

APPENDIX 8

MANUFACTORY REPAIR FLATE RATE FOR MERCEDES G WAGON 320 MODEL

OPERATION	DESCRIPTION	TIME
Engine assembly		
Engine & transmission complete	Remove and Install	11.5
Cylinder head		
Camshaft/valve cover & gasket - left	Remove and Install	3.8
Camshaft/valve cover & gasket - right	Remove and Install	3.3
Camshaft/valve cover & gasket (both)	Remove and Install	6.4
Camshaft & drive gear		
Camshaft drive belt/chain	Remove and Install	5.1
Lubrication		
Engine oil & filter	Renew	0.4
Oil sump pan - upper	Remove and Install	8.8
Oil sump pan - lower	Remove and Install	2.8
Throttle controls		
Throttle pedal - LHD	Remove and Install	0.3
Diesel injection system		
Control ECU	Remove and Install	1.2
Injectors (all)	Remove and Install	2.8
Pre-heat plugs (all)	Remove and Install	1.4
Fuel supply		
Tank breather	Remove and Install	1
Turbocharger		
Turbocharger	Remove and Install	2.7
Radiator. fan & intercooler		
Coolant/antifreeze	Drain and refill	0.7
Pressure test system	Check	0.3
Radiator	Remove and Install	5.5
Intercooler	Remove and Install	5.7
Header tank & hoses		
Header/expansion tank	Remove and Install	0.8
Exhaust system		
Lambda sensor	Remove and Install	0.8
Torque converter & driveplate		
Converter	Remove and Install	5.8
Converter housing & gasket	Remove and Install	7.1
Automatic transmission, housing & fluid system		
Transmission unit	Remove and Install	5.8
Oil cooler	Remove and Install	1.3
Oil pan & gasket	Remove and Install	1.8
Control, governor & valves		
Control ECU	Remove and Install	2.1
Valve block	Remove and Install	2.1

Propshaft, centre differential & transfer box		
Propshaft - front/single	Remove and Install	2.4
Propshaft - rear	Remove and Install	2.2
Transfer box	Remove and Install	3.9
Front axle		
Front axle - complete	Remove and Install	5.9
Final drive pinion oil seal	Remove and Install	2.2
Halfshaft	Remove and Install	5.5
Rear axle		
Rear axle - complete	Remove and Install	6.4
Final drive pinion oil seal	Remove and Install	2.6
Driveshaft - left	Remove and Install	1.6
Driveshaft - right	Remove and Install	1.6
Driveshaft (both)	Remove and Install	2.7
Front suspension		
Road spring (both)	Remove and Install	4.6
Shock absorbers (pair)	Remove and Install	1.8
Radius arm	Remove and Install	1.9
Radius arm (both)	Remove and Install	2.4
Anti-roll bar	Remove and Install	1.6
Anti-roll bar bushes (all)	Remove and Install	1.3
Rear suspension		
Road spring (both)	Remove and Install	2.6
Shock absorbers (pair)	Remove and Install	1.1
Trailing/semi-trailing arm	Remove and Install	1
Trailing/semi-trailing arm (both)	Remove and Install	1.4
Panhard rod	Remove and Install	0.6
Steering geometry		
Geometry - complete vehicle	Check	1.3
Geometry - complete vehicle	Check and Adjust	1.6
Front wheel alignment (toe)	Check and Adjust	0.7
Steering mechanism		
Steering rack/box	Remove and Install	8.2
Drag link assembly	Remove and Install	0.4
Track rod	Remove and Install	0.4
Track rod end joint	Remove and Install	0.4
Steering column		
Steering wheel	Remove and Install	0.3
Steering column lock	Remove and Install	0.9
Steering column	Remove and Install	4.7
Power assisted steering		
Pump	Remove and Install	3.1
Wheels		
Wheel	Remove and Install	0.4
Wheels - (both)	Remove and Install	0.5
Wheels - (all)	Remove and Install	0.8
Braking system hydraulics		
Hydraulic system	Bleed	1

Fluid reservoir (separate)	Remove and Install	0.3
Master cylinder LHD	Remove and Install	1.5
Rear wheel cylinder (both)	Remove and Install	2
Front brake caliper (both)	Remove and Install	2.2
Front brake hose (one)	Remove and Install	1.1
Front brake hose (both)	Remove and Install	1.4
Pressure compensator/load valve (one)	Remove and Install	1.9
Footbrakes		
Front brake pads (all)	Remove and Install	0.8
Front brake pads (all) - wheels removed	Remove and Install	0.3
Rear brakes shoes (all)	Remove and Install	2
Front brake disc (both)	Remove and Install	2
Brake pedal & servo		
Servo - LHD	Remove and Install	1.4
Servo non-return valve	Remove and Install	1.3
ABS or ABS/ESP		
ECU	Remove and Install	0.8
Wheel sensor - front (one)	Remove and Install	0.7
Wheel sensor - front (both)	Remove and Install	1.3
Wheel sensor - rear (one)	Remove and Install	0.5
Wheel sensor - rear (both)	Remove and Install	0.9
Parking brake		
Parking brake freeplay	Check and Adjust	0.3
Parking brake lever	Remove and Install	2.5
Parking brake cable - secondary	Remove and Install	1.9
Parking brake cables - (both) equal length	Remove and Install	3
Parking brake pads/shoes (all)	Remove and Install	2
Battery		
Battery	Check	0.3
Charging system		
Alternator	Remove and Install	1.8
Voltage regulator	Remove and Install	1.9
Starting system		
Starter motor - pre-engaged	Remove and Install	1.9
Starter motor solenoid	Remove and Install	2
Bulbs & LEDs		
Bulb - unspecified (one)	Remove and Install	0.2
Headlamp bulb	Remove and Install	0.7
Rear combination bulb (any)	Remove and Install	0.2
Instrument panel warning lamp (any)	Remove and Install	0.2
Front lamps		
Gas discharge headlamps	Check and Adjust	0.7
Gas discharge headlamp - one	Remove and Install	0.9
Gas discharge headlamp - (both)	Remove and Install	1.2
Fog lamp - one	Remove and Install	0.8
Direction indicator lamp - one	Remove and Install	0.5
Rear lamps		
Rear combination lamp assembly	Remove and Install	0.3

Number plate lamp - one	Remove and Install	0.3
Interior lamps		
Interior lamp - front	Remove and Install	0.2
Interior lamp - rear	Remove and Install	0.2
Switches		
Starter/ignition switch	Remove and Install	1
Direction indicator switch	Remove and Install	1.4
Main lighting switch	Remove and Install	0.5
Dip/main/flash switch	Remove and Install	1.4
Wash/wipe switch	Remove and Install	1.4
Hazard warning lights switch	Remove and Install	1.4
Stop lamps switch	Remove and Install	0.4
Instruments		
Instrument panel	Remove and Install	0.5
Transducers, sensors & transmitters		
Fuel level sensor	Remove and Install	0.8
Fusebox & Relays		
ABS relay	Remove and Install	0.2
ABS pump relay	Remove and Install	0.2
Air conditioning		
System evacuation/recharging	Check and Adjust	1
Air conditioning control panel	Remove and Install	0.7
Front door		
Door mirror - one	Remove and Install	1.1
Door mirror - (both)	Remove and Install	1.3
Interior/Seats/Seatbelts		
Airbag - driver	Remove and Install	0.6
Airbag control module	Remove and Install	1.9
Front seat belt	Remove and Install	1.1
Seat belt buckle - rear outer	Remove and Install	0.4
Seat belt buckle - rear centre	Remove and Install	0.2
Back door		
Lock barrel	Remove and Install	1.1