The car: view from below
1 catalytic converter
2 crankcase
3 differential
4 exhaust system
5 front axle beam
6 gearbox (BrE) / transmission (AmE)
7 hydraulic converter
8 line shaft
9 oil sump (BrE) / oil pan (AmE)
10 petrol tank (BrE) / gas tank (AmE)
11 radiator
12 rear axle
13 shock absorber
14 silencer (BrE)/ muffler (AmE)
15 tyre (BrE) / tire (AmE)

Internal combustion engine elements
1 camshaft
2 connecting rod
3 coolant
4 crankshaft
5 engine block
6 exhaust port
7 exhaust valve
8 head
9 intake port
10 intake valve
11 oil pan
12 piston
13 spark plug
14 valve cover

Types of engines – cylinder arrangement
- 6-cylinder V engine
- 60 V engine / V60 engine
- acute angle V engine
- diesel engine
- double-piston engine
- flat-twin engine
- four-stroke engine
- free-piston engine
- horizontal engine
- inclined engine
- inline 4-cylinder engine
- low compression engine
- opposed-piston engine
- two-stroke engine
- U-type engine
- vertical engine
Cars and the motor industry

**Types of brakes**

**Disc brake**
- brake line
- brake pads
- disc (BrE) / disk (AmE)
- piston
- splash shield
- stud
- wheel hub

**Drum brake**
- brake lining
- brake shoe
- drum
- piston
- return spring
- wheel cylinder

**Acronyms**
- ADB (automatic differential brake)
- AWD (all wheel drive)
- FEI (fully electronic ignition)
- CMR (cold mixture heater)
- GDI (gasoline direct injection)
- HP (horsepower)
- HFS (heated front seat)
- IFS (independent front suspension)
- LDV (light duty vehicle)
- OD (overdrive)
- DOHC (double overhead camshaft)
- SOHC (single overhead camshaft)
- OHV (overhead valve)
- PB (power brakes)
- RHD (right-hand drive)
- RKE (remote keyless entry system)
- RPM (revolutions per minute)
- SBR (seat belt reminder)
- SBR (steel belted radius)
- TBI (throttle body injection)
- ZEV (zero emission vehicle)

**At the service centre**
- adjustable arm of hydraulic lift
- beam setter
- cable boom
- check light for steering alignment
- computer harness
- data printout
- diagnostic test bay
- excavation
- firing sequence insert
- hydraulic lift
- hydraulic lift pad
- light read-out
- main computer socket
- mains switch
- oil temperature sensor
- power screwdriver
- pressure gauge
- printer
- storage box for small parts
- switch from automatic to manual
- test equipment for wheel and steering alignment
- wall chart (of tools)

**At the car repair garage**
- automatic computer test
- bonnet (BrE) / hood (AmE)
- bonnet support
- computer harness
- engine compartment
- main computer socket
- motor car mechanic
- oil temperature sensor
- passenger vehicle
- rear engine
- tailgate
- tool trolley

**Tools**
- air hose
- bearing extractor
- body hammer / roughing-out hammer
- bush extractor
- car jack
- chisel
- depth gauge
- expander cone
- hone
- hub extractor
- impact wrench
- torque wrench

- pin spanner
- ring spanner
- spark plug box spanner
- spark plug wrench
- wheel nut spanner
**Useful phrases**

**Car repair**
I’ve taken my car in for a service.
We advise a repair by unit replacement.
You must change to winter tyres.
You must change to winter tyres.
Unscrew these bolts if you want to change the wheel.
I’m getting the ignition adjusted at a diagnostic centre.
Could you check the wheel balance?
That engine is making a strange noise.
The engine is malfunctioning.
The low fuel warning light is on.
The engine has blown a gasket – it needs changing.
The rear fog lamp isn’t on – you must change the bulb.
The wheels are / aren’t aligned.
We advise you to change the radiator fluid.
We have fitted new tyres.

**Buying a car**
The car has done (200,000 km).
How many litres does the tank hold?
What’s that gauge on the left?
It shows the oil temperature.
What type of engine is it?
It’s a (4.2-litre) (V8) engine.
So what’s the top speed?
The top speed is (155 mph) and acceleration is (0-60) in just (6) seconds.
And what about fuel consumption?
The official test figures say (14 l/100 km) around town.
And how much does it cost?
This (4.2) model costs around (£54,000).
What’s the year of manufacture?
(2008), so it’s quite new.
But it looks like it’s been in a few accidents.
So what’s the ‘real’ mileage?
Let me give you my card. If you have any other questions, please give me call.

**At the petrol station**
We must stop for some petrol / gas.
Fill it up with unleaded petrol, please.
Can you also check the oil, please.
How much is diesel oil / diesel ?

**Troubleshooting**
(car alarm) malfunction
adjust (fuel pressure / coolant level)
breakdown / failure
calibrate (the speedometer)
change car parts
corrosion wear
disassemble (the engine / the car)
disconnect the car battery
descending wear
discharge (head / gasket) damage
discharge (unit)
efficiency wear
engine wear
excessive wear
fuel wear
fuel level adjustment
gas wear
machine wear
massive repair / general overhaul
mechanical wear
reassembly (the engine)
reconditioning
rework the interior
reduce (the clutch / engine revolutions)
rework the wheels
remove (paint / varnish)
repair by unit replacement
repair (windscreen wipers / halogen bulbs)
scraper car
screw / screw in (bolts)
separate (wires / cables)
silencing / muffling
sound insulation
take out the gearbox
unscrew / screw out (bolts)
usual wear and tear
vehicle disposal / car scrapping
wheel balance

**Useful phrases**

**Car repair**
I’ve taken my car in for a service.
We advise a repair by unit replacement.
You must change to winter tyres.
Unscrew these bolts if you want to change the wheel.
I’m getting the ignition adjusted at a diagnostic centre.
I’m afraid this part has to be scrapped.
Could you check the wheel balance?
That engine is making a strange noise.
The engine is malfunctioning.
The low fuel warning light is on.
The engine has blown a gasket – it needs changing.
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