

# 4WD Drive Manifold

## 19-1

### 4WD Drive Manifold Components

Index No.	Description	Schematic Item	Function	Torque
1	Check valve .....	W .....	Brake check .....	25-30 ft-lbs / 34-41 Nm
2	2 position 3 way valve .....	S .....	Brake release .....	8-10 ft-lbs / 11-14 Nm
3	2 position 3 way valve .....	R .....	2-speed wheel motors (energized in high range to destroke the rear motor swash plates) .....	8-10 ft-lbs / 11-14 Nm
4	Check valve .....	K .....	RR check in forward .....	35-40 ft-lbs / 47-54 Nm
5	Orifice 0.025 in (0.635 mm) ...	X .....	Motor shift / brake release circuit	
6	Check valve .....	L .....	RR check in reverse .....	35-40 ft-lbs / 47-54 Nm
7	Relief valve, 320 psi (22 bar) .	V .....	Charge pressure .....	10-12 ft-lbs / 14-16 Nm
8	Shuttle valve 3-position 3 way	U .....	Low pressure flow path for brake release and 2 speed motor shift .....	15-18 ft-lbs / 20-24 Nm
9	Pilot to open check valve .....	O .....	RF check in forward .....	85-90 ft-lbs / 115-122 Nm
10	Pilot to open check valve .....	P .....	RF check in reverse .....	85-90 ft-lbs / 115-122 Nm
11	Check valve .....	J .....	LR check in reverse .....	35-40 ft-lbs / 47-54 Nm
12	Check valve .....	I .....	LR check in forward .....	35-40 ft-lbs / 47-54 Nm
13	Pilot to open check valve .....	N .....	LF check in reverse .....	85-90 ft-lbs / 115-122 Nm
14	Pilot to open check valve .....	M .....	LF check in forward .....	85-90 ft-lbs / 115-122 Nm
15	2 position 3 way valve .....	Q .....	Energized in high range to pilot open check valves 9, 10, 13 & 14 to bypass flow regulators and allow full flow to front wheel motors .....	8-10 ft-lbs / 11-14 Nm
16	Shuttle valve 2 position 3 way	T .....	High pressure flow path for flow regulator bypass .....	10-13 ft-lbs / 14-18 Nm
17	Flow regulator valve .....	D .....	LR flow control in reverse .....	10-12 ft-lbs / 14-16 Nm
18	Flow regulator valve .....	B .....	LR flow control in forward .....	10-12 ft-lbs / 14-16 Nm
19	Flow regulator valve .....	H .....	RR flow control in reverse .....	10-12 ft-lbs / 14-16 Nm
20	Flow regulator valve .....	F .....	RR flow control in forward .....	10-12 ft-lbs / 14-16 Nm
21	Flow regulator valve .....	A .....	LF flow control in forward .....	10-12 ft-lbs / 14-16 Nm
22	Flow regulator valve .....	C .....	LF flow control in reverse .....	10-12 ft-lbs / 14-16 Nm
23	Flow regulator valve .....	G .....	RF flow control in reverse .....	10-12 ft-lbs / 14-16 Nm
24	Flow regulator valve .....	E .....	RF flow control in forward .....	10-12 ft-lbs / 14-16 Nm

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