SERVICE MANUAL

T8.320 / T8.350 / T8.380 / T8.410 / T8.380 SmartTrax™ / T8.410 SmartTrax™

Powershift Transmission (PST)

Tractor

PIN ZGRE05001 and above; PIN ZHRE01013 and above

Part number 48123726
1st edition English
April 2017

NEW HOLLAND AGRICULTURE

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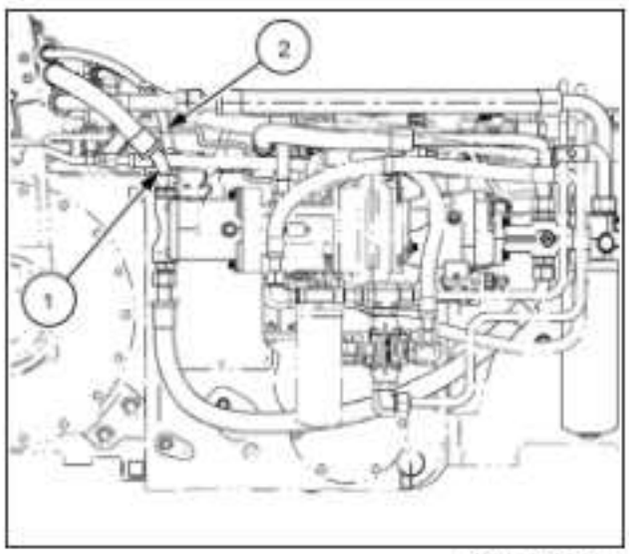
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Pump Dual flow pressure/flow compensating pump - Flow test - At the pump outlet

DATAR flow meter, DATAR scope, DATAR pressure sensor, electronic service tool (EST), two **25 mm** (**1.0 in**) hoses with a minimum working pressure of **206 bar** (**3000 psi**) and one signal line hose rated at **206 bar** (**3000 psi**) are required for this test. If DATAR equipment is not available, use flow meter **380001306**.

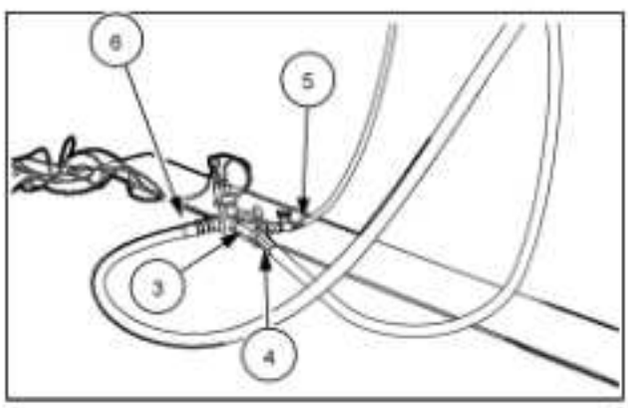
NOTE: *Perform this test when the flow recorded at the remote couplers (4, 5 and 6) during the pump flow test is not adequate.*

1. If necessary, move the right rear tire out near the end of axle.
2. Locate and disconnect the Megaflow outlet hose assembly **(1)** at the pump. Plug the open hose connection.
3. Locate and disconnect the load sense line **(2)** at the pump compensator. Plug the open connection.



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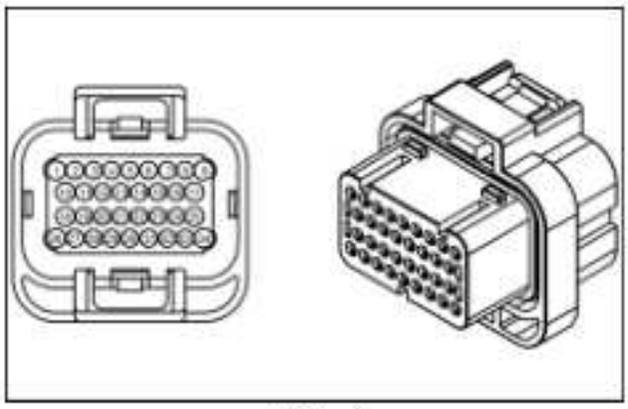
4. Install a tee fitting **(3)** at the DATAR flow meter inlet. Install the hose assembly from the Megaflow pump outlet port to the DATAR inlet port **(4)**.
5. Install an appropriate signal line hose assembly from the DATAR tee fitting **(5)** to the Megaflow signal port on compensator.



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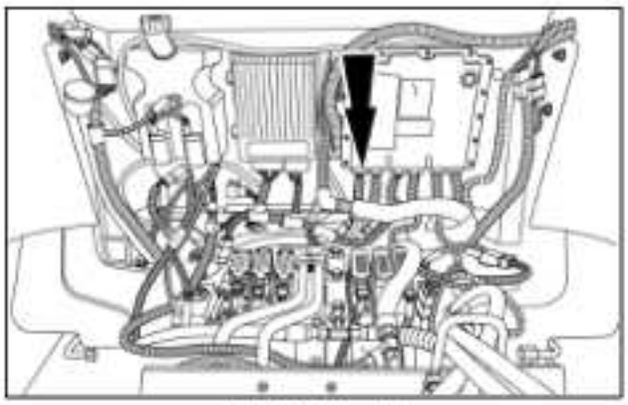
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X-355 - CN3B [A-044] (84130760) (Female)



84130760 9

84130760



RA6,141R0824AA 10

Pin	From	Wire	Description	Color-Size	Frame
1	**X-010 (Female) pin BB5** TO CAB HARNESS	OC-553	FNRP ENABLE STATUS	WH - 0.8	**SHEET 13**
2	**X-026 (Male) pin BA5** TO OUTSIDE CAB HARNESS	OC-588	MID/C2 CLUTCH SOL HI	WH - 0.8	
3	SP-901-P-X	OC-901B	+12 VS2	OR - 0.8	**SHEET 14**
4	**X-026 (Male) pin BB1** TO OUTSIDE CAB HARNESS	OC-2015	REV CLUTCH SOLENOID HI	WH - 0.8	**SHEET 13**
5	**X-026 (Male) pin BB5** TO OUTSIDE CAB HARNESS	OC-221	HIGH/C3 CLUTCH SOL HI	WH - 0.8	
6	**X-028 (Male) pin 3** TO OUTSIDE CAB HARNESS	OC-936A	SUS PISTON VALVE	WH - 0.8	**SHEET 15**
7	**X-026 (Male) pin AC5** TO OUTSIDE CAB HARNESS	OC-1010	CVT PUMP SWASH HI	WH - 0.8	**SHEET 52**
8	SP-901-P-X	OC-901C	+12 VS1	OR - 0.8	**SHEET 14**
9	SP-901-P-X	OC-901A	+12 VS1	OR - 0.8	
10	**X-026 (Male) pin BC7** TO OUTSIDE CAB HARNESS	OC-597	REAR PTO CLUTCH SOL HI	YE - 0.8	**SHEET 16**
11	**X-010 (Female) pin BD4** TO CAB HARNESS	OC-945M	FOOT THROTTLE IDLE VALIDATE SW	YE - 0.8	**SHEET 40**
12	**X-026 (Male) pin AD8** TO OUTSIDE CAB HARNESS	OC-1006	B SIDE PRESS SIG	YE - 0.8	**SHEET 52**
13	**X-026 (Male) pin BA1** TO OUTSIDE CAB HARNESS	OC-1007	A SIDE PRESS SIG	YE - 0.8	
14	**X-026 (Male) pin BC2** TO OUTSIDE CAB HARNESS	OC-564	SYSTEM PRESSURE SIG	YE - 0.8	**SHEET 13**
17	**X-026 (Male) pin BB7** TO OUTSIDE CAB HARNESS	OC-530	REAR DIFF CLUTCH SOL HI	YE - 0.8	**SHEET 15**
18	**X-026 (Male) pin BC4** TO OUTSIDE CAB HARNESS	OC-540	MFD SOLENOID HI	WH - 0.8	
19	**X-010 (Female) pin BA5** TO CAB HARNESS	OC-2183	FRONT PTO ON SW	YE - 0.8	**SHEET 20**
20	**X-026 (Male) pin AA6** TO OUTSIDE CAB HARNESS	OC-500	TRANS SUMP TEMP SIG	YE - 0.8	**SHEET 52**
21	SP-567-P-X	OC-567D	PARK BRAKE STATUS	GY - 0.8	**SHEET 24**

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4303 - Rear remote no. 6 - EEPROM error

NOTE: *Each remote valve consists of a valve body and a pilot head. The pilot contains the extend and retract solenoids, a sensor to determine spool position, as well as a microprocessor. The pilot head can only be serviced as a compete assembly. The microprocessor controls the extend and retract solenoids and reports the position of the main spool over the CAN bus to the Armrest Control Unit (ARU) and the lower display on the Instrument Control Unit (ICU).*

Cause:
EEPROM error in the pilot head.

Possible failure modes:

1. Software refresh required
2. EEPROM error in the pilot head

Solution:

1. Check for other active remote valve error code(s).

   Clear the error code(s) and test the system for normal operation.

   A. Error code does not redisplay. Return unit to field operation and monitor for recurring fault.

   B. Error code redisplays. Continue to step **2**.
2. Download the most current software into all remote valves. (All pilot heads must be at the same software level.)

   Renumber the remote valves.

   Calibrate the armrest control levers using the procedure in this manual. When calibration is complete, set all timers to continuous and set the flow controls to continuous.

   Calibrate the remote valves using the procedure in this manual.

   Test remote system operation.

   A. Error code does not redisplay. Return unit to field operation.

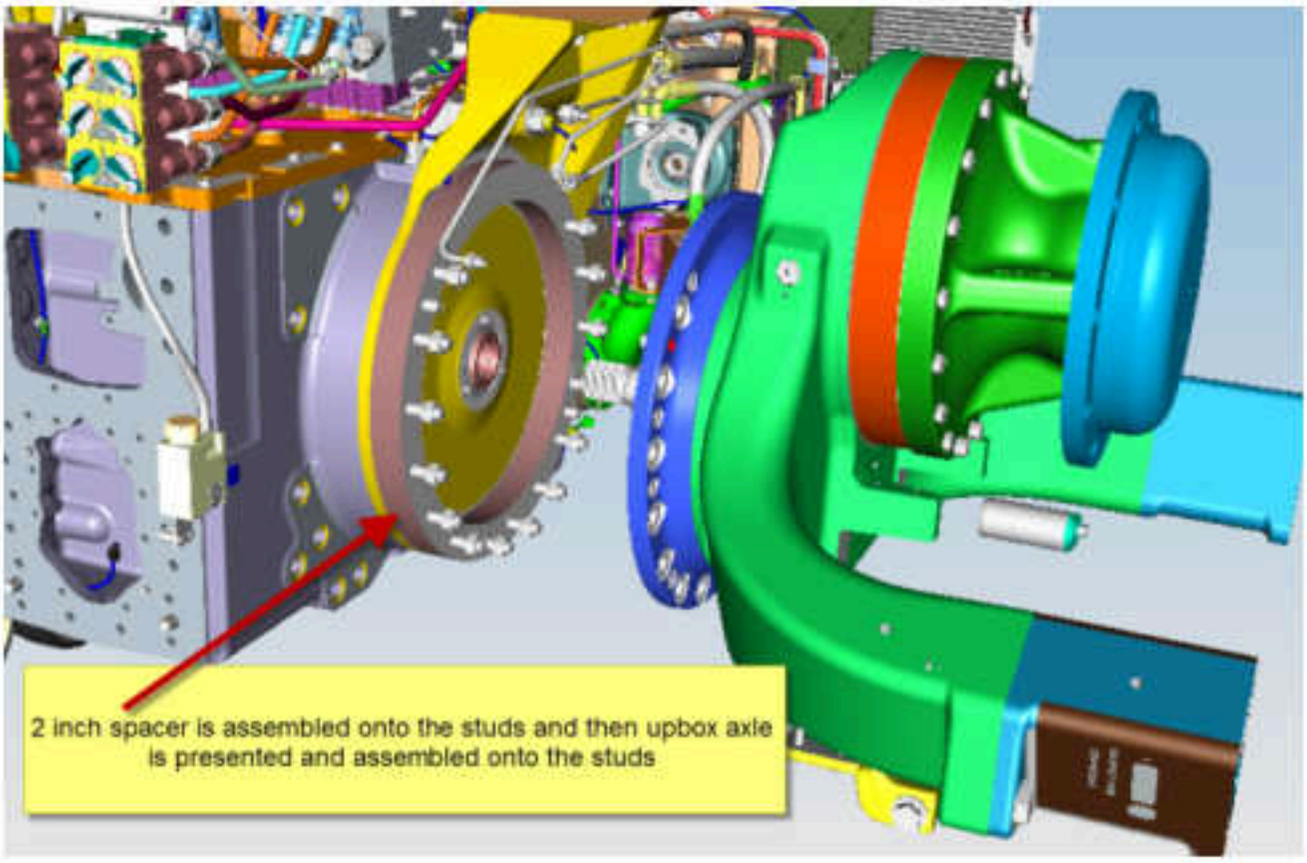
   B. Error code redisplays. Continue to step **3**.
3. Swap the pilot head causing the error with another pilot head.

   Retest system operation.

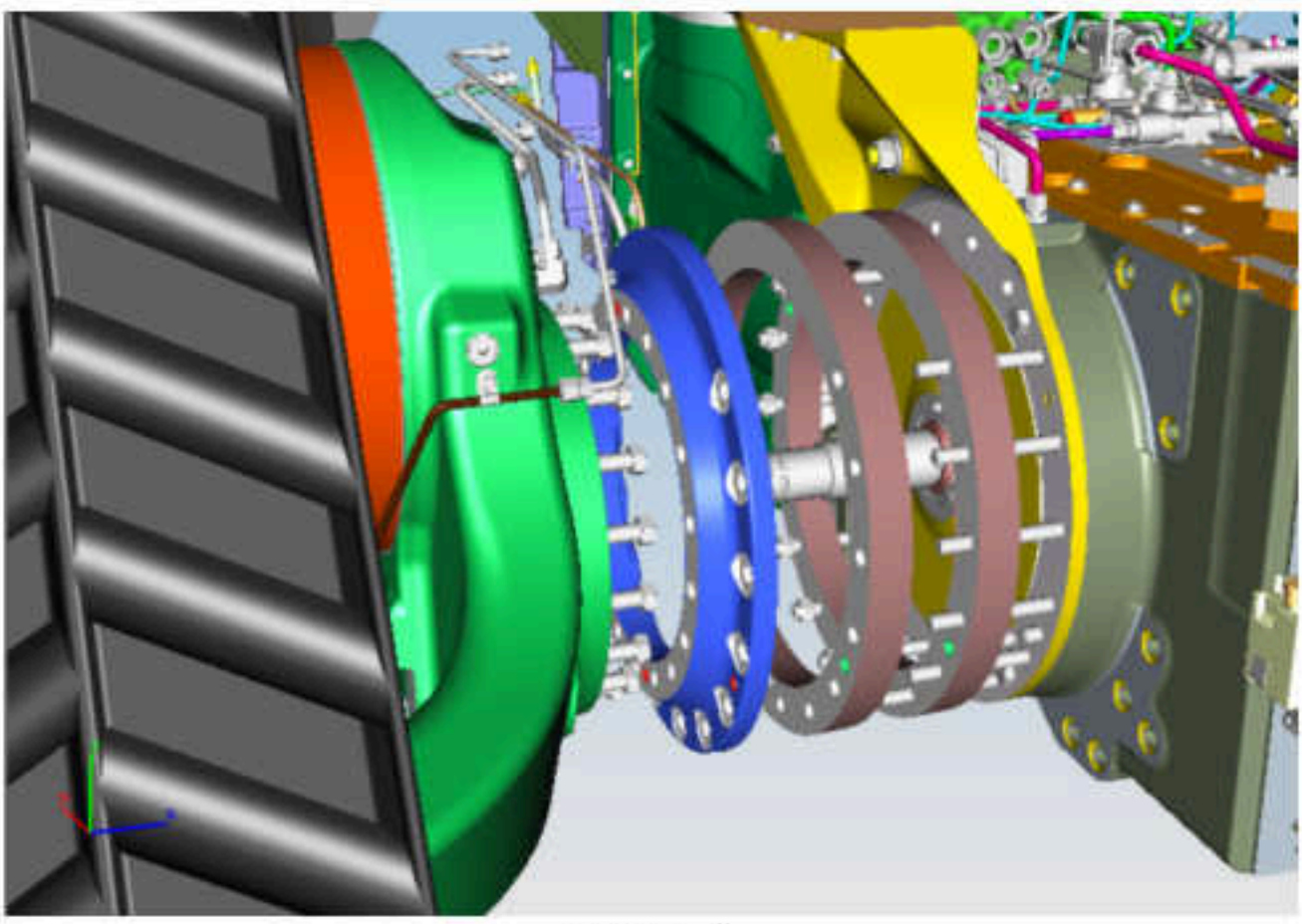
   A. Error code follows the pilot head move. Replace the pilot head. Return unit to field operation.

   B. Error code does not follow the pilot head move. Return the pilot heads to their original location and submit a concern to ASIST.

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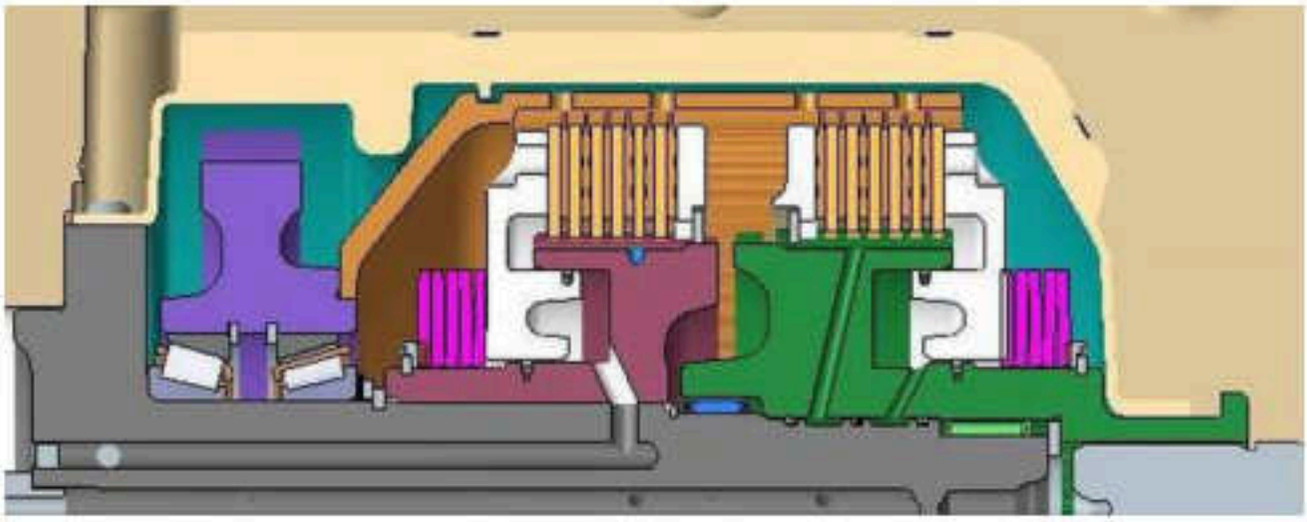
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RAIL1STR01620UA 11

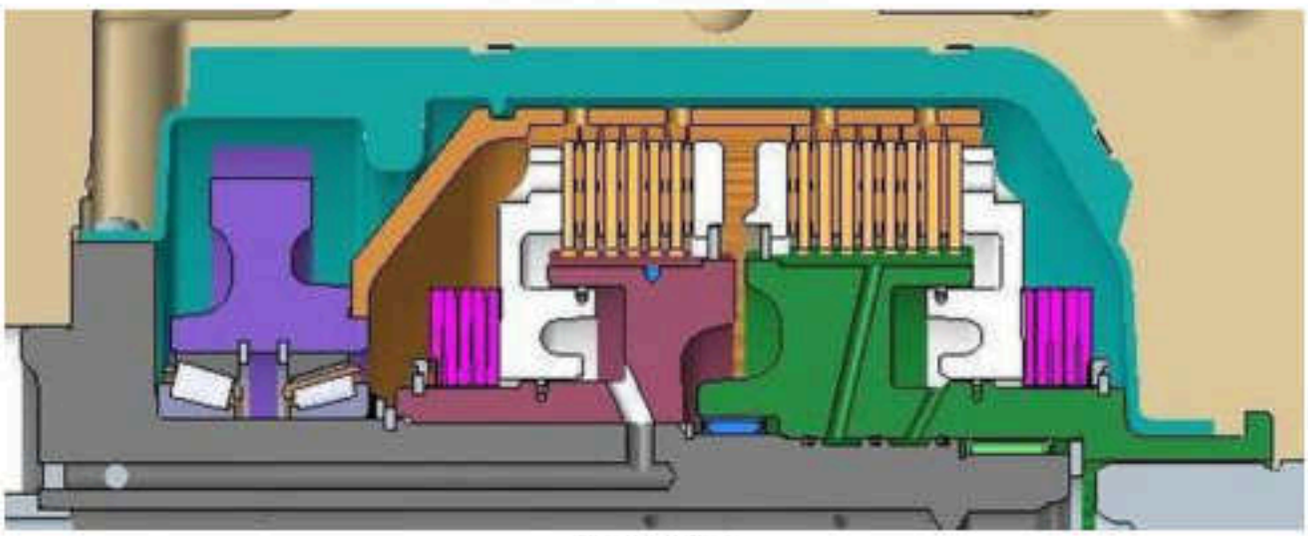
2032 mm (80 in) tread spacing

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RAILSTR316683A 4

Park brake 12 bolt front axle



RAILSTR316681A 5

Park brake class 5.0 front axle

Model	T8.320	T8.350	T8.380	T8.410
PTO Hp	205	235	265	290
No. of friction plates	6			6
Friction plate	Standard			Heavy duty
Belleville spring	Standard			Standard
# of Belleville springs	5			5

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Hydraulic schematic 47904542 — Sheet 2— PowershiftTransmission. Optional mega flow

	PFC PISTON PUMP
	REGULATED CIRCUIT PRESSURE
	CHARGE / LUBE PUMP FLOW
	RETURN TO TANK / SUMP
	OIL COOLER / FILTRATION AUX. CHARGE PUMP FLOW
	TWIN FLOW PUMP MEGA FLOW PUMP

1. REMOTE SECTION	33. INLET BRAKE VALVE
2. LOAD SENSE DIAGNOSTIC	34. PRIORITY REGULATOR VALVE T8.380 and T8.410 only See sheet 4 or 5 for other models.
3. PILOT / HITCH DRAIN	35. THERMAL BYPASS VALVE
4. PILOT SUPPLY	36. OIL COOLER
5. RETURN	37. LUBE REGULATOR
6. SUPPLY	38. PRESSURE AND FLOW COMPENSATED (PFC) PISTON PUMP
7. HITCH VALVE	39. FILTER
8. CATEGORY 4 HITCH	40. PTO CLUTCH LUBE
9. HITCH CYLINDERS	41. ODD / EVEN LUBE
10. RETURN	42. DROP BOX LUBE
11. SUPPLY	43. CREEP DRIVE LUBE
12. SIGNAL	44. MASTER CLUTCH LUBE
13. CASE DRAIN	45. RIGHT BRAKE / DIFFERENTIAL LUBE
14. POWER BEYOND MANIFOLD (OPTIONAL)	46. MFD / RANGE LUBE
15. PTO / DIFFERENTIAL LOCK VALVE	47. LEFT BRAKE / DIFFERENTIAL LUBE
16. PTO CLUTCH / BRAKE	48. TO PARK BRAKE VALVE SOLENOID
17. DIFFERENTIAL LOCK CLUTCH	49. SERVICE BRAKE
18. BEVEL PINION LUBE	50. MASTER CLUTCH
19. LUBE SUPPLY	51. INLET
20. MFD CLUTCH	52. MASTER CLUTCH INCHING VALVE
21. LOW CLUTCH	53. PARK / EMERGENCY BRAKE
22. MEDIUM CLUTCH	54. BRAKE RELEASE PUMP
23. HIGH CLUTCH	55. STEERING HAND PUMP
24. REVERSE CLUTCH	56. STEERING CYLINDERS
25. FIFTH CLUTCH	57. BYPASS VALVE
26. THIRD CLUTCH	58. BRAKE VALVE
27. FIRST CLUTCH	59. NOTE: SWITCH IS OPENED WHEN PEDAL REACHES FULL STROKE WHEN HYDRAULIC POWER IS LOST
28. EVEN CLUTCH	60. ACCUMULATOR
29. ODD CLUTCH	61. TWINFLOW PUMP MEGAFLOW PUMP
30. CREEPER CLUTCH	62. TWINFLOW MANIFOLD PLUGS MEGAFLOW MANIFOLD PLUGS
31. TRANSMISSION CONTROL VALVES	63. NOT USED
32. PARK CLUTCH	64. MARKER DRAIN

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