SERVICE MANUAL

T8.320 / T8.350 / T8.380 / T8.410 / T8.435 / T8.380 SmartTrax™ / T8.410 SmartTrax™ / T8.435 SmartTrax™

Continuously Variable Transmission (CVT) Powershift Transmission (PST)

Tractor

PIN ZGRE05001 and above; PIN ZHRE01013 and above

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April 2017

NEW HOLLAND AGRICULTURE

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Interchangeable PTO shaft

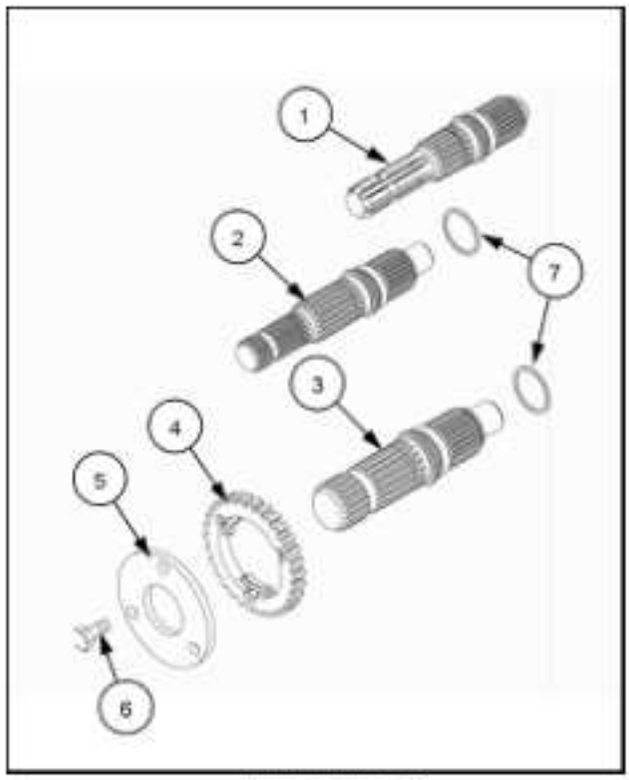
For maximum performance, use the guidelines when configuring the PTO:

- The **35 mm** (**1.375 in**) **540 RPM** 6-spline shaft **(1)** should be used with implements that require less than **63 kW** (**85 Hp**).
- The **35 mm** (**1.375 in**) **1000 RPM** 21-spline shaft **(2)** should be used with implements that require less than **112 kW** (**150 Hp**).
- The **44 mm** (**1.75 in**) **1000 RPM** 20-spline shaft **(3)** is intended for applications that require loads in excess of **112 kW** (**150 Hp**).

NOTE: *Also shown are the inner retainer plate* ***(4)****, outer retainer plate* ***(5)****, retainer plate mounting bolts* ***(6)*** *(only one shown) and the shaft sealing rings* ***(7)*** *(only two shown)*

NOTICE: *Operating outside the recommended PTO horsepower guidelines could cause premature shaft failure.*

NOTICE: *Anytime the PTO shaft is changed you must also change the drawbar position.*



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Reversible PTO shaft

For maximum performance, use these guidelines when configuring the PTO:

- When reversing the PTO shaft, always apply **NEW HOLLAND AMBRA GR-9 MULTI-PURPOSE GREASE** or equivalent, to the internal splines of the transmission sleeve and to the splines of the shaft end that will be installed into the sleeve.
- Properly maintain the driveshaft on the implements and do not operate the implement in a way that would create a high driveshaft angle under load for an extended period of time.
- The **35 mm** (**1.378 in**) 1000 RPM 21–Spline shaft **(2)** should be used with implements that require less than **112 kW** (**150 Hp**).
- The **44 mm** (**1.75 in**) 1000 RPM 20–Spline shaft **(3)** should be used with implements that require more than **112 kW** (**150 Hp**).

NOTE: *Operating outside the recommended PTO HP guidelines could cause premature shaft failure.*

NOTE: *In addition to reversing the shaft, lubricate the internal splines of the transmission sleeve every 300 PTO hours or twice a year with* ***NEW HOLLAND AMBRA GR-9 MULTI-PURPOSE GREASE*** *or equivalent NLGI No. 2 lithium grease.*

NOTE: *Anytime the PTO shaft is reversed, you must also change the drawbar position.*

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Wiring harnesses - Electrical schematic sheet 46 - Secondary CAN bus

Type	Component	Connector / Link	Description
ECU	**A-002**	**X-295**	TO PORT A
ECU	**A-010**	**X-407**	AUTOGUIDANCE CONTROLLER
ECU	**A-015**	**X-445**	TERMINATOR
ECU	**A-017**	**X-281A**	VIRTUAL TERMINAL
ECU	**A-018**	**X-340**	REMOTE VALVE #6
ECU	**A-019**	**X-443**	CAN SECOND DAIGNOSTICS
ECU	**A-020**	**X-144**	REMOTE VALVE #5
ECU	**A-021**	**X-143**	REMOTE VALVE #4
ECU	**A-022**	**X-142**	REMOTE VALVE #3
ECU	**A-023**	**X-140**	REMOTE VALVE #1
ECU	**A-024**	**X-141**	REMOTE VALVE #2
ECU	**A-044**	**X-053**	TCU CH18
ECU	**A-056**	**X-137**	ARMREST
Connector	X-010	**X-010**	TO CAB HARNESS
Connector	X-058	**X-058**	CN2B
Connector	X-137	**X-137**	ARMREST
Connector	X-140	**X-140**	REMOTE VALVE #1
Connector	X-141	**X-141**	REMOTE VALVE #2
Connector	X-142	**X-142**	REMOTE VALVE #3
Connector	X-143	**X-143**	REMOTE VALVE #4
Connector	X-144	**X-144**	REMOTE VALVE #5
Connector	X-281	**X-281**	TO ARMREST HARNESS
Connector	X-281A	**X-281A**	VIRTUAL TERMINAL
Connector	X-288A	**X-288A**	TO ISO HARNESS
Connector	X-290	**X-290**	TO OUTSIDE CAB HARNESS
Connector	X-295	**X-295**	TO PORT A
Connector	X-298A	**X-298A**	TO GPS HARNESS OR JUMPER
Connector	X-298D	**X-298D**	STEERING POTENTIOMETER
Connector	X-340	**X-340**	REMOTE VALVE #6
Connector	X-386A	**X-386A**	TO AUX HARNESS
Connector	X-386D	**X-386D**	TO AUX HARNESS
Connector	X-388	**X-388**	TO TERMINATOR
Connector	X-407	**X-407**	AUTOGUIDANCE CONTROLLER
Connector	X-421	**X-421**	TO CODI JUMPER HARNESS
Connector	X-434	**X-434**	TO CAB HARNESS
Connector	X-443	**X-443**	CAN SECOND DAIGNOSTICS
Connector	X-445	**X-445**	CAN TERMINATOR

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18027 - EHR (remote valve) 5 lever position - voltage too low

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

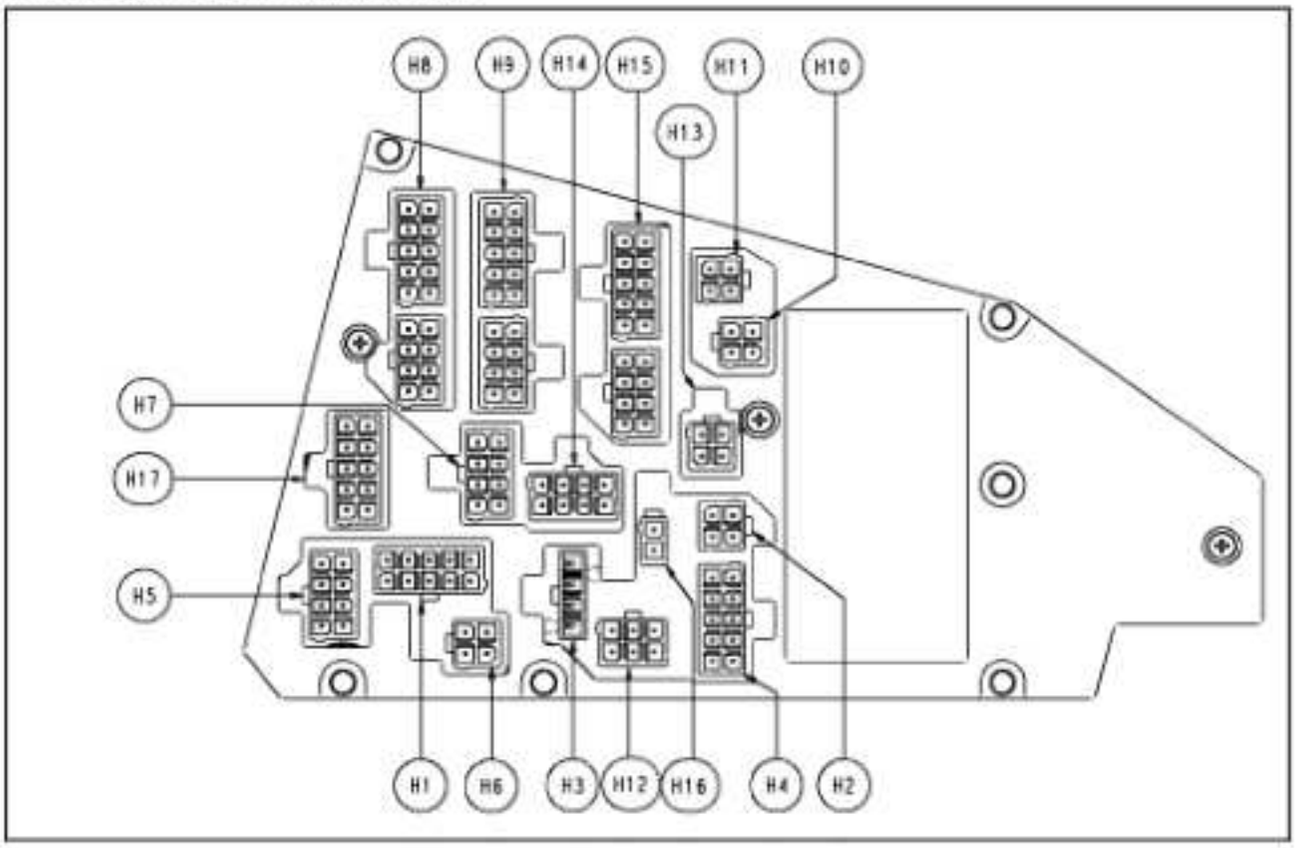
Cause:
Voltage from sensor too low (below **0.2 V**) as measured inside the armrest by the control module.

Possible failure modes:

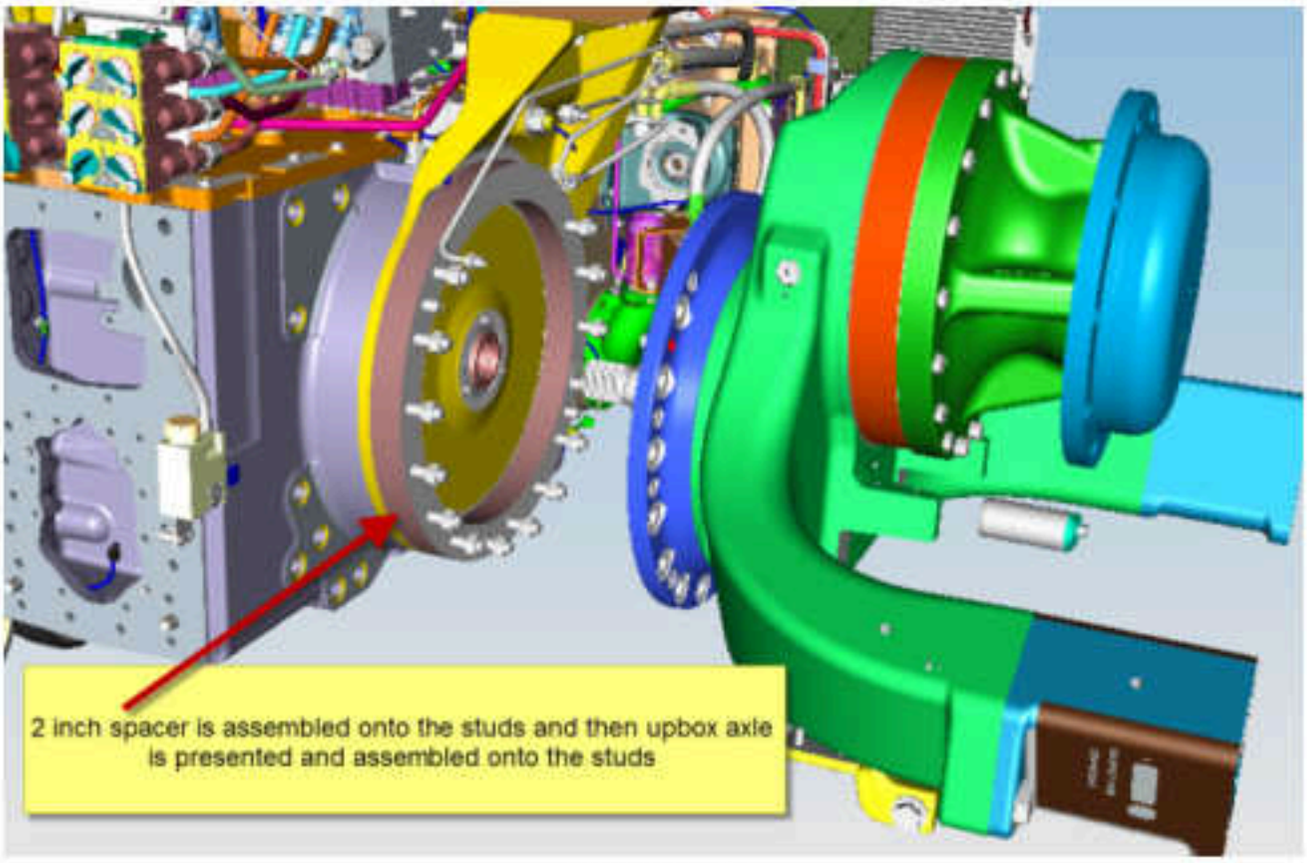
1. Faulty remote valve 5 lever
2. Incorrect armrest configuration
3. Faulty connector
4. Swapped connectors
5. Faulty armrest controller

Solution:

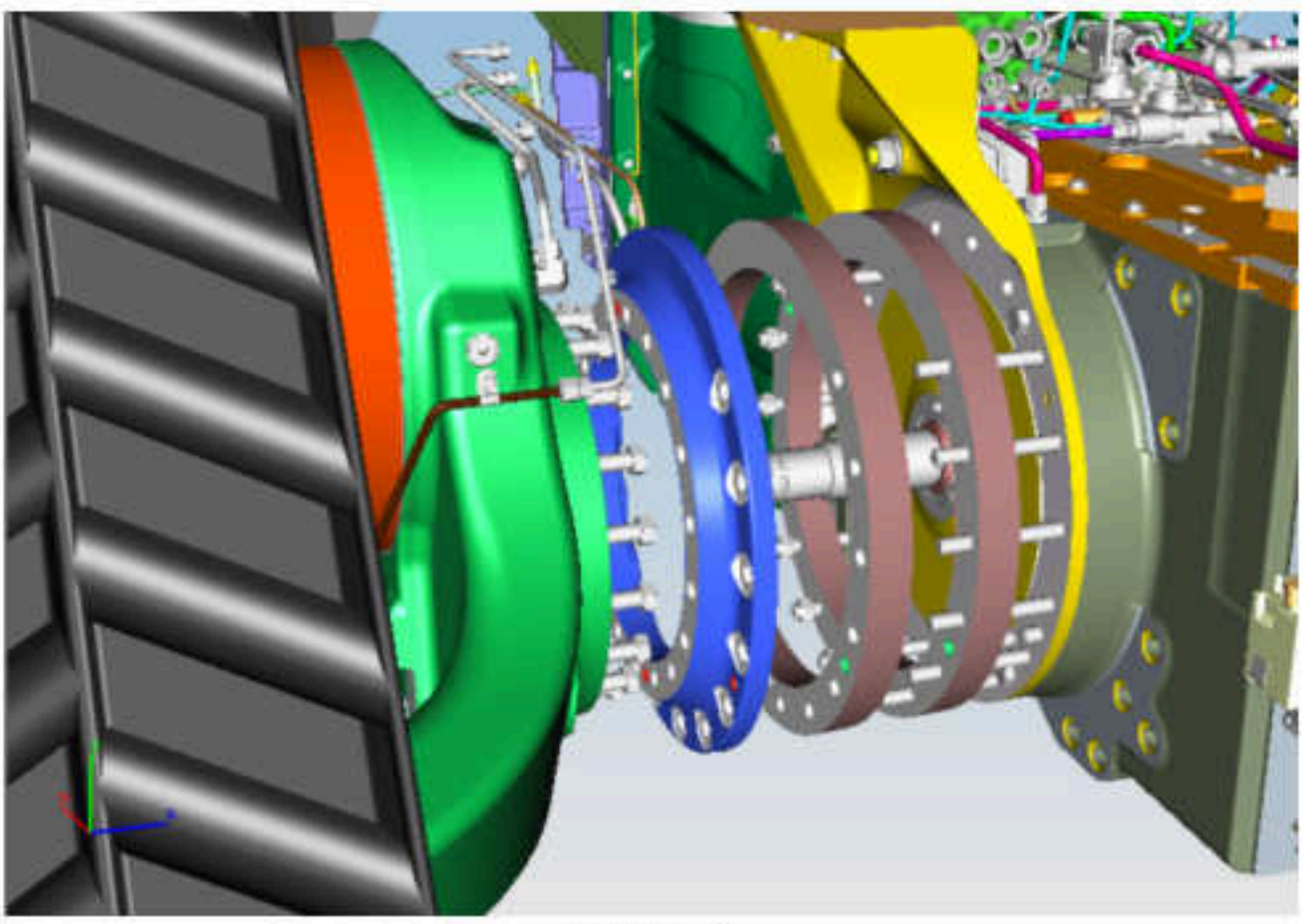
1. Check if the fault code is still active. Clear all fault codes. Operate the tractor under normal conditions.
   A. Fault code does not redisplay. Return unit to field operation and monitor for continuing problems.
   B. Fault code redisplays. Continue to step **2**.
2. Use the monitor screen function on the electronic service tool (EST) to check the remote lever 5 operation. 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 problem.
3. Check the armrest controller connectors.



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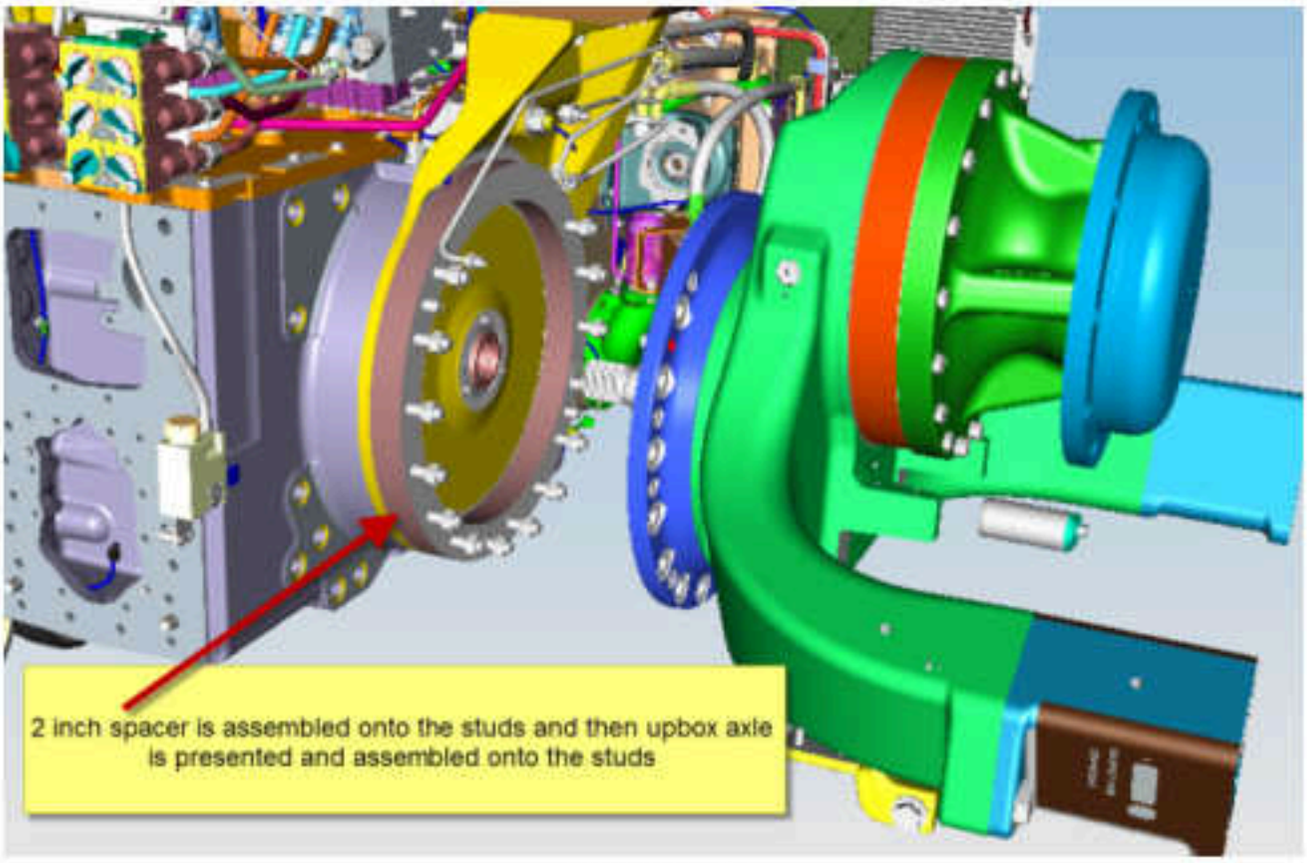
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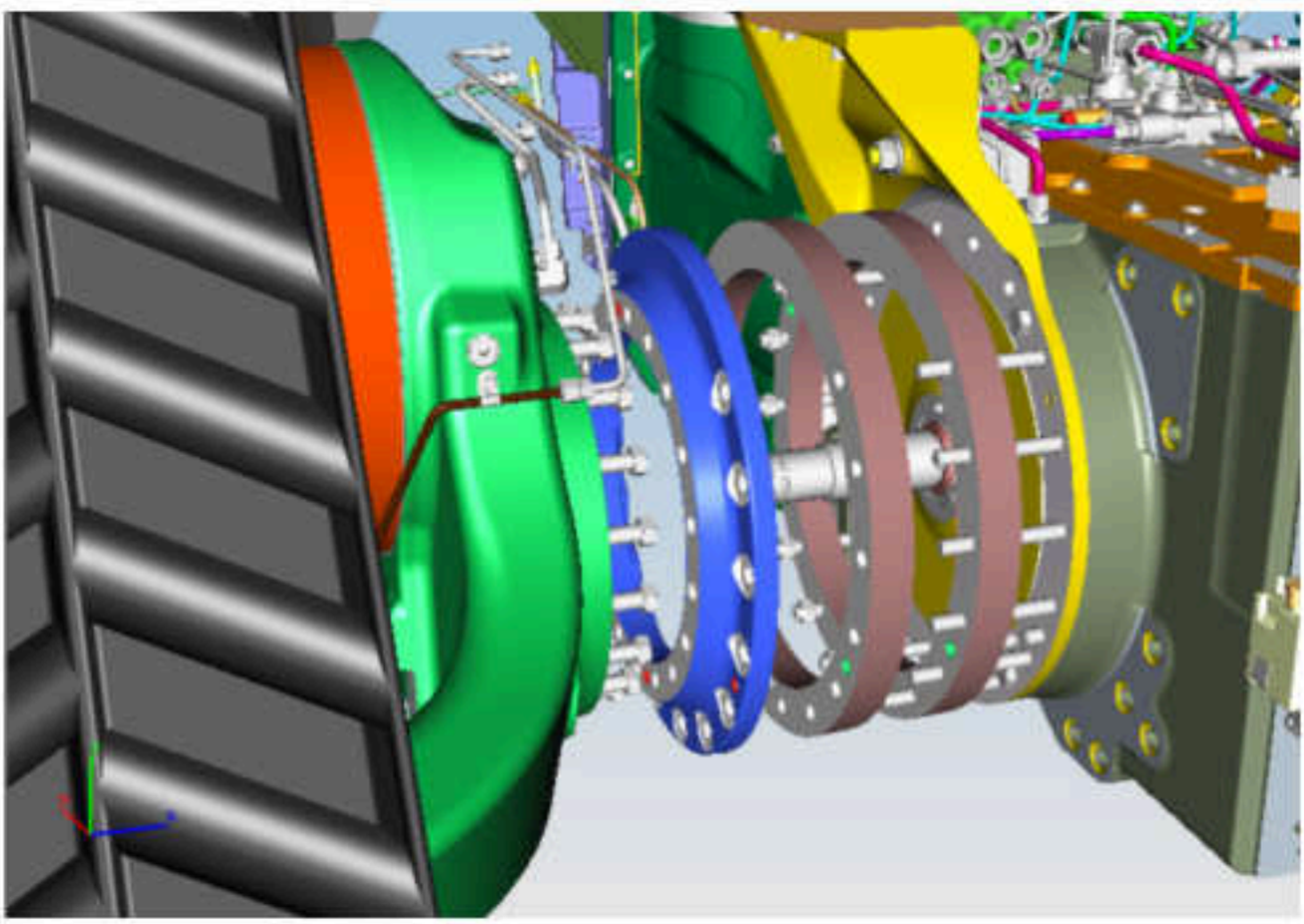
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2032 mm (80 in) tread spacing

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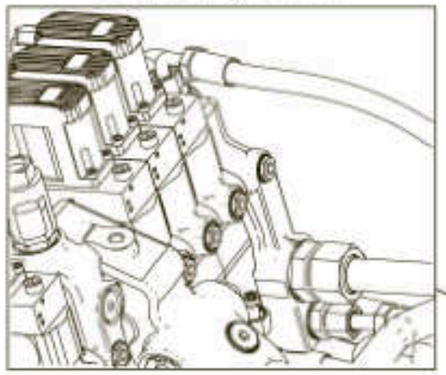


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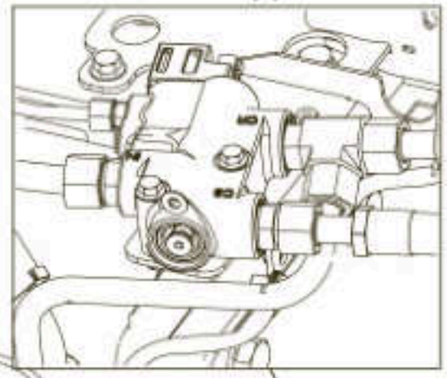
2032 mm (80 in) tread spacing

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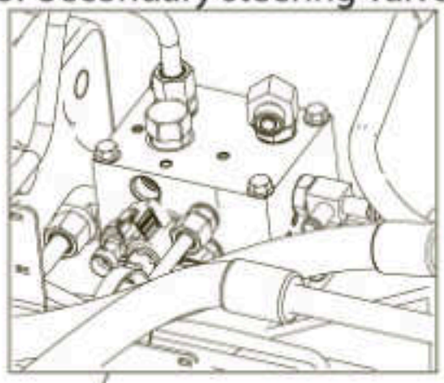
1. Priority valve



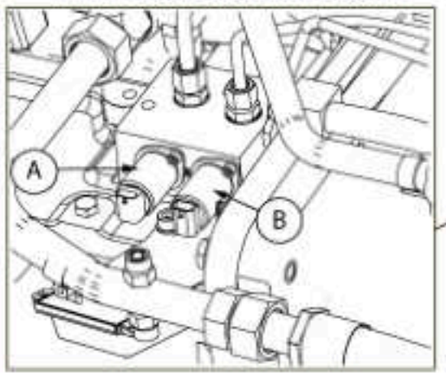
2. Oil cooler bypass valve

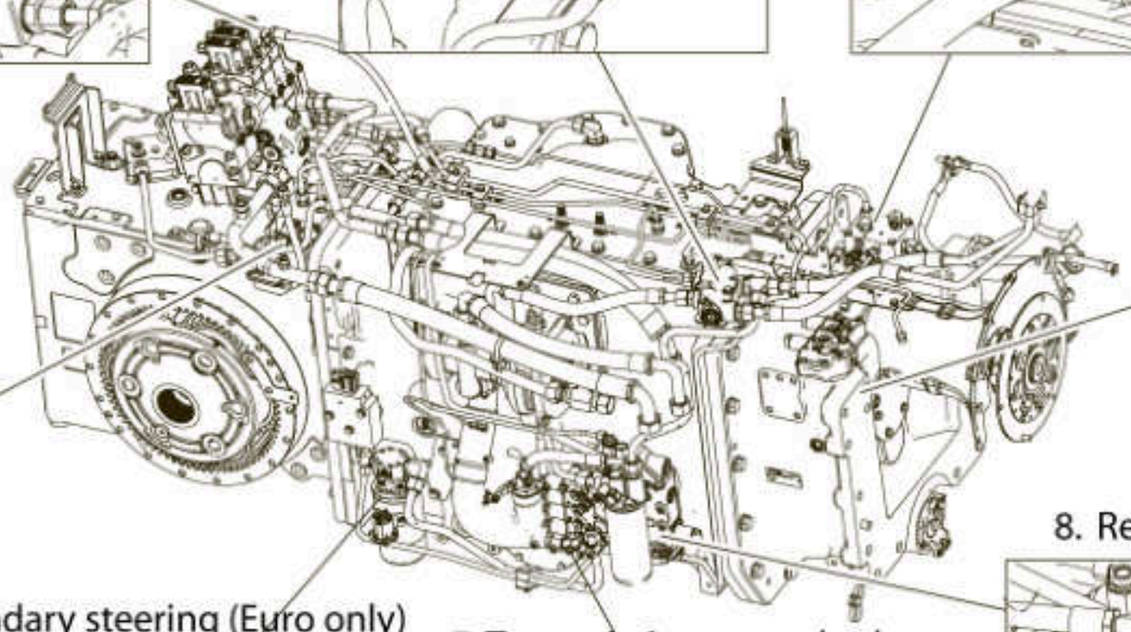


3. Secondary steering valve (Euro only)

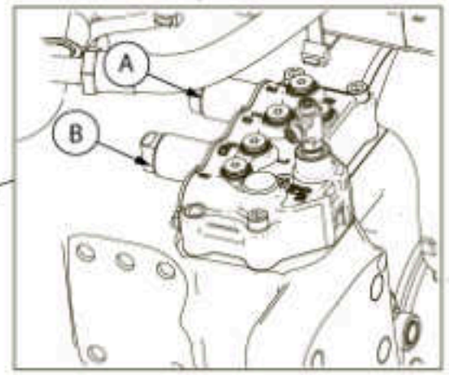


4. Rear PTO brake
MFD Differential lock

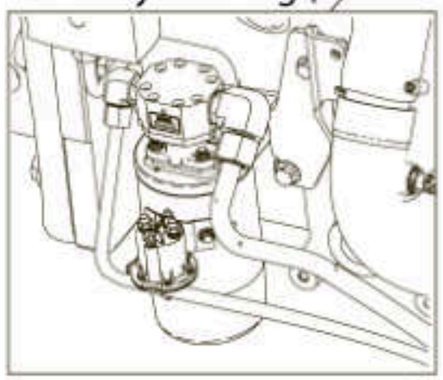




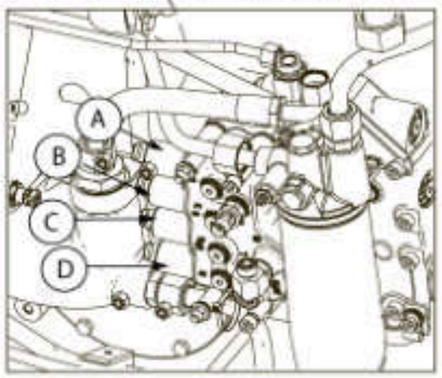
5. Forward/Reverse valve



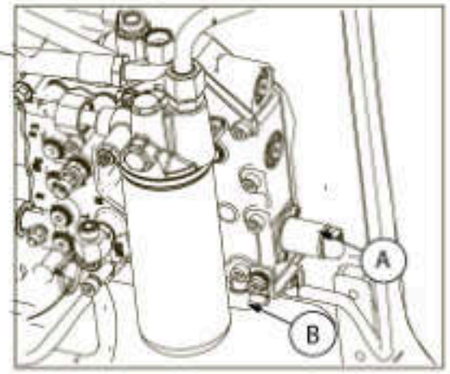
6. Secondary steering (Euro only)



7. Transmission control valve



8. Regulator valve



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