SERVICE MANUAL

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

Tractor

PIN ZERE08100 and above

Part number 47748118
1st edition English
November 2014

NEW HOLLAND AGRICULTURE

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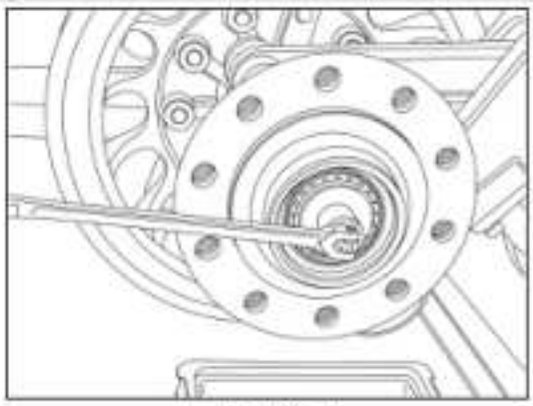
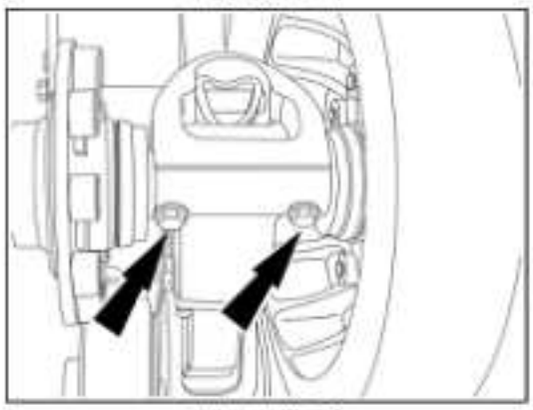
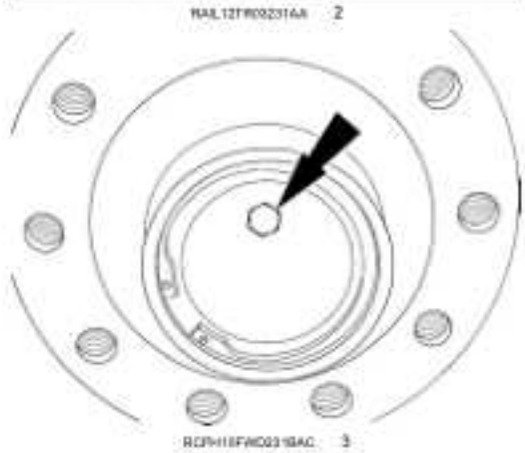
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Idler wheel - Torque

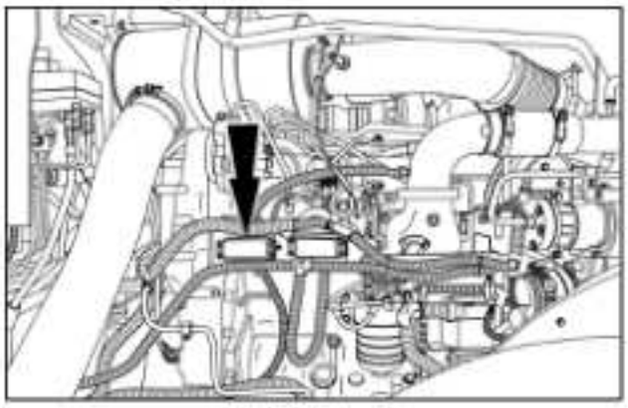
T8.380 SmartTrax™ 696110077 PST TIER 4B [ZERE08100 -]	NA
T8.410 SmartTrax™ 696110087 PST TIER 4B [ZERE08100 -]	NA

Component	N·m	Identification	lb-ft/lb in
Idler Wheel Bearing Retaining Bolt (lubricated)	455 - 510 Nm	 RAIL12TR03261AA 1	335 - 380 lb ft
Rear Idler Wheel Axle Bolts	575 - 630 Nm	 RAIL12TR03231AA 2	425 - 465 lb ft
Wheel bearing cap fill plug (plastic cap with steel plug)	3.1 - 3.6 Nm	 RCPH18FW003198AC 3	28 - 32 lb in

Idler wheel - Special tools

T8.380 SmartTrax™ 696110077 PST TIER 4B [ZERE08100 -]	NA
T8.410 SmartTrax™ 696110087 PST TIER 4B [ZERE08100 -]	NA

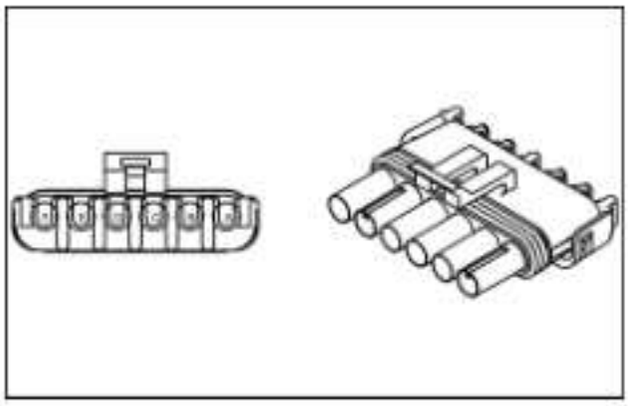
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RAE14TR00823AA 12

Pin	From	Wire	Description	Color-Size	Frame
5	**X-206 pin 5** GEP MODULE 1	EN-267	ENG MAIN B+	RD - 3.0	**Wiring harnesses - Electrical schematic sheet 10 - Engine control unit (55.100)**
6	SP-014-P-PIN1	EN-014A	ENGINE MAIN B+	RD - 3.0	**Wiring harnesses - Electrical schematic sheet 12 - Power distribution - Engine, sensors (55.100)**
7	**X-056 (Female) pin 1** ASPIRATOR RELAY	EN-015	Electric Aspirator B+	RD - 3.0	
7	F-080-P-2	WIRE2304			
8	SP-014-P-PIN1	EN-014D	ASPIRATOR UNSW B+	RD - 3.0	
8	F-080-P-1	WIRE2303			
9	K-018-P-85	WIRE40			**Wiring harnesses - Electrical schematic sheet 08 - Starting/charging system and grid heater (55.100)**
9	**X-061 pin 13** TO OUTSIDE CAB HARNESS	EN-346E	INT STARTING RELAY GND	BK - 1.0	
10	K-018-P-87	WIRE39			
10	**X-083A (Female) pin 1** STARTER MOTOR RELAY COIL	EN-306	STARTER MOTOR COIL B+	WH - 5.0	
11	SP-346-P-X	EN-620A	START RELAY B+ (UNSW)	RD - 5.0	
11	K-018-P-30	WIRE37			
12	**X-205 (Female) pin 26** GEP MODULE 2	EN-119	INT START RLY COIL	WH - 1.0	
12	K-018-P-86	WIRE38			

X-207 - EGRESS DIODE PACK I (87039236) (Female)



87039236 13

87039236

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18068-EHR (remote valve) 3 lever implausibility error

NOTE: *When the cause of the error code has been rectified, clear the error code and test the system for normal operation.*

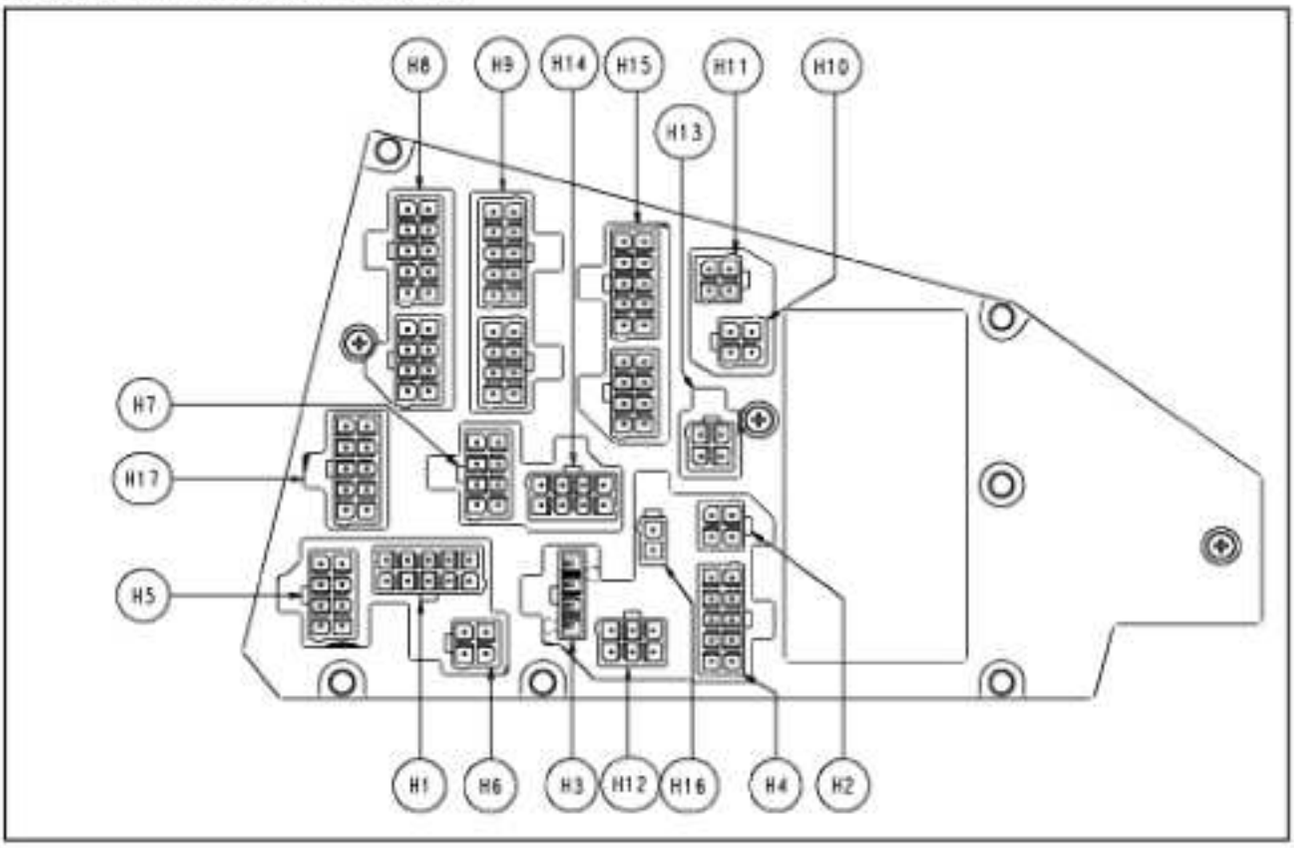
Cause:
Voltages from the dual track potentiometers inside lever3 do not match

Possible failure modes:

1. Faulty remote control lever
2. Incorrect armrest configuration
3. Faulty connector
4. Swapped connectors
5. Faulty armrest controller

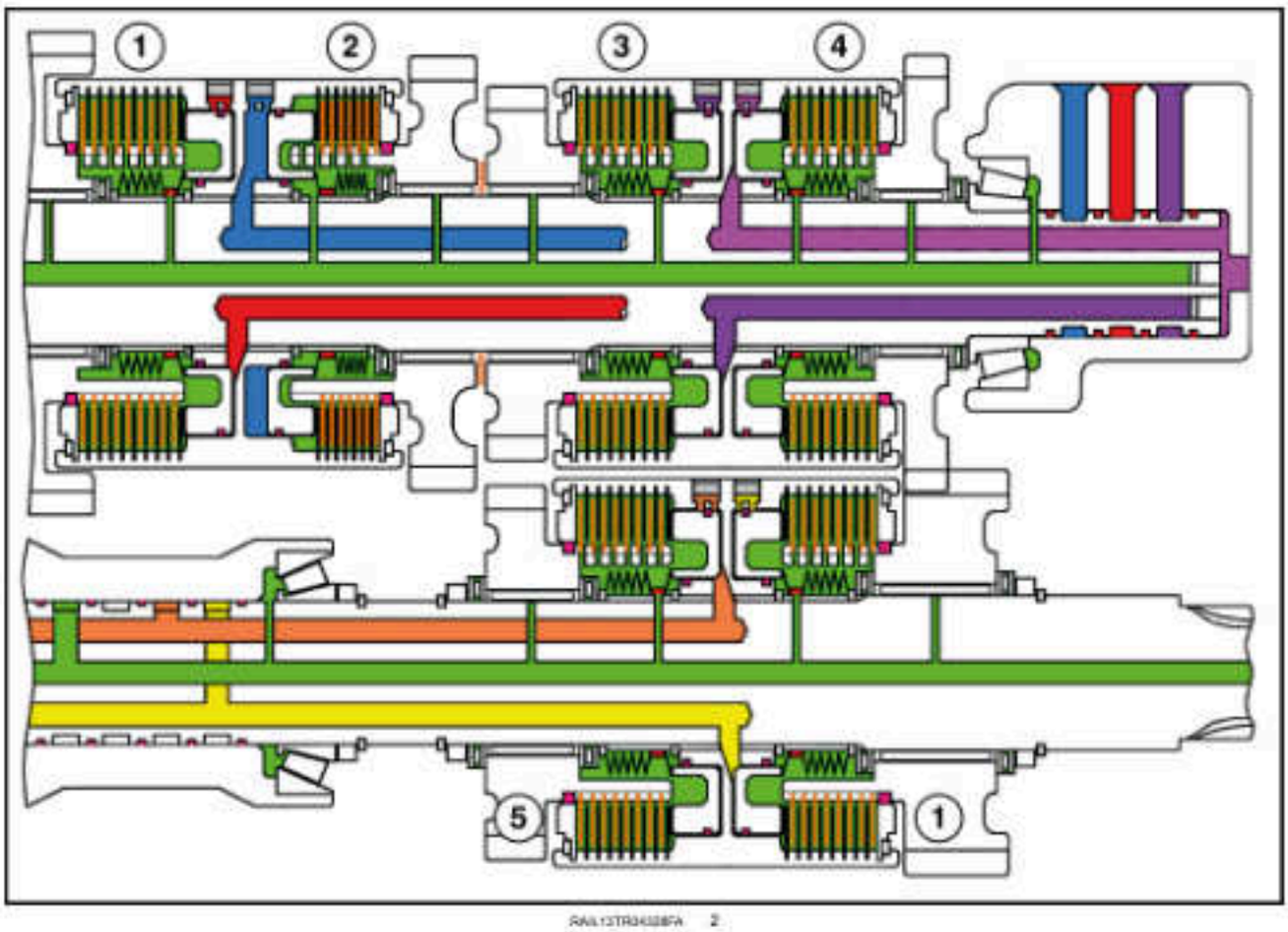
Solution:

1. Check if the fault code is still active. Clear all fault codes. Operate the tractor under normal conditions.
   A. Fault code does not redisplay. Return unit to field operation and monitor for continuing problems.
   B. Fault code redisplays. Continue to step **2**.
2. Use the monitor screen function on the electronic service tool (EST) to check operations of remote lever 3. Refer to the EST user guide.
   A. Lever not operating correctly. Continue with step **3**.
   B. Lever operating correctly. Return unit to field operation and monitor for continuing problem.
3. Check the armrest controller connectors.



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Speed housing clutch oil supply



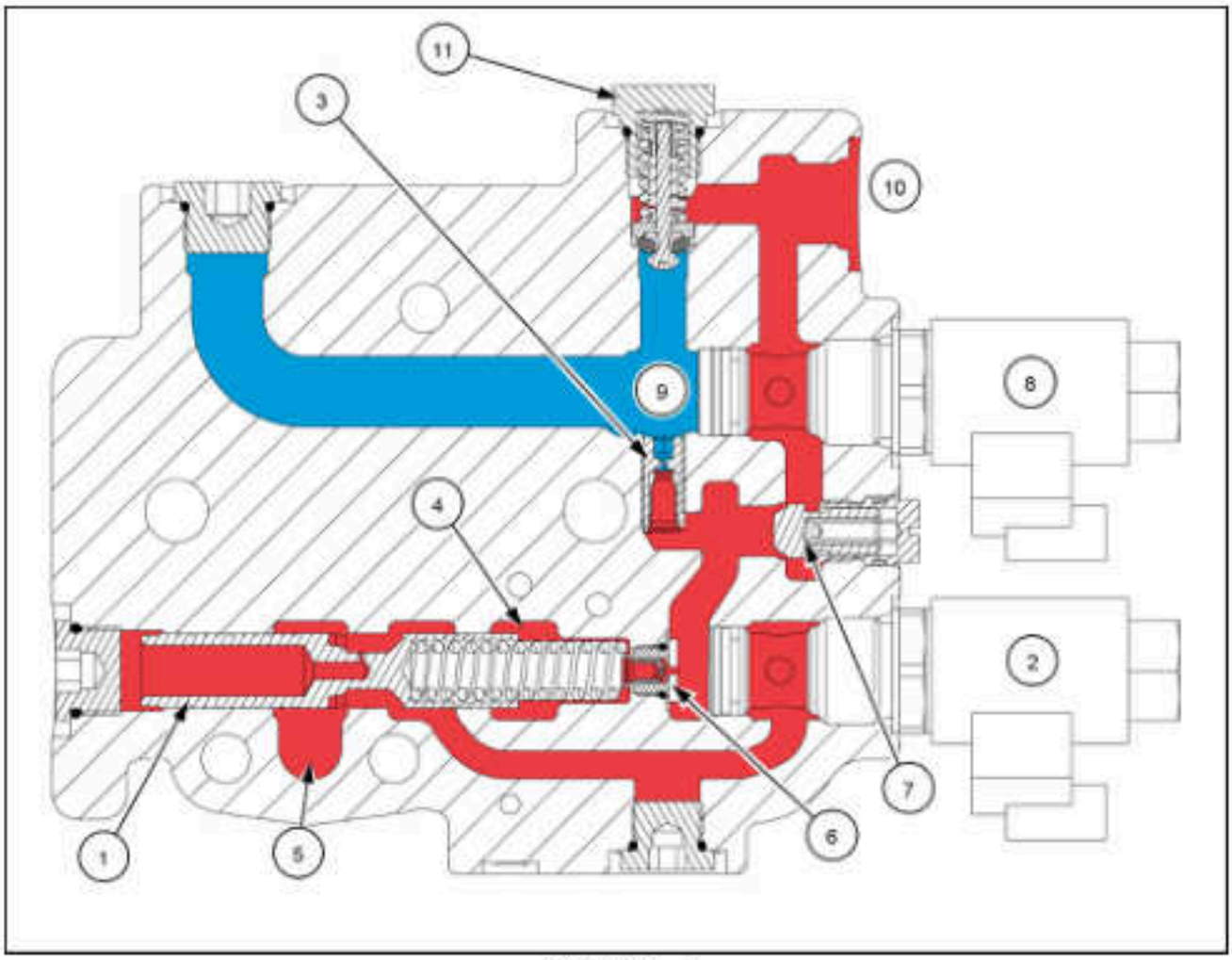
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Lubrication oil
Odd clutch supply
Even clutch supply
1-2 clutch supply
3-4 clutch supply
5-6 clutch supply
Reverse clutch supply

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

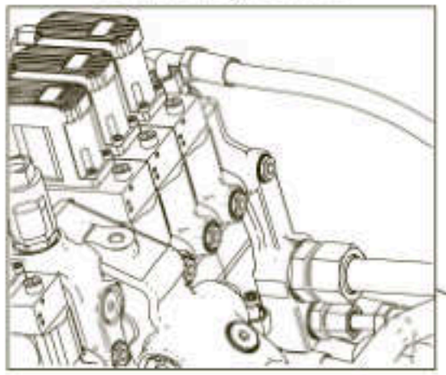
PFC pump pressure	Return to tank pressure
Trapped oil	
1. Flow control spool	7. Load check
2. Raise solenoid	8. Lower solenoid
3. Screened orifice plug	9. Return to tank
4. Pilot signal to compensator	10. Hitch cylinders
5. PFC pump supply	11. Relief valve
6. Check/orifice plug	

Lowering function

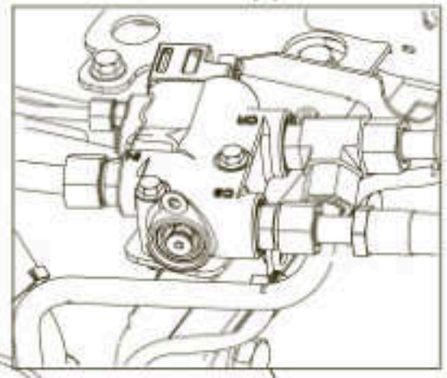
To lower the hitch, the lower proportional solenoid valve must be energized by the tractor control unit (TCU). The amount of spool movement depends on the amount of current supplied by the controller to the proportional solenoid. Once the lower solenoid is energized, the solenoid valve shifts, opening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

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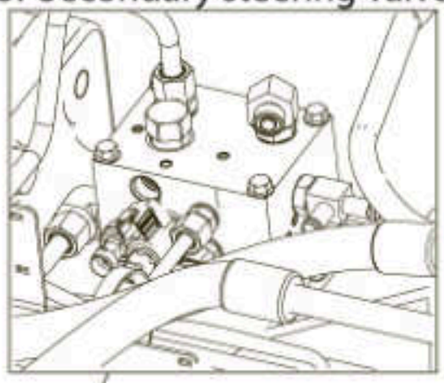
1. Priority valve



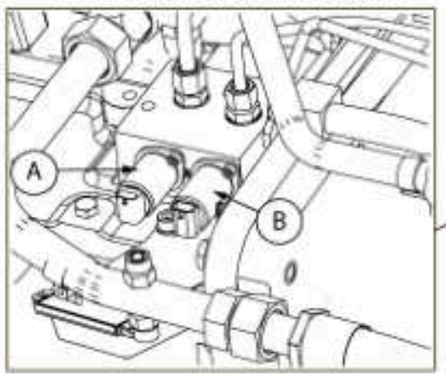
2. Oil cooler bypass valve

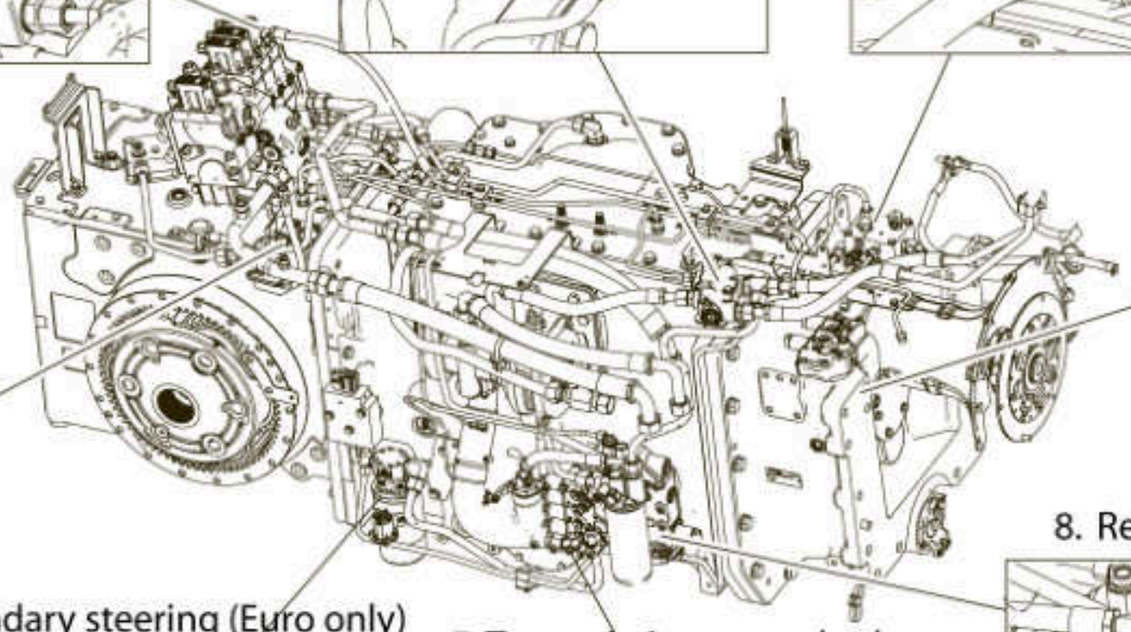


3. Secondary steering valve (Euro only)

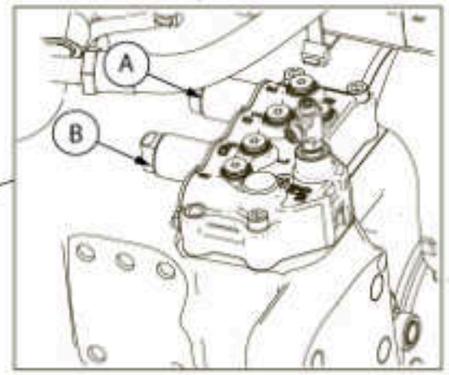


4. Rear PTO brake
MFD Differential lock

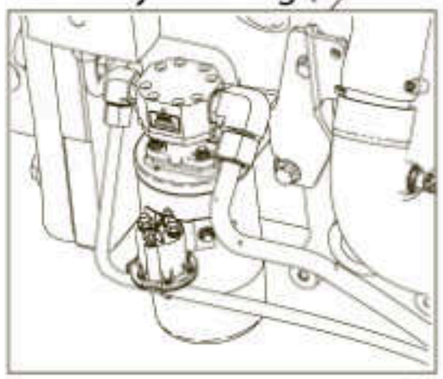




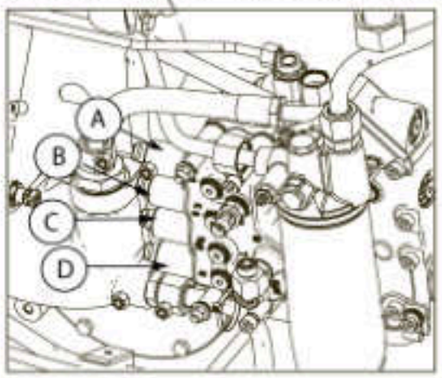
5. Forward/Reverse valve



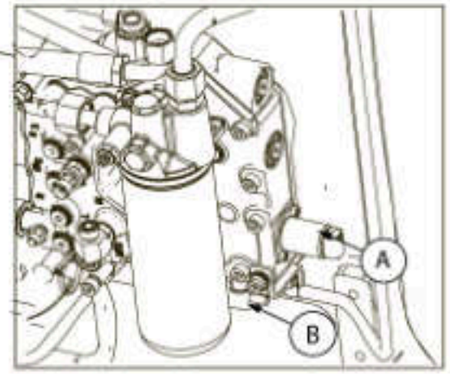
6. Secondary steering (Euro only)



7. Transmission control valve



8. Regulator valve



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