Description

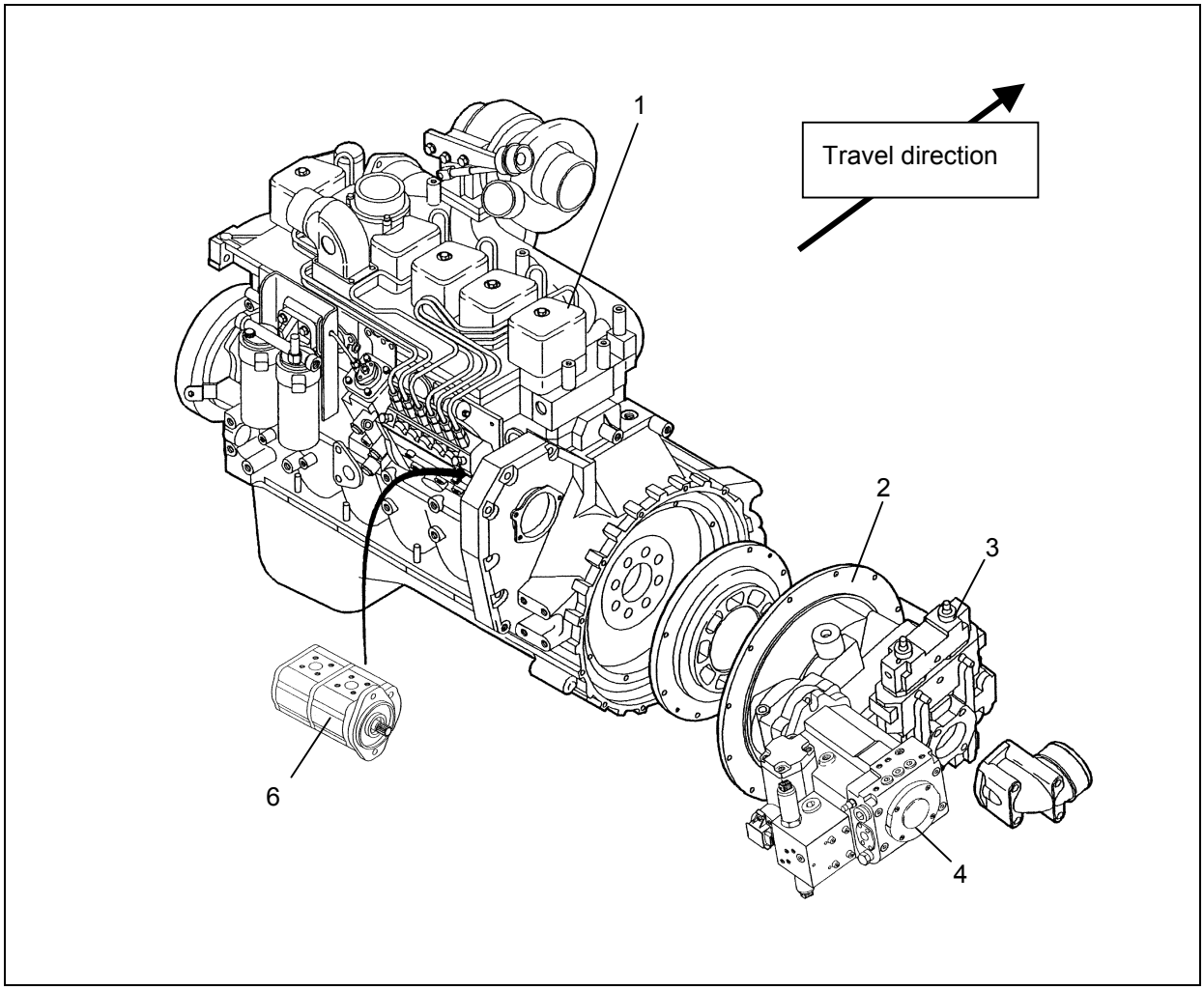

Fig. 2

The drive unit is essentially composed of the diesel engine, the multicircuit pump unit, the auxiliary pumps and the hydraulic reservoir.

The diesel engine (1) is a CNH engine belonging to the **N**ew **E**ngine **F**amily series (NEF). It is a 6-cylinder inline engine with exhaust turbocharger and downstream charge air cooler.

The multicircuit pump unit (2) is driven from the engine via a flexible coupling and comprises variable displacement twin pump (3) with integrated pilot-control pump and slewing pump (4).

A double gear pump (6) is mounted on the engine P.T.O.

The first pump is provided for the slewing circuit, the fan drive and the optional replenishment unit. The second pump feeds the braking circuit and the grab rotation motor.

The hydraulic reservoir (20) supplies the pumps with clean and cooled oil. The variable displacement twin pump (3) draws in oil through port S. The integrated pilot-control pump draws in oil from the housing of the variable displacement twin pump.

The auxiliary pump (feed pump) integrated in slewing pump (4) draws in oil through a separate line.

The single and (alternatively) the double pump draw in oil from the reservoir through an independent line.

Multi-circuit pump unit (No. 2)

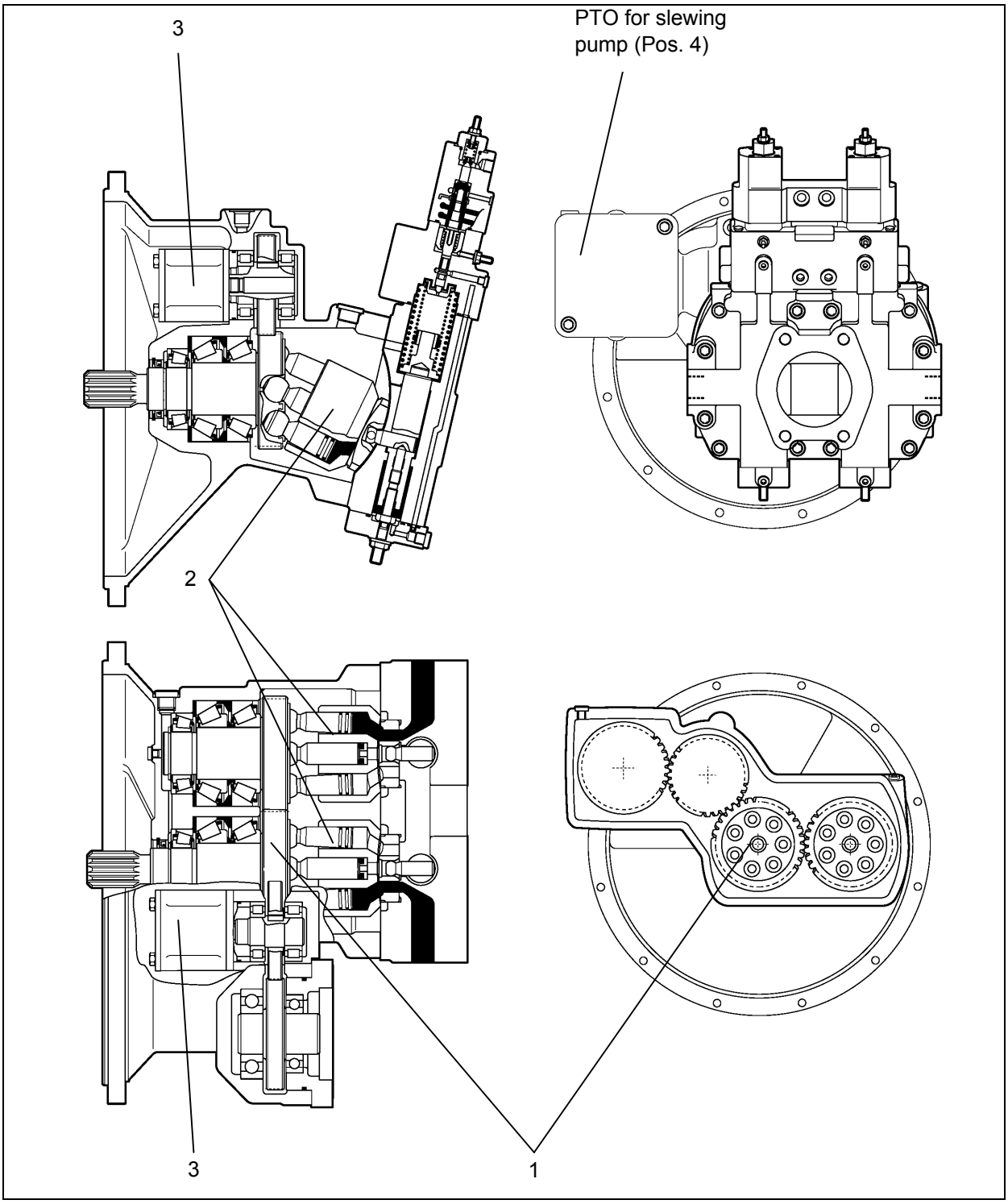

Fig. 3

Description

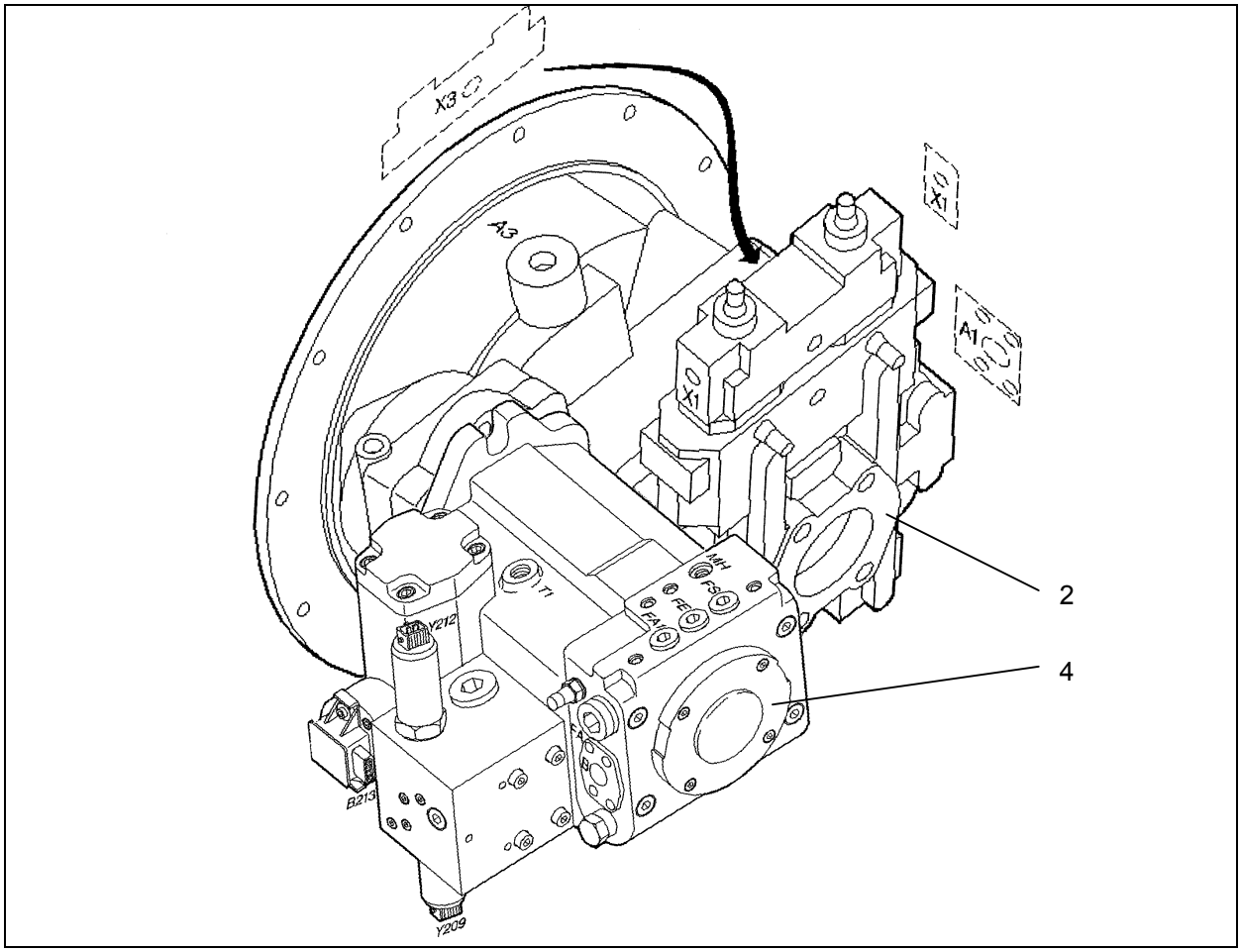

Fig. 4

The pump unit comprises a transfer gearbox, the variable displacement twin pump, the slewing pump and a pilot-control pump.

The transfer gearbox (1) is driven from the engine via a flexible coupling.

Two of the four gears of the transfer box constitute the drive of the variable displacement twin pump (2). An intermediate gear drives the pilot-control pump (3) and the PTO to the slewing pump (4).

The transmission ratio between the drive and the variable displacement pump and the slewing pump is 1.

The variable displacement twin pump (2) consists of two axial piston pumps in bent-axis design housed in the same casing. Each of the pumps has its own output regulator with which the discharge volume can be varied independently of the other pump.

The pilot-control pump (3) is a gear pump.

The slewing pump (4) is an axial piston pump in swash-plate design. The tilting angle of the swash-plate determines the superstructure slewing speed. The tilting direction of the swash-plate determines the slewing direction of the superstructure.