

## 10 Diagnosis code list (SPN)



### Notice!

Contact technical support if the display element displays error codes (SPNs) that are not in the following list!

Designation	BMK
Sensors, signal transmitters (electrical system)	B
Supply contacts (electrical system)	BAT
Control valves (hydraulics)	C
Electronics (electrical system)	D
Lights (electrical diagram)	E
Fuse (electrical system)	F
Supply (electrical system)	G
Ground (electrical system)	GND
Indicator lights (electrical system)	H
Jumper link (electrical system)	J
Relays (electrical system)	K
Auxiliary components (hydraulics)	L
Drives (electrical system)	M
Electronics (electrical system) (20 x per control unit)	N
Instruments (electrical system)	P
Filters (hydraulics)	Q
Resistors (electrical system)	R
Switches (electrical system)	S
Connection points	SP
Units (hydraulics)	T
Amplifier (electrical system)	U
Diodes (electrical system)	V
Antenna (electrical system)	W
Connectors (electrical system)	X
Socket (electrical system)	XX
Solenoids (electrical system)	Y
Cylinders (hydraulics)	Z

Designation	BMK	SPN range	Controller	Source address [hex]
<b>Sensors, signal transmitters (electrical system)</b>	<b>B</b>	<b>517000-517399</b>		
Fuel indicator	B001	517000		
Horn	B002	517001		
Backup warning system	B003	517002		
Front axle steering sensor	B004	517003		
Rear axle steering sensor	B005	517004		
Engine temperature sensor	B006	517005		
Hydraulic oil temperature sensor	B007	517006		



Load sensor – strain gauge	B008	517007		
Speed sensor	B009	517008		
Diesel engine speed	B010	517009		
Loudspeaker	B011	517010		
Loudspeaker	B012	517011		
Proximity switch	B013	517012		
Engine preheating system temperature sensor	B014	517013		
Coolant level sensor	B015	517014		
Fan control temperature sensor	B016	517015		
Gearbox input speed transmitter	B017	517016		
Buzzer	B018	517017		
Quickhitch buzzer	B019	517018		
Camshaft speed	B020	517019		
Charge air sensor (temperature/pressure)	B021	517020		
Rail/fuel pressure sensor	B022	517021		
Engine oil pressure sensor	B023	517022		
Fuel low pressure sensor	B024	517023		
Crankshaft speed	B025	517024		
Telescopic boom sensor (extended, rear)	B026	517025		
Telescopic boom sensor (extended, middle)	B027	517026		
Position pickup for bucket repositioning	B028	517027		
Particulate filter temperature sensor	B029	517028		
Particulate filter temperature sensor	B030	517029		
Outside temperature sensor	B031	517030		
Cabin temperature sensor	B032	517031		
Air duct temperature sensor	B033	517032		
Fan control temperature sensor	B034	517033		
Pressure sensor (exhaust gas back pressure after turbocharger)	B035	517034		
Exhaust gas mass flow sensor	B036	517035		
Diesel particulate filter differential pressure	B037	517036		
DPF input temperature sensor	B038	517037		
Buzzer option	B039	517038		
Extend/retract telescopic boom scroll wheel (Hall sensor)	B040	517039		
3rd control circuit scroll wheel (Hall sensor)	B041	517040		
Forward/reverse travel scroll wheel (Hall sensor)	B042	517041		
Position sensor spool I	B043	517042		
Position sensor spool II	B044	517043		
Position sensor spool III	B045	517044		
Position sensor spool IV	B046	517045		
Position sensor spool V	B047	517046		
Position sensor spool VI	B048	517047		
Position sensor spool VII	B049	517048		
Travel direction identification position sensor	B050	517049		
Power brake sensor	B051	517050		
Compressed-air braking system sensor	B052	517051		



Atmospheric pressure sensor	B053	517052		
Accelerator pedal	B054	517053		
Charge-air pressure sensor	B055	517054		
Temperature sensor DOC intake temperature	B056	517055		
Intake air temperature sensor	B057	517056		
Combustion-chamber temperature sensor	B058	517057		
DPF outlet temperature sensor	B059	517058		
Control rod sensor	B060	517059		
Delta P sensor	B061	517060		
Weighing system proximity switch	B062	517061		
Weighing system proximity switch	B063	517062		
Piston base side pressure switch	B064	517063		
Piston rod side pressure switch	B065	517064		
Overload sensor	B066	517065		
Automatic engine speed setting sensor	B067	517066		
Fan speed sensor	B068	517067		
Loader unit swivel scroll wheel (Hall sensor)	B069	517068		
Length measuring sensor 1	B070	517069		
Length measuring sensor 2	B071	517070		
Loader unit/boom angle sensor	B072	517071		
Inching pedal pressure sensor	B073	517072		
Scroll wheel for auxiliary hydraulics (Hall sensor)	B074	517073		
Scroll wheel for attachment control (Hall sensor)	B075	517074		
Lambda probe	B076	517075		
EGR pressure sensor	B077	517076		
EGR GAS temperature sensor	B078	517077		
Air temperature sensor	B079	517078		
Exhaust-gas temperature sensor	B080	517079		
Fuel temperature	B081	517080		
Parking brake pressure sensor	B082	517081		
Engine (machine travel) speed sensor	B083	517082		
Engine (machine travel) temperature sensor	B084	517083		
Engine (work) speed sensor	B085	517084		
Engine (work) temperature sensor	B086	517085		
Front camera	B087	517086		
Reversing camera	B088	517087		
Sensor for valve spool position	B089	517088		
Exhaust temperature before SCR	B090	517089		
Urea pressure after pump	B091	517090		
Pressure DS DPF	B092	517091		
NOx sensor after SCR cat	B093	517092		
NOx sensor before SCR cat	B094	517093		
Urea quality, level, temperature	B095	517094		
Delta P venturi	B096	517095		
EGR temperature after venturi	B097	517096		



Quickhitch pressure sensor	B098	517097		
Joystick stabilizer blade	B099	517097		
Joystick swivel stabilizer blade	B100	517097		
<b>Supply contacts (electrical system)</b>	<b>BAT</b>	<b>517400-517449</b>		
Supply contact	BAT1	517400		
Supply contact	BAT2	517401		
Supply contact	BAT3	517402		
Supply contact	BAT4	517403		
Supply contact	BAT5	517404		
Supply contact	BAT6	517405		
Supply contact	BAT7	517406		
Supply contact	BAT8	517407		
Supply contact	BAT9	517408		
<b>Electronics (electrical system)</b>	<b>D</b>	<b>517450-517499</b>	<b>or see also Electronics N</b>	
Steering electronics	D001	516700 – 516799		0x1
Control lever electronics	D002	516500 – 516549	Joystick (right)	0xEB
			Joystick (right) red.	0xED
		516550 – 516599	Joystick (left)	0x92
			Joystick (left) red.	0x93
CAN keyboard 1	D003	519951 – 520000		0xC8
CAN keyboard 2	D004	520001 – 520050		0xC9
CAN keyboard 3	D005	520051 – 520100		0xCA
CAN keyboard 4	D006	520101 – 520150		0xCB
CAN keyboard 5	D007	520151 – 520200		0xCC
CAN keyboard 6	D008	520201 – 520250		0xCD
<b>Lights (electrical diagram)</b>	<b>E</b>	<b>517500-517549</b>		
Front right parking light	E001	517500		
Rear right light	E002	517501		
Front left parking light	E003	517502		
Rear left light	E004	517503		
High, low beam (right)	E005	517504		
High, low beam (left)	E006	517505		
Rear working light	E007	517506		
Rear working light	E008	517507		
Front working light	E009	517508		
Front working light	E010	517509		
Loader unit working light	E011	517510		
Chassis/telescopic boom working light	E012	517511		
Chassis/telescopic boom working light	E013	517512		
Interior light	E014	517513		
12 V power outlet	E015	517514		
Numberplate light	E016	517515		
Clearance lights	E017	517516		
Clearance lights	E018	517517		
Side working light	E019	517518		



Side working light	E020	517519		
Side working light	E021	517520		
<b>Supply (electrical system)</b>	<b>G</b>	<b>517550-517599</b>		
Alternator	G001	517550		
Battery	G002	517551		
Transformer	G003	517552		
<b>Indicator lights (electrical system)</b>	<b>H</b>	<b>517600-517799</b>		
High beam indicator light	H001	517600		
Preheating indicator light	H002	517601		
Engine temperature indicator light	H003	517602		
Engine oil pressure indicator light	H004	517603		
Alternator charge function indicator light	H005	517604		
Air filter indicator light	H006	517605		
Hydraulic oil filter indicator light	H007	517606		
Hydraulic oil temperature indicator light	H008	517607		
Safe load indicator light	H009	517608		
Hose burst valve indicator light	H010	517609		
3rd control circuit indicator light	H011	517610		
Differential lock indicator light	H012	517611		
4 wheel steering indicator light	H013	517612		
Front axle steering indicator light	H014	517613		
Synchronism indicator light	H015	517614		
Forward driving indicator light	H016	517615		
Reverse driving indicator light	H017	517616		
Parking brake indicator light	H018	517617		
Pressure accumulator indicator light (brake)	H019	517618		
Brake lights	H020	517619		
Brake lights	H021	517620		
Machine turn indicator light	H022	517621		
Rear attachment turn indicator light	H023	517622		
Front right turn indicator	H024	517623		
Rear right turn indicator	H025	517624		
Front left turn indicator	H026	517625		
Rear left turn indicator	H027	517626		
Rotating beacon	H028	517627		
Rotating beacon	H029	517628		
Reversing light	H030	517629		
Reversing light	H031	517630		
Vario indicator light	H032	517631		
Water separator indicator light	H033	517632		
Coolant level indicator light	H034	517633		
Crab steering indicator light	H035	517634		
Hydraulic oil level indicator light	H036	517635		
Travel electronics indicator light	H037	517636		
Oscillating axle interlock indicator light	H038	517637		



Rear stabilizer leg indicator light	H039	517638		
Front stabilizer leg indicator light	H040	517639		
Right stabilizer leg indicator light	H041	517640		
Left stabilizer leg indicator light	H042	517641		
Indicator light hydraulic functions OFF (overload)	H043	517642		
Diesel engine electronics indicator light	H044	517643		
Front socket indicator light	H045	517644		
Diesel particulate filter indicator light	H046	517645		
Caution indicator light	H047	517646		
Front axle sensor indicator light	H048	517647		
Rear axle sensor indicator light	H049	517648		
Boost pressure indicator light	H050	517649		
Manual throttle indicator light	H051	517650		
High-speed Vgmax indicator light (hare)	H052	517651		
Creep-gear Vgmin indicator light (snail)	H053	517652		
Indicator light (4 wheel drive switched on)	H054	517653		
Indicator light (front axle drive switched on)	H055	517654		
Indicator light (SCR lamp ash accumulation)	H056	517655		
Charge-air temperature indicator light	H057	517656		
Engine operation indicator light	H058	517657		
Maintenance display	H059	517658		
Indicator light (3rd control circuit switched over)	H060	517659		
Confirmation indicator light	H061	517660		
Indicator light (tipping trailer/coupling volume setting)	H062	517661		
Indicator light (volume setting of front additional control circuit)	H063	517662		
Indicator light (volume setting of rear additional control circuit)	H064	517663		
Indicator light (volume setting of continuous operation of 3rd control circuit)	H065	517664		
Indicator light (volume setting of 3rd control circuit joystick)	H066	517665		
Fuel consumption indicator light	H067	517666		
Error indicator light	H068	517667		
Regeneration indicator light	H069	517668		
Inside cabin pressure indicator light	H070	517669		
Bucket mode indicator light	H071	517670		
Fork-lift mode indicator light	H072	517671		
Crane mode indicator light	H073	517672		
Turtle indicator light	H074	517673		
Vertical lift indicator light	H075	517674		
Combined front left light	H076	517675		
Combinde front right light	H077	517676		
Combined rear left light	H078	517677		
Combined rear right light	H079	517678		
Indicator light (red)	H080	517679		
Indicator light (yellow)	H081	517680		
Indicator light (green)	H082	517681		
Bucket repositioning indicator light	H083	517682		



Automatic coupling indicator light	H084	517683		
Electrical function I indicator light	H085	517684		
Electrical function II indicator light	H086	517685		
Indicator light for compressed-air brake trailer	H087	517686		
<b>Relays (electrical system)</b>	<b>K</b>			
High-current relay	K001	519750		
High-current relay	K002	519751		
Reverse driving switching relay	K003	519752		
Forward driving switching relay	K004	519753		
Preheating high-current relay	K005	519754		
Preheating time lag relay	K006	519755		
Start high-current relay	K007	519756		
Time lag relay 1s cutoff solenoid	K008	519757		
Cutoff solenoid switching relay	K009	519758		
Turn indicator relay	K010	519759		
Air conditioning switching relay	K011	519760		
Condenser switching relay	K012	519761		
Condenser switching relay (1st/2nd speed)	K013	519762		
Vario time-lag relay	K014	519763		
Vario switching relay	K015	519764		
Front socket switching relay	K016	519765		
Switching relay (unlock)	K017	519766		
Switching relay (lock)	K018	519767		
Switching relay (extend telescopic boom)	K019	519768		
Switching relay (retract telescopic boom)	K020	519769		
Differential lock switching relay	K021	519770		
Load stabilizer switching relay	K022	519771		
Switching relay – wiper (1st speed)	K023	519772		
Switching relay – wiper (2nd speed)	K024	519773		
Intermittent-wipe relay	K025	519774		
Step-by-step relay	K026	519775		
Time lag relay 5 min	K027	519776		
Bucket repositioning switching relay	K028	519777		
Diesel engine valves switching relay	K029	519778		
Brake lights switching relay	K030	519779		
Fuel preheater switching relay	K031	519780		
Reversing fan switching relay	K032	519781		
Rear window heating high current relay	K033	519782		
Switching relay for overload protection	K034	519783		
Switching relay for overload protection	K035	519784		
Machine travel signals switching relay	K036	519785		
Machine travel signals switching relay	K037	519786		
Options switching relay	K038	519787		
Preheating indicator light switching relay	K039	519788		
Steering sensor relay	K040	519789		



Road travel relay	K041	519790		
Engine electronics switching relay	K042	519791		
Switching relay (joystick signal changeover)	K043	519792		
Switching relay (joystick signal changeover)	K044	519793		
Additional function switching relay	K045	519794		
Additional function switching relay	K046	519795		
Working light switching relay	K047	519796		
Working light switching relay	K048	519797		
Working light switching relay	K049	519798		
Working light switching relay	K050	519799		
Time-lag relay (automatic engine speed setting)	K051	519800		
Mini SPC switching relay	K052	519801		
Fan switching relay	K053	519802		
Hose burst valve switching relay	K054	519803		
Brake lights switching relay	K055	519804		
Load stabilizer switching relay	K056	519805		
Compressed air braking system switching relay	K057	519806		
1st/2nd speed switching relay	K058	519807		
Manual throttle switching relay	K059	519808		
Manual throttle switching relay	K060	519809		
Start interlock switching relay	K061	519810		
Low beam switching relay	K062	519811		
High beam switching relay	K063	519812		
Time lag relay 5 min (immobilizer)	K064	519813		
Time lag relay 5 min (immobilizer)	K065	519814		
Immobilizer switching relay	K066	519815		
Immobilizer switching relay	K067	519816		
Switching relay for overload protection	K068	519817		
Switching relay for overload protection	K069	519818		
Switching relay (diesel engine runs) (D+)	K070	519819		
Coolant level switching relay	K071	519820		
Auxiliary heating switching relay (night heater)	K072	519821		
Switching relay for operator presence switch 5 s	K073	519822		
3rd control circuit release	K074	519823		
Continuous operation of 3rd control circuit	K075	519824		
High-current relay	K076	519825		
Manual throttle switching relay	K077	519826		
Differential lock switching relay	K078	519827		
Tilt cylinder lock switching relay	K079	519828		
Switching relay for overload protection	K080	519829		
Switching relay for overload protection	K081	519830		
Switching relay for lowering throttle valve	K082	519831		
End position switching relay	K083	519832		
End position switching relay	K084	519833		
Angle detection switching relay	K085	519834		





PreSafe switching relay	K086	519835		
Time-lag relay (general)	K087	519836		
Fuel pump switching relay	K088	519837		
DPF pump switching relay	K089	519838		
DPF glow plug switching relay	K090	519839		
Parking brake switching relay	K091	519840		
Rear wiper switching relay	K092	519841		
Side wiper switching relay	K093	519842		
Switching relay for electrical supply of weighing system	K094	519843		
Switching relay chute FF (G)	K095	519844		
Switching relay chute FF (H)	K096	519845		
Switching relay chute RIGHT (C)	K097	519846		
Switching relay chute LEFT (D)	K098	519847		
Switching relay for switch position II	K099	519848		
Switching relay chute DOWN (F)	K100	519849		
Switching relay chute UP (E)	K101	519850		
Push button step-by-step relay (J)	K102	519851		
Air-conditioning compressor switching relay	K103	519852		
Switching relay for operator presence switch	K104	519853		
Parking brake switching relay	K105	519854		
Start repeat interlock switching relay	K106	519855		
Throttle orifice switching relay	K107	519856		
3rd control circuit release	K108	519857		
Relay (tilt-in stop)	K109	519858		
Reversing fan switching relay 2	K110	519859		
Oscillating-axle interlock switching relay	K111	519860		
Manual inching switching relay	K112	519861		
Start switching relay	K113	519862		
Rotating beacon	K114	519863		
Mirror heating	K115	519864		
Battery control	K116	519865		
Main contactor	K117	519866		
Loader unit swivel relay	K118	519867		
Engine stop relay	K119	519868		
Relay I regulator	K120	519869		
Relay II regulator	K121	519870		
Rear wiper relay	K122	519871		
Rear washer relay	K123	519872		
Inclination sensor relay	K124	519873		
Relay for feed module heating element	K125	519874		
Relay for suction line heating element	K126	519875		
Relay for throttle line heating element	K127	519876		
Relay for pressure line heating element	K128	519877		
Relay for SCR control	K129	519878		
Horn relay	K130	519879		



<b>Drives (electrical system)</b>	<b>M</b>	<b>517800-517899</b>		
Starter	M001	517800		
Front wiper motor	M002	517801		
Rear wiper motor	M003	517802		
Fan	M004	517803		
Front wipe/wash pump	M005	517804		
Rear wipe/wash pump	M006	517805		
Fuel-filling pump	M007	517806		
Engine speed regulation	M008	517807		
Fuel pump	M009	517808		
Air-suspension seat	M010	517809		
Mirror adjustment motor	M011	517810		
Electric compressor (reversing fan)	M012	517811		
Fan	M013	517812		
Auxiliary heating	M014	517813		
Side wiper motor	M015	517814		
Central lubrication system	M016	517815		
DPF air compressor	M017	517816		
Air conditioning fan	M018	517817		
Fan 1 inverter 1	M019	517818		
Fan 2 inverter 1	M020	517819		
Fan 3 inverter 1	M021	517820		
Fan 4 inverter 1	M022	517821		
Fan 1 inverter 2	M023	517822		
Fan 2 inverter 2	M024	517823		
Fan 3 inverter 2	M025	517824		
Fan 4 inverter 2	M026	517825		
Fan motor (machine travel)	M027	517826		
Fan motor (work)	M028	517827		
Urea pump	M029	517828		
<b>Electronics (electrical system) (20 x per control unit)</b>	<b>N</b>	<b>517900-518899</b>		
Drive electronics	N001	516400 – 516499	Primary	0x05
Operating hydraulics electronics/MVCU (main regulator)	N004	516100 – 516199	Primary	0xD
		517900 – 517919	Secondary	0xE
			Hydac	0x21
Diesel engine electronics	N005	520200 – 520224	Perkins	0x00
		523000 – 524124	Deutz	0x00
Automatic climate control/ACC	N008	518140 – 518159	Primary	0x90
Fan speed regulation	N009	518180 – 518199	Primary	0x91
Fan drive control unit/FDCU	N010	518000 – 518019	Primary	0x86
CAN – analog adapter/CCV CAN converter	N011	518160 – 518179	Primary	0x87
Overload management device/OMD	N013	516600 – 516699	Primary	0xE1
Chassis electronics/AVCU 2	N014	517940 – 517959	Primary	0x80
			Secondary	0x81



Cabin electronics/CCU	N015	516300 – 516399	Primary	0xB
			Secondary	0xC
		518020 – 518039	Hydac	0xB
Option electronics/AVCU	N016	516800 – 516899	Primary	0xF
			Secondary	0x10
		517920 – 517939	Hydac	0xF
Electronics 9 m option/LCU	N017	516900 – 516999	Primary	0x11
			Secondary	0x12
Telematic module/TCU	N018	518100 – 518199	Wacker	0x88
AVCU 3 regulator 3	N019	517960 – 517979	Primary	0x82
			Secondary	0x83
AVCU 4 regulator 4	N020	517980 – 517999	Primary	0x84
			Secondary	0x85
Vehicle security unit/VSU	N021	518080 – 518099	Primary	0x1D
Accelerator pedal/ACPU	N022	518120 – 518139	Primary	0x89
HMI interface	N023	518060 – 518079	Primary	0x91
14-pole front socket	N032	518079 – 518199	Hydac	0x22
<b>Instruments (electrical system)</b>	<b>P</b>	<b>518900-518949</b>		
Hour meter	P001	518900		
Fuel level indicator	P002	518901		
Diesel engine coolant temperature indicator	P003	518902		
Hydraulic oil temperature indicator	P004	518903		
Speedometer	P005	518904		
Safe load indicator	P006	518905		
Tachometer	P007	518906		
Particulate filter indicating instrument	P008	518907		
Auxiliary heating indicating instrument	P009	518908		
Compressed-air gauge (compressed-air braking system)	P010	518909		
Indicating instrument (display) for additional machine information	P011	518910		
Power brake pressure indicator	P012	518911		
Clock	P013	518912		
Combined indicating instrument	P014	518040 – 518059	Bauser	0x17
			ROAD MIM 1	0xE3
			ROAD MIM 2	0xE4
DPF interface	P015	518914		
Additional display for cameras	P016	518915	ctVideo	
<b>Resistors (electrical system)</b>	<b>R</b>			
Glow plug	R001	519901		
Inching pedal	R002	519902		
Creep gear potentiometer	R003	519903		
Pump control potentiometer	R004	519904		
Pull up resistor	R005	519905		
Window heating	R006	519906		
Accelerator pedal potentiometer	R007	519907		
2nd glow plug	R008	519908		



Fuel preheater	R009	519909		
Mirror heating	R010	519910		
Accelerator pedal	R011	519911		
Manual throttle	R012	519912		
Tilt in/out potentiometer	R013	519913		
Raise/lower potentiometer	R014	519914		
Potentiometer (raise/lower right stabilizer leg)	R015	519915		
Potentiometer (raise/lower left stabilizer leg)	R016	519916		
Bus terminating resistance	R017	519917		
Bus terminating resistance	R018	519918		
Potentiometer (oil quantity for additional control circuit)	R019	519919		
Resistor for hydraulic motor speed sensor	R020	519920		
Pull up resistor	R021	519921		
Mirror heating	R022	519922		
Potentiometer for loader unit monitoring	R023	519923		
Resistor	R024	519924		
Resistor	R025	519925		
Bus terminating resistance	R026	519926		
Bus terminating resistance	R027	519927		
Potentiometer for auxiliary hydraulics (joystick rocker switch)	R028	519928		
Potentiometer for 3rd control circuit (joystick rocker switch)	R029	519929		
Potentiometer (retract/extend potentiometer)	R030	519930		
DPF glow plug	R031	519931		
Heated seat	R032	519932		
Bus terminating resistance	R033	519933		
Bus terminating resistance	R034	519934		
120 Ohm resistance	R035	519935		
Frame leveling potentiometer	R036	519936		
Resistor component	R037	519937		
Resistor component	R038	519938		
<b>Switches (electrical system)</b>	<b>S</b>	<b>518950-519299</b>		
Preheating start switch	S001	518950		
Engine oil pressure switch	S002	518951		
Diesel engine temperature switch	S003	518952		
Air filter pressure switch	S004	518953		
Hydraulic oil pressure switch	S005	518954		
Hydraulic oil temperature switch	S006	518955		
Hydraulic oil level switch	S007	518956		
Battery master switch	S008	518957		
Brake light switch	S009	518958		
Brake pressure accumulator switch	S010	518959		
Parking brake switch	S011	518960		
Steering-column control lever (left)	S012	518961		
Steering-column control lever (right)	S013	518962		
Light switch	S014	518963		



Heating switch	S015	518964		
Working light switch	S016	518965		
Working light switch	S017	518966		
Rotating beacon switch	S018	518967		
Hazard warning switch	S019	518968		
Wiper/washer switch	S020	518969		
1st/2nd speed switch	S021	518970		
Steering mode/high speed switch	S022	518971		
Synchronism push button	S023	518972		
Oscillating axle interlock switch	S024	518973		
Differential lock push button	S025	518974		
Increased pump output switch (High Flow)	S026	518975		
Front socket/changeover switch	S027	518976		
Left-hand safety switch	S028	518977		
Armrest safety switch	S029	518978		
"Unlock" push button	S030	518979		
"Lock" push button	S031	518980		
3rd control circuit switch	S032	518981		
Continuous operation of 3rd control circuit (AUX)	S033	518982		
Forward driving push button	S034	518983		
Reverse driving push button	S035	518984		
Loader unit/stabilizer blade changeover	S036	518985		
Bucket/upper carriage tilting changeover	S037	518986		
Extend telescopic boom/front socket	S038	518987		
Retract telescopic boom/bucket repositioning	S039	518988		
Quickhitch lock push button	S040	518989		
Safe load indicator pressure switch	S041	518990		
Safe load indicator switch	S042	518991		
Backup warning signal pressure switch	S043	518992		
Load stabilizer switch	S044	518993		
Load stabilizer pressure switch	S045	518994		
Bucket repositioning pressure switch	S046	518995		
Tilt cylinder lock key-operated switch	S047	518996		
Vario push button	S048	518997		
Vario push button	S049	518998		
Air-conditioning fan switch	S050	518999		
Air conditioning switch	S051	519000		
Air conditioning pressure switch	S052	519001		
Air conditioning pressure switch	S053	519002		
Air conditioning temperature switch	S054	519003		
Horn push button	S055	519004		
Additional control circuit switch	S056	519005		
Additional control circuit switch	S057	519006		
Water separator switch	S058	519007		
Rear window heating push button	S059	519008		



Telescopic boom working light switch	S060	519009		
Fuel preheater switch	S061	519010		
Mirror adjustment switch	S062	519011		
Float position/hose burst valve switch	S063	519012		
Reversing fan	S064	519013		
Parking brake switch	S065	519014		
Neutral push button	S066	519015		
Bucket repositioning/front socket push button	S067	519016		
Automatic coupling/tipping trailer changeover switch	S068	519017		
Additional control circuit I-0-II switch	S069	519018		
Raise/lower tipping trailer I-0-II push button	S070	519019		
Automatic coupling unlock push button	S071	519020		
Frame leveling switch	S072	519021		
Crab steering switch	S073	519022		
Fuel preheater temperature switch	S074	519023		
Rear/front stabilizer leg switch	S075	519024		
Front stabilizer leg switch	S076	519025		
Rear stabilizer leg switch	S077	519026		
Travel pressure switch	S078	519027		
Changeover switch to 3rd boom segment	S079	519028		
Steering direction	S080	519029		
Pressure switch (right stabilizer leg)	S081	519030		
Pressure switch (left stabilizer leg)	S082	519031		
Creep gear potentiometer switch	S083	519032		
Switch for cutoff of hydraulic functions	S084	519033		
Switch for joystick cutoff during road travel (lock for long-haul travel)	S085	519034		
Error code call push button	S086	519035		
Door contact switch	S087	519036		
Mirror heating switch	S088	519037		
Pressure switch for automatic engine speed setting	S089	519038		
Automatic engine speed setting switch	S090	519039		
Central lubrication system push button	S091	519040		
Option switch/push button	S092	519041		
Push button (fuel-filling pump ON)	S093	519042		
Push button (fuel-filling pump OFF)	S094	519043		
Switch (full tank)	S095	519044		
Boost pressure switch	S096	519045		
Manual throttle switch	S097	519046		
Quickhitch pressure switch	S098	519047		
Changeover switch for rear hydraulic connection/3-point mount	S099	519048		
Pedal position switch	S100	519049		
Control lever push button for additional function	S101	519050		
Plunger switch	S102	519051		
Plunger switch	S103	519052		
Operator presence switch	S104	519053		



Clutch pedal switch	S105	519054		
Hydraulic oil temperature switch (radiator)	S106	519055		
Diesel engine temperature switch	S107	519056		
Charge air pressure switch	S108	519057		
Push button for electrical connection 1 on control lever	S109	519058		
Push button for electrical connection 2 on control lever	S110	519059		
Switch for loader unit lock	S111	519060		
Switch for loader unit load stabilizer	S112	519061		
Switch for electrical connection	S113	519062		
Differential lock axle probe	S114	519063		
Differential lock axle probe	S115	519064		
Limit switch 1 (telescopic boom fully retracted)	S116	519065		
Control lever push button for additional function	S117	519066		
Changeover push button (tilt/skip flap)	S118	519067		
Activation of diesel particulate filter regeneration (DPF)	S119	519068		
Switch/push button Eco mode	S120	519069		
Telescopic boom switch (extended, middle)	S121	519070		
Pressure switch (extend/retract telescopic boom)	S122	519071		
Seat belt contact switch	S123	519072		
Switch/push button/limit switch for start repeat interlock (starting interlock)	S124	519073		
Switch for vertical lowering	S125	519074		
Rear wiper switch	S126	519075		
Pressure relief switch	S127	519076		
Switch for option	S128	519077		
Switch for option	S129	519078		
Switch/push button (4 wheel drive OFF/axle cutoff)	S130	519079		
Raise/lower automatic coupling I-0-II push button	S131	519080		
Display changeover push button	S132	519081		
Side working light switch	S133	519082		
Limit switch (gearbox shift position)	S134	519083		
Speed/mode reduction push button	S135	519084		
Speed/mode increase push button	S136	519085		
Push button raise automatic coupling	S137	519086		
Push button automatic coupling locked	S138	519087		
Switch for option	S139	519088		
Switch raise/lower 3-point mount	S140	519089		
VLS mode switch (changeover of vertical lift function)	S141	519090		
Limit switch 2 (boom fully retracted)	S142	519091		
PTO shaft ON/OFF switch	S143	519092		
Switch for stabilizer blade swiveling	S144	519093		
Push button for engine speed SET/RESET	S145	519094		
Gearbox shift position	S146	519095		
Travel speed control	S147	519096		
Pressure relief	S148	519097		
Man basket operation switch	S149	519098		



Attachment 2 push button	S150	519099		
Attachment 3 push button	S151	519100		
Attachment 4 push button	S152	519101		
Hammer switch	S153	519102		
Work functions locking switch	S154	519103		
Parallel bucket lift switch	S155	519104		
X axis pressure switch	S156	519105		
Y axis pressure switch	S157	519106		
Identify "Raise" pressure switch	S162	519107		
Identify "Lower" pressure switch	S163	519107		
3rd control circuit/rear hydraulic connections changeover	S164	519112		
Raise/lower tipping trailer I-O-II switch	S165	519113		
3rd/4th control circuit changeover	S166	519114		
Emergency OFF switch	S167	519115		
High-Flow Plus push button	S168	519116		
<b>Socket (electrical system)</b>	<b>XX</b>	<b>519300-519349</b>		
Sockets	XX00	519300		
Sockets/electrical function 1 & 2	XX01	519301		
Sockets	XX02	519302		
Sockets	XX03	519303		
Sockets	XX04	519304		
Sockets	XX05	519305		
Sockets	XX06	519306		
Sockets	XX07	519307		
Sockets	XX08	519308		
Sockets	XX09	519309		
Sockets	XX10	519310		
Sockets	XX11	519311		
Sockets	XX12	519312		
Sockets	XX13	519313		
Sockets	XX14	519314		
Sockets	XX15	519315		
<b>Solenoids (electrical system)</b>	<b>Y</b>	<b>519350-519749</b>		
Cutoff solenoid/release	Y001	519350		
1st/2nd speed solenoid valve	Y002	519351		
Normal speed solenoid valve	Y003	519352		
Reverse travel solenoid valve	Y004	519353		
Forward solenoid valve	Y005	519354		
Front axle steering solenoid valve	Y006	519355		
4 wheel steering solenoid valve	Y007	519356		
Oscillating axle interlock solenoid valve	Y008	519357		
Differential lock solenoid valve	Y009	519358		
Driving direction identification solenoid valve	Y010	519359		
Increased pump output solenoid valve	Y011	519360		
Increased pump output solenoid valve	Y012	519361		





Joystick OFF pilot control safety valve	Y013	519362		
Loader unit/stabilizer blade changeover solenoid valve	Y014	519363		
Solenoid valve for changeover of auxiliary hydraulics /loader unit swivel	Y015	519364		
"Lock" solenoid valve	Y016	519365		
"Unlock" solenoid valve	Y017	519366		
Solenoid valve (upper carriage tilt)	Y018	519367		
Vario solenoid valve	Y019	519368		
Load stabilizer solenoid valve	Y020	519369		
Load stabilizer solenoid valve	Y021	519370		
Hose burst valve solenoid	Y022	519371		
Solenoid valve (retract telescopic boom)	Y023	519372		
Solenoid valve (extend telescopic boom)	Y024	519373		
Quickhitch lock solenoid valve	Y025	519374		
Tilt cylinder lock solenoid valve	Y026	519375		
Tilt cylinder lock solenoid valve	Y027	519376		
Bucket repositioning solenoid valve	Y028	519377		
Float position solenoid valve	Y029	519378		
Multiple quantity valve (cold start)	Y030	519379		
Magnetic clutch (compressor)	Y031	519380		
Float position solenoid valve	Y032	519381		
Additional control circuit solenoid valve	Y033	519382		
Additional control circuit solenoid valve	Y034	519383		
Fan solenoid valve	Y035	519384		
Crab steering solenoid valve	Y036	519385		
Reversing fan solenoid valve	Y037	519386		
1st speed range solenoid valve	Y038	519387		
2nd speed range solenoid valve	Y039	519388		
4 wheel steering solenoid valve 2	Y040	519389		
Solenoid valve for overload protection	Y041	519390		
Solenoid valve for overload protection	Y042	519391		
Parking brake solenoid valve	Y043	519392		
Raise tipping trailer solenoid valve	Y044	519393		
Lower tipping trailer solenoid valve	Y045	519394		
Automatic coupling/tipping trailer changeover solenoid valve	Y046	519395		
Automatic coupling unlock solenoid valve	Y047	519396		
Emergency lowering OFF solenoid valve	Y048	519397		
Parking brake signal compressed-air brake solenoid valve	Y049	519398		
Compressed-air brake solenoid valve	Y050	519399		
Solenoid valve for changeover of front 4th control circuit (lock/unlock)	Y051	519400		
Solenoid valve for frame leveling, extend cylinder	Y052	519401		
Solenoid valve for frame leveling, retract cylinder	Y053	519402		
Oscillating axle interlock solenoid valve	Y054	519403		
Solenoid valve (rear left stabilizer leg)	Y055	519404		
Solenoid valve (rear right stabilizer leg)	Y056	519405		
Solenoid valve (front left stabilizer leg)	Y057	519406		



Solenoid valve (front right stabilizer leg)	Y058	519407		
Solenoid valve (diesel engine speed control)	Y059	519408		
Fuel injector	Y060	519409		
Fuel injector	Y061	519410		
Fuel injector	Y062	519411		
Fuel injector	Y063	519412		
Solenoid valve (extend 3rd boom segment)	Y064	519413		
Solenoid valve (retract 3rd boom segment)	Y065	519414		
Raise arm solenoid valve	Y066	519415		
Lower arm solenoid valve	Y067	519416		
Solenoid valve (tilt in)	Y068	519417		
Solenoid valve (tilt out)	Y069	519418		
Steering direction	Y070	519419		
Solenoid valve (raise right stabilizer leg)	Y071	519420		
Solenoid valve (lower right stabilizer leg)	Y072	519421		
Solenoid valve (raise left stabilizer leg)	Y073	519422		
Solenoid valve (lower left stabilizer leg)	Y074	519423		
Solenoid valve for orifice	Y075	519424		
Rail pressure feed solenoid valve	Y076	519425		
Exhaust gas recirculation solenoid valve	Y078	519426		
Minus compensation	Y079	519427		
Solenoid valve for additional control circuit with additional function	Y080	519428		
Solenoid valve for additional control circuit with additional function	Y081	519429		
Heating water valve	Y082	519430		
Solenoid valve (4th control circuit, proportional)	Y083	519431		
Solenoid valve (4th control circuit, proportional)	Y084	519432		
Solenoid	Y085	519433		
Solenoid valve (reverse High Flow)	Y086	519434		
Solenoid valve (changeover of rear hydraulic connection/3-point mount)	Y087	519435		
Driving direction identification solenoid valve (auxiliary motor)	Y088	519436		
Swivel angle adjustment solenoid valve (operating hydraulics)	Y089	519437		
Oil flow restriction solenoid valve (operating hydraulics)	Y090	519438		
Solenoid valve (4 wheel drive switched ON)	Y091	519439		
Solenoid valve (front axle drive switched ON)	Y092	519440		
Brake valve	Y093	519441		
Solenoid valve (loader unit interlock 1)	Y094	519442		
Solenoid valve (loader unit interlock 2)	Y095	519443		
Solenoid valve (tilt/skip flap changeover)	Y096	519444		
Intake air throttle valve	Y097	519445		
Solenoid valve (hydraulic motor setting)	Y098	519446		
Solenoid valve (operating hydraulics derate)	Y099	519447		
Solenoid valve for throttling loader unit lowering	Y100	519448		
Solenoid valve (stabilizer blade lock)	Y101	519449		
Lowering solenoid valve	Y102	519450		
Lowering solenoid valve	Y103	519451		



Lowering solenoid valve	Y104	519452		
Lowering solenoid valve	Y105	519453		
Solenoid valve (pressure relief)	Y106	519454		
Solenoid valve (loader unit lock)	Y107	519455		
Solenoid valve (tilt-in stop)	Y108	519456		
Driving direction identification solenoid valve	Y109	519457		
Retarder solenoid valve	Y110	519458		
Retarder solenoid valve	Y111	519459		
Solenoid valve (PCOR valve)	Y112	519460		
Solenoid valve (hydraulic trailer brake)	Y113	519461		
Diesel engine limitation solenoid	Y114	519462		
Solenoid valve (hydraulic trailer brake)	Y115	519463		
Solenoid valve for lowering tipping trailer (black/white)	Y116	519464		
Solenoid valve (raise 3-point mount)	Y117	519465		
Solenoid valve (lower 3-point mount)	Y118	519466		
Solenoid valve (loader unit load stabilizer)	Y119	519467		
PTO shaft solenoid valve	Y120	519468		
Solenoid valve (swivelable stabilizer blade)	Y121	519469		
Solenoid valve (loader unit swivel to the left)	Y122	519470		
Solenoid valve (loader unit swivel to the right)	Y123	519471		
Solenoid valve (PWM machine travel)	Y124	519472		
Tipping trailer, Autohitch/frame leveling changeover solenoid valve	Y125	519473		
Parallel bucket lift 1	Y126	519474		
Parallel bucket lift 2	Y127	519475		
Throttle orifice solenoid valve	Y128	519476		
Rear hydraulics lowering mode solenoid valve	Y129	519477		
1st hydraulic connection (rear)	Y130	519478		
2nd hydraulic connection (rear)	Y131	519479		
Rear hydraulic connection, double-action, single 1	Y132	519480		
Rear hydraulic connection, double-action, single 2	Y133	519481		
Rear hydraulic connection, double-action, double 1	Y134	519482		
Rear hydraulic connection, double-action, double 2	Y135	519483		
Boost-pressure dependent full-load stop (LDA)	Y136	519484		
Changeover valve 3rd control circuit/rear hydro	Y137	519485		
Manual inching solenoid valve	Y138	519486		
Magnetic brake assembly	Y139	519487		
Tilt-in lock solenoid valve	Y140	519488		
Urea metering valve	Y141	519489		
Urea suction valve	Y142	519490		
Urea reservoir heating valve	Y143	519491		
Stabilizer blade solenoid valve 1	Y144	519492		
Stabilizer blade solenoid valve 2	Y145	519493		
Powertilt changeover solenoid valve	Y146	519494		
ISO/SAE changeover solenoid valve	Y147	519495		
Reservoir return solenoid valve	Y148	519496		