

IMPORTANT:

Perfect operation and long working life of a car is strictly related to its good use and, above all, to the care with which regular service is performed. Considering product evolution, new service schedules have been adopted. The scheduled service coupons are planned at 20,000 km.

It is, however, important to note that the car requires ordinary precautions, such as systematic fluid checks and topping up, tyre pressure checks, etc.

In any case, remember that the correct car maintenance is certainly the best way to ensure performance, safety, environmental friendliness and low running costs in time.

Additional operations

The following precautions are required in addition to the operations shown in the Service Schedule to ensure good operation of the car:

Every 1000 km or before long trips, check and top up if required:

- engine oil
- engine coolant
- brake/clutch fluid
- power steering fluid
- battery electrolyte
- tyre pressure
- windscreen washer fluid.

Engine oil

If the car is mainly used in one of the following especially demanding conditions:

- towing trailers
 - dusty roads
 - short, repeated trips (less than 7-8 km) with temperature below zero degrees centigrade
 - engine frequently idling or long distances at slow speed (or after a long storage period)
- we recommend changing the engine oil more frequently than shown in the Service Schedule.

Air cleaner

Replace the air cleaner more frequently than prescribed if the car is mainly used on dusty roads.

Brake pads

The brake pads are subject to different use and wear, according to conditions of use and to driving style. Have the pad thickness checked at an Alfa Romeo Dealership as soon as the front brake pad warning light comes on.

As the car is equipped with front brake pad wear sensors only, check the rear pads when the front pads are replaced. According to the car use, the rear brake pads may not need to be replaced immediately. We recommend in this case to check them later.

Brake/clutch fluid

Brake fluid is hygroscopic, i.e. it absorbs moisture. To prevent faulty braking, change the brake fluid every two years, regardless of the mileage (see the Service Schedule).

Battery

Check the battery charge status, preferably at the beginning of winter, to prevent the electrolyte from freezing. Perform this check more frequently if the car is mainly used for short trips or if permanent intake devices also running when the key is removed are fitted, especially those fitted after market.

Climate control system

To keep the system in perfect shape, simply turn it on once every fortnight - also in winter - and run the compressor for a few minutes. Furthermore, we recommend having the system checked before the summer, when the system will be used.

Dust/pollen filter (cars with climate control only)

Have the filter checked once a year, preferably at the beginning of summer, by an Alfa Romeo Dealership. If the car is frequently used in dusty or very polluted environments, we recommend you have the filtering element checked more frequently than shown in the Service Schedule. The filter should be replaced in particular if decreased air intake into the passenger compartment is noticed.

Anti-freeze

We recommend topping up with Climafluid Super Permanent -40°C Alfa Romeo to preserve the protective features of the mixture.

Rubber hoses

The rubber hoses in the brake, power steering, fuel feed lines, etc. should be carefully checked at the frequency shown in the Service Schedule.

Wheels

Periodically and before long trips, check the pressure of each tyre, including the spare. Check pressure on cold tyres.

Periodically check that the depth of the tread complies with the minimum legal prescriptions. Periodically check that the tyres are not cut, swollen or present irregular wear. If this is so, go to an Alfa Romeo Dealership.

If a tyre is punctured, stop immediately and replace it to prevent damage to the tyre, the rim, the suspension and the steering.

The factory fitted wheels (rims and tyres) are suited to the features of the car and ensure maximum safety and comfort in all normal conditions of use. Before replacing the rims or tyre fitted on the car, check the allowed type table. However, observe the rim-tyre coupling of the original fitting. Always fit new tyres. Avoid tyres from unknown sources.

SERVICE SCHEDULE

Operations to be performed at the indicated km	Km x 1,000								
	20	40	60	80	100	120	140	160	180
Check tyre conditions and wear	●	●	●	●	●	●	●	●	●
Check front disc brake pad wear warning light operation	●	●	●	●	●	●	●	●	●
Check rear disc brake pad wear		●		●		●		●	
Check intactness of drive shaft bellows, power steering, joint caps and tightness of fuel and brake lines	●	●	●	●	●	●	●	●	●
Inspect conditions of: external bodywork and underbody protection (exhaust - fuel feed - brakes); rubber parts (boots - sleeves - bushings - etc.)	●	●	●	●	●	●	●	●	●
Inspect conditions of accessory drive Poly-V belt		●							●
Check tension of accessory drive belt and adjust, if required	●						●		
Check handbrake lever travel		●		●		●		●	
Check/adjust tappet clearance	●	●	●	●	●	●	●	●	●
Check exhaust emissions		●		●		●		●	
Check evaporation system operation				●				●	
Replace air cleaner cartridge		●		●		●		●	
Check fluids and top up if required (brakes, hydraulic clutch, power steering, windscreen washer, battery, engine coolant, etc.)	●	●	●	●	●	●	●	●	●
Replace timing belt and accessory drive Poly-V belt						●			
Replace spark plugs	●	●	●	●	●	●	●	●	●
Check engine control system operation (via diagnostic socket)		●		●		●		●	
Check gearbox and differential oil level				●				●	
Change engine oil and filter (*)	●	●	●	●	●	●	●	●	●
Change brake fluid (or every 24 months)			●			●			●
Check dust/pollen filter	●	●	●	●	●	●	●	●	●
Operations on hood: - open/close functional check, oil seal inspection, check adherence of windows to hood seal and adjust if required (or every 18 months)	●	●	●	●	●	●	●	●	●
- for version with automatic hood, check oil pump level and top up, if required (or every 12 months)	●	●	●	●	●	●	●	●	●

(*): Or every 18 months for lower mileage.

ENGINE TECHNICAL FEATURES

FEATURES

Engine		AR 16202
Cycle		Otto, four-stroke
Fuel feed/Ignition		Motronic ML4.1 / EZ212K
Firing order		1 - 4 - 2 - 5 - 3 - 6
Capacity	cm ³	1996
Number of cylinders		6 at V 60°
Bore	mm	80
Stroke	mm	66.2
Maximum power	CV CEE (kW CEE) rpm	200 (147) 6000
Maximum torque	kgm CEE Nm CEE rpm	27.6 (28.5 *) 271 (280 *) 2400
Compression ratio		8 : 1
Engine oil pressure (oil at 100°C)		
- Idling	bar	0.7
- 4000 rpm		3.8
Idling ratio	rpm	800 ± 20

(*): With overboost.

NOTE: For other "Engine technical features", see GTV  TB

INDICATIVE CAPACITIES

Capacity		Version	916S2A
Fuel tank			70 litres
Fuel reserve			~ 9 litres
Engine oil	Sump + filter (for regular replacement)		6.5 litres
Gearbox-differential oil			2 litres
Power steering system oil			1.3 kg
Brake and clutch circuit oil			0.4 kg
Engine coolant			11.7 litres
Climate control compressor oil			240 ± 15 cm ³
Climate control system fluid			0.700 kg + 0.05 kg (1)

(1): Additional amount to be computed considering the fluid which remains the recharge device lines.

WHEELS AND TYRES

Features		Version	916S2A
Rim size			6.5J x 16"
Tyre size			205/50 R16 87Y
Tyre pressure (cold)		bar (kg/cm ²)	front 2.7 rear 2.5
Space saver spare wheel	Rim size		4J x 15" C26
	Tyre size		T125/80 R15 96M
	Tyre pressure	bar (kg/cm ²)	4.2

IMPORTANT: Increase pressure by 0.3 bar in the event of constant driving at top speed.

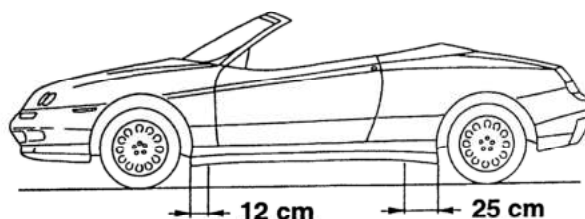
JACKING POINTS

With arm hoist or shop jack.

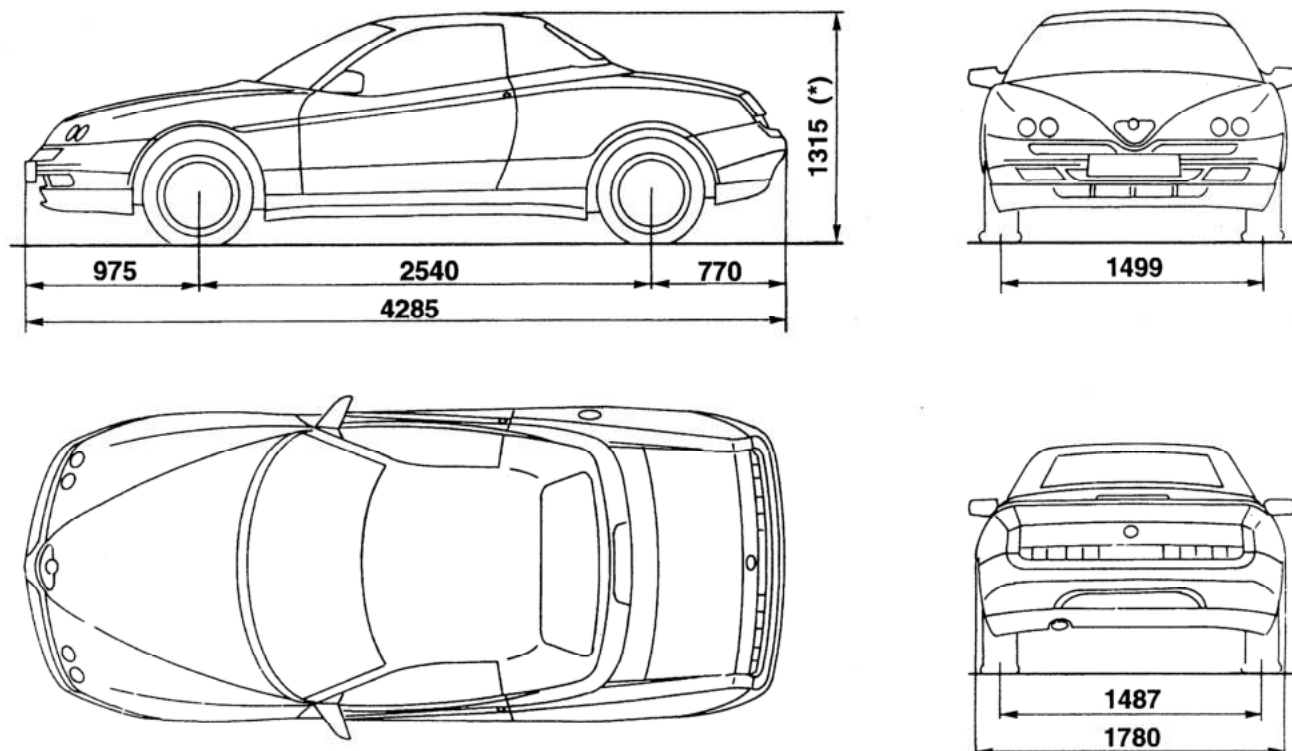
- Position the arms or the jack in the areas shown.



IMPORTANT:
Be very careful when positioning the arms or the jack in the front jacking points to avoid squeezing the brake and fuel lines.



DIMENSIONS



(*): Unladen vehicle

WEIGHTS AND LOADS

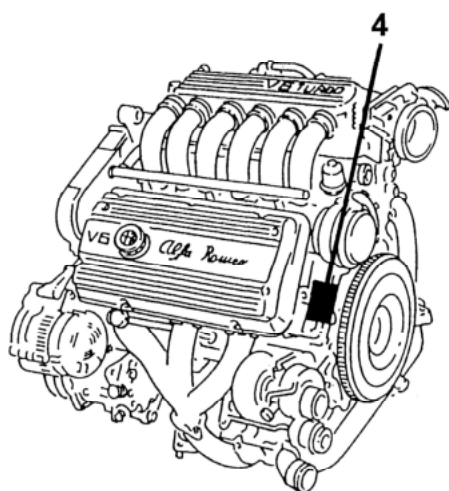
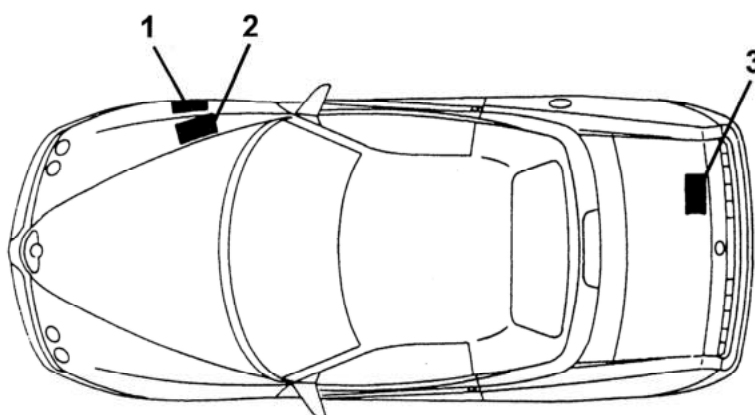
Unit: kg

Features		Version	916S2A
Kerb weight (without driver)			1430
Maximum admitted load			1680
Load			260
Maximum weight allowed on each axle	front		1060
	rear		870
Towable weight	trailer with brakes		1000
	trailer without brakes		500
Maximum load on tow hitch			50

MODEL IDENTIFICATION

Brand name	Spider 2.0 V6 TB
Version	Spider
Version (on identification plate)	916 S2A
Chassis (in engine compartment, on upper right-hand shock absorber bracket)	-
Progressive chassis number	6000001
Engine (code)	AR 16202
Engine symbol	 TB
Gearbox (code)	C.503.5.29.21

IDENTIFICATION PLATE LOCATION



1. Identification data plate
2. Chassis marking
3. Paintwork identification plate
4. Engine marking

INDEX

ENGINE (Continued)

10

AIR SUPPLY SYSTEM

- Air feed and oil vapour recovery system (*)
- Boost-Drive management (*)
- Air cleaner cartridge replacement..... (*)
- Throttle casing..... (*)
- Flow test..... (*)
- Air flow meter (*)
- Throttle position sensor..... (*)
- Intake manifold..... (*)
- Constant idling actuator (*)
- Oil vapour separator (*)
- Turbo compressor..... (*)
- Waste-Gate overpressure valve calibration check..... (*)
- Intercooler (*)
- Stall valve..... (*)

EXHAUST SYSTEM

- Exhaust system description..... (*)
- Catalytic converter..... (*)
- Lambda sensor..... (*)
- Exhaust emission check..... (*)

ELECTRICAL COMPONENTS

- Rpm and phase sensor (*)
- Engine coolant temperature sensor (NTC) (*)
- Knock sensors (*)
- Inertia switch..... (*)
- Boost-Drive (Pierburg) solenoid valve control device..... (*)
- Altitude sensor..... (*)
- Cylinder 1 acknowledgement sensor..... (*)

ENGINE COOLING SYSTEM

- Engine coolant system (*)

(*): See GTV  TB

SUSPENSION AND WHEELS

44

WHEEL GEOMETRY

- Checking the front wheel alignment (*)
- Checking the rear wheel alignment..... (*)
- Checking the characteristic angles (*)

(*) See GTV  TB

INDEX

TECHNICAL DATA

00

VEHICLE

- Model identification 1
- Identification plate location 1
- Identification data plate (*)
- Paintwork identification plate (*)
- Dimensions 2
- Weights and loads 2
- Wheels and tyres 3
- Fluids and lubricants (*)
- Jacking points 3
- Indicative capacities 4
- Towing points (*)

ENGINE

- Technical engine features 5

ENGINE SUPPLY - COOLING

- Fuel feed (*)
- Air feed (*)
- Sensors (*)
- Cooling system (*)

MECHANICAL GROUPS

- Clutch (*)

- Gearbox (*)
- Brakes (*)
- Front suspensions (*)
- Rear suspensions (*)
- Wheel geometry and characteristic angles (*)
- Steering (*)

ELECTRICAL SYSTEM

- Ignition (*)
- Start-up (*)
- Recharging (*)

HEATING - VENTILATION

- Three-level pressure switch calibration (Trinary) (*)
- Compressor (*)

TIGHTENING TORQUES (*)

SPECIFIC TOOLS (*)

MAINTENANCE

- Service operations 6
- Engine maintenance (*)
- Mechanical assembly maintenance (*)

(*): See GTV  TB

(•): See Spider  V6

ENGINE

10

REMOVAL/REFITTING

- Description (*)
- Removal (*)
- Refitting (*)

OPERATIONS IN VEHICLE

- Cylinder head (*)
- Oil sump (•)

ML4.1/EZ212K INJECTION-IGNITION

- General description (*)
- System operation (*)
- ML4.1/EZ212K injection-ignition functional diagram (*)
- ML4.1/EZ212K injection-ignition system components (*)

FUEL SUPPLY

- System description (*)
- Fuel pipe fittings (*)
- Fuel tank (•)
- Fuel level gauge (•)
- Fuel pump (•)
- Fuel filter (•)
- Fuel pressure regulator (*)
- Vibration damper (*)
- Injectors (*)
- Fuel circuit pressure and tightness test (*)
- Fuel vapour recovery system description (*)
- Fuel vapour separator (*)
- Fuel vapour canister (*)
- Fuel vapour solenoid valve (*)

(*): See GTV  TB

(•): See Spider  V6