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Implement Pump Unloader Kit

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Item	Part No.	Qty	Description	Item	Part No.	Qty	Description
	<b>586002</b>		<b>Implement Pump Unloader Kit</b>				
1	* 585736	1	. Manifold Assembly	10	209323	2	. Fitting
2	585765	1	. Plate, Mounting	11	12861	1	. Hose Assembly
3	R13811027	2	. Capscrew	12	R1939208	1	. Hose Assembly
4	R13802914	2	. Hard Washer	13	212717	2	. Fitting
5	585727	1	. Plate, Flange	14	244421	1	. Hose Assembly
6	256543	1	. Check Valve	15	244973	1	. Hose Assembly
7	R13806944	4	. Capscrew	16	209486	1	. Fitting
8	203446	2	. O-Ring	17	R330325	1	. Coupler, Male
9	207295	1	. Fitting				

\* See Separate Coverage

IMPLEMENT PUMP UNLOADER KIT

THE PURPOSE OF THIS INSTALLATION IS TO REDUCE THE HEAT GENERATED BY THE HYDRAULIC SYSTEM BY PROVIDING A LOW PRESSURE BYPASS OF THE IMPLEMENT PUMP FLOW UNTIL ADDITIONAL PUMP FLOW IS REQUIRED TO ACHIEVE FUNCTION SPEEDS REQUESTED BY THE OPERATOR. DURING THE LOADED PUSH PORTION OF THE DOZE CYCLE, FINE POSITIONING ADJUSTMENTS ARE REQUIRED BY THE OPERATOR TO MAXIMIZE THE PERFORMANCE OF THE CHIPDOZER. WHILE THESE SLIGHT ADJUSTMENTS REQUIRE RELATIVELY SMALL VOLUMES OF OIL, THE UNLOADER VALVE INCREASES THE PRESSURE OF THE PUMP FLOW AT THE VALVE INLET TO THE PRESSURE REQUIRED TO PERFORM THE REQUESTED FUNCTION. THE DIFFERENCE BETWEEN THE PUMP FLOW AVAILABLE AND THE PUMP FLOW REQUIRED TO POSITION THE BUCKET PASSES OVER THE UNLOADER VALVE, CREATING WASTE HEAT AT THE RATE OF 50 BTU/GALLON/1000 PSI PRESSURE DROP.

THIS KIT INSTALLS UNLOADER MANIFOLD (ASC 585736) PRIOR TO THE COMBINING OF THE IMPLEMENT PUMP FLOW WITH THE EXCESS FLOW FROM THE STEERING FLOW AMPLIFIER VALVE. THE 585736 MANIFOLD UNLOADS THE IMPLEMENT PUMP FLOW DIRECTLY TO RETURN UNTIL THE PILOT PRESSURE ON EITHER BUCKET DUMP "OUT" OR "BACK" REACHES THE PRESET VALUE OF THE PILOT VALVE CARTRIDGE IN THE 585736 MANIFOLD ASSEMBLY. THE CARTRIDGE IS SET TO 150 PSI, AND IS ADJUSTABLE FROM 25 TO 400 PSI. THE 150 PSI PILOT PRESSURE CORRESPONDS TO 40% OF VALVE SPOOL OR 40% OF FUNCTION SPEED. PRIOR TO THE BUCKET DUMP PILOT PRESSURE REACHING THE PILOT VALVE CARTRIDGE, SETTING THE EXCESS FLOW FROM THE STEERING FLOW AMPLIFIER VALVE IS AVAILABLE FOR THE THREE IMPLEMENT FUNCTIONS. WHEN THE ADDITIONAL FUNCTION SPEED IS REQUIRED, THE OPERATOR INCREASES THE ACTUATION OF THE JOYSTICK CONTROL, INCREASING THE PILOT PRESSURE TO THE VALVE PILOT END CAP, INCREASING THE VALVE SPOOL TRAVEL. THIS INCREASED PILOT PRESSURE ALSO CLOSES THE VENTED RELIEF CARTRIDGE IN THE UNLOADER VALVE TO PROVIDE THE REQUIRED ADDITIONAL FLOW TO THE MAIN VALVE.

THE MANIFOLD LOCATION SHOWN IN THE LAYOUT IS SUGGESTED AND MAY BE ADJUSTED AT THE INSTALLERS DISCRETION TO ENHANCE HOSE ROUTING. HOSE ASSEMBLIES ARE FOR NOMINAL INSTALLATION AS SHOWN.

REFER TO ANSI HYDRAULIC SCHEMATIC FOR FUNCTIONAL INFORMATION; SEE M/S

