SERVICE MANUAL

TI4.70 RS
TI4.80 RS
TI4.90 RS
TI4.100 RS
Tractor

Part number 51427768
English
July 2018

NEW HOLLAND AGRICULTURE

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1 : Introduction

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2.82 Special tools

2.82.1 Special tools

code	Description	Quantity
68400012A	Cylinder sleeve puller tool	1
68400015A	Tool for installing/removing camshaft and crankshaft bushes	1
68410006A	Crankshaft installation tool	1
68410012F	Tool for removing/installing hydraulic tappets	1
68420016F 68420015F	XZN wrench for lateral head screws (12 mm) XZN wrench for centre head screws (14 mm)	1
68420019F	Tool for angular wrench	1
68460003A	Head aligN ment pins	1
68480003A	Crankshaft immobiliser tool (installed in place of starter motor)	1
68490007A	Cylinder sleeve height measurement tool	1
68460005F	Flywheel aligN ment pins	1
68400038F	Crankshaft gear extractor tool (for crankshafts with conical front shank)	1
68410013G	Tool for installing front crankshaft oil seal	1
68400040F 68400046F 68400044F 68400045F 68400045G	Injector puller tool (complete) Housing Pin Fork R750 EURO 4 / IE3 Fork R750 EURO 5	1
68410010F	Tool for installing rear crankshaft oil seal	1
68480013F	Tool for synchronising counter-rotating counterweights (only for engine versions with counter-rotating counterweights)	1
6844009F 68440010F	Plate for testing hydraulic seal tightness of heads Plate for testing hydraulic seal tightness of heads complete with O-rings	1
68420022F	Tool for removing alternator idler pulley	1
68490038F	**FOR EURO 4 ENGINES ONLY** Furnace for cleaning diesel particulate filter 3kW - 220V	1
68490035F 68490036F 68490037F 68490040F	Engine test wiring harness R750EU4-EU5 / TE3 / IE3 / TE4/ISE4/IE4 (without throttle potentiometer and engine control unit) (with throttle potentiometer and without engine control unit) (with throttle potentiometer and with engine control unit) Engine test wiring harness R750EU6	1
68490034F	Adapter for engine compression testing	1

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12.5.9 S009 - Brakes

Electrical wiring diagram: Brakes

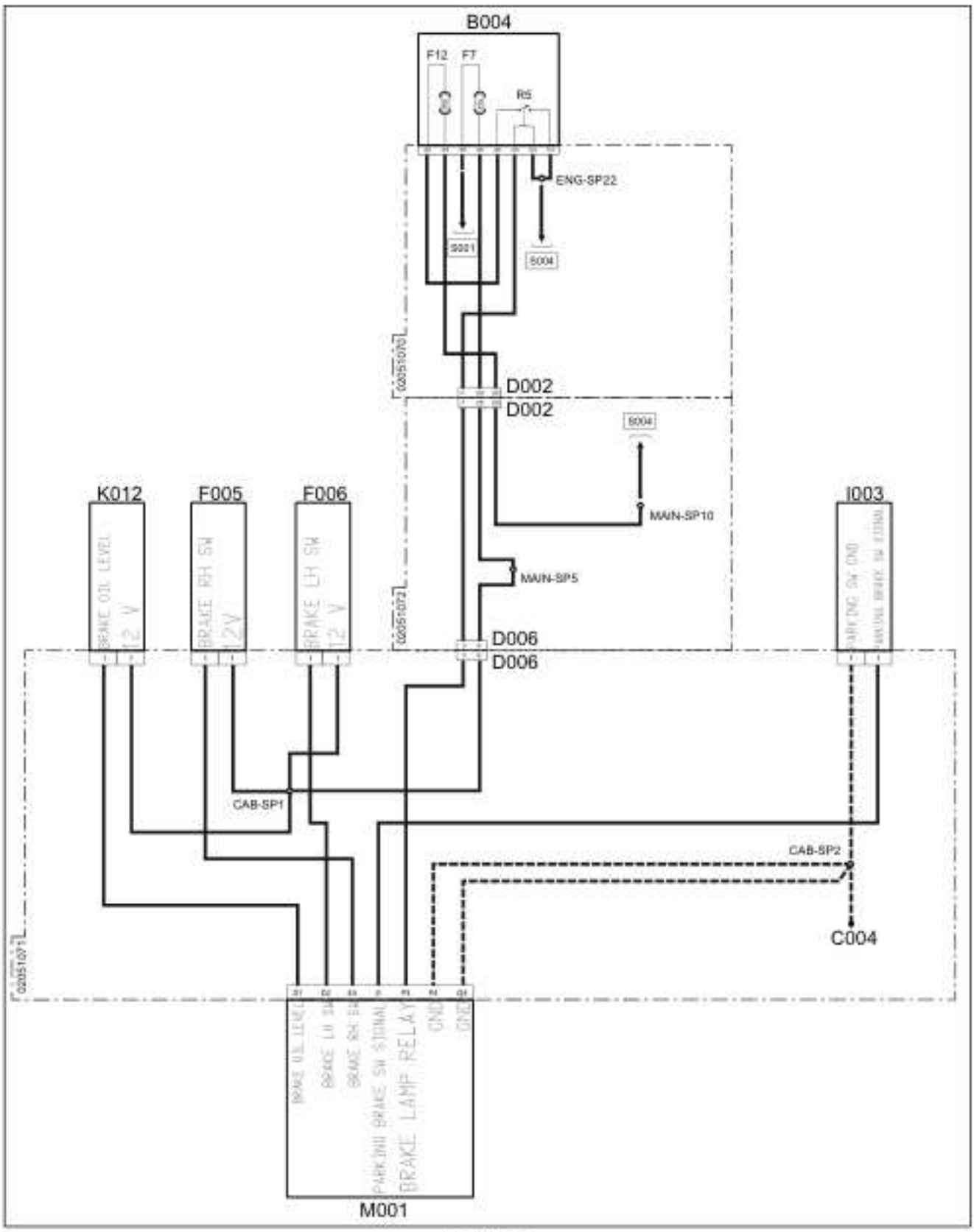


Fig. 12.98

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3170 - DPF temperature sensor: short circuit to battery or open circuit

Description of fault

The ECU engine control unit detects a short circuit to battery or open circuit fault in the circuit of the DPF temperature sensor

Severity of error

Medium

Additional information

 Amber lamp illuminated

The ECU engine control unit monitors the readings of the DOC (upstream) and DPF (downstream) temperature sensors to determine if the DOC is working correctly. The DOC sensor should produce a temperature reading lower than or the same as the reading produced by the DPF sensor. If it does not, this means that the DOC is not working correctly

Behaviour of system

No engine limiting strategy implemented by the control unit

Checks necessary

1 - Check if there are any other error codes
   - If there are any other error codes, also refer to these codes to facilitate correct diagnosis of the problem
   - If there are no other error codes, proceed to the next step

2 - Use the diagnostic tool to monitor the DPF temperature sensor (see the documentation of the diagnostic tool)
   - Monitor the temperature in the intake manifold to check that the DOC temperature sensor is working correctly
   - If the problem persists, proceed to the next step

3 - Check that the connectors of the DPF temperature sensor and of the engine control unit, and any intermediate interface connectors, are fitted and connected correctly
   - Disconnect any badly connected connectors and reconnect correctly
   - If all the connectors are connected correctly, proceed to the next step

4 - Check that the terminals are not contaminated with dirt or water. Dirt or water in the terminals may be the result of cleaning the engine with a pressure washer, loose connections or poor connector seal integrity.

5 - Contact the technical support service if the problem persists

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2.53.4 Assembly

- Lubricate the interior of the piston pin bush and the piston pin.
- Assemble the piston onto the connecting rod. (See the section "Connecting rod").
- Fit the piston pin in the piston and fit the circlip.
- Secure the assembled connecting rod and piston in a vice

Warning

Always fit the piston rings with any identification codes or markings ("CTOP", "PIP" or a reference dot) facing towards the top of the piston.

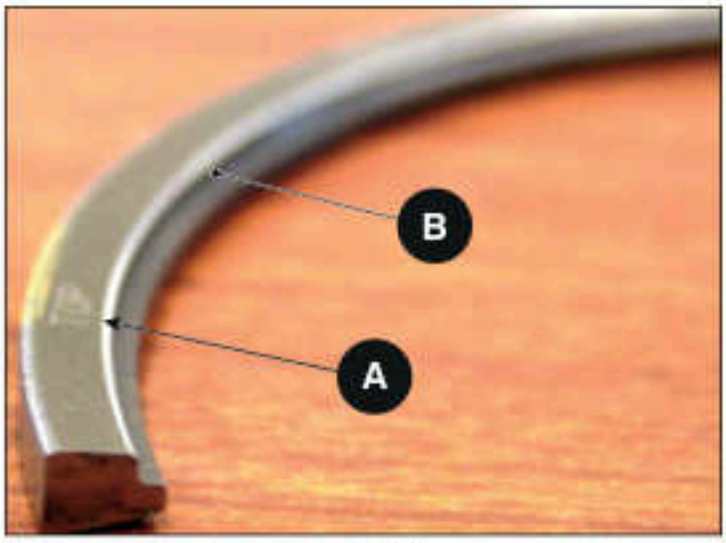


Fig. 2.186

A - identification codes or markings on piston rings
B - First compression ring

- Install the oil scraper ring in the bottom seat on the piston.
- Use a commercially available tool to install the oil scraper ring.
- Press the ring by hand to fit it correctly in the seat, and rotate the ring to check that it turns freely without sticking.
- Use the same tool to fit the second compression ring in the middle seat. The shorter end of the bevel must face towards the bottom of the piston.
- Press the ring by hand to fit it correctly in the seat, and rotate the ring to check that it turns freely without sticking. 10. Use the same tool to fit the first compression ring in the top seat.
- Press the ring by hand to fit it correctly in the seat, and rotate the ring to check that it turns freely without sticking.

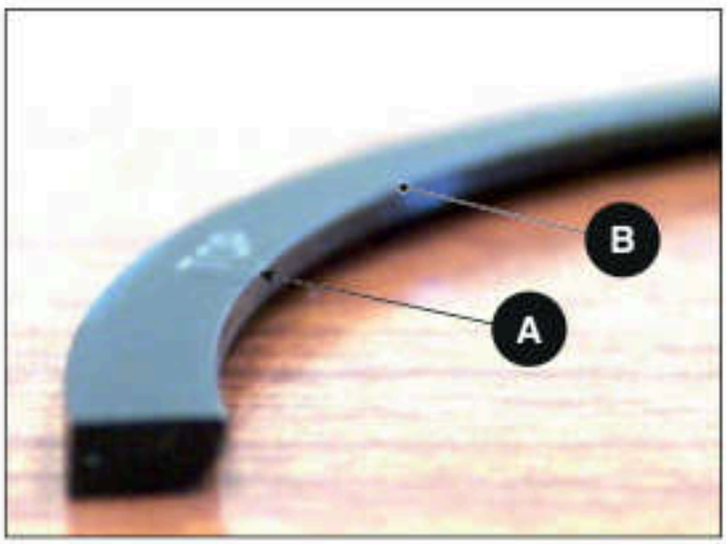


Fig. 2.187

A - identification codes or markings on piston rings
B - Second compression ring

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Fit the swinging drawbar carrier (3) with the plate (4).

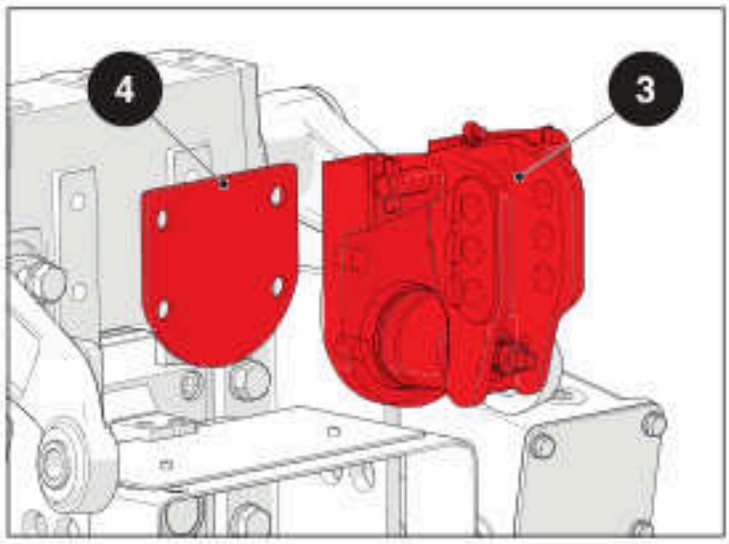


Fig. 10.14

Fit the washers (2) and tighten the screws (1).

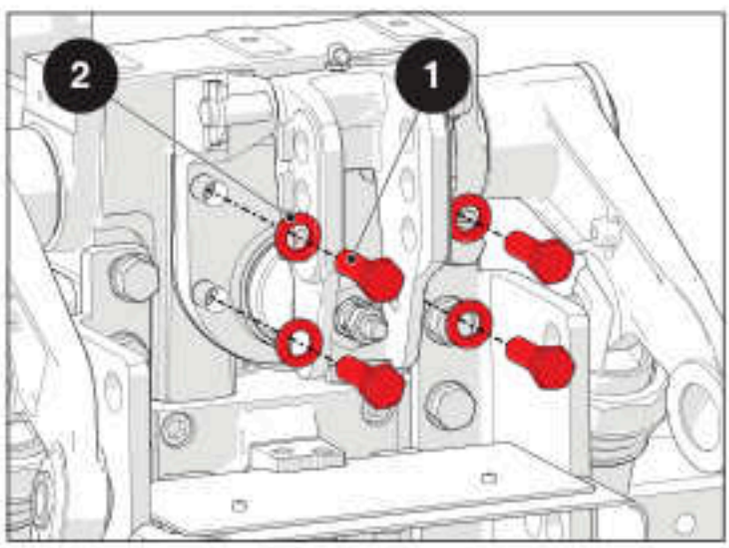


Fig. 10.15

Fit and connect the draft control rod.

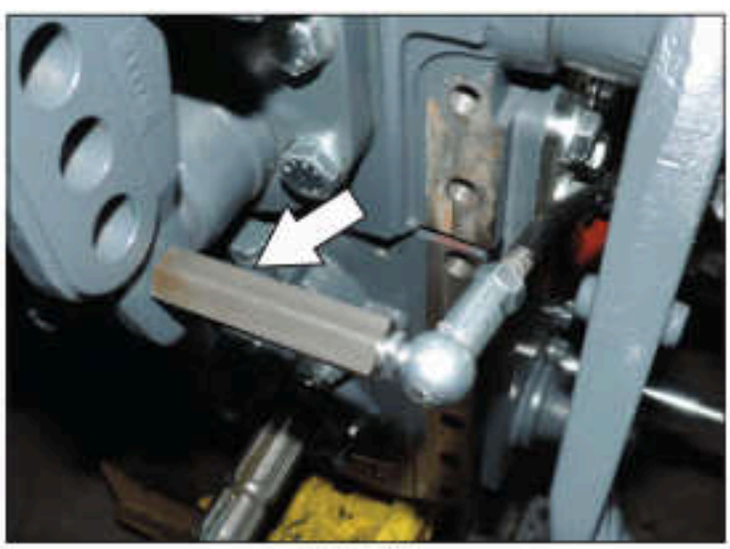


Fig. 10.16

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11.2.1.2 General hydraulic circuit diagram

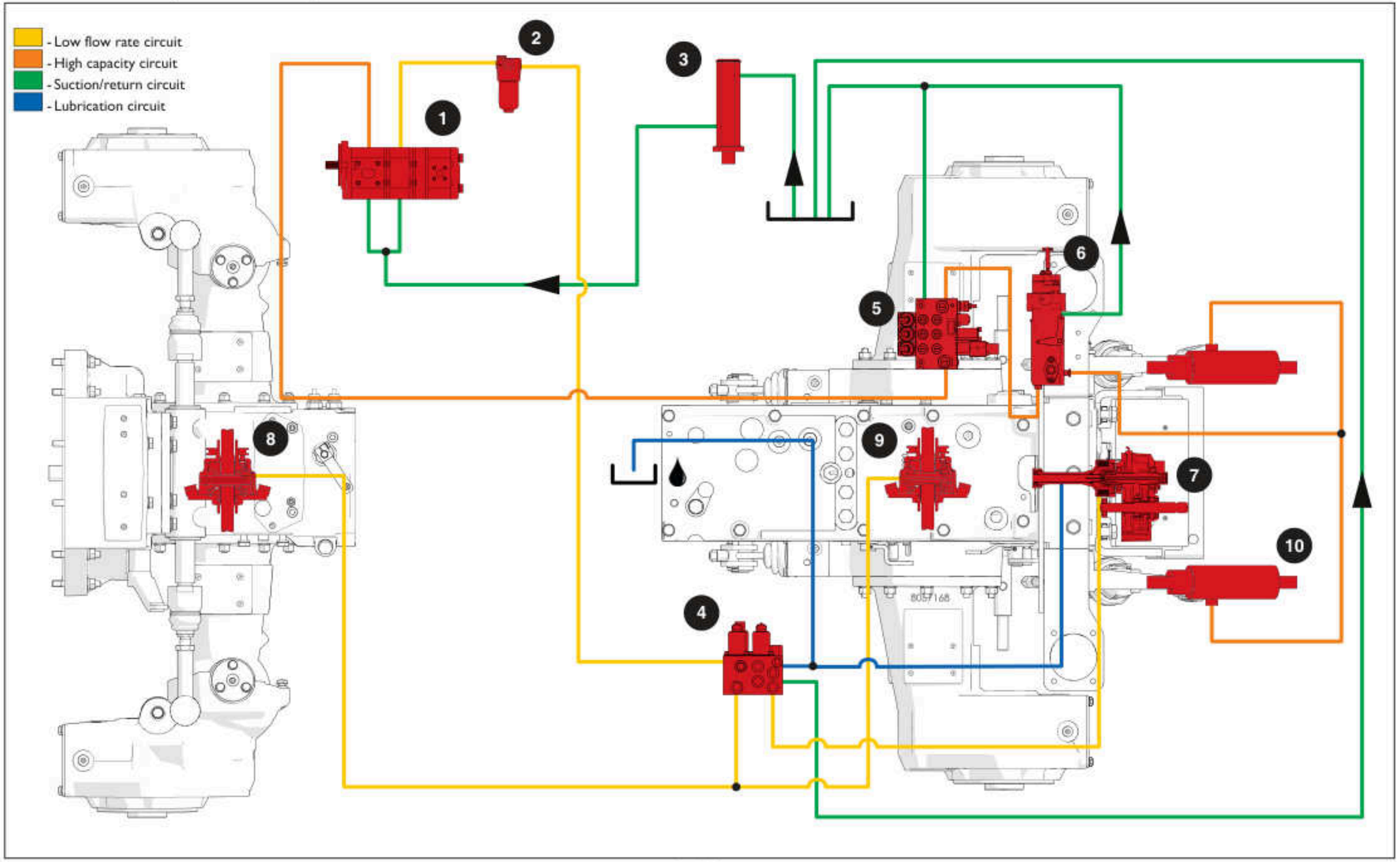


Fig. 11.2

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