SERVICE MANUAL

T4.55 / T4.65 / T4.75

Tractor

Part number 51505313
English
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NEW HOLLAND AGRICULTURE

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Ambient Temperature* °C (°F)	High Pressure Gauge Reading kPa (psi)
35 °C (95 °F)	1248 – 1386 kPa (181 – 201 psi)
38 °C (100 °F)	1386 – 1524 kPa (201 – 221 psi)
40.5 °C (105 °F)	1503 – 1641 kPa (218 – 238 psi)
43 °C (110 °F)	1696 – 1834 kPa (246 – 266 psi)
46 °C (115 °F)	1910 – 2048 kPa (277 – 297 psi)
49 °C (120 °F)	2117 – 2255 kPa (307 – 327 psi)

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Label Name	Component Name	Size of the fuse	Description
F6	F-085	**15.0 A**	Windshield wiper and washer
F7	F-086	**5.0 A**	A/C Switch
F8	F-087	**15 A**	Rotating beacon

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3673 (DTC 68B-02) - EGR valve control circuit over load

Control Module: ECU

Context:
The engine control unit (ECU) has detected a short circuit in the valve control circuit EGR.

Cause:
The engine control unit (ECU) has detected a short circuit in the valve control circuit EGR.

Possible failure modes:

1. Wiring shorted
2. Defective engine control unit (ECU)

Solution:

1. Check for active fault codes.

   (1) Verify that the fault code is still active.
   Prior to clearing fault codes write down all fault codes, number of occurrences, and engine hours at last occurrence.

   (2) Use the Electronic Service Tool to clear all fault codes.

   (3) To check for active fault codes: Start and operate machine.

   A. Fault code 3673 is not recorded again. OK to return machine to service.

   B. Fault code 3673 is active and recorded again. Continue with Step **2**.
2. Verify that the wiring harness and connectors are free of damage.

   Turn the key switch **(1)** OFF.

   (2) Inspect the ECU **X-939** connector and the EGR valve connector . All connections should be secure, tight, free of corrosion, abrasion and damage.

   (3) Inspect the harness from the connector ECU **X-939** to the EGR valve connector . Verify that the harness is free of damage, corrosion, abrasion and incorrect attachment.

   A. The connectors are secure and the harness is free of damage. Continue with Step **3**.

   B. The connectors or the wiring harness has damage. Repair or replace the wiring harness or connectors as required.
   return to Step **1** to confirm elimination of fault.
3. Measure the resistance of the harness to chassis ground

   Turn the key switch **(1)** OFF.

   Disconnect connector **(2)** of valve EGR. Disconnect the (ECU **X-939**) connector.

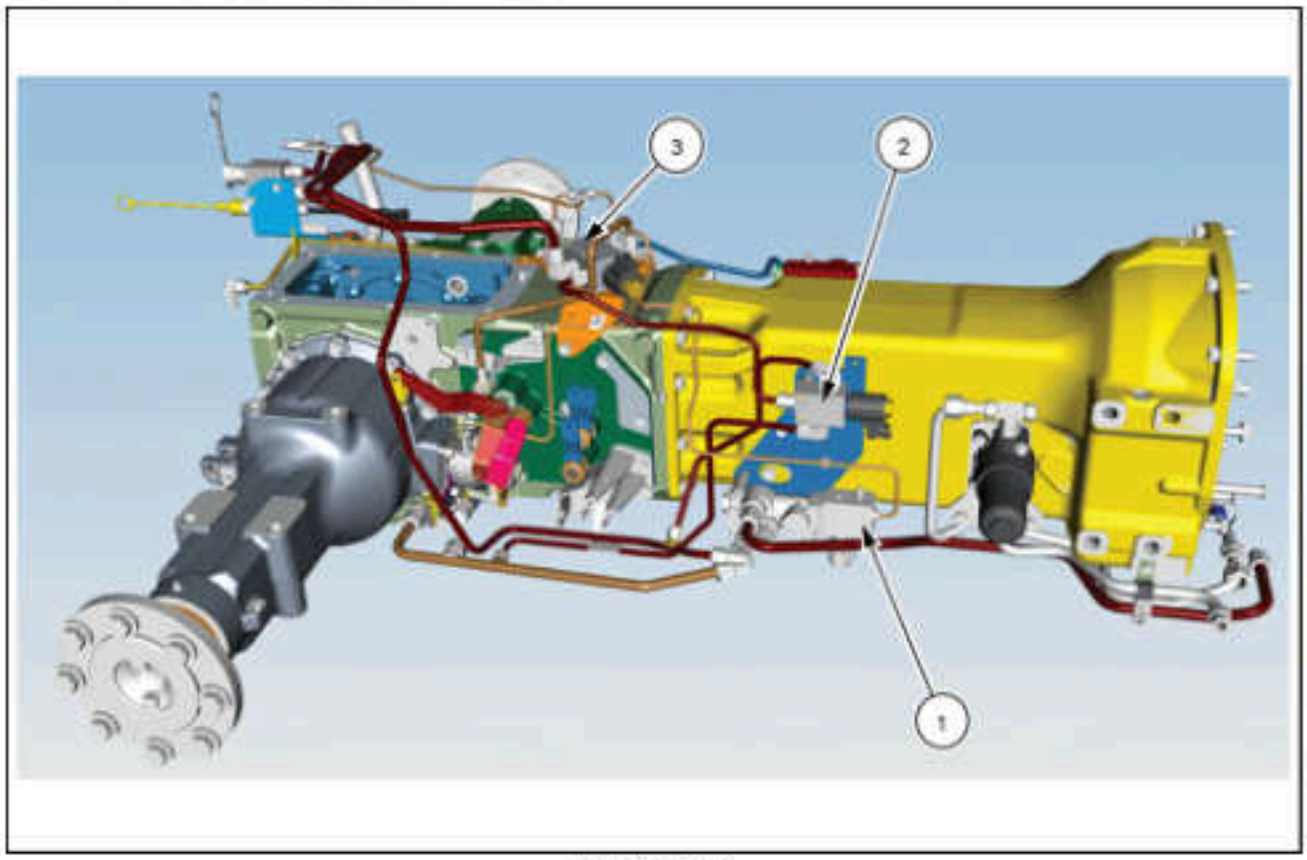
   (3) Measure the resistance between ECU **X-939 (Receptacle) pin 50** , wire EN2-0088 (WH) and ECU connector **X-939 (Receptacle) pin 35** , wire 408 (TQ). The resistance should be greater than **20,000 Ω** . Wiggle the harness during measurement to reveal an intermittent condition.

   A. The resistance is greater than **20,000 Ω**. Continue with Step **4**.

   B. The resistance is less than **20,000 Ω**. There is a short circuit in the wiring harness. Repair/replace wiring as needed.
   return to Step **1** to confirm the elimination of the failure.
4. Measure the resistance of the valve to chassis ground.

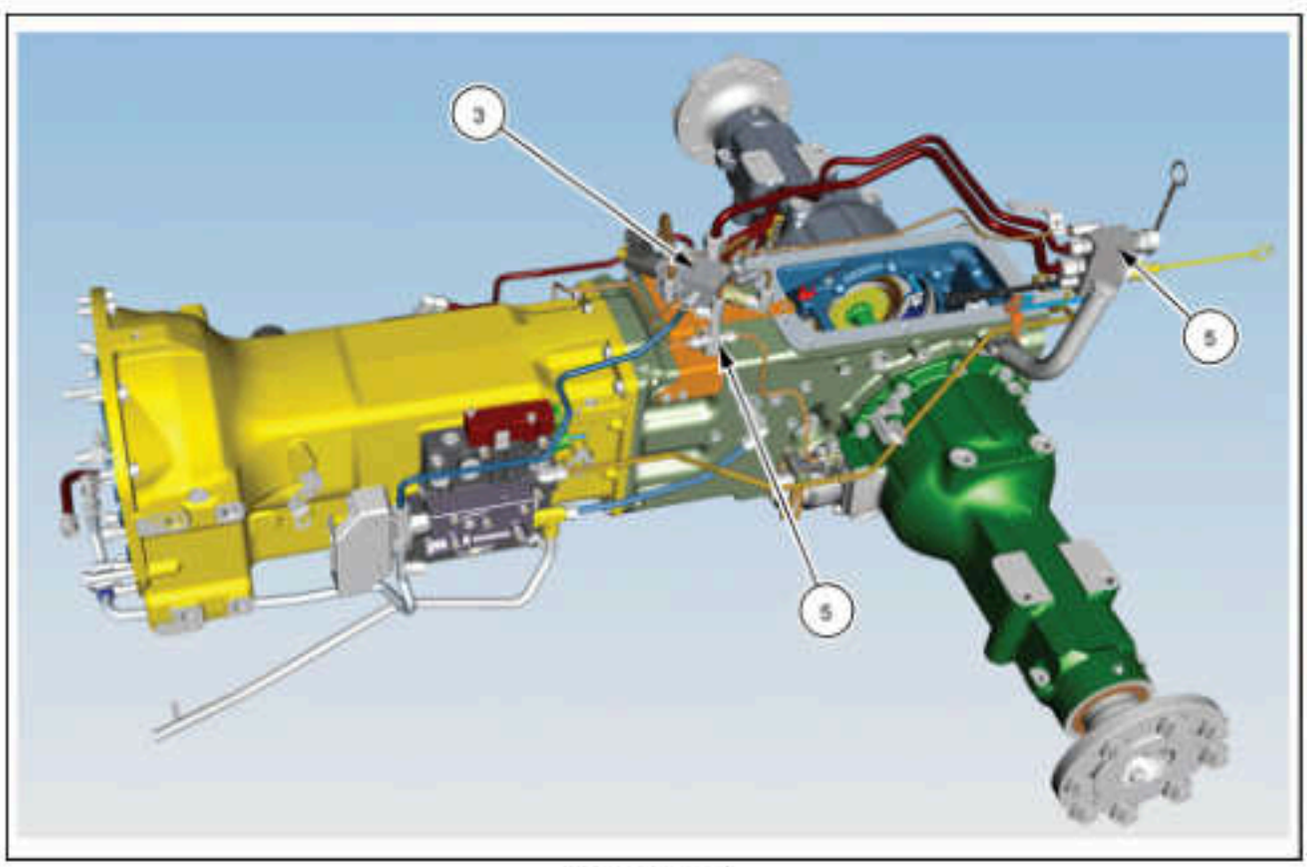
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Models with Powershuttle transmission



MOIL17TR02120TA 3

Right-hand view



MOIL17TR02119TA 4

Left-hand view

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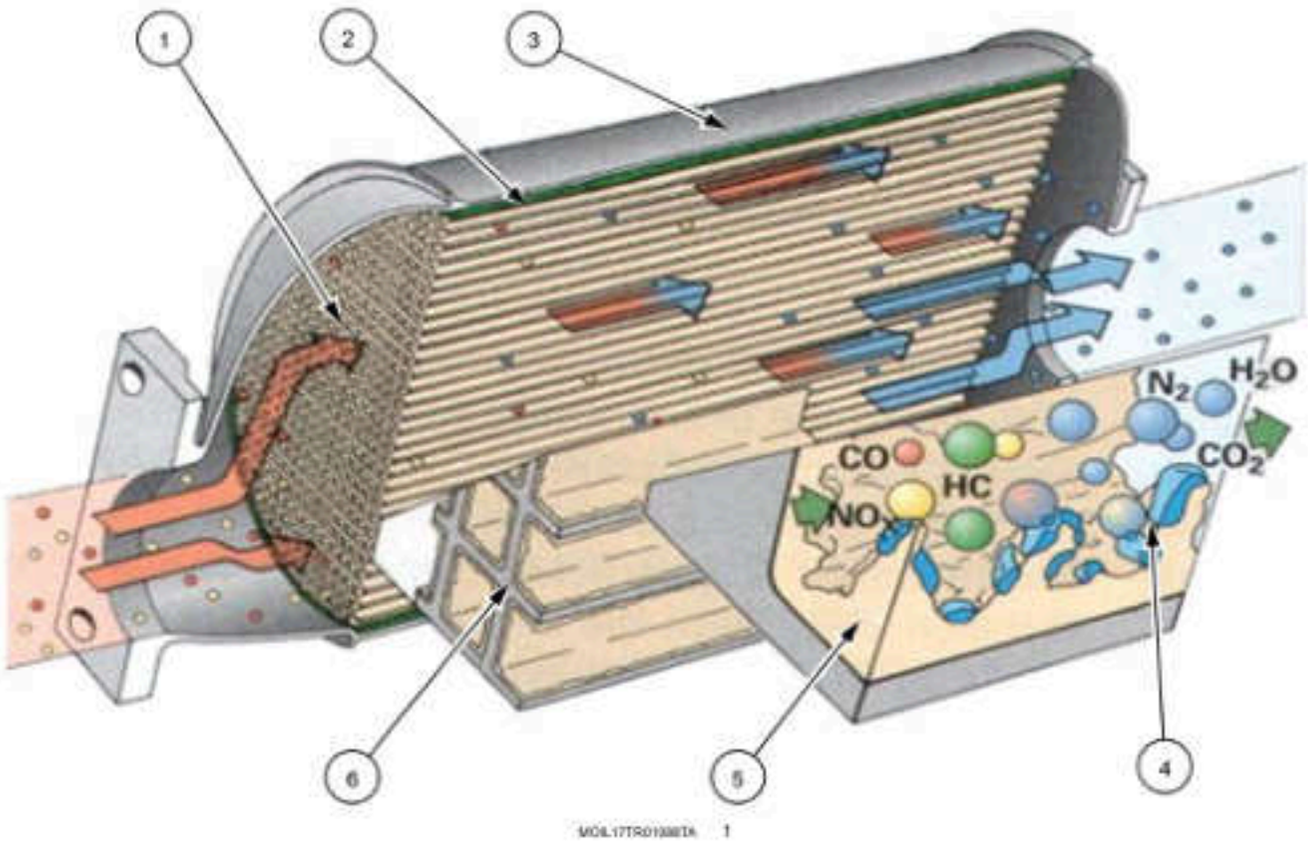
Diesel Oxidation Catalyst (DOC) - Dynamic description

The gases with high pollutant levels emitted by the engine reach the inlet of the exhaust terminal and come into contact with the honeycomb surface of the DOC catalyst.

The filter, consisting of a tightly packed series of small parallel channels, provides a large surface area which is highly efficient for catalysing the exhaust gases, and by a chemical reaction converts the gases which are then emitted from the terminal.

The catalysing process is more efficient the higher the temperature of the exhaust gases in contact with the DOC filter.

The chemical reaction produced allows the filter to transform the particulate present in the exhaust gases (nitrogen oxide, cobalt, hydrocarbons) into harmless substances such as water and carbon dioxide



1.	Ceramic honeycomb conductor
2.	Mesh with high thermal resistance
3.	Steel casing
4.	Active catalytic surface
5.	Intermediate layer
6.	Ceramic supports

The control strategy of the DOC catalytic converter takes place by controlling certain parameters to keep the temperature range between 220 and 600°C.
The parameters are:

1. Gas temperature in the intake manifold
2. Gas pressure in the intake manifold.
3. Turbine inlet gas temperature
4. Boost Press
5. Injection timing
6. Injection pressure
7. EGR valve position

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Hydraulic systems - Hydraulic schema - Power shuttle transmission

T4.55 With cab [ELRT4055HHAN00017 -]	(Transmission = Power Shuttle)
T4.55 Without cab [ELRT4055PHAN00080 -]	(Transmission = Power Shuttle)
T4.65 With cab [ELRT4065JHAN00039 -]	(Transmission = Power Shuttle)
T4.65 Without cab [ELRT4065TJAN00096 -]	(Transmission = Power Shuttle)
T4.75 With cab [ELRT4075LHAN00005 -]	(Transmission = Power Shuttle)
T4.75 Without cab [ELRT4075AHAN00049 -]	(Transmission = Power Shuttle)

4WD hydraulic diagram with electrohydraulic engagement and selectable trailer brake valve (MR + Universal)

1.	Low pressure switch **10 bar** (**145 psi**)	
2.	Modulation valve	**Power shuttle transmission external controls - Exploded view - Power Shuttle transmission control valve (21.134)**
3.	Forward gear	
4.	Reversing	
5.	PTO brake	**Two-speed rear Power Take-Off (PTO) - Exploded view (31.114)**
6.	PTO clutch	**Rear electro-hydraulic control - Dynamic description PTO engagement 540 rpm, 540/540E rpm (31.104)**
7.	Primary shaft lube	
8.	PTO lubrication	
9.	Safety valve	**Safety valve - Static description (33.220)**
10.	Unloading valve	**Dump valve - Static description (33.220)**
11.	Trailer brake coupling manifold	**Trailer brake coupling manifold - Static description (33.220)**
12.	Trailer brakes	
13.	Trailer brake valve	**Trailer brake valve - Static description - Dual-line circuit, compatible with single-line universal (33.220)**
14.	Brake master cylinder	
15.	Left-hand rear brake	
16.	Right-hand rear brake	
17.	Mid mount valve	
18.	Mechanical Draft Control (MDC) lift	**Three-point hitch control valve - Exploded view (35.114)** **Hitch control valve - Technical Data - Hitch control valve (35.114)**
19.	Lift cylinder shock safety valve **210 – 215 bar** (**3045 – 3118 psi**)	
20.	Remote valve (open center)	**Remote control valve - Static description (35.204)**
21.	Main relief valve **190 bar** (**2755 psi**)	**High pressure relief valve - Component localization (35.350)** **High pressure relief valve - Technical Data (35.350)**
22.	**19 cm³/rev** (**1.2 in³/rev**) pump	**Fixed displacement pump - Static description (35.104)** **Pump - Technical Data - Tandem gear pump (35.104)** **Fixed displacement pump - Static description - Fixed displacement pumps (35.104)**
23.	**14 cm³/rev** (**0.9 in³/rev**) pump	**Fixed displacement pump - Static description (35.104)** **Pump - Technical Data - Tandem gear pump (35.104)** **Fixed displacement pump - Static description - Fixed displacement pumps (35.104)**
24.	Steering control valve / Orbitrol	**Power steering control valve - Component localization (41.200)** **Power steering control valve - Technical Data - Steering motor (41.200)**
25.	4WD clutch	
26.	Low pressure control valve	**Low pressure valve - Component localization (35.322)**
27.	Ground speed PTO	**Two-speed rear Power Take-Off (PTO) - Overview Ground speed (31.114)**

High pressure line

Low pressure **18 bar** (**261 psi**)

Steering line

Return/discharge line

Brake fluid line

Lubrication

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