6. Technical data

Lamborghini Murciélago LP640 Roadster

Frame

High strength tubular steel structure with carbon fibre components.

Bodywork

In carbon fibre, except roof and door external panels (steel)

Steering

Type	Mechanical (rack and pinion) power-assisted
Right-hand turning circle	12.55 m

Wheels and tyres

Front	245/35 ZR 18
Rear	335/30 ZR 18

Engine

Type	12 cylinders at 60°
Bore and stroke	88 mm x 89 mm
Displacement	6496 cc
Compression ratio	$(11 \pm 0.2):1$
Maximum power	640 hp (471 kW) at 8000 rpm
Maximum torque	660 Nm at 6000 rpm
Engine position in vehicle	Longitudinal central-rear
Cylinder heads and engine block	Aluminium
Intake system	Variable geometry with 3 operating modes

Timing

4 valves per cylinder, 4 overhead camshafts	

Timing gear transmission	2 chains
Continuous timing variator (int. and ex.)	Electronically controlled

Ignition system

Static type ignition system with individual coils (one for each spark plug).

Firing sequence 1-7-4-10-2-8-6-12-3-9-5-11

Fuel system/injection

Lamborghini LIE electronic engine control unit, multipoint, sequential timed, DRIVE BY WIRE

Lubrication system

Type	Dry sump
Recovery pumps	2 gear pumps
Delivery pump (high pressure)	1 gear pump

Cooling system

Type	Liquid cooled, with pressurized circuit
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Transmission

Type of transmission	Permanent all-wheel drive with Viscous Traction
	system
Gearbox	6-speed mechanical gearbox
Clutch	Dry single disc
Clutch disc diameter	272 mm
Disengagement	With self-adjusting hydraulic control

Transmission ratios

Gearbox:	
I st	1:3.091

II nd	1:2.105
III rd	1:1.565
IV th	1:1.241
V th	1:1.065
VI th	1:0.939
Reverse	1:2.692

Brakes

4 self-ventilated rotors with pedal control, hydraulic transmission with dual independent circuits, one for each axle with vacuum servo.

ABS antilock device + DRP function.

Steel brake lines

Front rotor	Ø 380 x 34 mm
Front calliper cylinders	N. 8 (32-28 mm/32-28 mm)
Rear rotor	Ø 355 x 32 mm
Rear calliper cylinders	N. 4 (40-44 mm)

Ceramic rotors system (Optional)

Front rotor	Ø 380 x 38 mm
Front calliper cylinders	N. 6 (32-36-38 mm)
Rear rotor	Ø 380 x 38 mm
Rear calliper cylinders	N. 6 (32-36-38 mm)
Handbrake	Mechanical, acting on rear wheels

Suspension

4-wheel independent articulated quadrilateral system. Hydraulic shock absorbers and coaxial coil springs. Suspension with dual front and rear struts, antiroll, antidive and antisquat bar.

Performance data

Top speed	330 km/h (before: 320 km/h)
Acceleration 0-100 km/h	3.4 s (before: 3.8 s)

Dimensions

Wheelbase	2665 mm
Total length	4580 mm
Total width	2045 mm
Total height	1132 mm (with roof)
	1068 mm (without roof)
Dry weight (no fuel)	1665 kg
Front track width	1635 mm
Rear track width	1695 mm
Front overhang	1005 mm
Rear overhang	1695 mm
Maximum overall width with external rear-view	2240 mm
mirrors	

Liquid capacities (litres)

Fuel tank	100 litres
Engine oil	12 litres
Gearbox oil	3.5 litres
Front differential oil	1 litre
Rear differential oil	2.5 litres
Cooling circuit	15 litres

Consumption (according to DIR 1999/100/CE)

Urban	32,3 1/100km
Extra-urban	15,0 1/100 km
Combined	21,3 1/100 km
CO ₂ emissions	495 g/km