

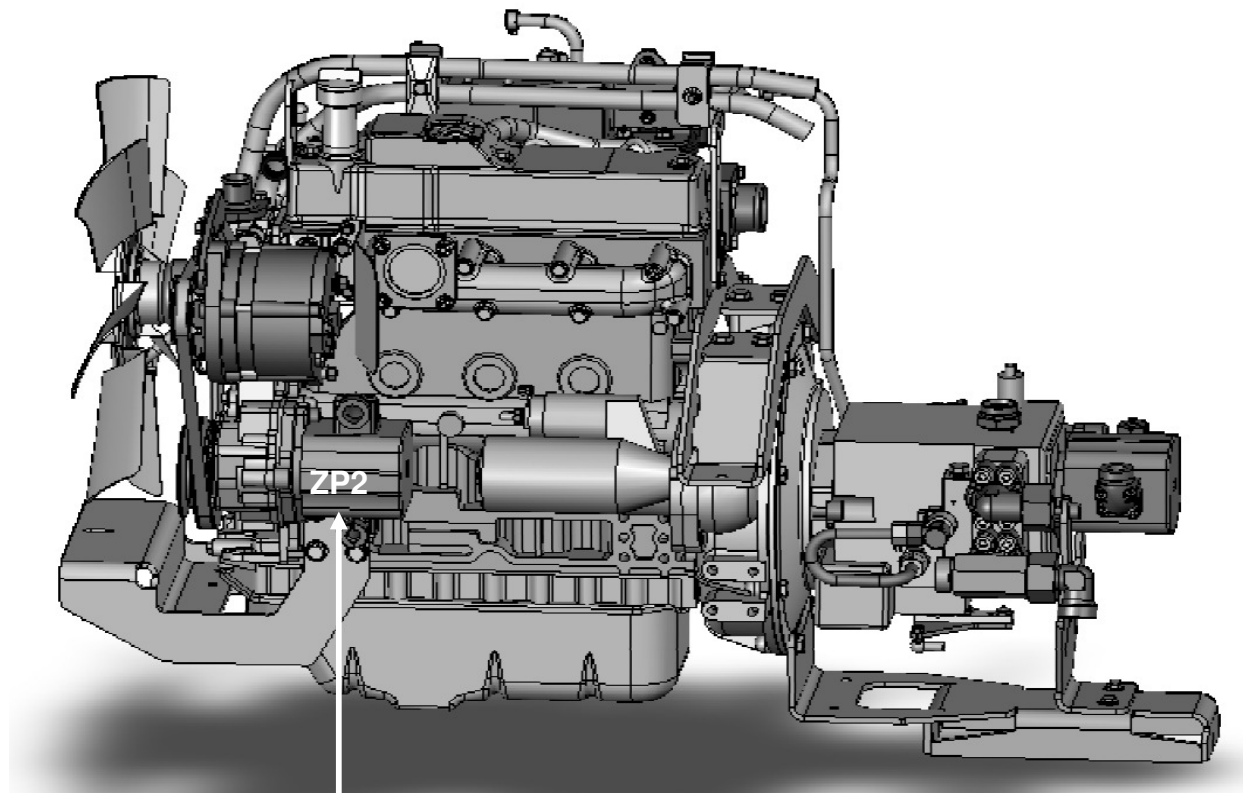
4.0.1 Steering

Contents Steering

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4.0.1 Steering

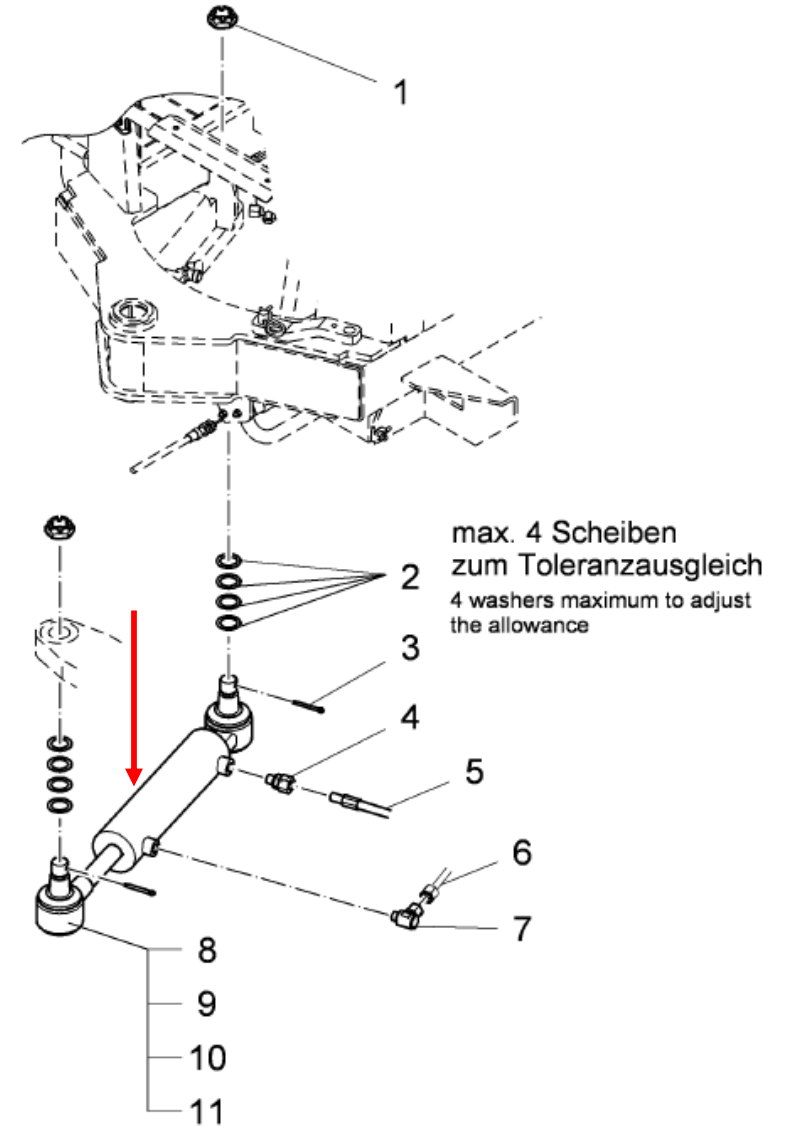
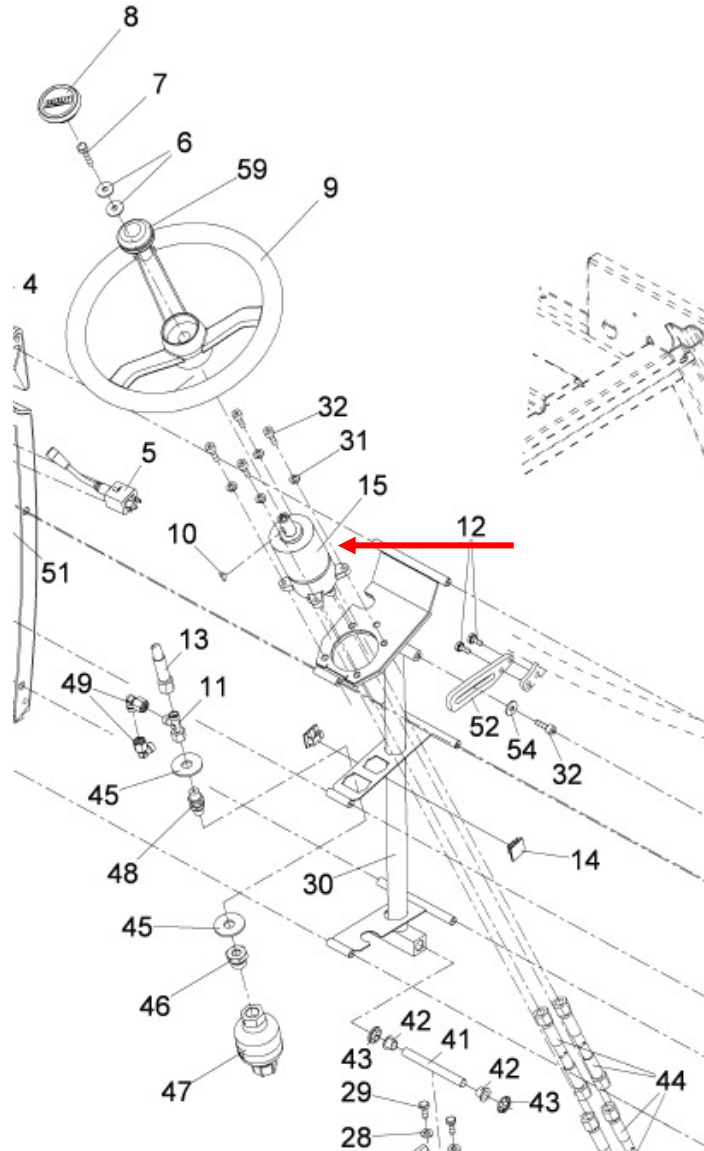
Gear pump 2 (ZP2) pump circuit 2, oil supply for work hydraulics and steering



Gear pump 2 (ZP2), type: Sauer - Sundstrand SNP 2/17
Feed capacity: 36 l/min. at 2212 rpm on auxiliary drive from Yanmar engine
Oil supply for pump circuit 2, work hydraulics:
Side brush drive or spreader drive
Raise/Lower attachment support; raise/lower dirt hopper or platform
Pivot circular brush in/out
Also for oil supply to the steering at 8 l/min.

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Steering – steering unit and steering cylinder



4.0.1 Steering

Steering unit

SEE ALSO CATALOGUE FOR HYDROSTATIC STEERING COMPONENTS

5x6,5 DIN 6888 (Key not incl.)

ISO symbol

Sauer-Danfoss symbol

Check valve in P	INCLUDED
Shock valves	175-195 bar
Pressure relief valve	120-125 bar
P,T,L and R	9/16-18 UNF ORFS ISO 8434-3
BLACK PAINTED	

Scale 0 10 20 30 40 50 60 70 80 90 100mm

SAUER DANFOSS

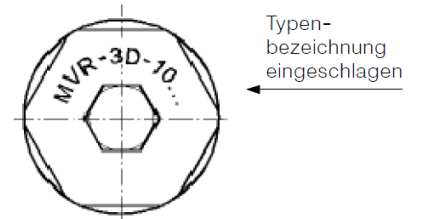
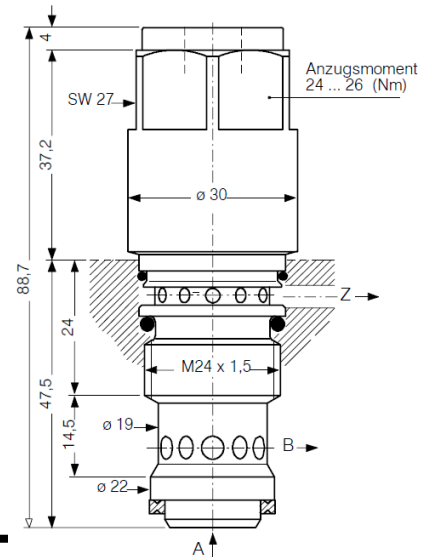
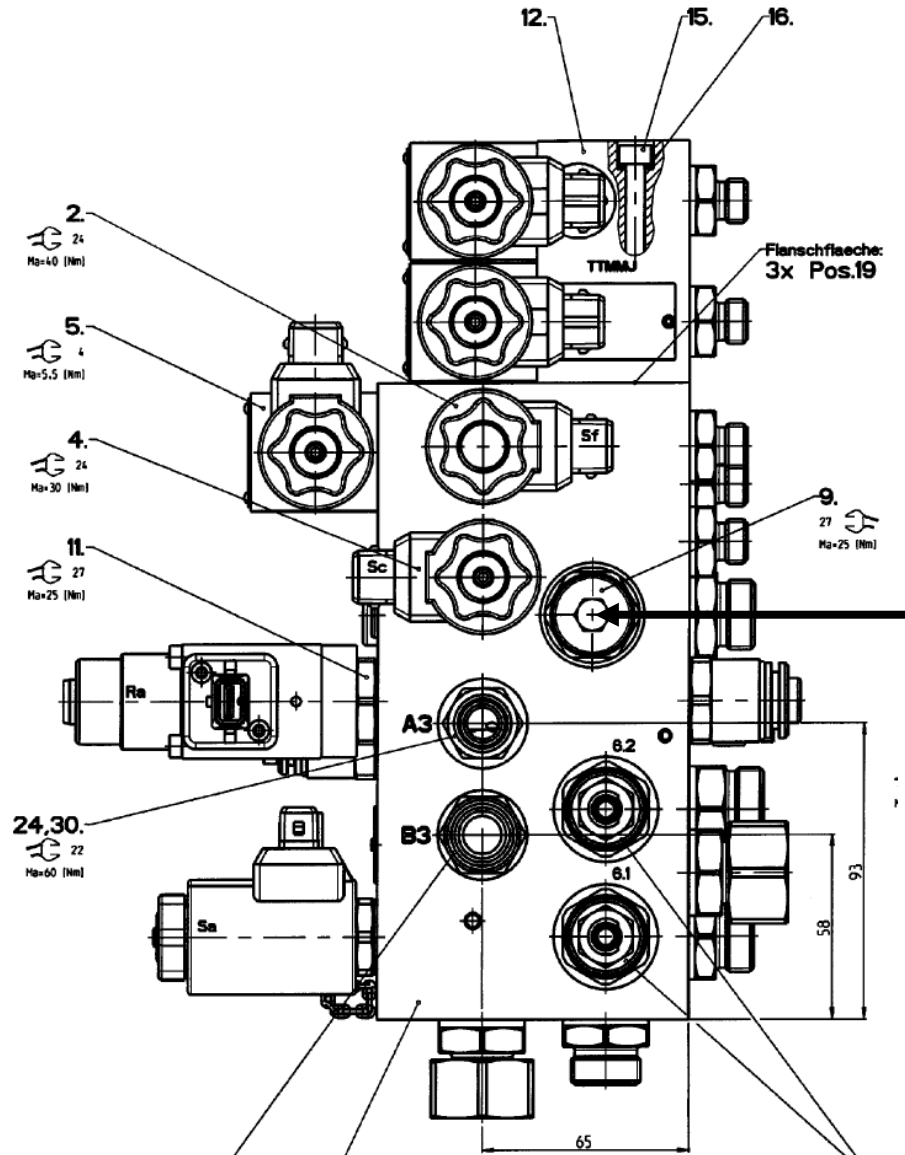
1:1
Date 28.06.2005
Design BP / Approv. BP

Mini steering unit
Type OSPM 80 ON

No. 150L0182

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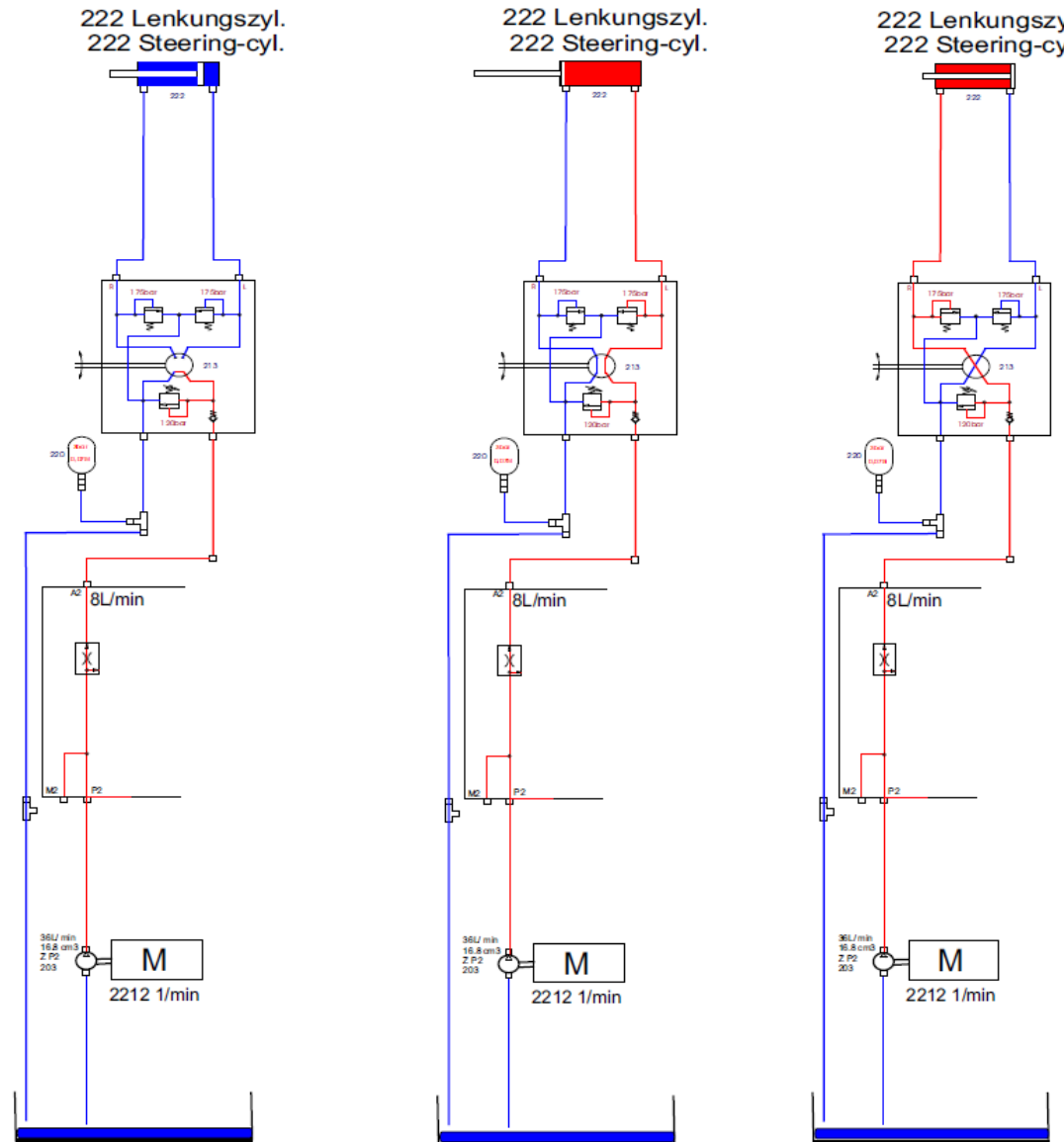
Position of current regulation valve and flow distributor 8l for steering in main valve manifold



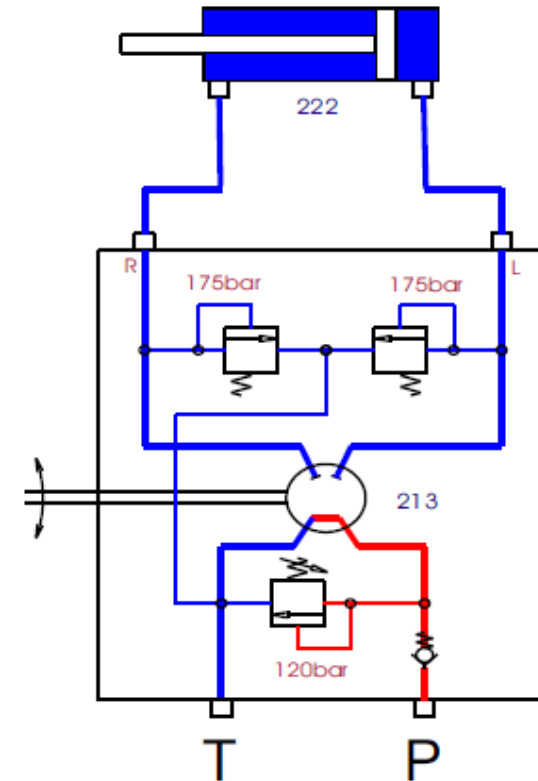
Flow distributor (Pos.9)
 steering/work hydraulics
 steering 8l/min.
 work hydraulics valve manifold
 26l/min.

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Hydraulics – function diagram - steering



222 Lenkungszykl.
222 Steering-cyl.



213 Lenkeinheit
213 Steering Unit

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Steering - functional faults and fault location

I. The steering is sluggish or jumps when the hydraulic oil is warm:

Corrective measure: Check the steering cylinder for internal leaks!

To do this, turn the steering wheel as far as possible to press in the steering cylinder and disassemble the return flow hydraulic hose. Hold the steering wheel to keep the steering cylinder in this position. No oil should escape from screw connection of the hydraulic cylinder. If oil escapes, the seal in the steering cylinder is defective. In this case, replace the hydraulic cylinder.

If no oil escapes, repeat the test in the other steering direction.

Attention: Reassemble the hydraulic hose beforehand, otherwise oil will escape!

If no oil escapes in the other steering direction either, measure the hydraulic oil pressure using a manometer.

Note: The oil must be warm to complete the pressure test (50- 55 °C). Never measure hydraulic oil when it is cold!

The hydraulic oil pressure should be approx. 120 bar when the steering is locked. If the measured value is under 100 bar or the measured value constantly changes, disassemble the flow distributor in the main valve manifold and inspect it for signs of dirt and damage. Clean the flow distributor or replace it, in the event of damage.

II. The steering emits noises:

Corrective measure: Check as in the case of a **“The steering is sluggish or jumps when the hydraulic oil is warm”** fault (see Section 1).

III. If all the tests have been completed (steering cylinder checked for internal leaks + flow distributor) and there is no sign of improvement, change the steering unit.

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Notes



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Notes

