SERVICE MANUAL

T5.95 / T5.105
T5.115

Tractor

Part number 84568014
English
March 2013

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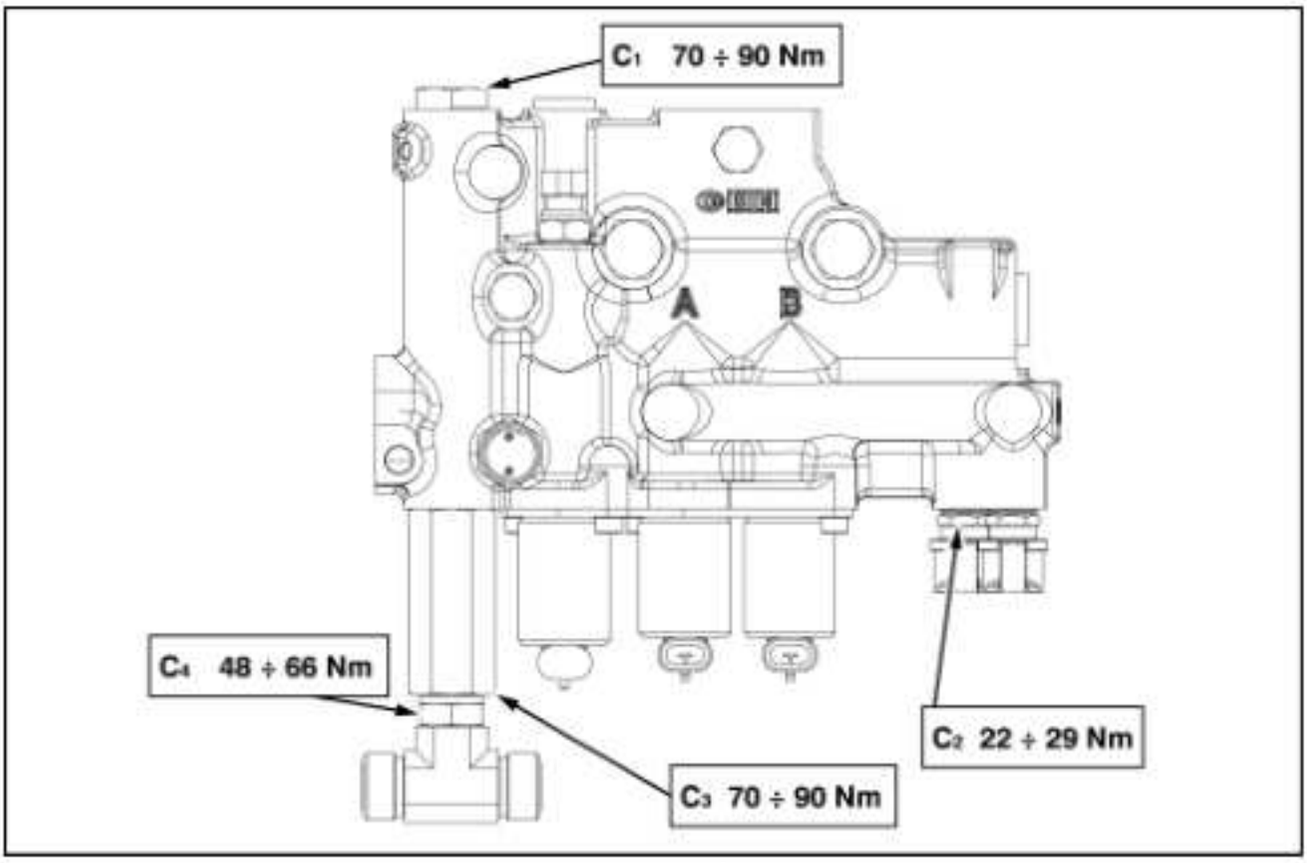
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WLAR1421C003F 2

PARTS TO BE TIGHTENED	Tightening torque	
	Nm (lbft)	kgm
Driven shaft manifold cover retaining nut **(C1)**	22 - 25 N·m (16.23 - 18.44 lb ft)	2,24 ÷ 2,55
Lubrication manifold retaining screw **(C2)**	22 - 25 N·m (16.23 - 18.44 lb ft)	2,24 ÷ 2,55
Clutch A bell housing retaining nut **(C3)**	22 - 25 N·m (16.23 - 18.44 lb ft)	2,24 ÷ 2,55
Flexible coupling retaining nut **(C4)** (•)	30 - 34 N·m (22.13 - 25.08 lb ft)	3,06 ÷ 3,46
Spacer retaining screw **(C5)**	105 - 115 N·m (77.44 - 84.82 lb ft)	10,7 ÷ 11,7
Spool valve cap (**(C1)**, 2)	70 - 90 N·m (51.63 - 66.38 lb ft)	7,1 ÷ 9,2
Clutch pressure control union (**(C2)**, 2)	22 - 29 N·m (16.23 - 21.39 lb ft)	2,24 ÷ 3
Oil fitting (**(C3)**, 2)	70 - 90 N·m (51.63 - 66.38 lb ft)	7,1 ÷ 9,2
Oil T fitting (**(C4)**, 2)	48 - 66 N·m (35.40 - 48.68 lb ft)	4,9 ÷ 6,7

(•) Apply one or two drops of **LOCTITE® 270** before tightening.

Power shuttle transmission - Special tools

T5.95 20 x 20 (PS and Creeper), T5.105 20 x 20 (PS and Creeper), T5.115 20 x 20 (PS and Creeper)

Power Shuttle transmission with creeper unit - 20X20 version

380000301: Rotating stand for overhaul operations.

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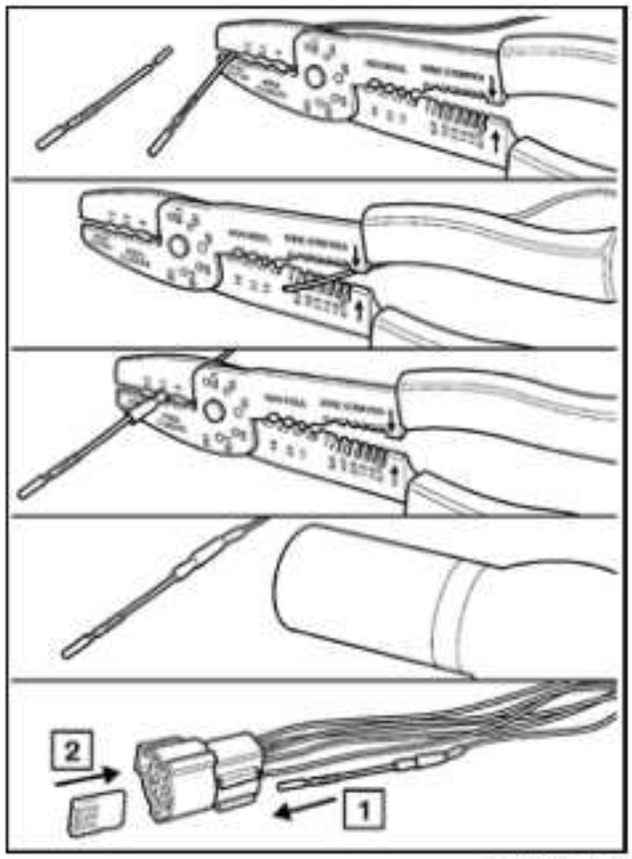
Wire harnesses - Rewire

Harness Wire Replacement

If a wire within the harness is found to be beyond repair or is open circuit, a jumper wire may be installed as a temporary repair until such time when a new harness assembly can be installed. Use the following procedure to install an additional wire:

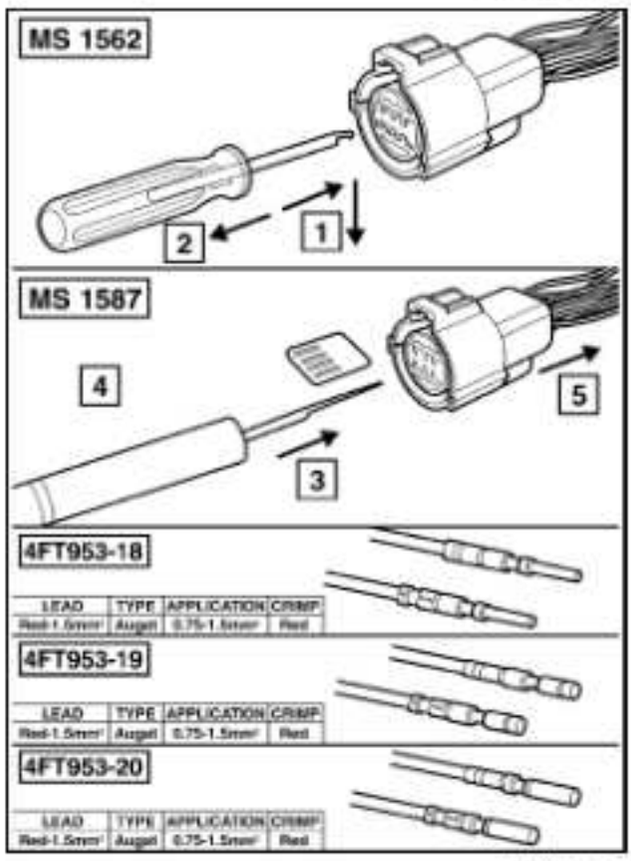
1. Locate the faulty wire using the procedures described in the fault code charts.
2. Disconnect the affected connectors.
3. If fitted carefully roll back the seal between the connector and harness outer covering.
4. Remove the pins from the connector blocks of the affected wire using the appropriate removal tool found in the harness repair kit.

NOTE: *Use the instructions supplied with the kit to ensure correct pin removal.*



5. From the harness repair kit select the correct pin for the connectors. Obtain locally the correct cross--sectional size wire and measure out the length required by following the harness routing.
6. Join the new wire to the new pins as described in the harness repair kit and install one of the pins into its connector.
7. If possible attempt to run the new wire within the existing harness outer covering; if this is not possible, run the wire along the harness, securing regularly with suitable ties. With the wire correctly routed install the second terminal into its connector block. Replace the connector seal if removed.
8. To ensure that the repair has been effective check for continuity of the new wire using a suitable multi--meter.

NOTE: *This is a temporary repair only. Ensure the damaged cable is replaced as soon as possible to prevent ingress of water or chemicals.*



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3870-Timeout for BC2EDC1

Control Module : ECU

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

Cause:
The ECU has detected a timeout of BCM2EDC1 CAN message.

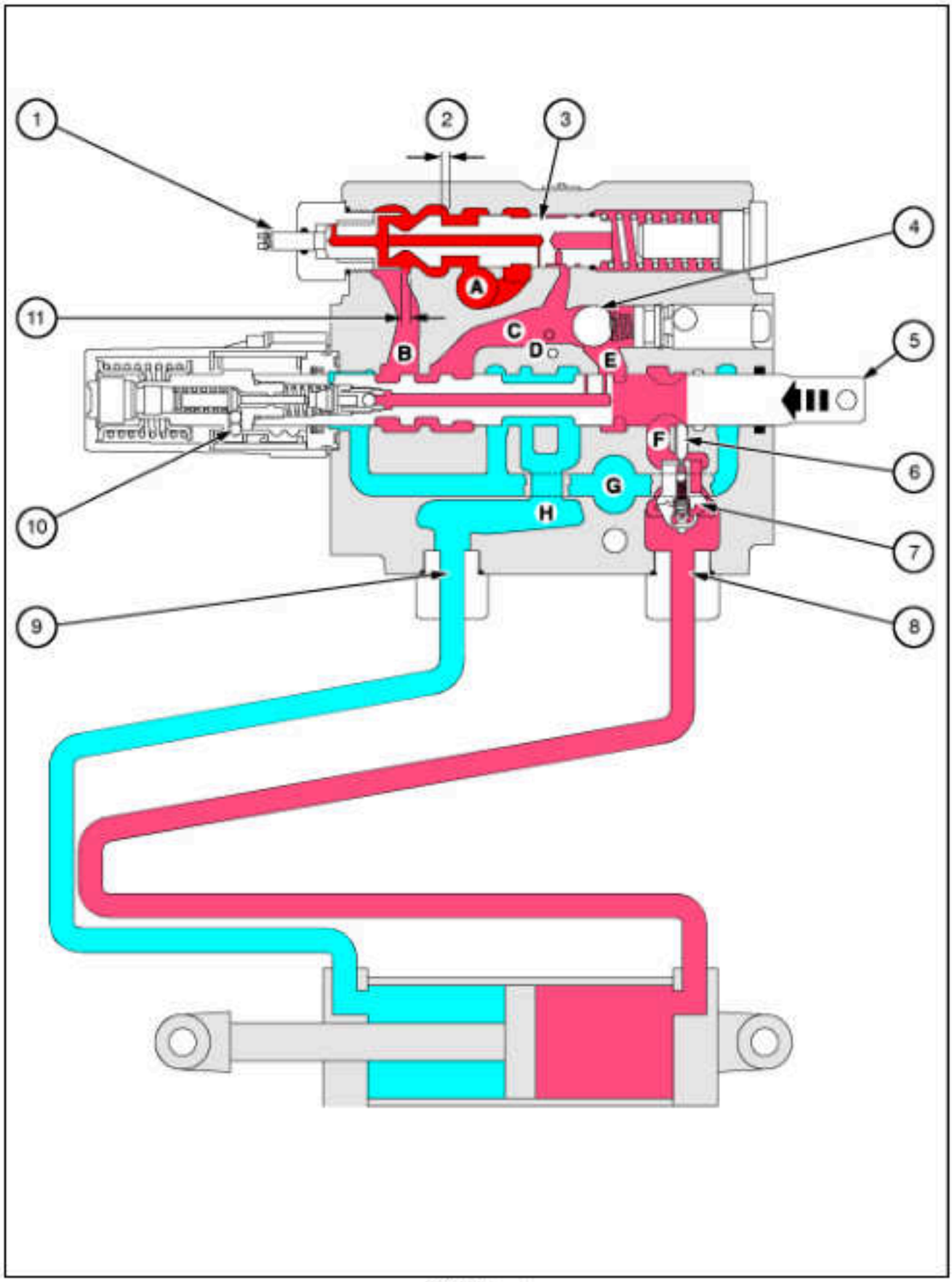
Possible failure modes:

1. Faulty harness
2. CAN BUS interference
3. Faulty ECU
4. Faulty XCM

Solution:

1. Before proceeding clear the error code with the approved diagnostic equipment. Run the tractor under normal conditions and retest.
   A. If the error code is not indicated, check that the system is operating correctly.
   B. If the error code is indicated, continue to step **2**
2. Check for other CAN related error codes displayed.
   A. If other error codes are displayed, continue to these tests.
   B. If no other error codes are displayed, continue to step **3**
3. Check all power supplies and grounds to the controllers on the CAN BUS network.
   A. If a fault is indicated, repair or replace the harness as required.
   B. If the power supplies and grounds are okay, download the correct levels of controller software. If the fault is still present, remove and replace the ECU.

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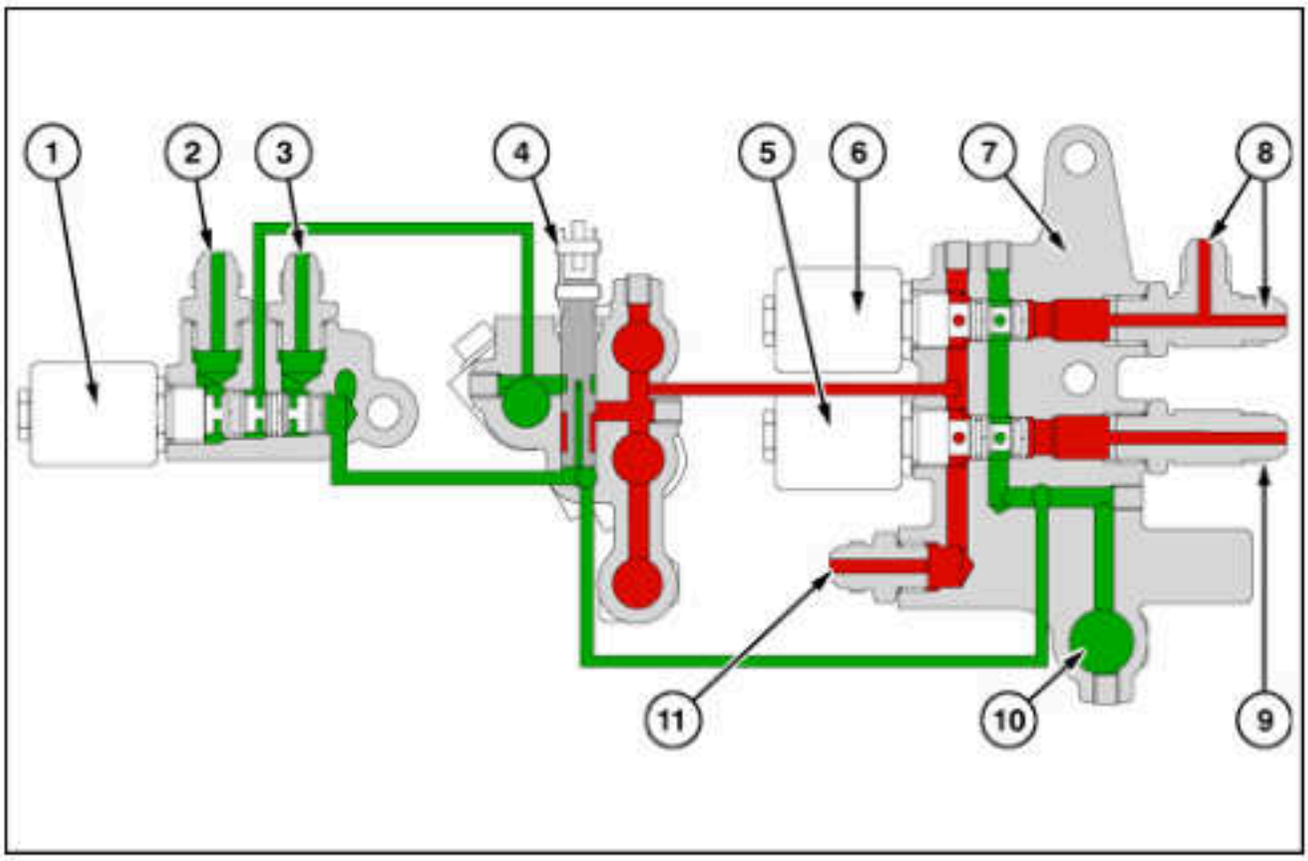
SE23CAP3H-1 1

LIFTING OIL FLOW: Auxiliary control valve operation - Lifting (cylinder extension)

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Power Take-Off (PTO) control valve - Dynamic description and services spool valve with rod (4) in PTO synchronized with gearbox position hydraulic diagram

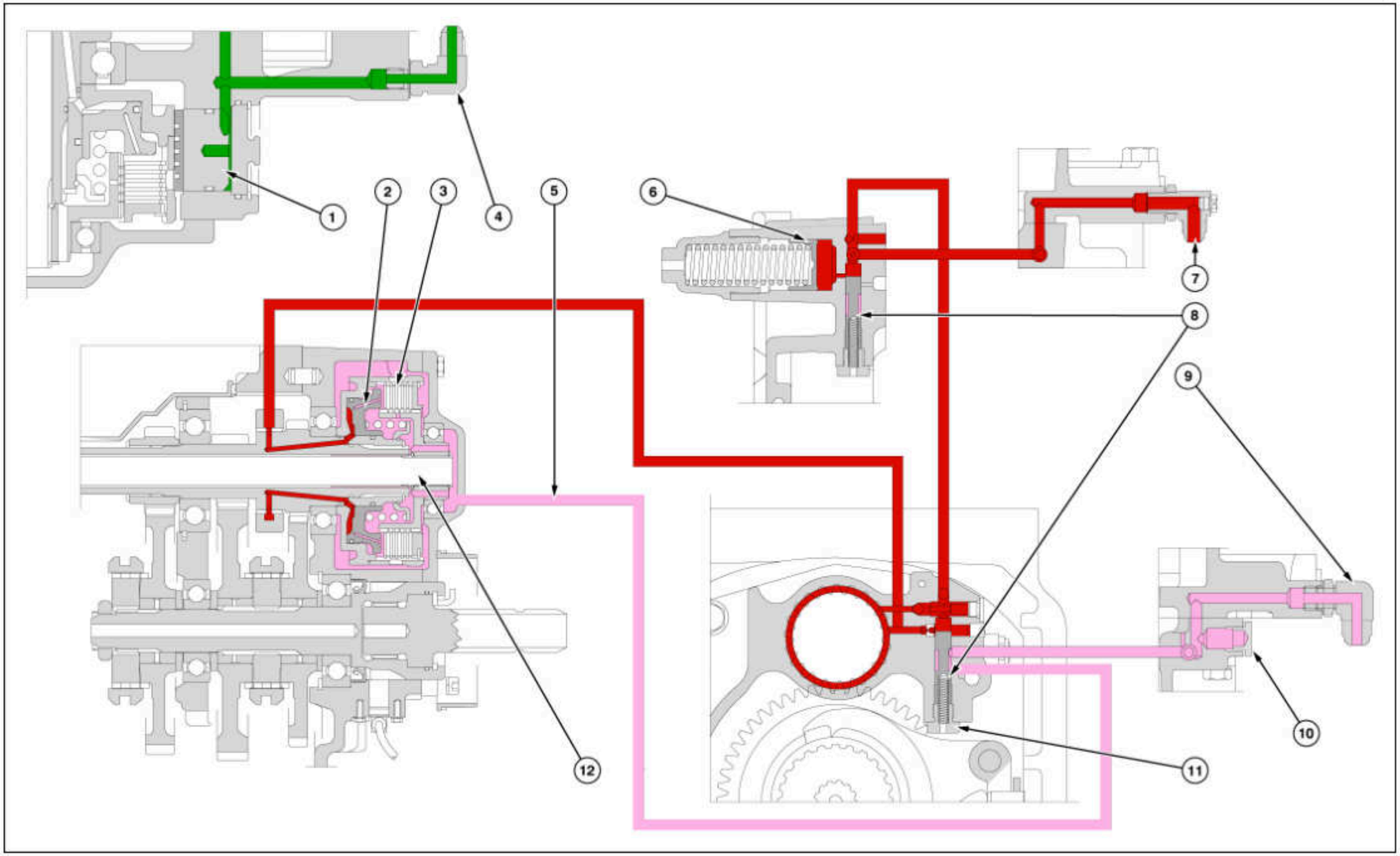
Moving the synchronized PTO engagement lever fully upwards, engaged, the rod of the spool valve **(4)** is in the position shown in the figure.
The line **(11)** receives pressurized oil from the pump, but the spool valve **(4)** closes the oil flow to the PTO clutch engagement cylinder delivery lines **(2)** and to the PTO clutch brake **(3)**, connecting them with the discharge line **(10)** to the transmission casing, as shown in the drawing.
The oil under pressure from line **(11)** can moreover be used for the services of lines **(8)** and **(9)** .
The figure shows solenoid valve **(5)** and **(6)** excited.
With the solenoid valve **(5)** excited, the delivery line **(9)** is pressurized and the four−wheel drive is disengaged.
With the solenoid valve **(6)** excited, the delivery line **(8)** is pressurized and the front and rear differential lock is engaged.



: Pressurised oil
: Discharge oil

(1). Oil delivery solenoid valve to PTO clutch or clutch brake (deactivated).	**(6)**. Front or rear differential engagement command solenoid valve activated.
(2). Delivery line (discharging) to the PTO clutch engagement cylinder.	**(7)**. Control valve support.
(3). Delivery line (discharging) to the clutch brake.	**(8)**. Pressurized delivery lines (front and rear differential engaged).
(4). Control valve rod oil delivery to solenoid valve **(1)** in PTO synchronized with gearbox position.	**(9)**. Delivery line pressurized (**4WD** disengaged).
(5). **4WD** disengagement command solenoid valve activated.	**(10)**. Outlet line to transmission casing.
	(11). Delivery line from the pump to the services control valve **(7)**.

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