

PUMA 165

PUMA 180

PUMA 195

PUMA 210

Tractor with/without Multicontroller

SERVICE MANUAL

Part number 87628095_CNA

English

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CASE II
AGRICULTURE

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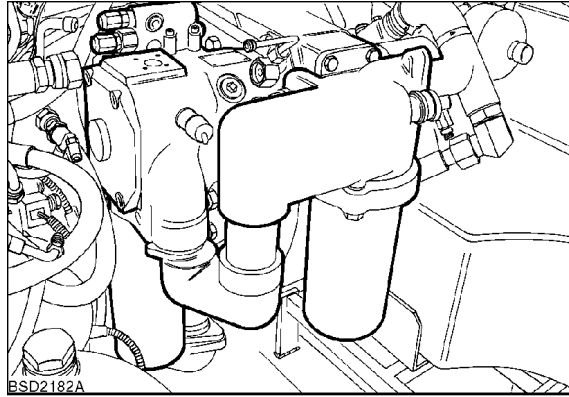
The high-pressure circuit illustrated in **PRIMARY HYDRAULIC POWER SYSTEM - Hydraulic schema (A.10.A)** comprises the following components:

Hydraulic pump unit

The Load Sensing valve with pressure and oil flow control valves, oil pump and priority valve for the steering hydraulics, intake filter and main oil filter as well as various electrical switches are integrated in the high-pressure variable displacement pump.

Figure 20 shows the main pump unit.

NOTE: The oil pump for the steering hydraulics is shown separately to the main pump unit.

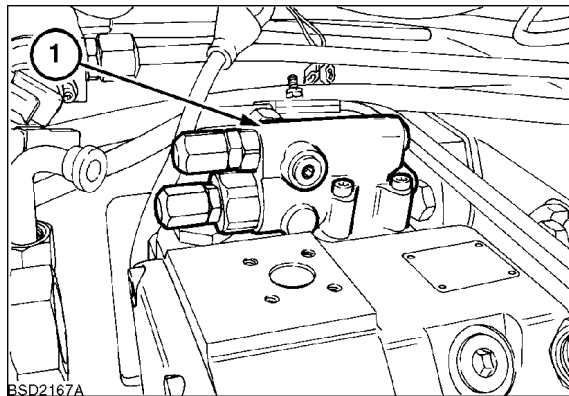


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The Load Sensing valve block consists of a high-pressure control valve (1) and an oil flow control valve. The Load Sensing valve receives hydraulic control signals from the driven components and transmits these to the oil pump, which then matches the supply volume to the system's requirement for oil.

The Load Sensing valve block is illustrated in Figure 21.

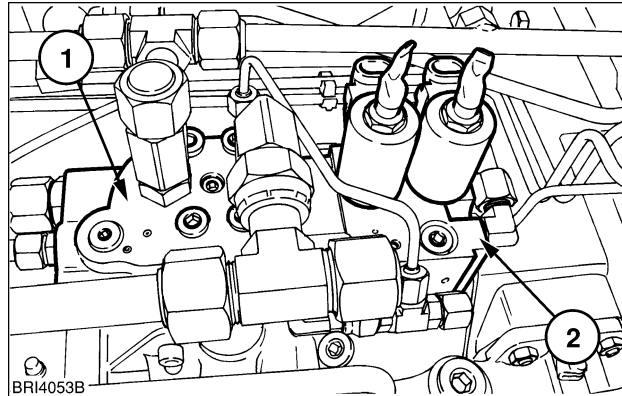


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Priority valve

The priority valve (1) on the top of the main oil pump channels high-pressure oil to the control block and to the trailer brake valve (where fitted). It also supplies the low-pressure control valve with low-pressure oil. If a front axle suspension is installed, a levelling valve (2) is mounted on the priority valve, which delivers an oil flow to the control valve for the suspension (Figure 30) and to the cylinder.



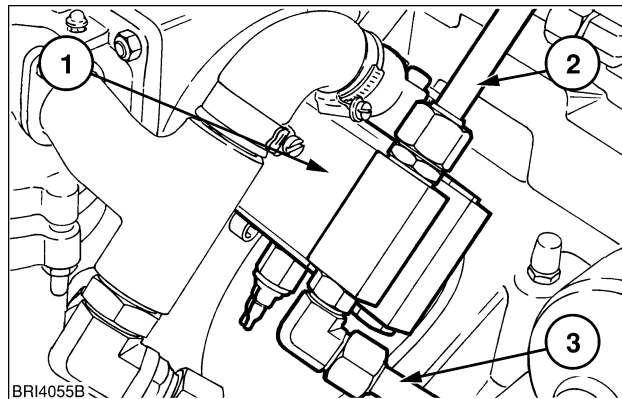
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Steering hydraulics oil pump

Figure 23 shows the oil pump for the steering hydraulics.

The oil pump for the steering hydraulics is configured as a separate unit, but it is also driven by the same geared wheel as the main oil pump.

1. Oil pump for the steering hydraulics
2. Connection to the control pump
3. Line to the oil cooler

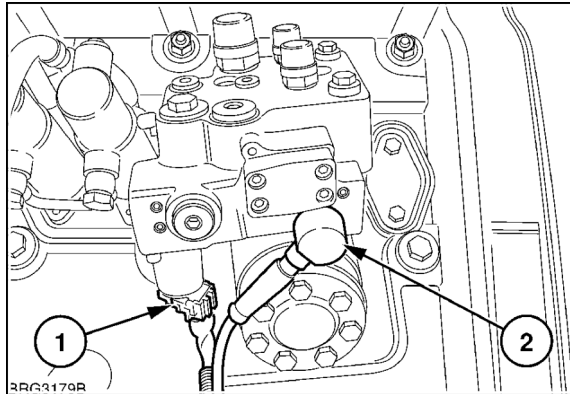


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Control valve of the Turn Assist (where fitted)

The Turn Assist, which is available as an optional extra, supplies increased responsiveness from the steering, when needed, e. g. during front loader operations.

From the straight ahead position, Turn Assist will provide full right or left-hand steering lock with a 8 ° movement of the steering wheel.

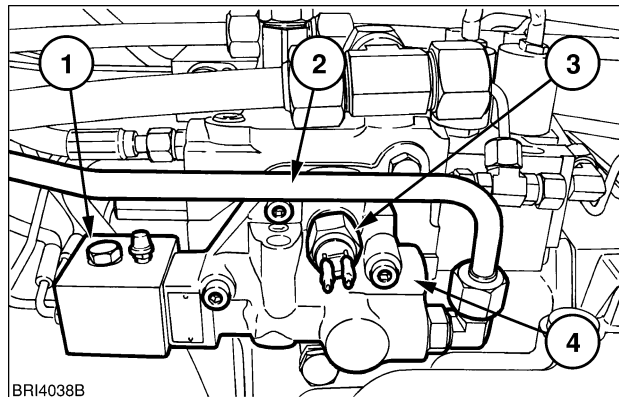


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Trailer brake valve

The trailer brake valve is under the cab and is mounted on the priority valve at the top of the main pump unit. The trailer brake valve allows pressure oil to flow to the trailer brake system, when both of the tractor's brake pedals are depressed.

Figure 25 shows the trailer brake valve.



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