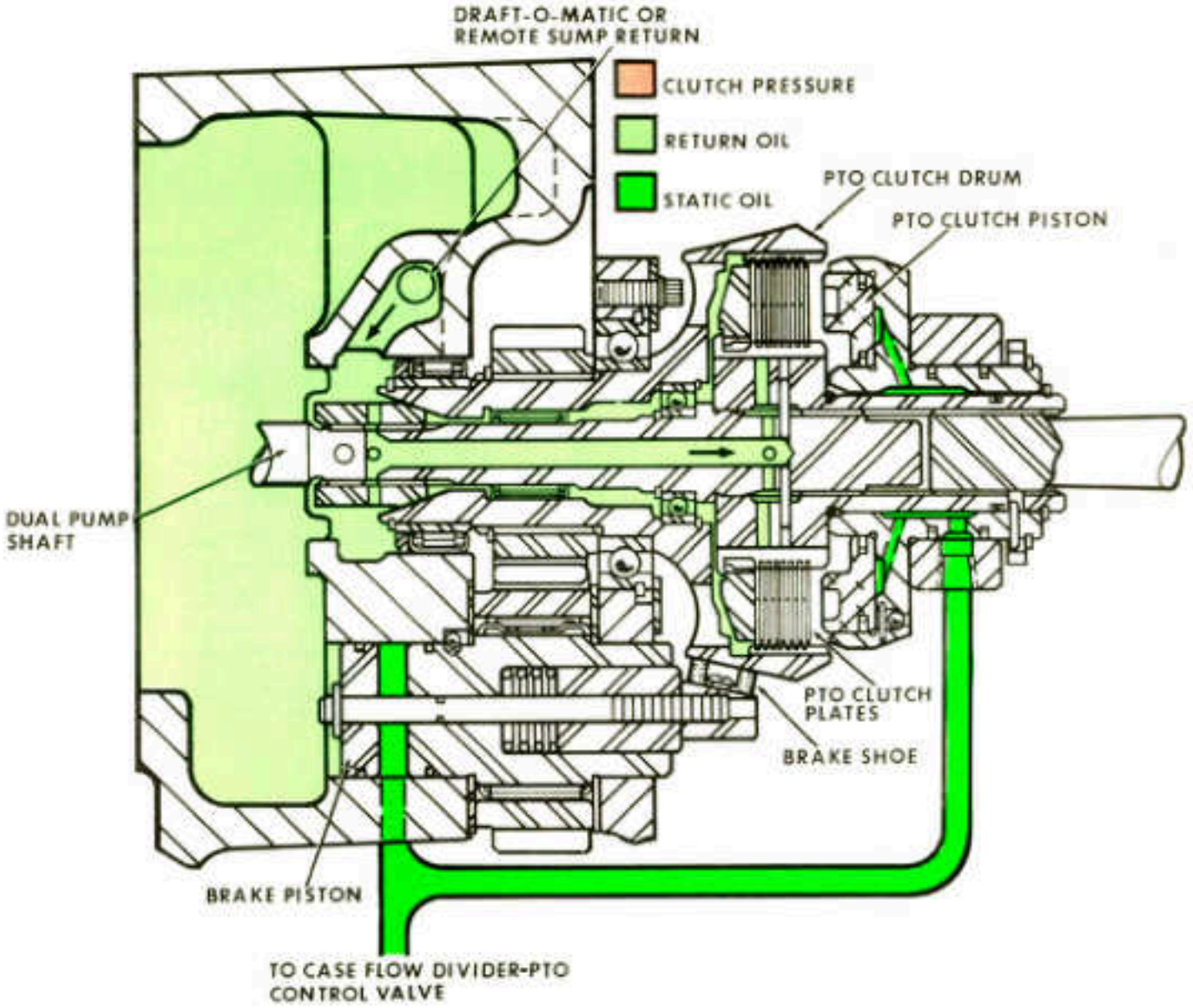


PLUGGED OIL FILTER

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PTO CLUTCH DISENGAGED

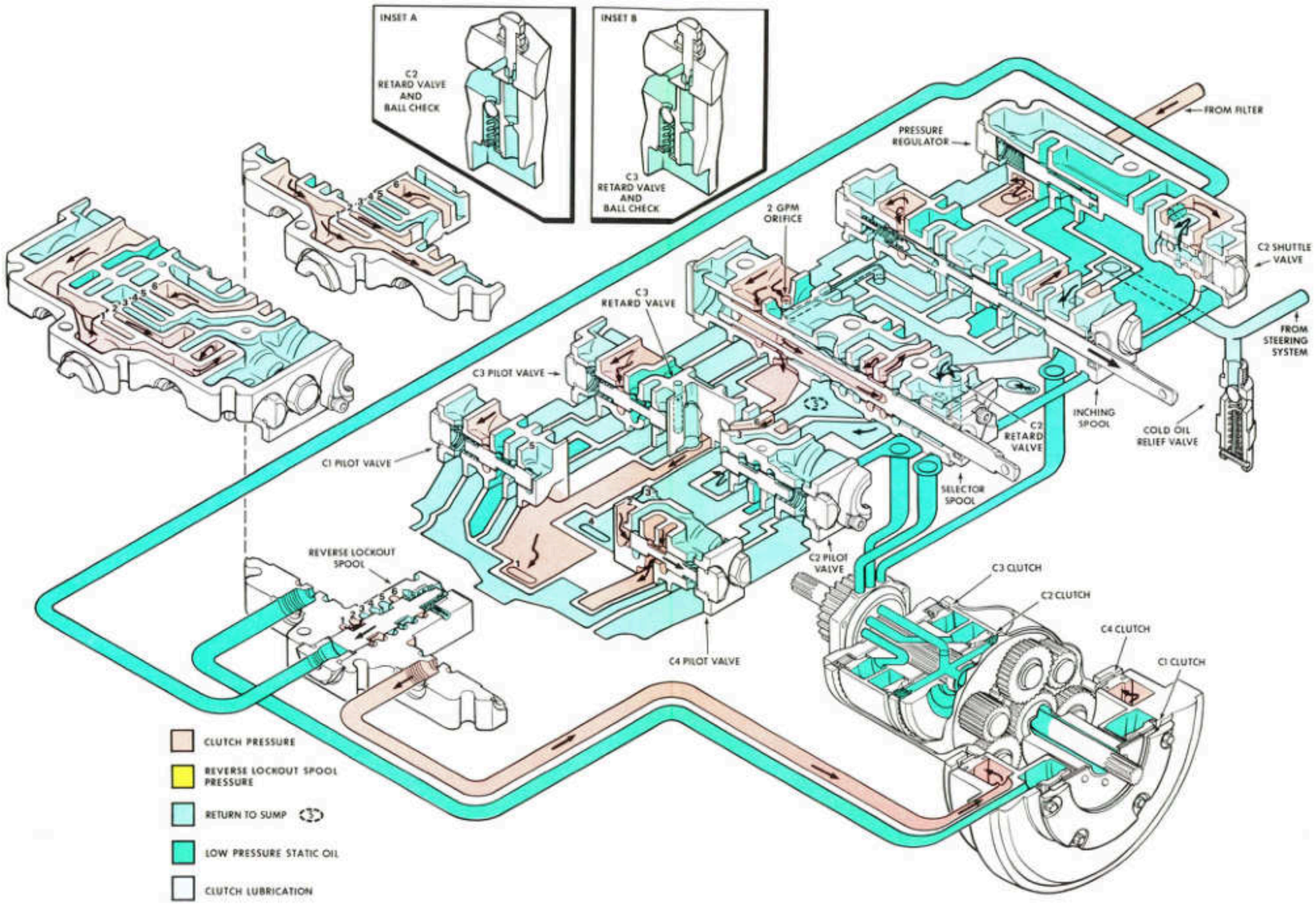
PTO CLUTCH LUBRICATION - Part of the return flow of oil from the Draft-O-Matic or dual remote valve is directed to the PTO housing. The oil then enters the PTO housing on the left side and flows through the center of the PTO shaft to the cross drilled hole in the shaft, which allows the oil to flow out through the PTO input hub and the PTO clutch plates.



PTO CLUTCH DISENGAGED - When the PTO control spool is moved to the disengaged position, flow of pressurized oil to the PTO stops. This will cause a static oil condition and the PTO brake piston, under spring tension, is allowed to move forward to a brake applied position. The separator springs, in the PTO clutch, move the clutch piston forward disengaging the PTO clutch and stops the PTO output shaft.

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POWER SHIFT - Inching Pedal Fully Depressed



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