

Operation code	Description of works	Manpower input,
		5490-0000702-T5
	0. Administrative time	
00-000	Opening and closing of an order for operating repair or maintenance	0/4
	STATION WORKS	
	00. Vehicle	
00-001	Wash the vehicle	0.9*
	Includes:	
	- washing of chassis units	
	- washing of power unit	
	- washing of cabin	
00-002	Check engine start	0/15
	Includes:	
	- engine start and shutdown	
	- engine operation with different idle rpm	
00-003	Oil pressure in the engine lubrication system	0/35
	Includes:	
	- installation and removal of reference pressure gauge	
	- engine start and shutdown	
	- engine warm-up to the operating temperature	
	- measurement of oil pressure at different crankshaft rpm	
00-004	To measure smokiness of exhaust gases	0/6
	Includes:	
	- installation and removal of the measuring instrument	
	- engine start and shutdown	
	- engine warm-up to the operating temperature	
	- measurement of smokiness at different crankshaft rpm	
00-005	Vehicle diagnostics on a bench	0/9
	Includes:	
	- vehicle installation on a bench and fastening with safety chains	
	- connection of exhaust gas discharge system (if necessary)	

	- installation and connection of measuring instruments	
	- engine start	
	- recording of all test data	
	- removal of measuring instruments	
	- disconnection of the exhaust gas discharge system	
	- removal of the vehicle from the bench	
00-006	Trial driving to reveal failures and malfunctions	0/9
	Includes:	
	- check drive to 10-15 km	
	- recording of all test data	
00-007	Measure oil flow rate using Star-Diagnose	0/8
00-008	Diagnostics of one unit controlled by electronic module (short test)	0/3
	Includes:	
	- connection of diagnostic instrument	
	- reading of error memory	
00-009	Diagnostics of one unit controlled by the electronic unit (extended without failure elimination)	1/5
	Includes:	
	- reading of error memory	
	- fulfillment of tests	
	- analysis of unit operating conditions	
	- determination of system operability or malfunction	
	10. Engine (Daimler E-5)	
	1000 - installation of the power unit	
S10-001	Remove and install the engine with the gearbox assembly (noise insulation screens are removed see	10/84
S10-002	Remove the engine with the gearbox assembly (noise insulation screens are removed)	4/92
S10-003	Install the engine with the gearbox assembly (noise insulation screens are removed)	5/92
S10-004	Check and adjust the clearances in the valve timing gear	1/2
	1001 - power unit suspension	
S10-011	Remove and install the bracket of the power unit front support	2/8
	Includes:	
	Removal and installation of boost air duct from the air cooler to the boost manifold	
	Disconnection and connection of the charge air hose, removal and installation of the hose clamp	

	Removal and installation of the air charging hose	
	Unscrewing and tightening of bolts on the engine bearing supports	
	Engine lifting and lowering with a lifting gear	
	Removal and installation of the lower noise insulation casing on the frame	
	Unscrewing and tightening of the engine support bolts	
	Removal and installation of the bracket of the power unit front support	
S10-012	Replace the cushion of the power unit front support assembly	1/1
	Includes:	
	Removal and installation of a platform through the gearbox	
	Removal and installation of the side footstep and right footstep	
	Fixing of the gearbox from below	
	Unscrewing and tightening of bolts on the gearbox bearing supports	
	Lifting and lowering of the gearbox	
	Removal and installation of the cable clamp wiring harness on the engine right side	
	Removal and installation of the cable clamp of SB wires	
	Unscrewing and tightening of the support fastening bolts	
	Removal and installation of the cushion of the power unit front support	
S10-013	Remove and install the beam of the power unit back-up support	1/5
S10-014	Replace the cushion of the power unit back-up support	1/5
S10-015	Replace the front support of engine mount, (engine is removed)	0/9
S10-016	Replace the front left support of engine mount	1/9
S10-017	Replace the front right support of engine mount	1/9
S10-018	Replace two front supports of engine mount	2/4
S10-019	Remove and install the front left engine mount bracket, replace depending on inspection results	1/6
S10-0110	Remove and install the front right engine mount bracket, replace depending on inspection results	3
S10-0111	Remove and install the front left engine mount brackets (both), replace depending on inspection results	3/3
	1002 - cylinder block	
S10-021	Compare compression in cylinders using Star Diagnose	0/3
S10-022	Check the compression (diesel fuel injectors are removed)	0/6
S10-023	Connect and disable Star Diagnose (when working on the engine)	0/2
S10-024	Check all cylinders with an endoscope (holes for access to the cylinders are cleared)	0/5
S10-025	Check a cylinder (one) with an endoscope (access to the cylinder is provided)	0/4

S10-026	Replace, seal the cylinder block cover from the belt drive side	6/6
S10-027	Replace, seal the cylinder block cover from the belt drive side, (the cooling unit is removed)	6/2
S10-028	Check and measure the inside diameter of all cylinders (access to the cylinders is provided)	0/5
S10-029	Check and measure the inside diameter of one cylinder (access to the cylinder is provided)	0/2
S10-0210	Check and measure the inside diameter of two cylinders (access to the cylinders is provided)	0/2
S10-0211	Measure the thrust shoulders on all cylinder sleeves (access to the sleeves is provided)	1/4
S10-0212	Measure the thrust shoulder on one cylinder sleeve (access to the cylinder sleeve is provided)	0/4
S10-0213	Measure the thrust shoulders on two cylinder sleeves (access to the sleeves is provided)	0/6
S10-0214	Seal all cylinder sleeves (engine is on the vehicle, access to the sleeves is provided)	3/5
S10-0215	Seal one cylinder sleeve (engine is on the vehicle, access to the cylinder sleeve is provided)	0/8
S10-0216	Seal two cylinder sleeves (engine is on the vehicle, access to the sleeves is provided)	1/3
S10-0217	Replace the cylinder sleeve with piston, (the cylinder head and oil sump are removed)	1/8
S10-0218	Replace each subsequent cylinder sleeve with piston, (the cylinder head and oil sump are removed)	1/5
S10-0219	Replace all cylinder sleeves with pistons (cylinder heads and oil sump are removed)	7/3
	1003 - cylinder block head	
S10-031	Remove and install the cylinder head	6/6
	Includes:	
	Cabin lifting and lowering	
	Drain and fill (partially) the coolant from the radiator	
	Removal and installation of the exhaust manifold	
	Disconnection and connection of the pipeline for air bleeding from all cylinder heads	
	Removal and installation of the throttle pipeline clamp from the rear eyelet	
	Unscrewing and tightening of bolts from the rear eyelet	
	Removal and installation of the air charge distribution manifold	
	Disconnection and connection of the fuel return tube on the cylinder head	
	Removal and installation of the cylinder block head cover	
	Disconnection and connection of the rocker arm mechanism, removal and installation of the valve	
	Removal and installation of the pusher rod	
	Unscrewing and tightening of the cylinder block head bolts	
	Removal and installation of the cylinder head (removal and installation of a gasket)	
S10-032	Remove and install each subsequent cylinder head (after inspection)	1/4
S10-033	Remove and install all cylinder heads	9/9

	1004 - pistons and connecting rods	
S10-041	Measure the diameter of holes in connecting rod bearings (access to lubricating holes is provided)	0/6
S10-042	Remove all pistons, make a conclusion about the condition, (the cylinder head and oil sump are removed)	1/3
S10-043	Remove one piston, make a conclusion about the condition, (the cylinder head and oil sump are removed)	0/4
S10-044	Remove each subsequent piston, make a conclusion about the condition (the cylinder head and oil sump are removed)	0/4
S10-045	Install one piston, (the cylinder head and oil sump are removed)	0/7
S10-046	Install each subsequent piston (cylinder head and oil sump are removed)	0/7
S10-047	Install all pistons (without the cylinder head)	2/3
S10-048	Replace the piston with the cylinder sleeve, (the cylinder block head and oil sump are removed)	1/8
S10-049	Replace each subsequent piston with the cylinder sleeve, (the cylinder block head and oil sump are removed)	1/5
S10-0410	Replace all pistons with cylinder sleeves, (the cylinder block head and oil sump are removed)	7/3
	1005 - crankshaft and flywheel	
S10-051	Replace the crankshaft belt pulley, (the cooling unit is removed)	1
S10-052	Remove and install the crankshaft damper, replace depending on inspection results (the cooling unit is removed)	2/3
S10-053	Replace the crankshaft front oil seal (belt drive side), (the cooling unit is removed)	2/7
S10-054	Replace the crankshaft front oil seal (belt drive side), (cooling unit and fan are removed)	2
S10-055	Replace the crankshaft rear oil seal on the engine power take-off side (clutch is removed)	1/2
S10-056	Replace the crankshaft rear oil seal on the engine power take-off side (access from the power delivery side is provided)	0/2
S10-057	Measure the diameter of holes in the crankshaft bearings (access to the lubricating holes is provided)	0/7
S10-058	Remove and install the crankshaft flywheel, (clutch is removed)	1
	1006 - camshaft	
S10-061	Replace the camshaft gear cover (after checking)	3/2
S10-062	Replace the camshaft gear cover, (cooling unit is removed)	1/9
	1007 - valves and pushers	
S10-071	Remove and install the valve cover, seal it	0/6
S10-072	Remove and install the valve covers (all), seal them	1/2
S10-073	Replace the valve spring (valve cover is removed)	0/7
S10-074	Replace the valve spring (lifting lever is removed)	0/2
S10-075	Replace all valve oil seals	6/4

S10-076	Replace the valve oil seals (on each subsequent cylinder) (after checking)	1/2
S10-077	Replace the valve oil seals (on one cylinder)	1/9
S10-078	Replace the valve rocker arm (with central support), (valve cover is removed)	0/5
S10-079	Replace the valve rocker arms (with central supports), (valve cover is removed)	0/5
S10-0710	Remove and install all support brackets of the rocker arms (with central supports), (valve cover is removed)	1/4
S10-0711	Remove and install the support bracket of the rocker arm (with central support), (valve cover is removed)	0/6
	1008 - exhaust manifold	
S10-081	Remove and install the intake manifold, replace it depending on inspection results	1/3
S10-082	Remove and install the exhaust manifold, replace it depending on inspection results	2/6
	1009 - oil sump (cylinder block sump)	
S10-091	Remove and install the oil sump (cylinder block sump), seal it (noise insulation screens are removed)	4/3
	Includes:	
	Draining and filling of engine oil	
	Disconnection and connection the oil filler tube on the oil sump	
	Disconnection and connection of the electric cable of the motor of sump oil level gauge, electric wire on the cylinder block	
	Removal and installation of the coolant pipeline fastening clamp	
	Removal and installation of the bracket on the cylinder block	
	Removal and installation of the coolant pipeline on the bracket	
	Removal and installation of the air conditioner compressor	
	Disconnection and connection of the air conditioning compressor bracket to the cylinder block	
	Removal and installation of the oil sump	
S10-092	Remove and install the oil nozzles in the engine cylinder block, replace depending on inspection results (the oil sump is removed)	0/7
S10-093	Remove and install the oil diffuser in the engine cylinder block, replace depending on inspection results (oil sump is removed)	0/4
	1011 - oil pump	
S10-111	Remove and install the engine oil pump, replace depending on inspection results (oil sump is removed)	0/3
S10-112	Remove and install the engine oil cooler, seal it, replace depending on inspection results	3/5
S10-113	Remove and install the engine oil cooler and oil filter unit, seal it, replace depending on inspection results	5/1
S10-114	Remove and install the engine oil cooler and oil filter unit, seal it, replace depending on inspection results (coolant is drained)	3/7

S10-115	Remove and install the turbocharger oil supply line, seal it	1
S10-116	Remove and install the turbocharger oil outlet line, seal it	0/8
S10-117	Remove and install the oil pump oil intake tube, replace depending on inspection results (oil sump is	0/4
	1012 - oil filter	
S10-121	Remove and install the oil filter housing assembly, seal it	4/7
	Includes:	
	Cabin lifting and lowering	
	Disconnection and connection of the ground wire from SB	
	Removal and installation of the noise insulation panel on the frame	
	Disconnection and connection of the coolant tube from the inlet pipe to the system heating block, partially drain the coolant from the engine	
	Removal and installation of the air intake pipe, disconnection and connection of the charge air connection from the compressor	
	Unscrewing and tightening of the oil filter cover with filtering element	
	Disconnection and connection of the electrical connector housing of the solenoid valve of the flow restrictors, removal and installation of the solenoid valve of the flow restrictors and bracket	
	Removal and installation of the bracket of the oil filter housing, unscrewing and tightening of the bolts on the oil filter housing	
S10-122	Replace the engine oil level gauge	1/1
S10-123	Replace the engine oil temperature gauge on the engine	0/6
S10-124	Replace the oil pressure gauge	0/6
	1015 - engine starting preheater	
S10-151	Remove and install the starting preheater	1
S10-152	Remove and install the liquid heater control unit	0/5
	1022 - glow plug preheater	
S10-221	Replace the solenoid valve of the electric glow plug preheater (GPP) for cold start (after checking)	0/6
S10-222	Replace the glow plug of the electric glow plug preheater for cold start (after checking)	0/3
S10-223	Replace the torch of the electric glow plug preheater for cold start (after checking)	0/8
	1080 - lower hooding of engine compartment	
S10-801	Remove and install the noise insulation screen under the engine	0/4
	11. Engine fuel supply system	
	1101 - fuel tank	

S11-011	Remove and install the fuel tank (400 l) (one)	1/5
S11-012	Remove and install the right (left) mounting bracket of the fuel tank	1/7
	Includes:	
	Removal and installation of the protective casing (for vehicles KAMAZ-5490-0000703-T5, KAMAZ-5490-0000704-T5)	
	Closing and opening of the right (left) valve of fuel supply between the tanks	
	Unscrewing and tightening of:	
	- fittings of the pipeline and corrugated tube from the fuel level sensor, disconnection and connection of pipelines	
	- screws of the right (left) hose clamp	
	- nut of the hose fitting, disconnection and connection of the fuel supply pipe between the tanks	
	Disconnection and connection of the fuel tank fastening clamps, removal and installation of clamps	
	Removal and installation of the fuel tank (one)	
	Unscrewing and tightening of:	
	- nuts and bolts of the fuel tank mounting brackets from the spacer	
	- nuts and bolts securing the spacer from the frame side member	
	Removal and installation of the fuel tank bracket	
S11-013	Remove and install the fuel tank mounting bracket gasket	1/55
S11-014	Remove and install the fuel tank fastening clamp	0/1
S11-015	Remove and install the fuel tank fastening clamp lining	0/15
	1102 - protective casing	
S11-021	Remove and install the fuel tank protective casing	-
	1103 - fuel tank plug	
S11-031	Replace the fuel tank plug gasket	0/06
	1104 - fuel pipelines	
S11-041	Determine the tightness of fuel pipelines and eliminate leaks	0/4
S11-042	Replace the faulty fuel injection pressure pipeline	1/4
S11-043	Replace all pressure pipelines of the injection system	1/7
S11-044	Remove and install the fuel suction hose	0/25
S11-045	Remove and install fuel tube, bleed the system	0/5
	1105 - coarse fuel filter	
S11-051	Remove and install the coarse fuel filter, bleed the system	0/22

S11-052	Replace the filtering element of the coarse fuel filter, bleed the fuel system	0/22
	1109 - air filter	
S11-091	Remove and install the air filter	0/8
S11-092	Remove and install the air filter filtering element	0/14
S11-093	Remove and install the safety filtering element	0/16
S11-094	Remove and install the air intake	0/3
S11-095	Remove and install the connecting hose	0/1
S11-096	Remove and install the nipple	0/2
S11-097	Remove and install the air filter clogging indicator sensor	0/1
S11-098	Replace the valve	0/1
	1111 - high pressure fuel pump (HPFP)	
S11-111	Check the high pressure fuel pump	0/5
S11-112	Remove and install the high pressure fuel pump	2/5
S11-113	Remove and install the fuel pump drive bearing, replace depending on inspection results (the camshaft driving gear cover is removed)	1/6
S11-114	Replace the manual fuel pump	0/8
S11-115	Remove and install the cylinder HPFP (each subsequent one)	0/5
S11-116	Seal the cylinder HPFP in case of external signs of sealing failure, (pump-injector unit is removed)	0/3
S11-117	Seal the cylinder HPFP (each subsequent one) in case of external signs of sealing failure (pump-injector unit is removed)	0/3
S11-118	Normalize the HPFP pressure code	0/6
S11-119	Normalize the HPFP pressure code (after replacing the pump-injector unit)	0/3
	1112 - injector	
S11-121	Remove and install the diesel fuel injector	1/9
S11-122	Remove and install the diesel fuel injector, (valve cover is removed)	1/3
S11-123	Remove and install the diesel fuel injector, (engine block head is removed)	0/4
S11-124	Remove and install injectors (all)	3/7
S11-125	Remove and install injectors (all) (cylinder heads are removed)	1/4
S11-126	Remove and install the diesel fuel injector (each subsequent one)	0/5
S11-127	Remove and install the diesel fuel injector (each subsequent one), (valve cover is removed)	0/4
S11-128	Remove and install the pump-injector units (all)	3/5
S11-129	Remove and install the pump-injector unit (one)	1/6

1115 - intake manifold		
S11-151	Replace the rubber-metal buffers of the intake pipe suspension on the driver's cabin (the suction pipe is removed)	0/3
S11-152	Replace the engine air intake path hose upstream of the air filter in the rear of the driver's cabin	0/2
S11-153	Replace the engine air intake path hose upstream of the turbocharger	0/6
S11-154	Replace the boost air duct hose upstream of the boost air cooler	0/5
S11-155	Replace the boost air duct hose downstream of the boost air cooler	0/5
S11-156	Replace the engine air intake path upstream of the air filter at the rear of the driver's cabin	0/8
S11-157	Replace the engine boost air duct upstream of the boost air cooler	0/7
S11-158	Replace the engine boost air duct downstream the boost air cooler	0/8
1117 - fine fuel filter		
S11-171	Clean the filtering element of the fine fuel filter, replace depending on inspection results	0/7
	Includes:	
	- dismantling and installation of the filter, cleaning, checking, replacement of parts	
	- trial start of the engine and check of functional serviceability and tightness	
1118 - engine turbocharger and drive		
S11-181	Check the turbocharger charging pressure	0/5
S11-182	Check the turbocharger, evaluate the condition	0/8
S11-183	Remove and install the turbocharger	2/7
S11-184	Remove and install the thermal protective metal panel on the turbocharger (ATL), replace it according to inspection results	0/5
1130 - electronically controlled fuel injection equipment transmitters		
S11-301	Replace the vacuum-gage pressure transmitter	0/23
S11-302	Replace the speed sensor (crankshaft position sensor), (noise insulation screens are removed)	0/3
S11-303	Replace the boost air pressure and temperature sensor	0/5
S11-304	Replace the acceleration sensor	0/3
S11-305	Replace the coolant temperature sensor	0/5
S11-306	Replace the fan operation mode sensor	0/5
S11-307	Replace the camshaft position sensor	0/4
1170 - boost air cooling system		
S11-701	Remove and install the boost air cooler heat exchanger (BACHE)	1/68
S11-702	Check the boost air cooler for leaks	0/8

	12. Engine gas exhaust system	
	1201 - exhaust muffler	
S12-011	Remove and install catalytic muffler	1
	1203 - muffler pipes and suspension	
S12-031	Remove and install the intake nipple	0/4
S12-032	Remove and install the catalytic muffler bracket	1/3
	1208 - exhaust gas neutralizer	
S12-081	Remove and install the AdBlue neutralizing liquid tank	1
S12-082	Remove and install the neutralizing liquid tank mounting bracket	1/5
S12-083	Remove and install the exhaust gas neutralization system pump module (after a check)	1/3
S12-084	Check the exhaust gas neutralization system pump module for traces of fuel/ oil	0/5
S12-085	Check the concentration of AdBlue (after an accelerated check)	0/2
S12-086	Check the dosage volume of AdBlue (after an accelerated check)	0/7
S12-087	Check the air operating pressure in the dosing unit of the exhaust gas neutralization system	0/5
S12-088	Remove and install the rear exhaust pipe	0/3
	13. Cooling system	
	1301 - radiator	
S13-011	Replace the coolant with antifreeze, check tightness of the cooling system	1
S13-012	Top up the coolant, visually inspect the tightness of the cooling system	0/13
S13-013	Remove and install the cooling unit	3
	Includes:	
	Removal and installation of the condenser, draining and filling of coolant	
	Removal and installation of the hydraulic tube of the telescopic rod	
	Removal and installation of the pipeline of the hydraulic-pneumatic system	
	Removal and installation of the charged air hose	
	Disconnection and connection of electrical wires from the coolant level sensor, from the expansion tank, from the coolant hoses	
	Disconnection and connection of the GB oil tube at connection points	
	Unscrewing and tightening of bolts on the brackets on the right, (left)	
	Removal and installation of the cooling unit	
S13-014	Remove and install the cooling unit, (coolant is drained)	2/2
S13-015	Check the cooling system for leaks	0/7

S13-016	Check the formation of vapor pockets in air conditioning and heating systems	0/4
S13-017	Adjust the ratio of antifreeze and coolant, check tightness of the cooling system	0/6
S13-018	Adjust the ratio of antifreeze and coolant, check tightness of the cooling system, (coolant is drained)	0/2
	1302 - radiator suspension	
S13-021	Remove and install the radiator fastening rod, adjust radiator position	0/2
	1303 - cooling system pipelines and hoses	
S13-031	Remove and install the outlet branch pipe	0/42
S13-032	Remove and install the clamp	0/1
S13-033	Replace the clamp gasket	0/15
	1306 - thermostat	
S13-061	Remove and install the cooling system thermostat, replace depending on inspection results	1/4
S13-062	Remove and install the cooling system thermostat, replace depending on inspection results (coolant is	0/5
	1307 - water pump	
S13-071	Remove and install the coolant pump, replace depending on inspection results	3/5
S13-072	Remove and install the coolant pump, replace depending on inspection results (coolant is drained)	2/4
S13-073	Remove and install the coolant pump, replace depending on inspection results (the cooling unit is	1/8
S13-074	Remove and install the coolant pump, replace depending on inspection results, (engine is removed)	1/3
S13-075	Replace the coolant pump belt pulley	1/4
S13-076	Replace the coolant pump belt pulley, (V-belt is removed)	0/6
S13-077	Remove and install the generator belt tensioner run-around roller	1/8
	Includes:	
	- removal and installation of the generator belt	
	- removal and installation of the run-around roller	
	- adjustment of the generator belt	
	1308 - fan	
S13-081	Remove and install the fan with viscous coupling	2/1
S13-082	Replace the fan V-belt	1/4
S13-083	Replace the fan V-belt, (tensioner is removed)	0/9
S13-084	Replace the fan V-belt tensioner	0/6
S13-085	Remove and install the fan with viscous coupling, replace depending on inspection results (the cooling unit is removed)	0/5
S13-086	Remove and install the fan drive bracket (fan with viscous coupling is removed)	0/3

S13-087	Remove and install the fan V-belt pulley on the fan drive bracket (fan with viscous coupling is	0/2
S13-088	Replace the fan hood, (cooling unit is removed)	0/1
	1311 - expansion tank	
S13-111	Remove and install the coolant expansion tank, replace depending on inspection results, (coolant is	0/8
S13-112	Replace the cooling system expansion tank joint cap	0/2
S13-113	Replace the coolant tube (bleeding line to the expansion tank) on the engine on the left (after checking)	1/1
S13-114	Replace the bleeder hose from the engine to the expansion tank	1/3
	1318 - fan drive hydraulic coupling	
S13-181	Remove and install the viscous coupling on the fan impeller (after checking)	0/3
S13-182	Check the time of fan coupling activation using Star-Diagnose	0/8
	15. Lower sound insulation screen of the gearbox	
	1580 - sound insulation screen	
S15-801	Remove and install the lower gearbox sound insulation screen	0/4
	16. Clutch	
	1601 - clutch	
S16-011	Remove and install the MFZ 430 clutch manuf. by SACHS	16/2
	1602 - mechanism and clutch drive	
S16-021	Bleed the clutch drive system and add fluid to the master cylinder up to the level	-
S16-022	Remove and install the clutch control master cylinder assembly. Bleed the clutch drive system.	-
S16-023	Check and adjust the free stroke of the drive master cylinder piston pusher and free travel of the lever of the clutch release fork shaft	-
S16-024	Replace the master cylinder piston pusher sealing ring	-
S16-025	Replace the clutch pedal servo spring	-
S16-026	Replace the tank	-
S16-027	Remove and install the clutch pedal	-
S16-028	Remove and install the clutch pedal axle arm	-
S16-029	Replace the clutch pedal pullback spring	-
S16-0210	Remove and install the clutch control drive flexible hose, fill and bleed the system	-
S16-0211	Remove and install the clutch control drive tube	-
	1609 - clutch drive air-oil intensifier	
S16-091	Remove and install the clutch air-oil intensifier	-
	Includes:	

	- drainage and filling of the hydraulic drive of the air-oil intensifier	
	- disconnection and connection of pneumatic and hydraulic drives	
	- removal and installation of air-oil intensifier	
	- bleeding of hydraulic drive of air-oil intensifier	
	17. Gearbox (ZF)	
	1700 - gearbox assembly	
S17-001	Check oil level, top up oil to the level	0/1
S17-002	Check gearbox tightness, eliminate faults	0/1
S17-003	Remove and install gearbox ZF 16S2221 TD (with retarder)	-
S17-004	Remove and install automatic gearbox ZF 12AS2131 TD (with retarder)	15/35
	1703 - gear shifting mechanism control drive	
S17-031	Remove and install the gear shift lever knob	-
S17-032	Remove and install the gear shift lever support	-
S17-033	Remove and install the gear shift lever	-
S17-034	Remove and install the bracket with the axle	-
S17-035	Adjust the remote control drive for the gear shifting mechanism	-
S17-036	Remove and install pull rod	-
S17-037	Remove and install the rear pull rod	-
S17-038	Remove and install the extension rod	-
S17-039	Remove and install the lever with the bracket	-
	1772 - control drive for the gear splitter shifting mechanism	
S17-721	Replace the pneumatic valve	-
S17-722	Remove and install the gear shift control wiring harness	-
	22. Cardan drive	
	2201 - rear axle cardan shaft	
S22-011	Remove and install the cardan shaft of the rear axle assembly	1
S22-012	Check the play in the joints of the cardan shaft (the cardan shaft is on the vehicle)	0/1
	24. Rear axle (Daimler)	
	2400 - rear axle assembly	
S24-001	Remove and install the rear axle	6
	Includes:	
	Disconnection and connection of the tail light plug-in connectors	

	Removal and installation of:	
	- mudguards of the rear wheels	
	- valve extension brackets	
	- rear axle wheels on the left and right sides	
	Draining and filling with oil of the rear axle housing and the hub drive crankcase	
	Lifting and lowering of:	
	- rear axle	
	- the vehicle tail by the frame	
	Unscrewing and tightening of the bolts which fasten the upper extension rod of the rear axle	
	Removal and installation of:	
	- brake hoses to the T-pieces of the distribution system	
	Disconnection and connection of:	
	- air line for switching-on of the inter-wheel lock	
	- wires to the inter-wheel lock sensor	
	Unscrewing and screwing of the fastening bolts of the lower extension rods	
	Removal and installation of:	
	- the cardan shaft of the rear axle	
	- the rear axle on a rack, on a trolley	
	Unscrewing and screwing of the fastening bolts of the axle rolling stops	
	27. Fifth wheel	
	2700 - fifth wheel assembly	
S27-021	Remove and install the bolster	2/8
	28. Frame	
	2800 - frame assembly	
S28-001	Replace the frame	98/1
	2801 - side members, cross members	
S28-011	Remove and install the tubular cross member	10/56
	2809 - underrun bar	
S28-091	Remove and install the front underrun protection device	2/2
	29. Vehicle suspension	
	2902 - front springs	
S29-021	Remove and replace the front spring assembly	2/5

	Includes:	
	Lifting and lowering of:	
	- front lining panel	
	- vehicle front	
	Removal and installation of:	
	- the top and bottom panels of the front buffer	
	- the brackets of the bottom panel of the front buffer	
	- spring U-bolts	
	- racks of anti-roll bars	
	- front spring	
	- clamping bolts of the spring front bracket	
	- clamping bolt of the front spring rear bracket	
S29-022	Remove and install (one) front spring U-bolt	0/4
S29-023	Replace the bushing of the front spring eye on the vehicle right side	12/6
S29-024	Remove the bushing of the front spring eye on the vehicle right side	6/3
	Includes:	
	- removal of the front wheel	
	- removal of storage batteries	
	- removal of the battery box	
	- removal of the front spring assembly	
	- removal of the shackle with bushing	
	- pressing out of the bushing from the shackle	
S29-025	Install the bushing of the front spring eye on the vehicle right side	6/3
	Includes:	
	- pressing of the bushing into the shackle	
	- installation of the shackle with bushing	
	- installation of the front spring assembly	
	- battery box installation	
	- installation of storage batteries	
	- installation of the front wheel	
S29-026	Replace the bushing of the front spring eye on the vehicle left side	9/4
S29-027	Remove the bushing of the front spring eye on the vehicle left side	4/7

	Includes:	
	- removal of the front wheel	
	- removal of the catalytic muffler	
	- removal of the front spring assembly	
	- removal of the shackle with bushing	
	- pressing out of the bushing from the shackle	
S29-028	Install the bushing of the front spring eye on the vehicle left side	4/7
	Includes:	
	- pressing of the bushing into the shackle	
	- installation of the shackle with bushing	
	- installation of the front spring assembly	
	- installation of the catalytic muffler	
	- installation of the front wheel	
S29-029	Remove and install the right (left) front spring bracket	3
S29-0210	Remove and install the front spring eye pin	0/6
S29-0211	Remove and install the front spring buffer	0/2
S29-0212	Remove and install the buffer spacer	0/3
	2905 - front shock absorbers	
S29-051	Remove and install the shock absorber	0/4
	2906 - front suspension anti-roll bar	
S29-061	Remove and install the rod of the anti-roll bar	0/9
S29-062	Remove and install the rack of the anti-roll bar	0/3
S29-063	Remove and install the upper bracket of the anti-roll bar	0/3
S29-064	Remove and install the right (left) lower bracket of the anti-roll bar	3
S29-065	Replace the bushings (2 pcs.) of the anti-roll bar	0/3
	2915 - rear shock absorbers	
S29-151	Remove and install the rear shock absorber	0/4
	2916 - rear anti-roll bar	
S29-161	Remove and install the rod of the anti-roll bar	0/5
	Includes:	
	Removal and installation of:	
	- lock rings	

	- polyurethane cushions in racks	
	- anti-roll bar fastening pin	
	- polyurethane bushings	
	- rod of the anti-roll bar	
	2919 - rear suspension torque arms	
S29-191	Remove and install the torque arm	1
S29-192	Remove and install the right, (left) air spring support	8/5
S29-193	Remove and install the upper arm	2
	2934 - air suspension spring	
S29-341	Remove and install the air suspension spring	1/36
	30. Front axle (KAMAZ)	
	3000 - front axle assembly	
S30-001	Remove and replace the front axle assembly	4/42
	Includes:	
	Lifting and lowering of:	
	- front lining panel	
	- vehicle front	
	- cabin	
	Lifting of the vehicle front part	
	Removal and installation of:	
	- the top and bottom panels of the front buffer	
	- the fastening brackets of the bottom panel of the front buffer	
	- front wheels	
	- U-bolts	
	- front axle	
	Disconnection and connection of:	
	- the longitudinal steering rod to the drop arm	
	- the brake hoses to the fittings on the frame	
	Rolling forward and rolling back of the stand and lift	
	3001 - front axle and steering knuckles	
S30-011	Remove and install the right steering knuckle	2/3
S30-012	Remove and install the left steering knuckle	2/6

S30-013	Remove and install the right (left) arm of the steering knuckle	0/42
S30-014	Remove and install the lever of the drop arm	0/42
S30-015	Remove and install the thrust bearing	3
	31. Wheels and hubs	
	3101 - wheels	
S31-011	Remove and install the front wheel	0/6
S31-012	Remove and install the outer rear wheel	0/6
S31-013	Remove and install the inner rear wheel	0/7
S31-014	Remove and install the spare wheel	0/3
	3103 - front wheel hubs (KAMAZ)	
S31-031	Remove and install the front wheel hub	2/5
S31-032	Remove and install the hub bearing (includes removal and installation of the hub, replacement of the	2/6
S31-033	Adjust the front wheel hub bearings	0/2
	3104 - hubs of rear wheels (Daimler)	
S31-041	Remove and install the rear wheel hub	2/26
S31-042	Remove and install the inner hub bearing	2/5
S31-043	Remove and install the sleeve with cup seals	2/5
	34. Steering	
	3400 - steering assembly	
S34-001	Replace oil and bleed the power steering system	0/4
S34-002	Check oil pressure in the power steering system	0/5
S34-003	Bleed the power steering system	0/2
S34-004	Remove and install steering gear Bosch 8098.956.152	4
S34-005	Remove and install power steering tank CTS (Serbia)	0/4
	3401 - steering	
S34-011	Remove and install the steering drop arm	0/6
	3402 - steering wheel	
S34-021	Remove and install the steering wheel	0/25
	3407 - power steering pump	
S34-071	Remove and install power steering pump Bosch 7685.955.313	1
	Includes:	
	Cabin lifting and lowering	

	Draining and filling of oil in the hydraulic system of the power steering	
	Removal and installation of:	
	- pipelines and hoses	
	- pump	
	Bleeding of the hydraulic system of power steering	
	3408 - power steering pipelines	
S34-081	Replace the high pressure hydraulic hose	0/4
S34-082	Replace the low-pressure hose of the power steering pump	0/4
S34-083	Replace the high pressure pipe of the power steering	0/5
S34-084	Replace the high pressure pipe of the power steering assembly	0/5
S34-085	Replace the low-pressure steering pipe	0/4
S34-086	Replace the low-pressure hose	0/4
S34-087	Eliminate fluid leaks from hoses and tubes	0/15
	3414 - steering rods	
S34-141	Replace the pull-rod of the steering drop arm	0/4
S34-142	Replace the steering linkage pull-rod, adjust wheel toe-in	1/2
S34-143	Replace the right (left) tip of the steering linkage pull-rod, adjust wheel toe-in	1/4
S34-144	Check play in the tips of the steering pull-rods	0/15
S34-145	Check toe-in of the front wheels	0/15
S34-146	Adjust toe-in of the front wheels	0/8
	3422 - steering cardan shaft	
S34-221	Remove and install the steering cardan shaft	1/2
	3444 - steering column	
S34-441	Remove and install the steering column	2/7
	35. Brakes	
	3500 - brake assemblies	
S35-001	Check tightness of the brake system by the organoleptic method, eliminate faults	0/43
S35-002	Check operability of the brake system on the test bench (measurement of braking forces on wheels)	0/9
S35-003	Fill the brake system with air (to check compressor performance)	0/1
S35-004	Check operability of the brake system with pressure gauges using test outputs	1/6
	3501 - front service brakes	
S35-011	Replace the brake pads and adjust (on one brake mechanism)	1/2

S35-012	Replace the brake disc (one)	3/5
S35-013	Remove and install the bracket	1/63
S35-014	Remove and install the corrugated cover (with removal of the bracket)	2
	3502 - rear service brakes	
S35-021	Replace the brake pads and adjust (on one brake mechanism)	1/8
S35-022	Replace the brake disc (one)	3/5
	3506 - air brake pipelines	
S35-061	Remove and install the armored brake hose	0/3
S35-062	Remove and install the cooler	0/3
S35-063	Remove and install the flexible hose to the front (rear) brake chamber	0/25
S35-064	Remove and install the right pipe bundle	2
S35-065	Remove and install the left pipe bundle	2/5
	3509 - air brake compressor	
S35-091	Remove and install the brake compressor	2/8
	Includes:	
	Draining and filling of coolant	
	Removal and installation of the oil reflector	
	Removal and installation of the power steering pump from the compressor (partial dismantling)	
	Disconnection and connection of the compressor from the valve train crankcase	
S35-092	Check compressor oil slobbering	1
S35-093	Check compressor output	0/5
S35-094	Remove and install the compressor head	1/9
S35-095	Replace the compressor resonance chamber	0/5
	3511 - air drier	
S35-111	Remove and install the air drier with PR function	0/21
	Includes:	
	Disconnection and connection of:	
	- wire to the heating cartridge	
	- pipelines to the air drier	
	Removal and installation of the air drier	
S35-112	Remove and install the drier cable	0/3
	3513 - air cylinders of pneumatic brakes	

S35-131	Remove and install the condensate drain valve	0/25
S35-132	Remove and install the receiver	0/5
	3514 - brake valve	
S35-141	Remove and install the two-section brake valve	0/26
	Includes:	
	Raising and lowering of the cabin lining panel	
	Disconnection and connection of:	
	- pipelines to the valve	
	- wire to the air pressure sensor and to the brake light switch	
	Removal and installation of the valve	
S35-142	Remove and install the two-section brake valve pedal	0/35
	3515 - control and safety equipment	
S35-151	Remove and install the single safety valve for the supply line of the 2-wire drive	0/2
S35-152	Remove and install the single safety valve for air cylinders of circuit III	0/5
S35-153	Remove and install the four-circuit safety valve	0/61
S35-154	Remove and install the test outlet valve	0/25
	3518 - air brake relay valve	
S35-181	Remove and install the rear axle (rear bogey) brake control unit	0/5
S35-182	Remove and install the control unit for brakes of the second circuit	0/5
S35-183	Remove and install the control unit for brakes of the third circuit	0/5
S35-184	Remove and install the relay valve	0/7
	3519 - brake chambers	
S35-191	Remove and install type 24 brake chamber	0/26
S35-192	Remove and install the brake chamber with spring brake, type 24/24	0/43
S35-193	Adjust the stroke of the brake chamber stem	0/04
S35-194	Fasten the brake chamber	0/15
	3521 - air brake connecting head	
S35-211	Remove and install the connecting head	0/35
	3522 - trailer brake control valves	
S35-221	Remove and install the trailer brake control valve	0/95
	3533 - brake force regulator	
S35-331	Remove and install the brake force regulator (BFR)	0/38

	Includes:	
	Disconnection and connection of	
	- pipelines to BFR	
	- BFR pull-rod	
	Removal and installation of BFR together with bracket	
S35-332	Adjust the brake force regulator on the vehicle	0/1
	3537 - manually operated brake valves	
S35-371	Remove and install the manually operated reverse brake valve	0/25
	3541 - speed sensor	
S35-411	Remove and install the speed sensor (front brake)	0/7
S35-412	Remove and install the speed sensor (rear brake)	1/2
	3542 - modulators	
S35-421	Remove and install the ABS modulator block	0/4
S35-422	Remove and install the ABS modulator	0/5
S35-423	Remove and install the differential valve	0/2
	3562 - bypass check valves	
S35-621	Remove and install the two-line bypass valve together with the relay valve	0/5
S35-622	Remove and install the two-line valve	0/6
S35-623	Remove and install the relay valve with muffler	0/6
	3570 - auxiliary brake and its drive	
S35-701	Remove and install the solenoid valve for auxiliary brake application	0/4
S35-702	Remove and install auxiliary brake housing with flap assembly	1
S35-703	Remove and install the pneumatic cylinder of the auxiliary brake system	0/3
S35-704	Remove and install the tube to the pneumatic cylinder of the flap drive	0/1
	37. Electrical equipment	
	3701 - generator	
P37-011	Remove and install the generator	1/5
	Includes:	
	Cabin lifting and lowering	
	Disconnection and connection of:	
	- storage batteries	
	- alternator wires	

	Removal and installation of:	
	- belt	
	- alternator	
	- adjustment of belt tension of the water pump and alternator drive	
	- starting of the engine to check operability	
S37-012	Replace the generator V-belt	1/8
S37-013	Replace the generator V-belt tensioner	0/8
S37-014	Replace the generator belt pulley	0/7
S37-015	Replace the generator regulating relay	0/9
S37-016	Replace the generator bracket on the engine cylinder block, (the generator is removed)	0/3
	3703 - storage battery	
P37-031	Remove and install storage batteries (SB)	0/8
P37-032	Check electrolyte level in the SB and bring it to normal	0/42
P37-033	Check electrolyte density in SB.	0/8
P37-034	Remove and install the battery box	1/8
S37-035	Remove and install the battery box mounting bracket	2/2
	3708 - starter	
P37-081	Remove and install the engine starter	1/5
	Includes:	
	Disconnection and connection of:	
	- storage batteries	
	- starter wires	
	- starter removal and installation	
	- starting of the engine to check operability	
	3709 - electric selector switches	
P37-091	Remove and install the combination switch	0/15
	3710 - electric switches	
P37-101	Remove and install the inter-axle differential lock switch	0/1
P37-102	Remove and install the inter-wheel differential switch	0/1
P37-103	Remove and install the road train lights switch	0/1
P37-104	Remove and install the storage battery switch	0/2
S37-105	Remove and install the GPP switch	0/1

S37-106	Remove and install the voltage converter switch	0/1
S37-107	Replace the starter and instrument switch (ignition switch)	0/25
S37-108	Replace the reverse light switch	0/1
	3711 - headlights	
P37-111	Remove and install the right (left) headlamp (with removal of the front buffer and adjustment of the headlamp light)	1
P37-112	Replace the bulb of the headlamp unit	0/35
P37-113	Remove and install the instrument panel filament lamp	0/1
	3714 - interior lamps	
P37-141	Remove and install the cabin interior lamp	0/12
P37-142	Remove and install the cabin interior lamp bulb	0/1
S37-143	Remove and install the glove compartment lamp	0/12
S37-144	Remove and install the berth lamp	0/12
	3716 - tail lights	
P37-161	Remove and install the rear right (left) light	0/2
P37-162	Replace the rear light bulb	0/12
P37-163	Remove and install the rear right (left) light bracket	0/3
P37-164	Remove and install the reversing light	0/13
P37-165	Replace the reversing light bulb	0/1
	3717 - license plate lamp	
S37-171	Remove and install the license plate lamp	0/15
	3718 - headlight corrector control unit	
S37-181	Remove and install the headlight corrector control unit	0/1
	3720 - brake light switch	
P37-201	Remove and install (adjust) the brake light switch	0/1
	3721 - horns	
P37-211	Remove and install the horns kit	0/3
P37-212	Remove and install the horn (buzzer)	0/12
P37-213	Adjust the low (high) tone horn	0/2
	3722 - fuses for electric circuits	
P37-221	Remove and install the fuse box	0/2
P37-222	Replace the fuse	0/1

	3723 - electrical wire connectors	
S37-231	Remove and install the trailer outlet	0/2
S37-232	Remove and install the portable lamp socket	0/1
	3724 - electrical wires	
P37-241	Remove and install front wiring harness assembly	5/45
P37-242	Remove and install the rear right wiring harness assembly	2/5
P37-243	Remove and install the rear left wiring harness assembly	2/6
P37-244	Remove and install the rear light wiring harness assembly	0/5
P37-245	Remove and install the lamp wiring harness (the roof liner is removed)	0/2
P37-246	Remove and install the assembled wire from battery to starter	0/38
P37-247	Remove and install the assembled wire from battery to ground switch	0/1
P37-248	Remove and install the wire connecting the cabin ground to the frame	0/05
P37-249	Replace the MUX and EBS wiring harnesses at the same time	10
P37-2410	Repair the wiring harness (locally)	0/4
P37-2411	Replace the multiplex node harness (MUX)	7
P37-2412	Replace the electronic brake system (EBS) wiring harness	6
	3726 - direction indicators	
P37-261	Remove and install the side repeater light	0/25
P37-262	Replace the lamp of the side repeater light	0/1
P37-263	Replace the direction indicator lamp	0/5
	3727 - floodlight	
S37-271	Remove and install the coupler floodlight	0/25
S37-272	Replace the coupler lamp	0/25
	3730 - electric motors	
P37-301	Remove and install the heater electric motor assembly	0/75
	3731 - side marker lamp	
S37-311	Remove and install the right (left) side marker lamp	0/15
S37-312	Replace the side marker lamp bulb	0/1
	3737 - battery disconnect switch	
P37-371	Remove and install the battery disconnect switch	0/4
S37-372	Remove and install the manually operated reverse brake valve (on the panel)	0/25
	3738 - light alarm	

S37-381	Remove and install the road train lamp	0/3
S37-382	Replace the road train lamp bulb	0/1
S37-383	Remove and install the marker lamp	0/1
S37-384	Remove and install the flashing beacon assembly	-
	3741 - starting preheater electrical equipment	
S37-411	Remove and install the frame preheater wiring harness	1/1
S37-412	Remove and install the cabin preheater wiring harness	1/1
S37-413	Remove and install the fuel heating system wiring harness	0/5
S37-414	Remove and install the control panel	0/8
	3743 - fog lights	
P37-431	Remove and install the right (left) fog light	0/25
P37-432	Replace the fog light bulb	0/25
	3747 - relays for different purposes	
P37-471	Remove and install the relay	0/1
	3762 - electronic engine control unit	
S37-621	Replace the electronic engine control unit	0/8
	3765 - control unit for electrical equipment switching	
S37-651	Remove and install the control unit for electrical equipment switching	0/7
	38. Instruments and sensors	
	3801 - instrument panel (instrument cluster)	
P38-011	Remove and install the central instrument cluster block	0/3
	3802 - speedometer	
P38-021	Remove and install the speedometer	0/25
P38-022	Remove and install the speedometer sensor	0/15
	3803 - indicating lamp lights	
P38-031	Remove and install the flasher relay of the manual brake indicating lamp	0/1
	3805 - instrument panel	
P38-051	Remove and install the instrument panel assembly with instruments	0/3
	3813 - tachometer	
P38-131	Remove and install the electric tachometer indicator	0/25
S38-132	Remove and install the electric tachometer sensor	0/2
	3814 - air filter clogging indicator	

P38-141	Remove and install the air filter clogging indicator	0/1
	3826 - emergency air pressure drop sensor	
S38-261	Replace the emergency air pressure drop sensor	0/15
	3827 - fuel level indicator sensor	
P38-271	Replace the fuel level indicator sensor	0/15
	3828 - coolant temperature indicator sensor	
P38-281	Replace the coolant temperature indicator sensor	0/9
P38-282	Replace the coolant level gage sensor (after check)	0/3
	3829 - oil pressure indicator sensor	
P38-291	Replace the oil pressure indicator sensor	0/15
	3859 - antilock brake system (ABS)	
P38-591	Check vehicle ABS serviceability according to readings the indicating lamp on the dashboard	0/1
P38-592	Check the connecting cables, connection to the unit and modulator. Eliminate damage	0/2
P38-593	Replace the modulator	0/5
P38-594	Adjust the air gap between the sensor and the toothed rotor	0/1
P38-595	Check the sensor, connection to the unit and sensor, sensor cable for open or short circuit. Eliminate	0/3
P38-596	Check the cable and sensor signal level when wheels are rotating. Check rotor operability	0/1
P38-597	Replace the sensor	0/2
P38-598	Check the wiring for communication with the electronic control unit	0/1
P38-599	Replace the electronic control unit (ECU)	0/1
P38-5910	Check the supply cable of the solenoid valve for auxiliary brake disconnection for open or short circuit, and check the connection to the ECU. Eliminate the failure. Check the valve operability.	0/5
P38-5911	Check operability of the solenoid valve for valve auxiliary brake disconnection. Replace the valve	0/2
P38-5912	Check the lamp wires and the diagnostic keys for open or short circuit. Eliminate damage	0/1
P38-5913	Check correct connection of ECU power supply	0/1
P38-5914	Check the sensor signal level. Check presence and operability of the toothed rotor.	0/5
P38-5915	Check the connections of the modulators of the first diagonal	0/1
	40. Electronic control	
	4011 - brackets	
S40-111	Remove and install the diagnostic switch	0/2
S40-112	Remove and install the set/reset switch	0/2
S40-113	Remove and install the engine brake switch	0/2

S40-114	Remove and install the emergency engine shutdown cancellation switch	0/1
S40-115	Remove and install the general purpose switch	0/1
S40-116	Remove and install the display unit	0/1
	4012 - relay	
S40-121	Remove and install the relay	0/1
	4014 - switches and selectors	
S40-141	Remove and install the right (left) steering column switch	0/6
S40-142	Remove and install the plug in the overhead console	0/1
S40-143	Replace the cabin tilt blocking switch	0/1
S40-144	Replace the hazard light switch	0/1
S40-145	Replace the cabin interior light switch	0/1
S40-146	Replace the combined light switch	0/15
	4015 - units	
S10-151	Replace the control unit	1/3
S40-152	Remove and install the tachograph	0/25
S40-153	Remove and install the tachograph actuator sensor	0/35
	4019 - sensors	
S40-191	Remove and install the angular accelerometer	0/2
S40-192	Remove and install the body position sensor (with sensor position adjustment)	0/4
S40-193	Remove and install the clutch pedal sensor (with sensor position adjustment)	-
S40-194	Remove and install the accelerator pedal position sensor	0/4
	4020 - accelerator pedal	
S40-201	Remove and install the electronic accelerator pedal	0/35
	4070 - wiring harnesses	
S40-701	Remove and install the cabin wiring harness	3
S40-702	Remove and install the wiring harness in the overhead console	3/5
	4071 - engine electronic control system wiring harnesses	
S40-711	Remove and install the engine control system wiring harness (panel)	3/9
S40-712	Remove and install the engine control system wiring harness (motor)	2
S40-713	Remove and install the neutralization system wiring harness	1/8
	50. Cabin	
	5000 - cabin assembly	

P50-001	Remove and install the cabin assembly	5/1
P50-002	Remove the cabin upholstery and thermal insulation for painting	2/5
P50-003	Install the upholstery and thermal insulation of the cabin	2/6
P50-004	Weld up a crack on the cabin up to 50 mm, treat the weld area	0.2**
P50-005	Prime the surface, 1 dm ² (grind, prime, treat)	0.4**
P50-006	Paint the cabin surface 1 dm ² , outside	0.6**
P50-007	Replace the cabin frame	55/2
	5001 - cabin fastening	
P50-011	Remove and install the rear right (left) air element	0/4
P50-012	Remove and install the front air element	0/5
P50-013	Remove and install the lower bracket of the cabin rear suspension	0/6
P50-014	Remove and install the upper bracket of the cabin rear suspension	0/3
S50-015	Remove and install the cross member	1/2
S50-016	Remove and install the right, (left) bracket of the front suspension	1/1
S50-017	Remove and install the anti-roll bar assembly with levers	5/3
S50-018	Remove and install the rear lever bracket	1
S50-019	Remove and install the right (left) rear shock absorber of the driver's cabin	0/5
	5003 - cabin lifting cylinder	
S50-031	Remove and install the cabin hydraulic cylinder, bleed the system	0/5
S50-032	Remove and install the lower bracket	0/3
	5004 - cabin lifting mechanism	
S50-041	Remove and install the tilting mechanism pump, bleed the system	0/8
S50-042	Remove and install the tube (one)	0/2
S50-043	Bleed the tilting mechanism system	0/2
	5018 - locking device	
P50-181	Remove and install the right (left) cabin hydraulic check valve assembly	1/9
	52. Windshield	
	5205 - windshield wiper and its drive	
P52-051	Remove and install the windshield wiper assembly	0/5
S52-052	Remove and install the electric motor with reducer	0/3
	5206 - windows and seals	
P52-061	Replace the windshield glass	5

	Includes:	
	- dismantling and installation of glass	
	- removal of old sealant and application of new sealant on the prepared window contour	
	- drying	
	5208 - washer	
P52-081	Remove and install the windshield wiper	0/2
	53. Cabin front	
	5300 - dashboard	
P53-001	Remove and install the dashboard	3
	56. Cabin rear end	
	5614- sound insulation screens above the engine	
P56-141	Remove and install the sound insulation screens above the engine (all)	0/9
	57. Cabin roof	
	5702 - roof liner	
P57-021	Remove and install the roof liner assembly	0/7
	5713 - cabin ventilation	
P57-131	Remove and install the ventilation hatch assembly with mechanism	0/5
S57-132	Remove and install the ventilation hatch cover	0/2
	61. Cabin door	
	6100 - cabin door assembly	
P61-001	Remove and install the right (left) cabin door	0/8
	6103 - door window	
P61-031	Remove and install the drop door glass	1/2
P61-032	Replace the glass seal	1/45
	6104 - glass raiser	
P61-041	Remove and install the glass raiser switch	0/1
P61-042	Remove and install the door electric glass raiser	1/1
	6105 - door lock and handles	
P61-051	Remove and install the outer door handle	0/45
P61-052	Remove and install the inner door handle	0/1
P61-053	Remove and install the right (left) door lock	0/55
P61-054	Remove and install the right, (left) door lock keeper	0/1

	6107 - door seal	
P61-071	Replace the door seal	0/25
	68. Seats	
	6800 - driver's seat	
P68-001	Remove and install the driver's seat assembly	0/4
	6810 - passenger seat	
P68-101	Remove and install the passenger seat assembly	0/4
	81. Cabin ventilation and heating	
	8101 - heater	
P81-011	Remove and install the heater radiator	0/5
P81-012	Remove and install the heater radiator assembled with the air conditioner radiator	12/5
	8102 - window heating	
P81-021	Remove and install the air distributor	0/5
	8105 - heating system valve	
P81-051	Remove and install the heater valve assembly	0/33
	8106 - heating unit	
S81-061	Remove and install the hose	0/3
S81-062	Remove and install the T-connector	0/3
S81-063	Remove and install the heater bracket	1/2
S81-064	Remove and install the fuel tank	0/5
S81-065	Remove and install the fuel pump	0/5
	8111 - air conditioner compressor	
S81-111	Remove and install the air conditioner compressor	2/5
S81-112	Replace the compressor belt pulley	1/2
S81-111	Replace the compressor electromagnetic coupling, (compressor is removed)	0/7
	8117 - safety belts	
S81-171	Remove and install the diagonal seat belt with lock	0/3
S81-172	Remove and install the seat belt with lock	0/1
	8118 - fans	
P81-181	Remove and install the electric motor	0/3
S81-182	Remove and install the heater fan casing	0/1
S81-183	Remove and install the right (left) fan scroll housing with distributor	0/5

S81-184	Remove and install the booster-fan of the heating/ventilation system	0/7
	8120 - heating system pipelines	
P81-201	Remove and install the heater bleed hose	0/3
P81-202	Replace the TORRO hose retaining clamp	0/1
	82. Cabin accessories	
	8201 - mirrors	
P82-011	Remove and install the rear view mirror	0/2
P82-012	Remove and install the rear view mirror bracket	0/3
S82-013	Remove and install the front view mirror with holder	0/2
S82-014	Remove and install the side view mirror with holder	0/2
	8202 - handrails	
S82-021	Remove and install the right (left) entrance handrail	0/05
	8203 - ashtray	
P82-031	Remove and install the ashtray	0/03
	8204 - sun visor	
P82-041	Remove and install the sun visor	0/06
	8208 - light reflectors	
P82-081	Remove and install the light reflectors	0/4
	8213 - overhead console	
P82-131	Remove and install the overhead console	0/5
	84. Trim package	
	8401- radiator cowl	
P84-011	Remove and install the upper lining panel assembly	0/3
P84-012	Remove and install the lower lining panel assembly	0/25
P84-013	Remove and install the lining panel lock (one)	0/1
S84-014	Remove and install the stopper assembly	0/1
S84-015	Remove and install the right (left) corner cowl	0/6
	8403 - front fender	
P84-031	Remove and install the front fender right (left) front panel	0/4
P84-032	Remove and install the front fender right (left) rear panel	0/4
P84-033	Remove and install the right middle panel of the front fender	0/2
P84-034	Remove and install the left middle panel of the front fender	0/5

S84-035	Remove and install the right (left) mudguard of the front fender	0/15
	8404 - rear fender	
P84-041	Remove and install right (left) rear fender No. 1	0/3
S84-042	Remove and install right (left) rear fender No. 2	0/4
S84-043	Remove and install the right (left) upper fender part with clamps	0/1
S84-044	Remove and install the rear fender bracket	0/2
S84-045	Remove and install the middle frame mud floor	0/2
S84-046	Remove and install the left frame mud floor	0/2
S84-047	Remove and install the footstep	0/6
S84-048	Remove and install the quick-absorbing shield	0/2
S84-049	Tint the vehicle fender (the fender is on the vehicle)	0/2
	8405 - footstep	
P84-051	Remove and install the right, (left) footstep shield	0/27
S84-052	Remove and install the right (left) footstep bracket	0/4
S84-053	Remove and install the front right (left) footstep support	0/5
S84-054	Remove and install the upper (lower) footstep pad	0/1
	8411 - side protection	
S84-111	Remove and install the right (left) side guard	0/3
S84-112	Remove and install the right front stand	0/15
S84-113	Remove and install the right (left) rear stand	0/2
	8415 - cowl	
P84-151	Remove and install the external sun visor	0/4
S84-152	Remove and install the right (left) bracket	0/5
	8416 - buffer facing	
S84-161	Remove and install the buffer facing	0/5