Hydraulics

50 Series Specifications

	All pressures with Engine at High Throttle	Procedure paragraph number	L-950	L-1150	L-1350	L-1850	L-2350
Hyd Tank Air	Air pressure regulator	A	4 to 6 PSI	4 to 6 PSI	4 to 6 PSI	4 to 6 PSI	4 to 6 PSI
Gear Box Circuit	Gearbox	Not adjustable	50 to 125 psi at High Throttle	50 to 125 psi at High Throttle	50 to 125 psi at High Throttle	50 to 125 psi at High Throttle	50 to 125 psi at High Throttle
Pilot Circuit	Pressure relief valve (new)	B	450 psi ±10	450 psi ±50	450 psi ±10	450 psi ±10	450 psi ±10
	Pressure Reducing Valve (old)	C	450 psi ±10	N/A	450 psi ±10	450 psi ±10	450 psi ±10
	Pilot Overpressure Relief (old)	C	800 psi +0 -50	N/A	800 psi +0 -50	800 psi +0 -50	800 psi +0 -50
See note #1	Hoist Up Responsiveness	D	0 ~200 psi (JS) 220 psi (Detent)	N/A	0 ~200 psi (JS) 220 psi (Detent)	0 ~200 psi (JS) 220 psi (Detent)	0 ~200 psi (JS) 220 psi (Detent)
See note #1	Hoist Down Responsiveness	H	0 ~ 179 psi (JS) 280 psi (Float)	N/A	0 ~ 179 psi (JS) 280 psi (Float)	0 ~ 179 psi (JS) 280 psi (Float)	0 ~ 179 psi (JS) 236 psi (Float)
See note #1	Bucket Back Responsiveness	P	0 ~ 196 psi	N/A	0 ~ 196 psi	0 ~ 196 psi	0 ~ 196 psi
See note #1	Bucket Forward Responsiveness	U	0 ~ 220 psi	N/A	0 ~ 220 psi	0 ~ 220 psi	0 ~ 220 psi
See note #1	Solenoid Drive	V		N/A			
Hoist / Bucket Circuit	Hoist & Bucket Pump Compensators	E	3700 psi ± 50	4000 psi ± 50	3300 psi ± 50	3300 psi ± 50	4000 psi ± 50
	Main Valve Relief	F	4000 psi +50 -0	4500 psi +50 -0	3800 psi +50 -0	3800 psi +50 -0	4500 psi +50 -0
	Hoist Base Circuit Relief	F	4000 psi +50 -0	4500 psi ± 50	3800 psi ± 50	3800 psi ± 50	4500 psi ± 50
	Hoist Rod Circuit Relief	F	2000 psi ± 50	2000 psi ± 50	2000 to 2400 psi ± 50	2000 psi ± 50	2000 psi ± 50
	Bucket Base Circuit Relief	F	4000 psi +50 -0	4500 psi ± 50	3800 psi ± 50	3800 psi ± 50	4500 psi ± 50
	Bucket Rod Circuit Relief	F	2000 psi ± 50	2000 psi ± 50	2000 psi ± 50	2000 psi ± 50	2000 psi ± 50
	Secondary Dump Relief	G	800 psi ± 50	800 psi ± 50	800 psi ± 50	800 psi ± 50	800 psi ± 50
Steer Circuit	Steering Pump (Stand By)	I	N/A	N/A 250psi (Reference Only)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)
	Steering Pump (Compensator)	I	N/A	N/A	3400 psi ± 50	3400 psi ± 50	3400 psi ± 50
	Steering Main Relief (Flow Amp)	J	Turn in Full	Turn in Full	N/A (see note #2)	N/A (see note #2)	N/A (see note #2)
	Steering Overload Relief (Flow Amp)	K	4000 psi ± 50	4000 psi ± 50	4000 psi ± 50	4000 psi ± 50	4000 psi ± 50
	Relief (PVG)	L	4000 psi	4000 psi	4000 psi	4000 psi	4000 psi
	Steering Remote Relief (new)	Z	2500 psi ± 50	2500 psi ± 50	N/A	N/A	N/A
	Aux. Steering Relief	M	1600 psi +50 -0	1600 psi +50 -0	2000 psi +50 -0	2000 psi +50 -0	2000 psi +50 -0
See note #1	Steer Left Responsiveness	W		N/A			
See note #1	Steer Right Responsiveness	X		N/A			
Blower Circuit	Blower Pump (Stand by)	N	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)
	Blower Pump (Compensator)	N	3100 RPM	2800 RPM	3300 RPM	3300 RPM	3300 RPM
	Blower Remote Relief	N	2800~3000 RPM	2500 RPM	3000 RPM	3000 RPM	3000 RPM
Engine Fan Circuit	Fan Pump (Stand by) - Idle	O	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)	450 - 500 psi (Stand-by)
	Fan Pump (Compensator) - High	O	950 RPM (High)	1150 RPM (High)	950 RPM (Max)	950 RPM (Max)	950 RPM (Max)
	Fan Remote Relief - High	O	850 RPM (Max)	950 RPM (Max)	850 RPM (Max)	850 RPM (Max)	850 RPM (Max)
Aux Oil Cooler Circuit	Idle Speed	Not adjustable	N/A Fixed Flow Control	120psi psi (0 RPM)	165 psi (275 RPM)	165 psi (275 RPM)	165 psi (275 RPM)
	High Speed	Y	N/A Fixed Flow Control	1700psi (1600 RPM)	1100 psi (1400 RPM)	1100 psi (1400 RPM)	1100 psi (1400 RPM)
Accessory Pump	Accessory Pump Compensator	Q	2000psi	2000psi	2500psi	2500psi	2500psi
AutoLube Circuit	Pressure Reducing Valve	R	3500 psi ± 100 (Grease Pressure)	3500 psi ± 100 (Grease Pressure)	3500 psi ± 100 (Grease Pressure)	3500 psi ± 100 (Grease Pressure)	3500 psi ± 100 (Grease Pressure)
	Flow Control	R	1.5 to 2 strokes per second	1.5 to 2 strokes per second	1.5 to 2 strokes per second	1.5 to 2 strokes per second	1.5 to 2 strokes per second
Air Conditioning Circuit	Relief Setting (Sigma)	S	2300 psi +50 -0		2300 psi +50 -0	2300 psi +50 -0	2300 psi +50 -0
	Reducing valve setting (Sigma)	S	2000 psi +50 -0		2000 psi +50 -0	2000 psi +50 -0	2000 psi +50 -0
	Flow Setting	T	8GPM (1800 to 1950rpm)	8GPM (1800 to 1950rpm)	8GPM (1800 to 1950rpm)	8GPM (1800 to 1950rpm)	8GPM (1800 to 1950rpm)
	High Side Refrigerant		175 psi @ 90°F / 32°C	275 psi @ 90°F / 32°C	175 psi @ 90°F / 32°C	175 psi @ 90°F / 32°C	175 psi @ 90°F / 32°C
Cycle Times	Hoist Up	Not adjustable	9-11 Sec	10-12 Sec	12-14 Sec	12-14 Sec	16-18 Sec
	Hoist Down	Not adjustable	9-11 Sec	9-11 Sec	9-11 Sec	9-11 Sec	12-14 Sec
	Float	Not adjustable	4-6 Sec	6-8 Sec	6-8 Sec	6-8 Sec	6-8 Sec
	Bucket Rollback	Not adjustable	3-5 Sec	4-6 Sec	3-5 Sec	3-5 Sec	3-5 Sec
	Bucket Dump	Not adjustable	3-5 Sec	3-5 Sec	3-5 Sec	3-5 Sec	3-5 Sec
	Steer Lock to Lock	Not adjustable	6 Sec	7 Sec	6 Sec	6 Sec	6 Sec
Notes							
			1) Can be adjusted at Service Level in LINCS				
			2) Maximum steering pressure set at the pump compensator. Screw Dan Foss main relief in completely.				