SERVICE MANUAL

T8.320 / T8.350 / T8.380 / T8.410 / T8.435 Continuously Variable Transmission (CVT)

Tractor

PIN ZERE04800 and above

Part number 47685455
1st edition English
May 2014

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Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.101] Cylinder heads 10.2

[10.202] Air cleaners and lines 10.3

[10.216] Fuel tanks 10.4

[10.218] Fuel injection system 10.5

[10.304] Engine lubrication system 10.6

[10.310] Aftercooler 10.7

[10.400] Engine cooling system 10.8

[10.414] Fan and drive 10.9

[10.500] Selective Catalytic Reduction (SCR) exhaust treatment 10.10

Power coupling 19

[19.100] Drive shaft 19.1

[19.110] Flywheel damper 19.2

[19.120] Drive shaft shield assembly 19.3

Transmission 21

[21.504] Continuously Variable Transmission (CVT) 21.1

[21.505] Continuously Variable Transmission (CVT) external controls 21.2

[21.506] Continuously Variable Transmission (CVT) lubrication system 21.3

[21.507] Continuously Variable Transmission (CVT) internal components 21.4

[21.900] Hydraulic pump drive 21.5

Four-Wheel Drive (4WD) system 23

[23.202] Electro-hydraulic control 23.1

[23.314] Drive shaft 23.2

Front axle system 25

MidWestTech | New Holland T8.320, T8.350, T8.380, T8.410, T8.435 CVT Tractor Servi... Order the manual at mid-west-tech.com >

[25.100] Powered front axle 25.1
[25.102] Front bevel gear set and differential 25.2
[25.108] Final drive hub, steering knuckles, and shafts 25.3
[25.122] Axle suspension control 25.4
Rear axle system 27
[27.100] Powered rear axle 27.1
[27.106] Rear bevel gear set and differential 27.2
[27.120] Planetary and final drives 27.3
Power Take-Off (PTO) 31
[31.104] Rear electro-hydraulic control 31.1
[31.110] One-speed rear Power Take-Off (PTO) 31.2
[31.114] Two-speed rear Power Take-Off (PTO) 31.3
[31.146] Front Power Take-Off (PTO) 31.4
Brakes and controls 33
[33.110] Parking brake or parking lock 33.1
[33.202] Hydraulic service brakes 33.2
[33.220] Trailer brake hydraulic control 33.3
[33.224] Trailer brake pneumatic control 33.4
Hydraulic systems 35
[35.000] Hydraulic systems 35.1
[35.102] Pump control valves 35.2
[35.106] Variable displacement pump 35.3
[35.114] Three-point hitch control valve 35.4
[35.124] Three-point hitch hydraulic adjustment 35.5
[35.204] Remote control valves 35.6
[35.300] Reservoir, cooler, and filters 35.7
[35.304] Combination pump units 35.8
Pneumatic system 36

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[36.100] Pneumatic system 36.1

Hitches, drawbars, and implement couplings 37

[37.110] Rear three-point hitch 37.1

[37.162] Front hitch 37.2

Steering 41

[41.101] Steering control 41.1

[41.200] Hydraulic control components 41.2

[41.206] Pump 41.3

Wheels 44

[44.520] Rear wheels 44.1

Cab climate control 50

[50.100] Heating 50.1

[50.200] Air conditioning 50.2

[50.300] Cab pressurizing system 50.3

Electrical systems 55

[55.010] Fuel injection system 55.1

[55.012] Engine cooling system 55.2

[55.014] Engine intake and exhaust system 55.3

[55.024] Transmission control system 55.4

[55.045] Front axle control system 55.5

[55.046] Rear axle control system 55.6

[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system 55.7

[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls 55.8

[55.100] Harnesses and connectors 55.9

[55.130] Rear three-point hitch electronic control system 55.10

[55.201] Engine starting system 55.11

[55.301] Alternator 55.12

[55.302] Battery 55.13

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Pin	From	Wire	Description	Color-Size	Frame
C1	**X-008 (Male) pin A5** TO CAB HARNESS	CB-210	RIGHT WIDE MARKER	VT - 0.8	**Wire harnesses - Electrical schematic sheet 27 - Lighting, fender and trailer (55.100)**
C2	**X-025 (Male) pin C6** TO CAB HARNESS	CB-211	LEFT WIDE MARKER	VT - 0.8	
C3	SP-180D-P-X	CB-180F	FLASHER GROUND	BK - 0.8	**Wire harnesses - Electrical schematic sheet 17 - Instrument cluster, electronic flasher (55.100)**

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18069-EHR (remote valve) 4 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.*

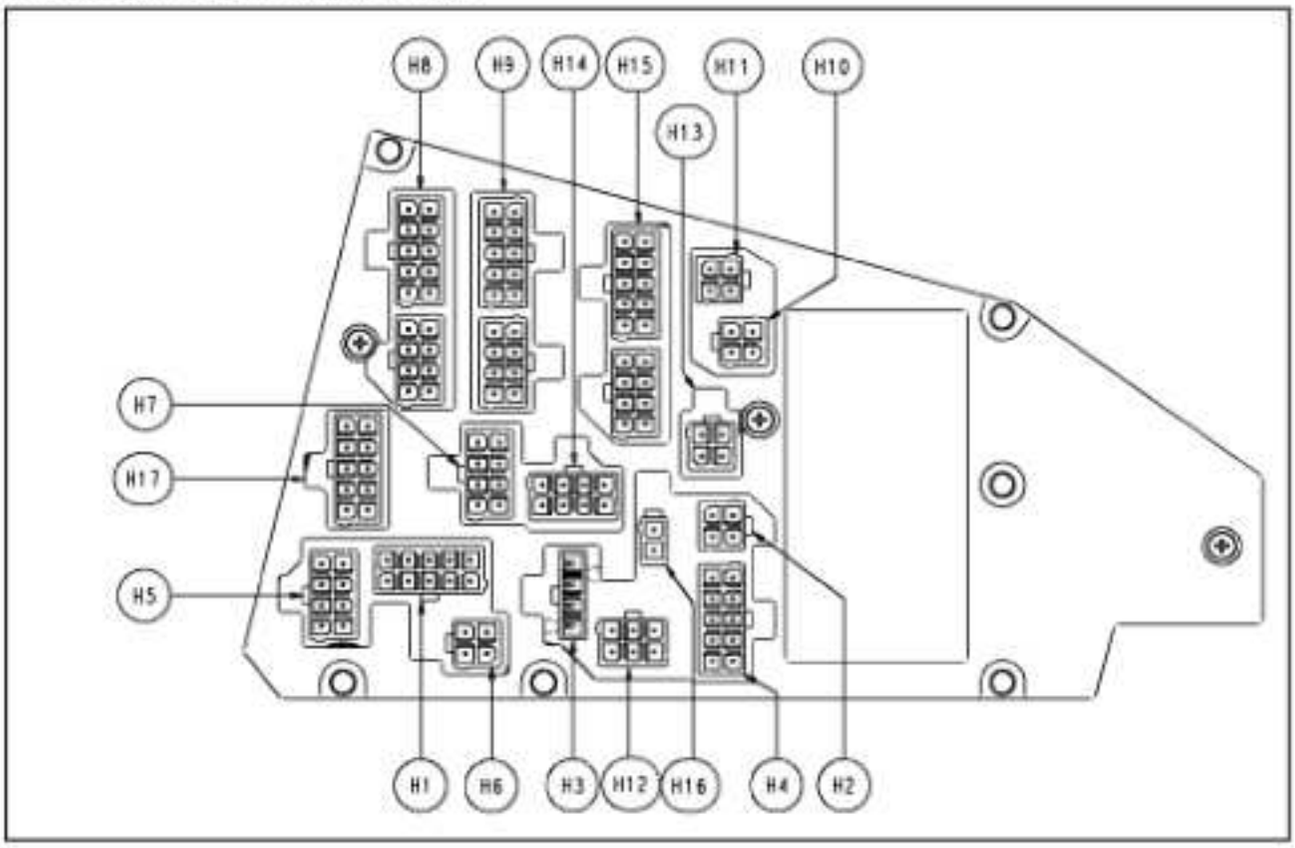
Cause:
Voltages from the dual track potentiometers inside lever 4 do not match

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 4. 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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B. If none are active, continue with Step **4**.

4. Check the DEF/AdBlue® level and the DEF/AdBlue® mixture concentration.

   Visually determine that the DEF/AdBlue® quality sensor **A-9104** is sufficiently immersed.

   Use a refractometer to determine the concentration level of the DEF/AdBlue® mixture.

   There should be **28.75 - 36.25 %** mixture concentration.

   A. If there is an insufficient level of DEF/AdBlue® to adequately cover the DEF/AdBlue® quality sensor **A-9104** or if the DEF/AdBlue® mixture concentration is not between **28.75 - 36.25 %**, drain the DEF/AdBlue® tank. Then remove, inspect and clean, if necessary, the DEF/AdBlue® quality sensor **A-9104** to assure the DEF/AdBlue® quality sensor **A-9104** cover holes are free of debris. Then fill the DEF/AdBlue® tank with properly concentrated DEF/AdBlue® mixture.

   B. If there is a sufficient level of DEF/AdBlue® to adequately cover the DEF/AdBlue® quality sensor **A-9104** and the DEF/AdBlue® mixture concentration is between **28.75 - 36.25 %**, continue with Step **5**.

5. Check dosing module **Y-9103** for deposits.

   Remove the dosing module **Y-9103** and check for large deposits that would inhibit injection.

   There should be no blockage.

   A. If significant blockage does exist, repair or replace the dosing module **Y-9103**, as required.

   B. If significant blockage is not visible, do not install the dosing module **Y-9103** and continue with Step **6**.

6. Check DEF/AdBlue® system for pressure, leaks and quantity.

   Orient the dosing module **Y-9103** and a piece of cardboard to a location that would allow capture of a produced spray pattern.

   Use the EST and follow the on-screen instructions to perform a Urea Dosing System Test (UDST).

   During the UDST record DEF/AdBlue® system pressure and capture the injection pattern on the cardboard.

   Also, visually check for any DEF/AdBlue® system leakage.

   There should be **9.00 - 11.00 bar** (**130.50 - 159.50 psi**) before injection, a uniform spray pattern, and no leakage.

   A. If the pressure is out of specification or the pattern is not uniform or leakage is seen, clean, repair or replace system components, as required.

   B. If the pressure is within specification, the spray pattern is uniform, and leakage is not seen, do not install the dosing module **Y-9103** and continue with Step **7**.

7. Check the condition of the DEF/AdBlue® mixing chamber.

   Visually inspect the DEF/AdBlue® and exhaust gas mixing chamber, through the dosing module **Y-9103** mounting hole, for large deposits or damage.

   A. If large deposits or damage are discovered, clean, repair or replace the DOC assembly, as required. If DOC assembly is replaced, use EST, see **Selective Catalytic Reduction (SCR) muffler and catalyst - Configure - Reset ECU data (10.500)**, if necessary, to perform the Replacement of Catalyst - Reset ECU Data configuration.

   B. If large deposits or damage is not discovered, install the dosing module **Y-9103** and continue with Step **8**.

8. Check the condition of the DOC catalyst.

   Remove the DOC upstream exhaust gas temperature sensor **B-9106**.

   Visually inspect the catalyst, through the DOC upstream exhaust gas temperature sensor **B-9106** mounting hole, for substrate contamination or damage.

   There should be no contamination or damage.

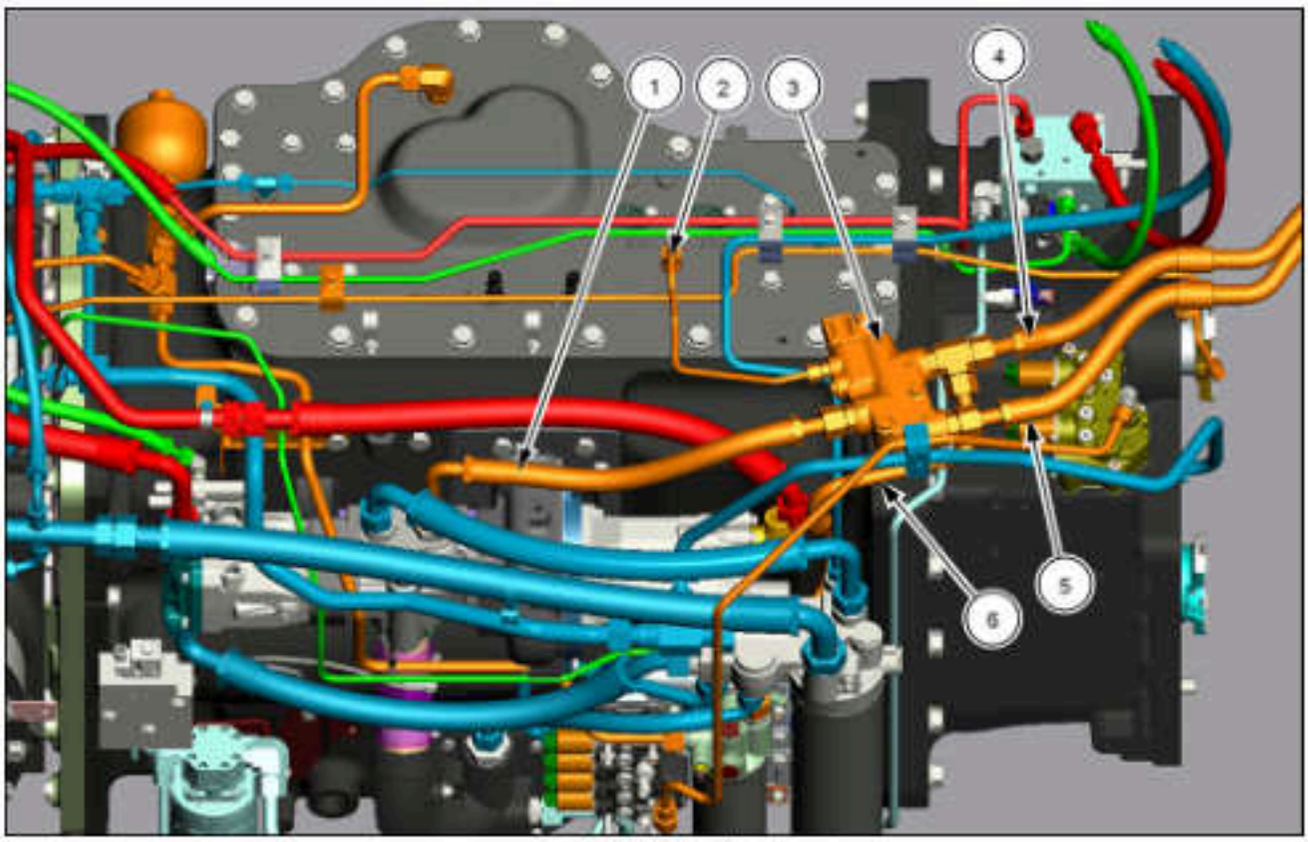
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Oil cooler/Heat exchanger Bypass valve - Dynamic description

The cooler bypass valve is located on the top of the transmission housing, above the main filter assembly.

All regulated circuit pump flow is directed to the cooler bypass valve inlet. The Tractor Control Unit (TCU) controls the cooler bypass valve function based on transmission oil temperature.

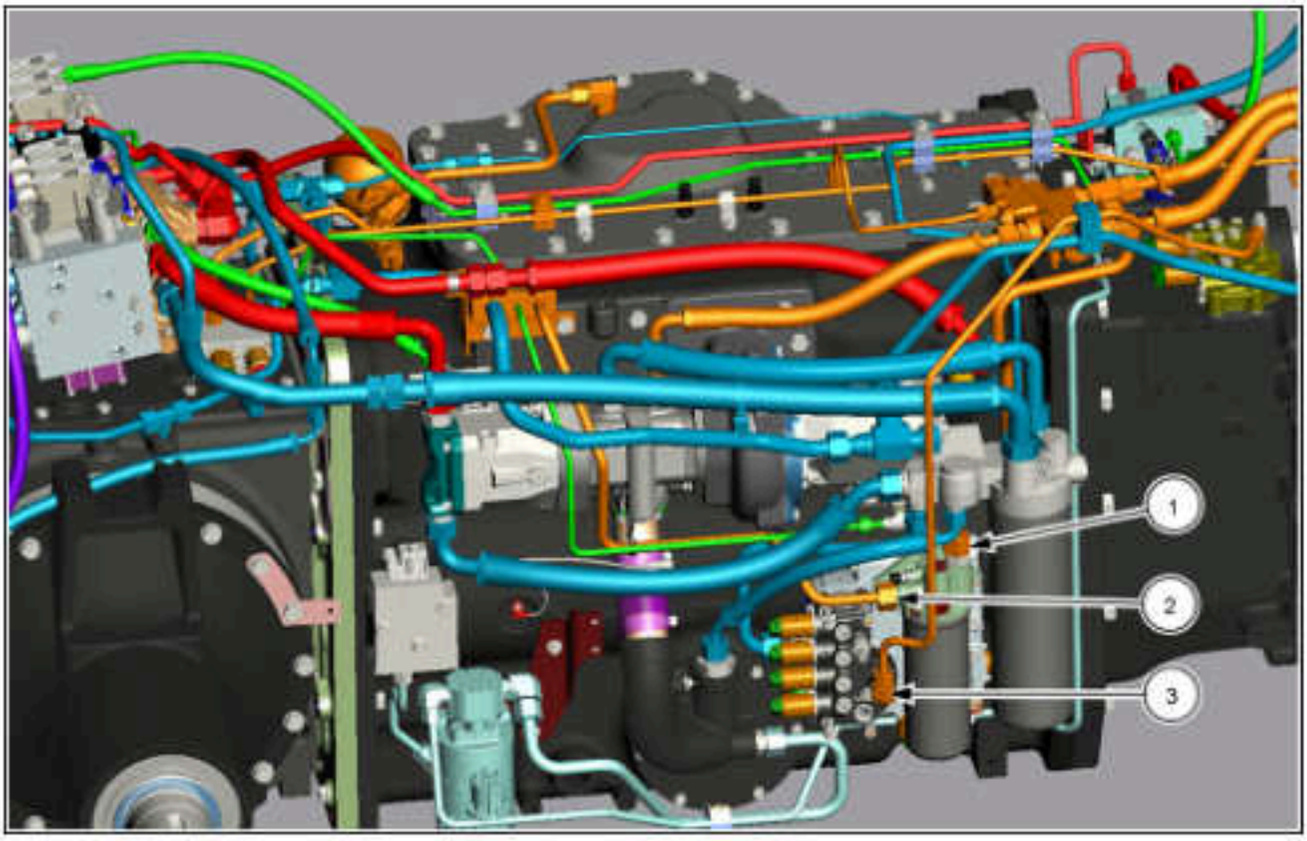
When the transmission oil temperature is below a preset limit, the cooler bypass solenoid valve will be energized. When energized most of the supply flow will bypass the cooler. When the oil temperature exceeds the preset limit, the cooler bypass solenoid will be de-energized by the tractor control unit (TCU), now all of the flow entering the bypass valve to be directed through the oil cooler.



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1. Regulated supply to cooler bypass valve	4. Cooler return line
2. Cooler bypass drain	5. Cooler supply line
3. Cooler bypass valve	6. Cooler bypass to regulated filter assembly

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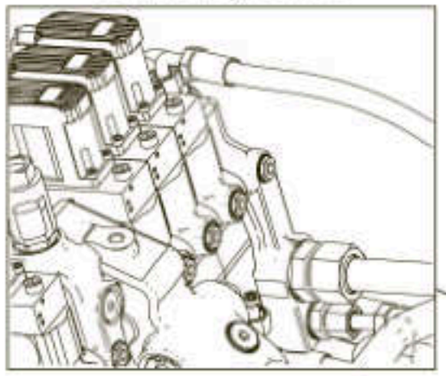
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Regulated circuit flow

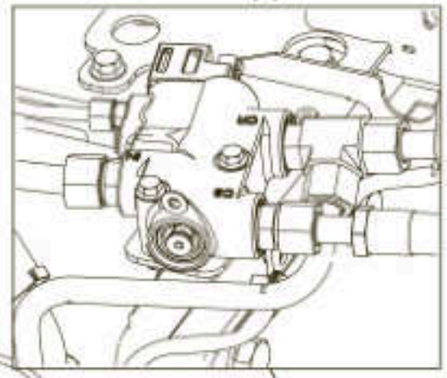
1. Cooler return to regulated circuit filter assembly
2. Regulated supply outlet
3. Regulated supply outlet to transmission forward/reverse control valve

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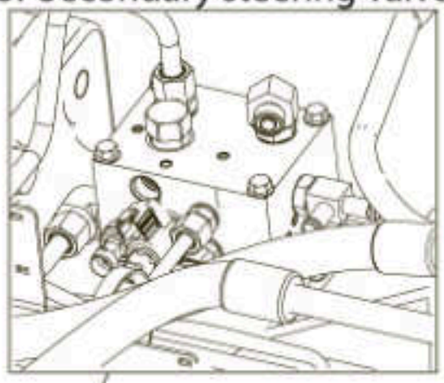
1. Priority valve



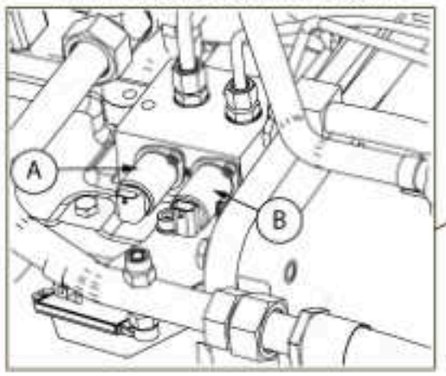
2. Oil cooler bypass valve

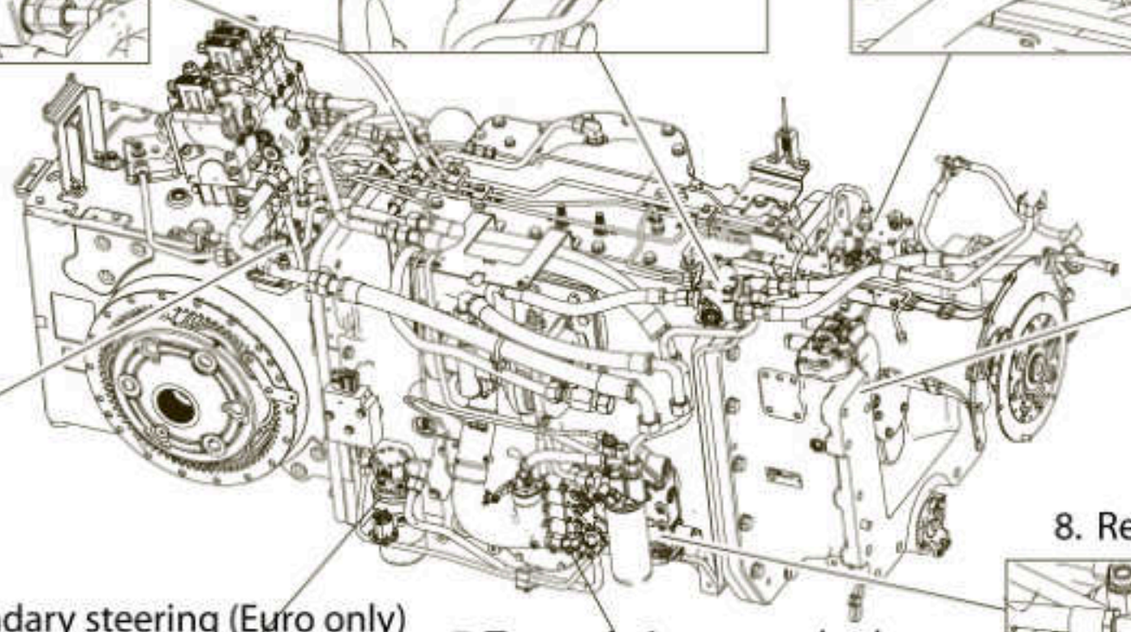


3. Secondary steering valve (Euro only)

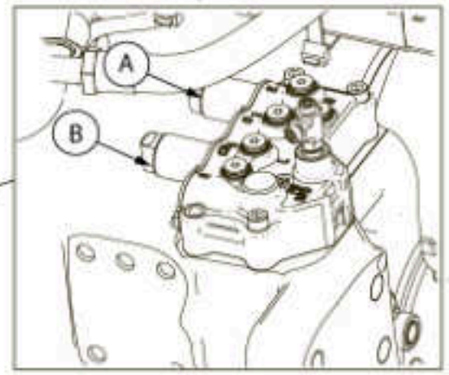


4. Rear PTO brake
MFD Differential lock

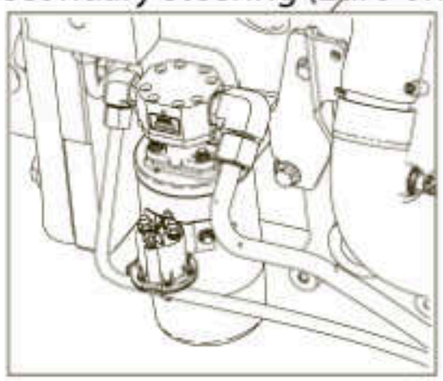




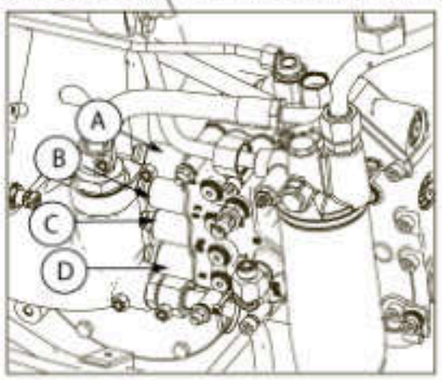
5. Forward/Reverse valve



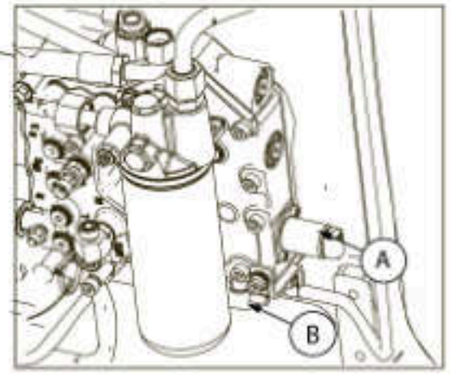
6. Secondary steering (Euro only)



7. Transmission control valve



8. Regulator valve



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