SERVICE MANUAL

T8.320 / T8.350 / T8.380 / T8.410
Powershift Transmission (PST)
Tractor

PIN ZERE08100 and above

Part number 47794972
1st edition English
November 2014

NEW HOLLAND AGRICULTURE

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Flushing adapter kit

Flushing adapters used to connect the power flush tool to the air conditioning system.



RCPH07SPT098AAA 13

Air conditioning - General specification - Temperature/pressure chart

Metric standard

Ambient temp	Normal low side pressure		Normal high side pressure		Louver temperature*	
	Low relative humidity**	High relative humidity	Low relative humidity**	High relative humidity	Low relative humidity**	High relative humidity
21 °C	117 - 138 kPa	145 - 172 kPa	938 - 1117 kPa	1040 - 1214 kPa	13 °C	17 °C
27 °C	145 - 172 kPa	172 - 207 kPa	1158 - 1379 kPa	1262 - 1469 kPa	16 °C	19 °C
32 °C	179 - 207 kPa	207 - 234 kPa	1372 - 1641 kPa	1482 - 1724 kPa	19 °C	22 °C
38 °C	200 - 241 kPa	228 - 276 kPa	1593 - 1951 kPa	1662 - 2027 kPa	22 °C	25 °C
43 °C	228 - 276 kPa	255 - 319 kPa	1813 - 2213 kPa	1875 - 2289 kPa	25 °C	27 °C
49 °C	255 - 319 kPa	283 - 345 kPa	2034 - 2482 kPa	2089 - 2551 kPa	28 °C	30 °C

U.S. standard

Ambient temp	Normal low side pressure		Normal high side pressure		Louver temperature*	
	Low relative humidity**	High relative humidity	Low relative humidity**	High relative humidity	Low relative humidity**	High relative humidity
70 °F	17 - 20 psi	21 - 25 psi	136 - 162 psi	151 - 176 psi	55 °F	62 °F
80 °F	21 - 25 psi	25 - 30 psi	168 - 200 psi	183 - 213 psi	60 °F	67 °F
90 °F	26 - 30 psi	30 - 34 psi	199 - 238 psi	215 - 250 psi	67 °F	71 °F
100 °F	29 - 35 psi	33 - 40 psi	231 - 283 psi	241 - 294 psi	71 °F	76 °F
110 °F	33 - 40 psi	37 - 45 psi	263 - 321 psi	272 - 332 psi	77 °F	81 °F
120 °F	37 - 45 psi	41 - 50 psi	295 - 360 psi	303 - 370 psi	82 °F	86 °F

* Temperatures shown are the highest normal temperatures expected at the louvers; actual temperatures may be cooler. Louver temperature should be measured in the louvers facing the operator.

** Compressor clutch cycling may occur under low humidity, low temperature conditions.

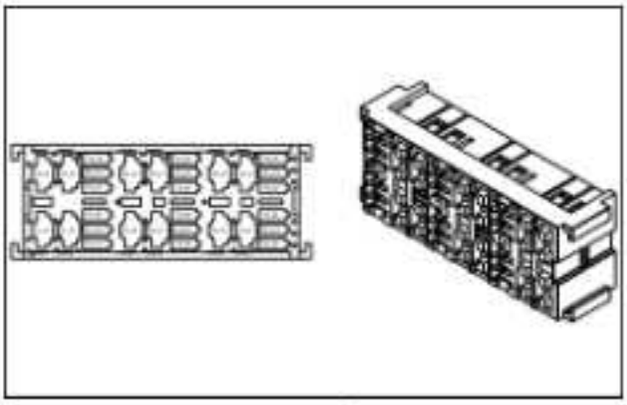
The temperature/pressure chart is based on the following conditions:

1. Engine operating at **1500 RPM**.
2. No engine load.
3. Blower speed control at the highest speed setting.
4. Door and rear window open.
5. Air conditioner temperature control set to maximum cooling.
6. Air conditioner control switch set to On (standard climate control) or Defog/defrost (automatic temperature control).

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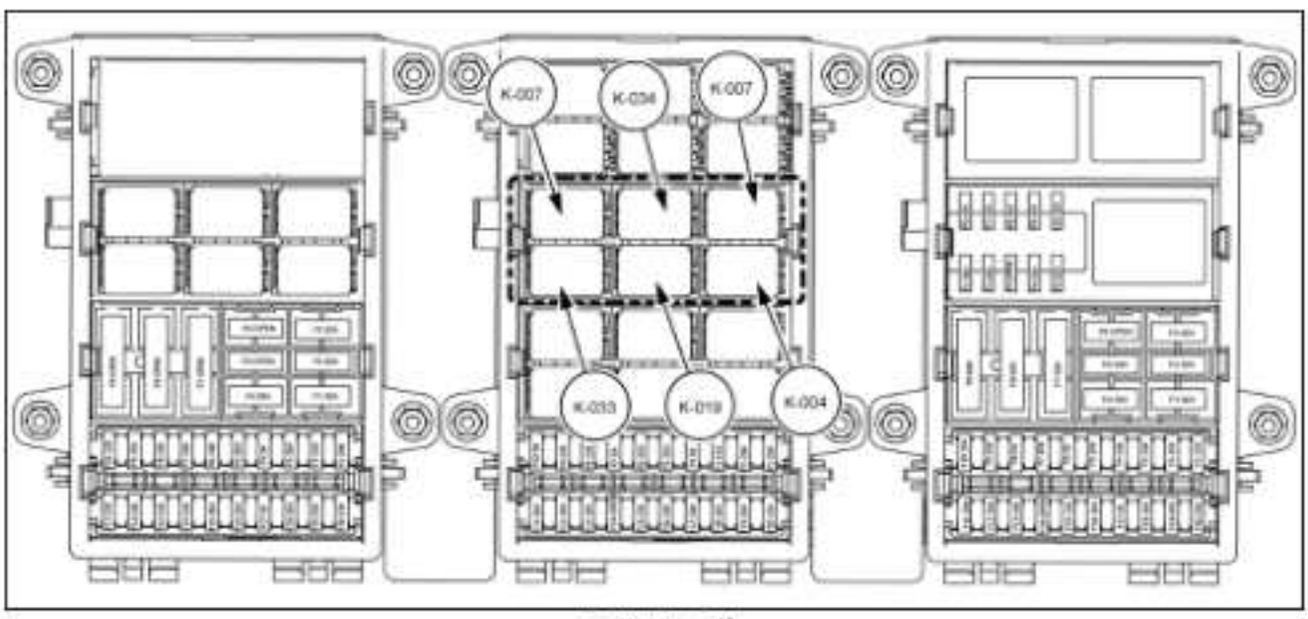
Pin	From	Wire	Description	Color-Size	Frame
R1_87 A	K-031-P-87A	WIRE168			**Wiring harnesses - Electrical schematic sheet 21 - Heating, Ventilation, Air Conditioning (HVAC) control (55.100)**
R3_87 A	K-012-P-87A	WIRE99			**Wiring harnesses - Electrical schematic sheet 27 - Lighting, fender and trailer (55.100)**
R6_87 A	K-007-P-87A	WIRE3			**Wiring harnesses - Electrical schematic sheet 26 - Lighting, roof, work and HID lamps (55.100)**

X-265 - RELAY BLOCK (84526304) (Female)



84526304 9

84526304



RAIL12TR84467FA 10

Pin	From	Wire	Description	Color-Size	Frame
R1_30	K-004-P-30	WIRE14			**Wiring harnesses - Electrical schematic sheet 06 - Power distribution - Fuse block X-045, X-260 (55.100)**
R1_30	**X-265 pin R1_30** RELAY BLOCK	CB-241A	WORK LIGHT INTERLOCK	OR - 0.8	
R1_85	SP-109A-P-X	CB-346D	FUEL SHUTT OFF GROUND	BK - 0.8	**Wiring harnesses - Electrical schematic sheet 09 - Grounding system (55.100)**
R1_85	**X-265 pin R1_85** RELAY BLOCK	CB-177	RELAY GND	BK - 0.8	
R1_85	K-004-P-85	WIRE12			
R1_86	K-004-P-86	WIRE13			**Wiring harnesses - Electrical schematic sheet 26 - Lighting, roof, work and HID lamps (55.100)**
R1_86	**X-265 pin R1_86** RELAY BLOCK	CB-750B	POS/HAZ	VT - 1.0	
R1_87	K-004-P-87	WIRE11			

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

B. Error code redisplays. Continue to step **6**.

6. Swap the pilot head causing the error with another pilot head.

   Retest system operation.

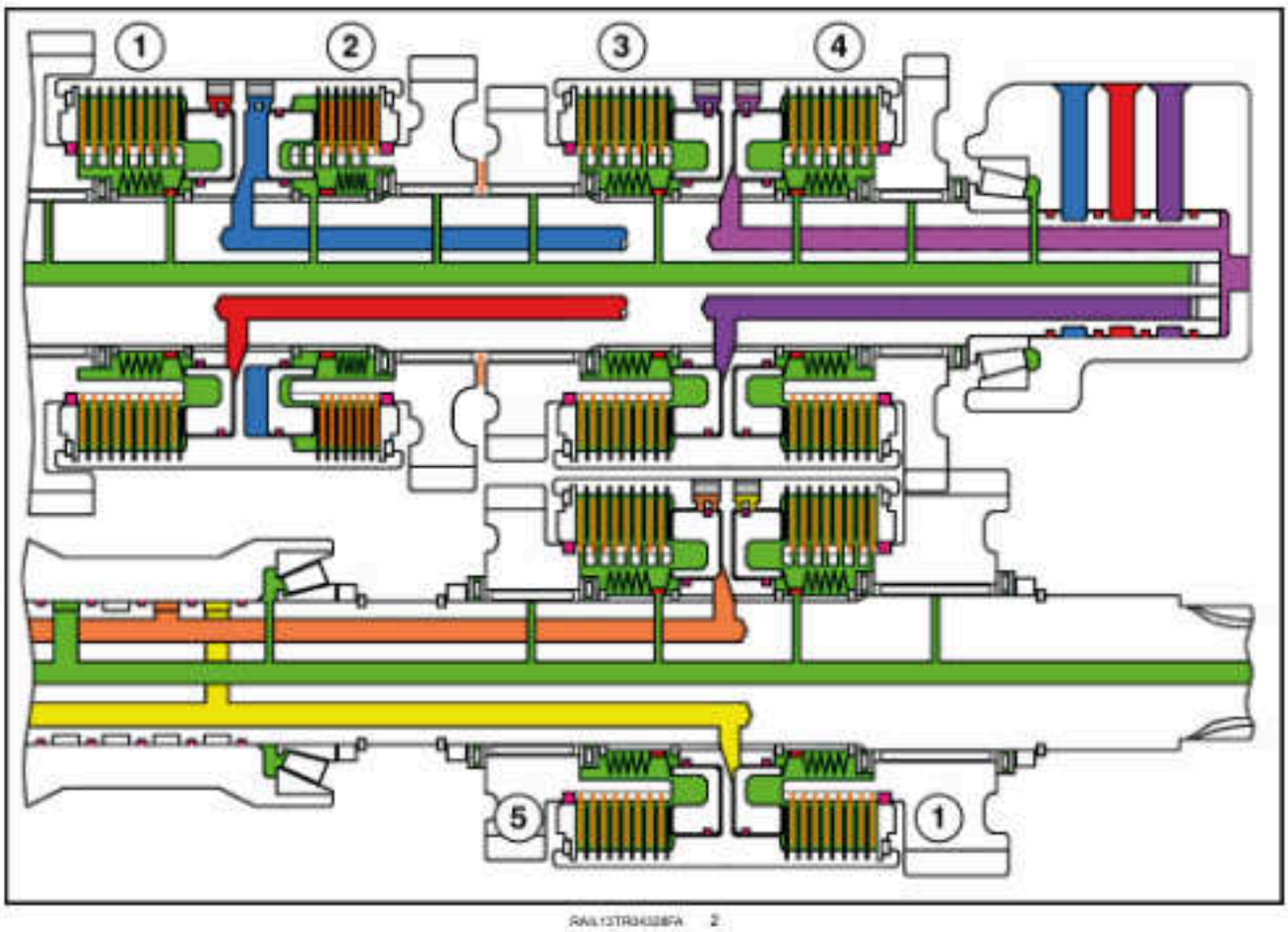
   A. Error code follows the pilot head move. Replace the pilot head. Return unit to field operation.

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

Wiring harnesses - Electrical schematic sheet 23 - Auxiliary remote valves (55.100.DP-C.20.E.23)
Wiring harnesses - Electrical schematic sheet 46 - Secondary CAN bus (55.100.DP-C.20.E.46)

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Speed housing clutch oil supply



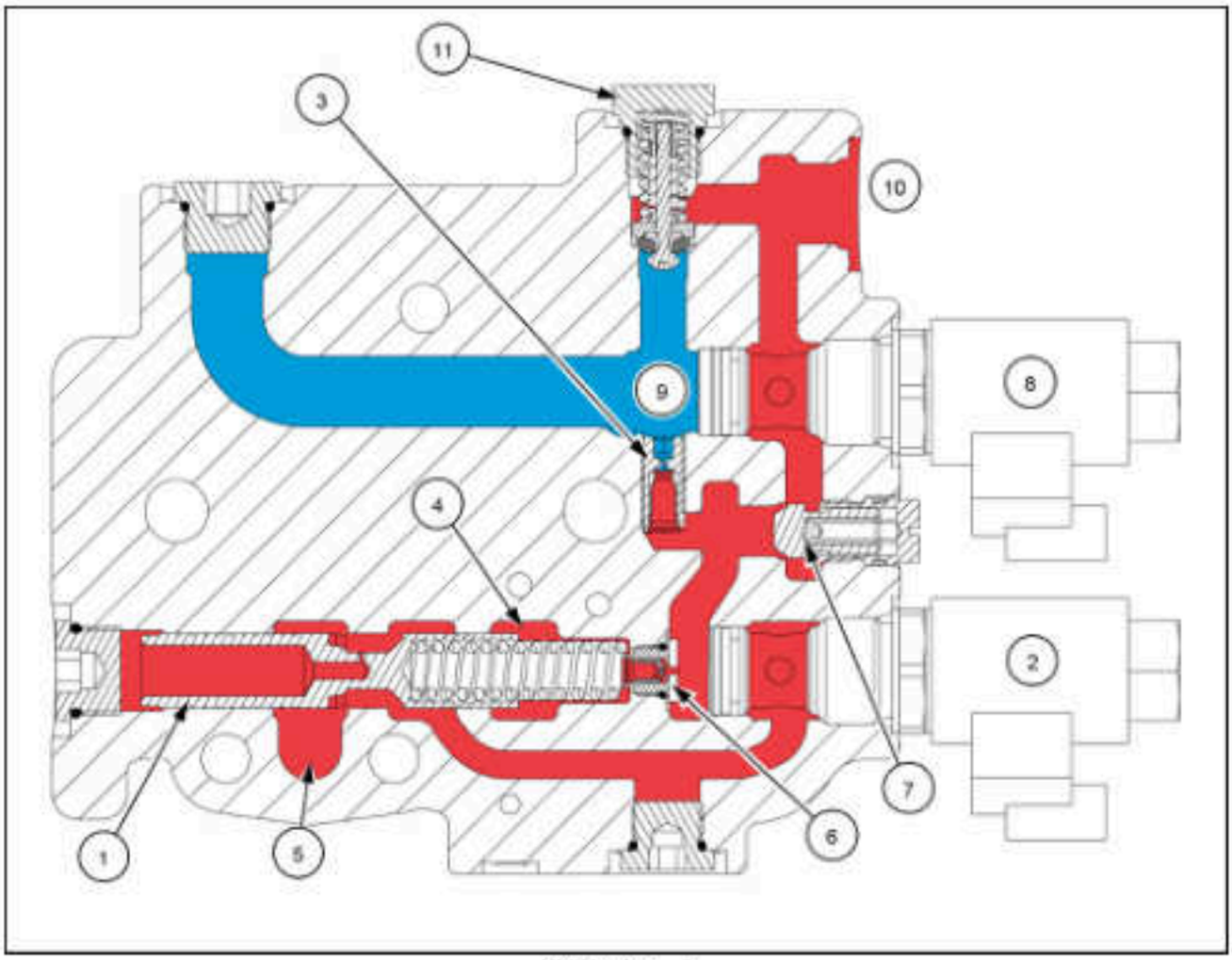
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Lubrication oil
Odd clutch supply
Even clutch supply
1-2 clutch supply
3-4 clutch supply
5-6 clutch supply
Reverse clutch supply

1. 1-2 clutch	4. Reverse clutch
2. 3-4 clutch	5. Odd clutch
3. 5-6 clutch	6. Even clutch

As oil is supplied to a clutch, the clutch locks and its gear is locked to the shaft. Torque is transmitted from the shaft through the clutch to the gear, or from the gear through the clutch to the shaft. Gears are in constant mesh, and the even gear is in mesh with the reverse gear/clutch and a countershaft gear. The even gear is used as an idler in some reverse gears and as direct drive to the reverse clutch in others. The master clutch is located between the speed output shaft and the range input shaft. All clutches are constantly supplied pressurized lubricating oil to keep them clean and cool.

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Raise position

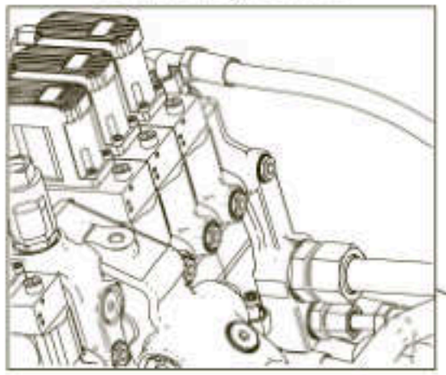
PFC pump pressure	Return to tank pressure
Trapped oil	
1. Flow control spool	7. Load check
2. Raise solenoid	8. Lower solenoid
3. Screened orifice plug	9. Return to tank
4. Pilot signal to compensator	10. Hitch cylinders
5. PFC pump supply	11. Relief valve
6. Check/orifice plug	

Lowering function

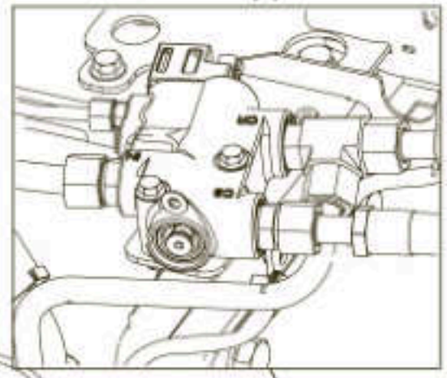
To lower the hitch, the lower proportional solenoid valve must be energized by the tractor control unit (TCU). The amount of spool movement depends on the amount of current supplied by the controller to the proportional solenoid. Once the lower solenoid is energized, the solenoid valve shifts, opening a flow path directly back to tank.

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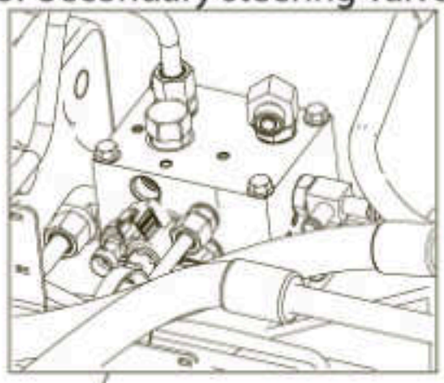
1. Priority valve



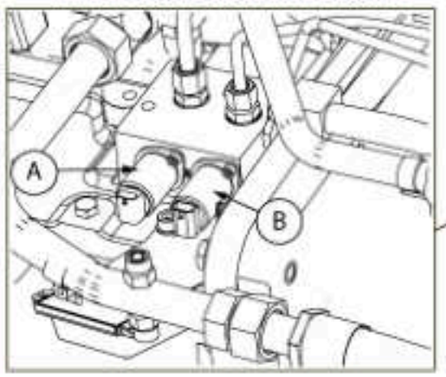
2. Oil cooler bypass valve

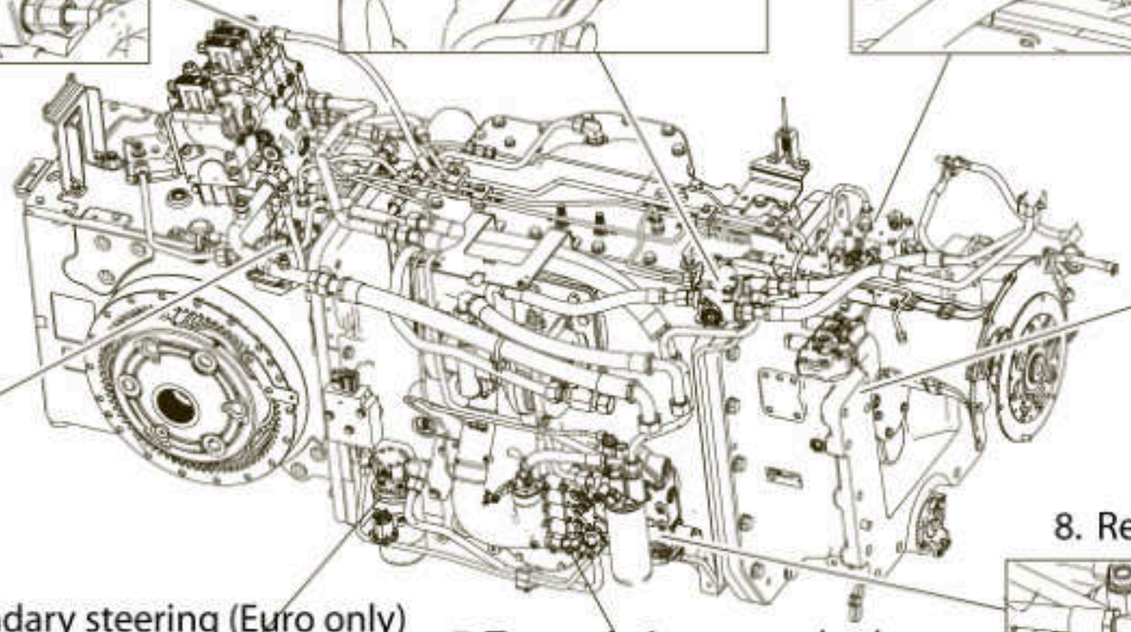


3. Secondary steering valve (Euro only)

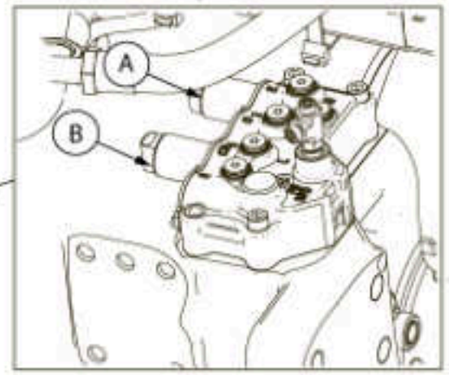


4. Rear PTO brake
MFD Differential lock

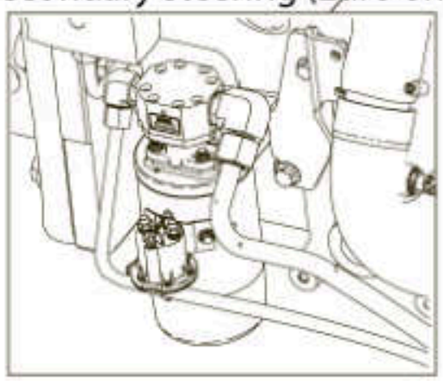




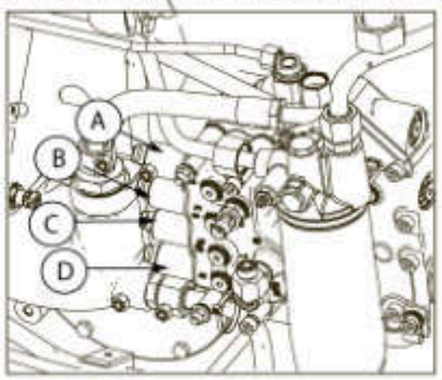
5. Forward/Reverse valve



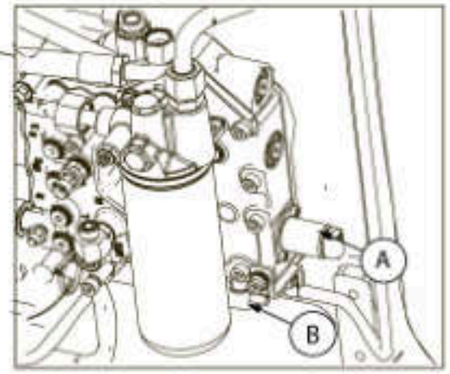
6. Secondary steering (Euro only)



7. Transmission control valve



8. Regulator valve



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