

Troubleshooting**ZF 2500 Series**

Fault	Possible causes	Corrective measures
Transmission oil temperature too high (Measuring points 11*, 12* and 41*)	<ul style="list-style-type: none"> • Insufficient water flow through cooler • Sludge in oil cooler • Clutch disc damage • Gear ratio not properly engaged, clutch slipping 	<ul style="list-style-type: none"> → Increase water flow → Clean oil cooler, see Maintenance Work 169 → Check clutch → Adjust shift mechanism
Transmission oil temperature too low	<ul style="list-style-type: none"> • Excessive water flow through cooler 	<ul style="list-style-type: none"> → Reduce water flow
Oil pressure upstream of filter too high (Measuring point 5*)	<ul style="list-style-type: none"> • Clogged filter 	<ul style="list-style-type: none"> → Clean filter and drain off oil sludge
No operating oil pressure (Measuring points 2*, 21* and 27*)	<ul style="list-style-type: none"> • No oil in transmission • Wrong direction of rotation at transmission input • Defective display unit 	<ul style="list-style-type: none"> → Add oil → Use special transmission version → Rectify fault
Operating oil pressure too low (Measuring points 2*, 21* and 27*)	<ul style="list-style-type: none"> • Low pressure slide jamming • Oil viscosity too low • Spring from shift pressure valve contracted • Incorrect shift pressure valve setting • Defective oil pump • Filter safety valve leaking • Time switch for pressure modulation defective • (Trolling) flow. limiting valve jamming 	<ul style="list-style-type: none"> → Loosen piston → Use a recommended oil grade (see List of Lubricants) → Replace → Reset using shim → Replace oil pump → Check for clogging/wear → Replace piston and sealing element → Loosen piston
If the fault cannot be rectified, the lube oil supply to the transmission is also at risk. Proceed at reduced engine speed until repairs can be carried out.		
Operating oil pressure too high (Measuring points 2*, 21* and 27*)	<ul style="list-style-type: none"> • Oil viscosity too high 	<ul style="list-style-type: none"> → Use a recommended oil grade (see List of Lubricants)
Drive interrupted between transmission input and output; clutch not transmitting torque	<ul style="list-style-type: none"> • Incorrect shift angle for mechanical transmission actuation • No operating oil pressure 	<ul style="list-style-type: none"> → Adjust setting → See remedy for no or insufficient operating oil pressure

* see Monitoring Diagram, Section 3.1 and 3.2 and Transmission Views Section 2