SERVICE MANUAL

T4.75 / T4.85 / T4.95 / T4.105 / T4.115

Tractor

PIN ZDJT13873 and above

Part number 47803847

English

November 2014

NEW HOLLAND AGRICULTURE

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Power Take-Off (PTO) clutch - General specification

Main Data

Number of clutch driving plates	No.5
Thickness of driving plates	**1.950 - 2.050 mm (0.077 - 0.081 in)**(*)
Driving plate material	N266420
Number of clutch driven plates	No.5
Driven plate thickness	**2.250 - 2.350 mm (0.089 - 0.093 in)**(*)
Driven plate thickness	**2.350 - 2.450 mm (0.093 - 0.096 in)**(*)
Driven plate material	Turn the crank handle counter-clockwise until it locks up in the rearward position as shown
Reaction plate thickness	**8.500 mm (0.335 in)**
Thickness of clutch assembly under a load of **1600.0 N (359.7 lb)**	**21.800 - 22.000 mm (0.858 - 0.866 in)**
Hydraulic control valve	Mounted on the outer left-hand side of the clutch casing
PTO clutch working pressure	**17.5 - 18.5 Kg/cm² (248.9 - 263.1 psi)**
Accumulator spring (**(4)** see **Power Take-Off (PTO) clutch - Sectional view (31.114)**)	
Spring free length	**122.000 mm (4.803 in)**
Spring length under load of **34.9 kg (76.9 lb)**	**100.000 mm (3.937 in)**
Spring length under load of **74.2 kg (163.6 lb)**	**75.000 mm (2.953 in)**

NOTE: *(*) Value to be obtained by varying the thickness of the driving plates.*

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14061-Air brake pressure short to Vcc or option set but sensor not connected

Control Module : ADIC

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

Cause:
Air brake pressure detection below **5.2 bar** (**75.4 psi**).
If at key on the analog-digital instrument cluster **ADIC** detects the presence of the Air Brake sensor (P>0) whilst the set mode indicates NO AIR BRAKE (see HH menu description, H3 setting), an error code should be generated.
When the Pressure is: (P > **9 bar** (**130.5 psi**)), it shall mean that we could have a failed sensor or a problem on the system or a problem on the wire harness.

Possible failure modes:

1. Faulty connectors
2. Faulty air brake pressure sensor
3. Faulty harness
4. Analog-digital instrument cluster faulty

Solution:

1. Check the machine is equipped with air brakes.
   A. If the unit is not equipped with air brakes, using H3 menu and selecting (ZC) module, make sure the air brake option on the analog-digital instrument cluster is disabled.
   B. If the unit is equipped with air brakes, using H3 menu and selecting (ZC) module, make sure the air brake option is enabled, continue to step **2**
2. Check the air brake pressure sensor in H9 menu channel 24.
   A. Under normal operating conditions, check the air brake pressure value indicates approximately between **350 - 4550 mV** . If the value indicated is not approximately between **350 - 4550 mV**, continue to step **3**
   B. If values displayed are okay, while in H9 channel 24 wiggle the harness and connectors to check for a intermittent circuit. Channel 24 values will change if an intermittent circuit is detected, repair or replace as required.
3. Check the air brake pressure connector **X-178**, the instrument cluster connectors **X-377**, **X-450**, **X-460** and the inline harness connector **X-381** and **X-300**.
   A. Ensure the connectors are connected, not damaged, the pins are in the correct position and that the fit is tight. Repair or replace as required.
   B. If the connectors are okay, continue to step **4**
4. Check for a short to ground.
   A. Disconnect the air brake pressure connector **X-178**, the connectors of the control unit **X-377**, **X-450** and **X-460**. Check between connector:
   X-178 pin 1, wire 1.0 (YE) and ground
   X-178 pin 2, wire 1.0 (WH) and ground
   If a short to ground is indicated, repair or replace the harness as required.
   B. If a short to ground is not indicated, continue to step **5**
5. Check for a short to positive voltage.
   A. Turn the ignition key switch ON. Check between connector:
   X-178 pin 1, wire 1.0 (YE) and ground
   X-178 pin 2, wire 1.0 (WH) and ground

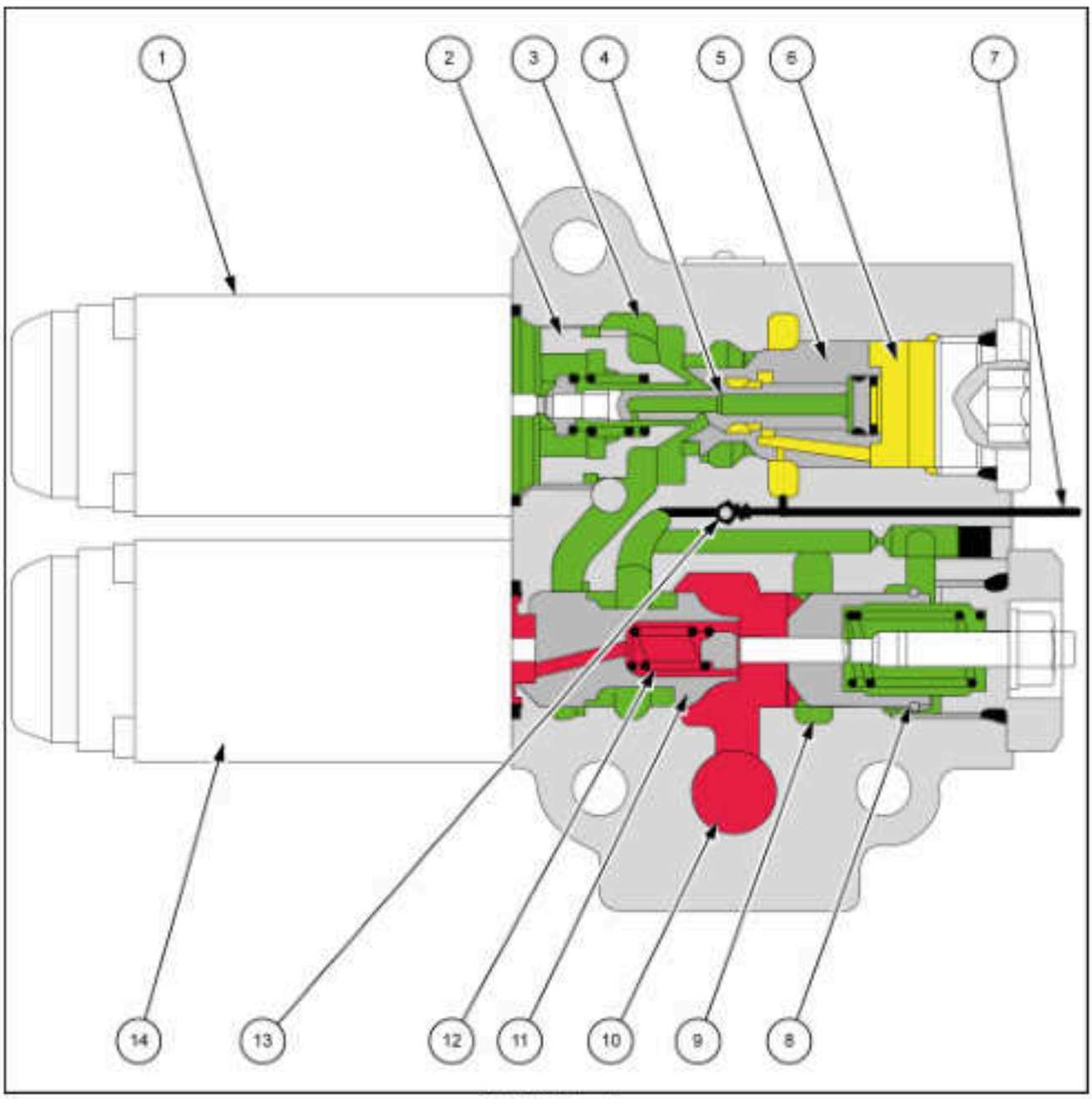
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Front hitch hydraulic system valve - Static description

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T4.95 with cab, with hi-lo transmission [ZxJT0xxxx]	
T4.95 less cab, with hi-lo transmission [ZxJT0xxxx]	

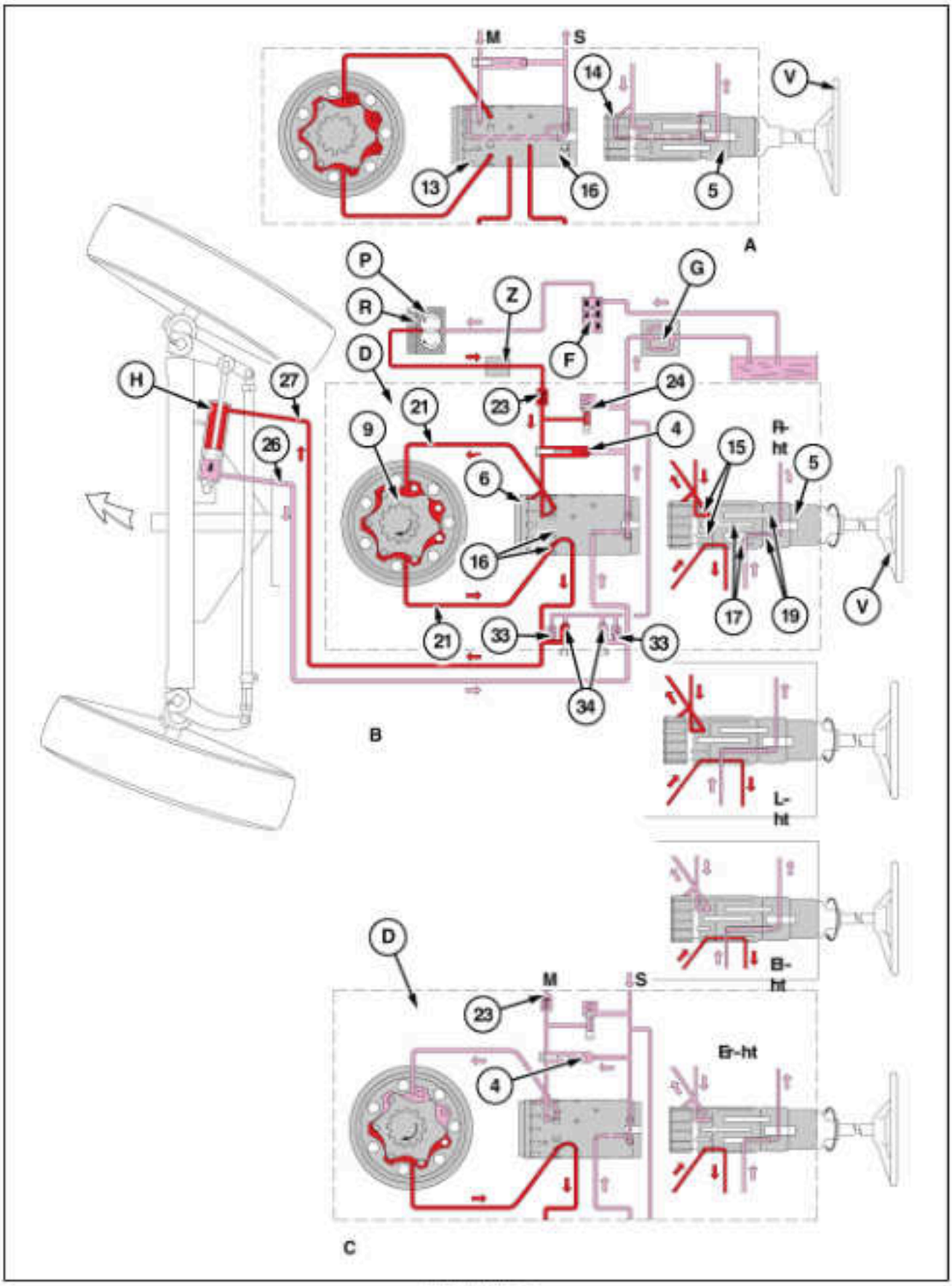


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Functional schematic of electronically controlled front lift. Neutral phase

Static rest oil
Pressure oil
Exhaust oil

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Wiring harnesses - Electrical schema CCU (Central Control Unit)

T4.105 with cab, with hi-lo transmission [ZxJT0xxxx]
T4.105 with cab, with hi-lo transmission, with Supersteer™ front axle [ZxJT0xxxx]
T4.105 less cab, with hi-lo transmission [ZxJT0xxxx]
T4.115 with cab, with hi-lo transmission [ZxJT0xxxx]
T4.115 with cab, with hi-lo transmission, with Supersteer™ front axle [ZxJT0xxxx]
T4.115 less cab, with hi-lo transmission [ZxJT0xxxx]
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T4.75 with cab, with hi-lo transmission, with Supersteer™ front axle [ZxJT0xxxx]
T4.75 less cab, with hi-lo transmission [ZxJT0xxxx]
T4.85 with cab, with hi-lo transmission [ZxJT0xxxx]
T4.85 with cab, with hi-lo transmission, with Supersteer™ front axle [ZxJT0xxxx]
T4.85 less cab, with hi-lo transmission [ZxJT0xxxx]
T4.95 with cab, with hi-lo transmission [ZxJT0xxxx]
T4.95 with cab, with hi-lo transmission, with Supersteer™ front axle [ZxJT0xxxx]
T4.95 less cab, with hi-lo transmission [ZxJT0xxxx]

COMPONENT NAME	SIZE OF THE FUSE	DESCRIPTION
A-011		EDC mouse
A-012		EDC LED panel
A-014		Gear lever
A-015		EDC potentiometers panel
B-003		EDC left-hand draft sensor
B-004		EDC right-hand draft sensor
B-005		Rear PTO speed sensor
B-008		Transmission temperature sensor
B-009		Wheel speed sensor
B-010		Clutch pedal position
F-002	**5 A**	Rear PTO circuit power supply [+ **12 V** 15/54 key]
F-004	**5 A**	CCU memory power supply [+ **12 V** F-061 - **10 A**]
F-009	**5 A**	Speed sensors power supply [+ **12 V** 15/54 key]
F-011	**5 A**	EDC control instruments power supply [+ **12 V** 15/54 key]
F-012	**5 A**	Transmission controls power supply (clutch C & D) [+ **12 V** 15/54 key]
F-035	**7.5 A**	Differential lock and 4WD circuit power supply [+ **12 V** 15/54 key]
F-043	**7.5 A**	Power shuttle lever power supply [+ **12 V** 15/54 key]
F-059	**60 A**	Main engine power supply [+ **12 V** G-001]
J-009		Main diagnostic socket
K-029		Starting relay
M-001		Starter motor
S-003		EDC left-hand fender switch
S-004		EDC right-hand fender switch
S-005		PTO left-hand fender switch
S-006		PTO right-hand fender switch
S-007		Rear PTO switch
S-008		Front PTO switch
S-009		Ground PTO engaged switch
S-010		4WD input switch
S-011		Differential lock switch
S-021		Brake pedal switch left hand
S-022		Brake pedal switch right hand
S-029		Safety pressure switch A
S-030		Safety pressure switch B

COMPONENT NAME	SIZE OF THE FUSE	DESCRIPTION
S-031		Gear 1-2 switch
S-032		Low range switch
S-033		Medium range switch
S-034		Shuttle lever
S-035		Clutch pedal switch
S-036		Power shuttle reactivity switch
S-067		Park Lock engaged switch (mechanical parking block)
S-088		Gear 3–4 switch
S-089		High range switch
S-090		Creeper switch
Y-001		EDC raise solenoid valve
Y-002		EDC work solenoid valve
Y-003		Rear PTO solenoid valve
Y-004		Front PTO solenoid valve
Y-005		Rear differential lock solenoid valve
Y-006		4WD solenoid valve
Y-009		Clutch solenoid "A"
Y-010		Clutch solenoid "B"
Y-011		Clutch solenoid "C"
Y-025		Rear PTO brake solenoid valve

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