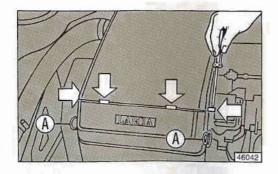
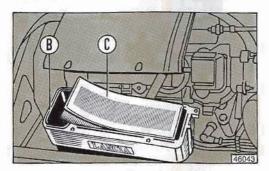
AIR CLEANER

Cleaning or replacing the filter element

Dedra 1.6 i.e.

Unscrew the four screws indicated by the arrows in the figure and release spring clips A.

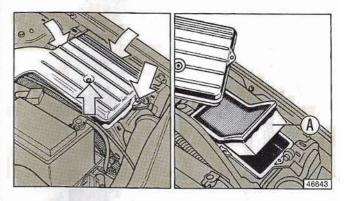




Remove cover B and pull out filter element C.

Dedra 1.8 i.e. - Dedra 2.0 i.e. - Dedra turbo ds

The figure refers to an engine with the filter located on the side near the battery. The replacement procedure is the same even if the filter housing is on the opposite side of the engine compartment.



Unscrew the three screws located in the holes indicated by the arrows.

Lift off the cover and remove filter element A.

Note: If the filter element is not cleaned or replaced when necessary, exhaust emissions and smoke opacity will increase and engine performance will drop.

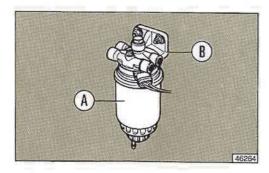
High emission levels and opaque exhaust fumes may be in violation of clean air standards.

FUEL FILTER

Replacing the filter

The fuel filter should be replaced every 20,000 km as part of service schedule maintenance.

If sediment is present in the diesel fuel, the filter may need to be replaced more often than indicated (turbo ds engine). It is probably necessary to change the fuel filter if the engine starts misfiring.

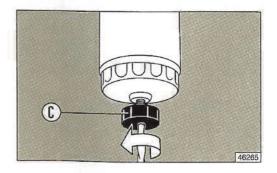


If you wish to replace the filter yourself, you will need a tool to unscrew cartridge A from housing B. Fill the new filter with diesel fuel before replacing it.

Whenever fuel filter cartridge A is replaced or the fuel lines are drained (e.g., when running out of fuel), it is unnecessary to bleed the air from the system. This will occur automatically when starting the engine.

Draining condensed water

(Dedra turbo ds engine)



Knob C should be used to drain water that may have condensed in the fuel filter. Unscrew it a couple of turns and then retighten it when water-free fuel flows out.

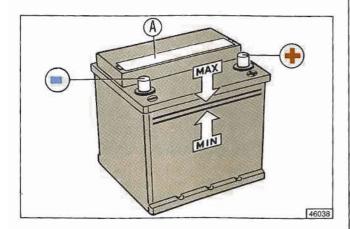
Condensed water should be drained when the instrument panel warning light turns on.

Battery

General information

The battery installed is maintenance-free. It does not need to be topped up with distilled water.

The electrolyte, when the car is on level ground, should be between the two reference marks on the case (MIN-MAX).



If absolutely necessary, the battery can be topped up with distilled water by removing cap A. Insert a screwdriver in the slot at the edge of the rectangular cap. Add distilled water to the MAX level without ever exceeding it.

Important: The battery electrolyte is toxic and corrosive. Avoid contact with your skin or eyes.

Lead batteries should be disposed of according to local regulations.

Recommendations

The car's battery will last much longer if you carefully follow these recommendations:

- If possible, do not leave power accessories on for a long time when the engine is not running (e.g., radio, hazard warning lights, side lights).
- When you leave the car parked in a garage ensure the doors, boot and glove compartment are properly closed to prevent the interior lights from remaining on. Remember to turn off the spot light.
- If you plan on installing other accessories (remote power locks, vehicle alarm systems, radio with memory features) ask your LANCIA dealer for advice regarding devices which will not cause the battery to lose its charge. Power absorption of any «aftermarket» installed accessories with the equipment turned off should not exceed 20 mA (with the engine off).

If the battery accidentally loses its charge, see the chapter on the battery in the "What to do if..." section.

ELECTRICAL AND ELECTRONIC DEVICES

Electronic control units

Under normal operating conditions no particular attention need be paid to the car's electronic ignition and injection control units.

However, the recommendations listed below should be carefully followed during diagnostic procedures, servicing, repairs or emergency starting.

- Never disconnect the battery when the engine is running.
- Disconnect the battery from the car's electrical system when charging it.
- Do not use a battery charger to start the engine. Use another battery with the same amperage rating.
- Ensure the battery cables are firmly fastened to the terminal posts and polarity is correct.
- Do not connect or disconnect control unit connectors when the ignition is on (key at MAR).
- Never check battery polarity by sparking.
- Disconnect the control units when arc welding body panels. Remove the units when temperatures could exceed 80 °C (body repairs, painting, etc.).

Important

Driving safety can be compromised if you connect devices or modify the car's electrical system – expecially systems such as the ignition, fuel injection or ABS.

Improper installation of a radio or vehicle alarm system may create interference hampering the operation of the electronic control units.

Spark plugs

The condition of the spark plugs is extremely important for engine life, performance and limiting exhaust emissions.

Other vehicle malfunctions (e.g. incorrect fuel/air mixture) can affect plug life.

If the engine is not operating properly, have spark plug operation verified at a LANCIA Service Center or by skilled mechanic.

The spark plugs are often an accurate indicator of the malfunction.

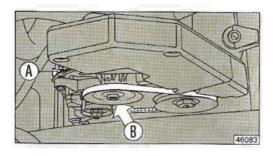


Use only recommended types of spark plugs. Plugs with an improper heat ratio could hamper engine operation.

Checking and adjusting belt tension

The alternator belt should never show signs of wear (cracking or fraying), and should be properly tensioned to prevent slippage.

Tension should be checked at a LANCIA Service Centre. In an emergency belt tension can be adjusted using the procedure below:



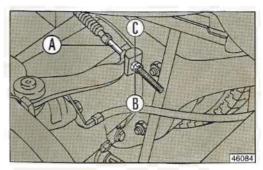
- Loosen belt tensioning nut A.
- Loosen articulation pin nut B.
- Pull the alternator outwards and tighten the nuts.

Do not overtighten the belt to prevent premature bearing wear. A simple method of determining correct belt tension is to press the belt down with your thumb. Its downward travel should be about 1 cm.

Note: Depending on the version you have the alternator and nuts described and illustrated in the figure may be have different positions, but the adjustment procedure is the same.

Clutch pedal height

The clutch is self-adjusting and has no pedal free travel; it is mechanically controlled for left-hand drive cars, hydraulically controlled for right-hand drive cars.



With the mechanical control clutch, the pedal position (not depressed) is adjustable and determined by the length of cable A.

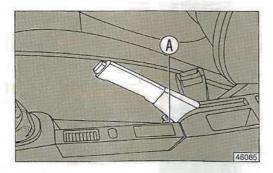
To adjust pedal height, loosen locknut B and turn nut C.

- Tighten it to raise the pedal.
- Loosen it to lower the pedal.

When properly adjusted, tighten locknut B.

Adjusting lever travel

Use this procedure to adjust the travel of the handbrake lever:



- Pull the lever upwards a single detent starting from the fully released (down) position.
- Turn nut A until the cable is taut.
- Ensure the car does not move after pulling up the handbrake one or two more detents.

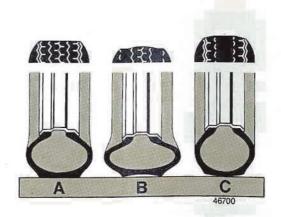
Pressure and tyre wear

Ensure the tyres are always properly inflated. This will increase their life, improve handling and your security. Verify the pressure of all tyres fortnightly and before taking a long trip.

Use a pressure gauge to check the tyres are inflated to the pressure values indicated on the inside front cover of this handbook.

Incorrect tyre pressure can lead to irregular wear.

- A Correct pressure: tyre wears evenly.
- B Underinflated tyre: excessive shoulder tread wear.
- C Overinflated tyre: excessive centre tread wear.



Notes

Always check the tyres when they are cold. Because tyre pressure increases when driving, add 0,3 bar to the values if you have to verify the pressure when the tyres are hot. Driving with underinflated tyres causes them to overheat, which can cause permanent damage. The tread depth should not be less than 1 mm*. The less tread present, the less road traction. In any case, always drive carefully on wet roads.

Tread wear indicators are moulded into some tyres. Replace them as soon as they are visible.

Inspect the tyres for irregular wear or cuts on the sidewalls. If they are not wearing evenly, take your car to a LANCIA Service Centre to determine the cause.

Important

Impact against the kerb, potholes or other objects, as well as driving frequently on poorly surfaced roads may damage the tyres.

If a blowout occurs, stop as soon as possible to change the tyre. Driving on a flat tyre will damage it.

Always remove the tyre from the wheel to inspect for damage.

Tyres can "age" even when they are not used.

Cracking of the tread or sidewalls and distention are signs of ageing. Have these tyres checked by an expert. If the tyres have been on the car for over 6 years they should also be checked.

Inspect the spare tire carefully to ensure it is in good condition. If not, replace it as soon as possible.

Never use cheap, recapped tyres. Inner tubes should never be used in tubeless tyres.

When changing a tyre, it is a good idea to replace the inflation valve. Rotate the tyres (exchange the front with rear on the same side of the car) every 10,000-15,000 km to ensure even wear.

Never rotate the tyres in a criss-cross fashion.

Snow chains

The use of snow chains is subject to the regulations of the country where the car is being driven.

Snow chains should be used on the front wheels (for frontwheel drive cars).

After driving for about 30 m (100 yards), stop and retighten the chains.

Drive at moderate speeds when using chains to avoid damaging the tyres. Do not drive on snowfree roads with chains.

Use only low-profile chains (max. chain height = 12 mm).

After 1 January 1992 minimum tread depth is 1.6 mm (ECE directive 89/459).

WINDSCREEN WIPERS AND REAR SCREEN WIPER

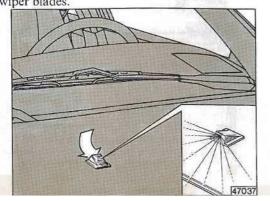
Blades and spray nozzles

Periodically clean the wiper blades using proprietary detergents (Autofà n. 9 DP1 liquid recommended) or alcohol. Make sure they are not damaged, or they will not clean properly. If the rubber edge of the blade is permanently deformed or worn down, replace the blade.

The following simple recommendations are useful to prevent damaging the wiper blades:

- When temperature is very low (below 0°C) make sure the wiper blades are not stuck to the glass by ice; if they are, use an anti-ice product to get them loose. Remove any ice or snow from the windscreen; this will help to save the blades and to prevent putting an overload on the wiper motor.
- Never attempt to remove any dirt from the windscreen or back window by operating the wiper blades while the glass is dry.

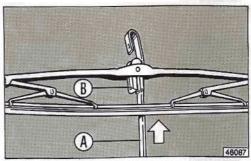
Failure to observe these precautions will result in early wear of the wiper blades.



If the washer spray nozzles are not operating properly check the tubing between the reservoir and the nozzles to ensure it is not clogged. If necesary, the spray nozzles can be cleaned with a pin.

Replacing the wiper blades

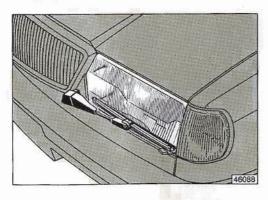
Lift the wiper blade arm so it is perpendicular to the windscreen and position the blade at a 90° angle with respect to the arm.



Press tab B and then press the blade downwards towards the base of arm A.

When the blade is released from the curved tip of the arm, press it down and remove it.

Blades and spray nozzles



If your car is equipped with headlight wiper / washers, check the operation of the wiper blades and spray nozzles frequently.

Important

After washing the car – especially in a car wash – ensure the blades are correctly positioned above the lower stops.

Verifying system efficiency

Use the air conditioner – even if only for a few minutes – all year round to maintain the system in excellent condition.

If you often use the ECON feature, make sure it is off because the compressor needs to operate from time to time.

During spring and autumn, use the system occasionally with ECON off. And remember to press the TEMP button until LO appears on the display.

During winter the compressor will not operate when the system is fully automatic.

Every time the system is serviced, ask to have the compressor oil level verified and topped up if necessary.

BODY MAINTENANCE AND CARE

	Pa
Body maintenance	
- Protecting the car	1
- Paint	
- Body	
- Underbody	10 9 11
- Interior	1-11
- Windows	. 87
- Engine compartment	C STATE
- Cleaning plastic parts	
Vehicle storage	

Protecting the car

LANCIA has taken action to improve the corrosion resistance of the car's body caused by chemical agents including:

- air pollution (cities and industrial areas);
- humidity and airborne salt (marine or hot, humid areas);
- seasonal conditions (e.g., use of road salt during winter).

Dust, dirt, sand, mud and gravel kicked up by other cars are all abrasive and can damage the paint and underbody.

The following high-tech solutions have been utilized:

- the use of corrosion and abrasion-resistant paints and painting methods;
- the widespread use of galvanised body panels which are extremely resistant to corrosion;
- spraying of the underbody, engine compartment, wheel arches and other box-construction components with highly protective wax-base sealants which have a particular affinity for metal;

- protective spraying of door sills, rocker panels and bumpers with resins;
- use of pollution-resistant enamels;
- use of open box cross and side member chassis construction to prevent the build-up of water and the formation of rust.

The factors described act in different ways depending on the environmental conditions in which the car is used. If you take care of your car it will last much longer.

The following pages provide suggestions for the proper maintenance of the car's body and interior.

Paint - Body

The body paint not only makes your car beautiful, but protects the sheet steel used in body construction.

Chips or deep scratches should be immediately touched up before rusting begins.

Always use original touch-up paint (see "Specifications - Paint identification plate").

Wash your car regularly. Washing should be done more frequently in areas with high levels of air pollution or when parking often under trees (sap or other debris may fall on the car).

Immediately remove bird droppings from the body because uric acid is particularly damaging to the paintwork. Thoroughly wash the car as soon as possible.

Wash the car with a low-pressure hose. Sponge gently with a 2-4% detergent solution rinsing the sponge often. Rinse well and then dry using an air jet or chamois-leather.

Dry the car carefully including less visible areas such as the door frames, bonnet and the headlamp housings – those areas where water can stagnate. Do not park the car in a closed garage immediately after washing so that air can circulate allowing the remaining water to evaporate.

Do not wash the car after it has been parked in the sun or if the bonnet is still hot to prevent damage to the high-gloss paint finish.

The occasional use of wax or silicone polish will protect the car's paint and retain the original lustre. If the paint becomes dull due to smog or other factors, use a slightly abrasive wax polish.

Underbody

The less visible body parts and box-type members have been treated by LANCIA using state-of-the-art techniques.

However, this area of the body should be regularly checked especially if the car is driven in adverse climatic conditions.

Underbody inspections should be performed to ensure the body metal and mechanical assemblies are in proper condition. Repair any damage observed immediately.

Some box sections are closed by plugs. These should be removed to check for rust when carrying out an underbody inspection.

In particularly severe climates the box sections and door frames should be sprayed periodically with protective compounds.

These protective materials should be applied by specialised body shops. Spraying needs to be done at least every two years (annually under very severe conditions) at the beginning of winter.

Interior

It is also extremely important to take care of the car's interior.

Check to make sure that there is no standing water under the mats (from shoes, umbrellas, etc.) which could cause the floorpan to rust.

Dust can be removed from seats and cloth upholstery (velvet, Alcantara, etc.) with a soft brush.

Remove grease stains using an appropriate product. Follow the manufacturer's instructions carefully.

If the seats need thorough cleaning, use a sponge dampened in a soapy water (2-4 grams of detergent per litre of water).

Dirt or dried matter can be removed from **leather seats** by gently rubbing with a chamois-leather or slightly dampened soft cloth.

Liquid or grease stains can often be removed by using a dry, absorbent rag without rubbing. After soaking up the stain, rub lightly with a soft cloth or chamois-leather moistened with soapy water.

If the stain remains, use an appropriate remover. Follow the manufacturer's instructions carefully.

Windows

The windows should be cleaned with a good quality glass cleaner. Wipe dry with a clean cloth to avoid streaking which could hinder visibility.

Clean the inside of the rear window carefully to avoid damaging the defroster wires. Rub lightly and in a horizontal direction only.

In addition, refer to the recommendations concerning the cleaning and maintenance of the wiper blades (page 118).

Engine compartment

The engine compartment should be thoroughly washed at the end of every winter to remove road salt.

Before starting to clean the engine compartment make sure the ignition key is off and the engine is cold.

After cleaning check that the various protections (e.g., high and low voltage cable caps and various covers) are in place and undamaged.

Cleaning plastic parts

Clean the exterior plastic parts in the same way as you would wash the car's body.

If still dirty, use an appropriate plastic cleaner following the manufacturer's instructions carefully. Never use paint cleaning compounds on plastic.

Do not use alcohol to clean the instrument panel.

For the interior plastic parts, avoid using products that shine the plastic – especially those containing silicone – as they will alter the appearance of those parts with a "matte" finish. Use soapy water, a very dilute alcohol solution (not for the instrument panel), or detergents appropriate for plastics.

VEHICLE STORAGE

Recommendations

If you are not planning on using your car for several months follow these recommendations:

- Clean and protect the paint with silicone wax; clean the chrome using ordinary chrome cleaning compounds.
- Store the car in a dry, covered ventilated place.
- Fully release the handbrake.
- Disconnect the cables from the battery terminal posts.
- Remove all the wiper blades and coat the rubber parts with talc.
- Leave the door windows slightly open.
- Cover the car with a tarpaulin that is NOT waterproof (made of cloth or perforated plastic). NEVER use a sheet of plastic to cover the car as it will trap the moisture present on the surface of the vehicle.
- Inflate the tyres to 2.5 bar; check the pressure periodically.
- Check the battery charge every 1½ months. When necessary charge the battery slowly (over a 24-hour period) using a trickle charger.
- Do not drain the coolant from the engine.

SPECIFICATIONS

	Page
Vehicle identification	128
Engine	131
Transmission	136
Brakes	137
Suspension	137
Wheels and tyres	138
Steering - Wheel alignment	138
Electrical system	139
Performance	140
Weights	140
Dimensions	141
Capacities	142
Lubricant and fluid specifications	144
Fuel consumption	146
Tyre inflation pressures	146

VEHICLE IDENTIFICATION

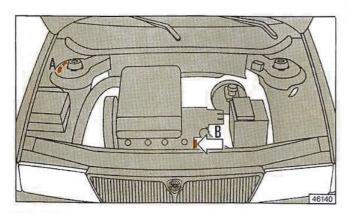
Chassis marking

Chassis marking A is located in the engine compartment at the top of the right damper. The following information is given on the plate:

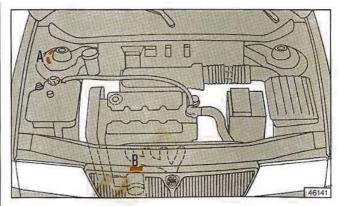
- Type of vehicle: ZLA 835 000
- Chassis serial number.

Engine marking

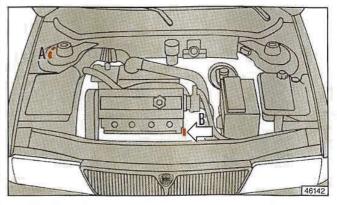
The engine type and serial number are located at point B, which has different positions depending on the engine mounted.



Dedra 1.6 i.e.



Dedra 1.8 i.e. - Dedra 2.0 i.e.



Dedra 2.0 turbo ds

VEHICLE IDENTIFICATION

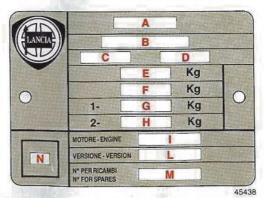
The engine type is given on the model plate at point I.

Dedra 1.6 i.e	835 A1.000
Dedra 1.8 i.e	835 A2.000
Dedra 2.0 i.e	835 A5.000
Dedra 2.0 turbo ds	835 A4.000

Model plate

Located in the engine compartment.

The following identification data is stamped on the plate:



- A. Manufacturer
- B. Homologation number
- C. Vehicle identification code
- D. Chassis serial number
- E. Maximum gross vehicle weight
- F. Maximum gross vehicle weight including trailer
- G. Maximum gross weight at front axle
- H. Maximum gross weight at rear axle
- I. Engine type
- L. Body type code
- M. Number for spares
- N. Smoke opacity index (diesel and turbo ds engines)

VEHICLE IDENTIFICATION

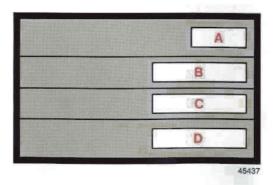
Body type code

Stamped on the model plate at point L.

Dedra 1.6 i.e.	***************************************	835 BA54A
Dedra 1.8 i.e.	***************************************	835 AC54A
Dedra 2.0 i.e.	***************************************	835 AI54A
Dedra 2.0 turb	o ds	835 AG54A

Paint identification plate

Located in the inside of the boot.



- A. Paint manufacturer
- B. Colour name
- C. Colour code
- D. Respray and touch-up colour code

	Dedra 1.6 i.e.	Dedra 1.8 i.e.
Type	835 A1.000	835 A2.000
Cycles	4-cycle	4-cycle
Number of cylinders	4, in line	4, in line
Bore x stroke mm	86.4×67.4	84×79.2
Engine capacity cm ³	1581	1756
Compression ratio	9.2	9.5
(kW(CFF)	65	80
Maximum power { CV(DIN)	90	110
at rpm	5800	6000
Maximum torque { Nm(CEE)	128	142
kgm(DIN)	13.2	14.7
at rpm	3500	3000

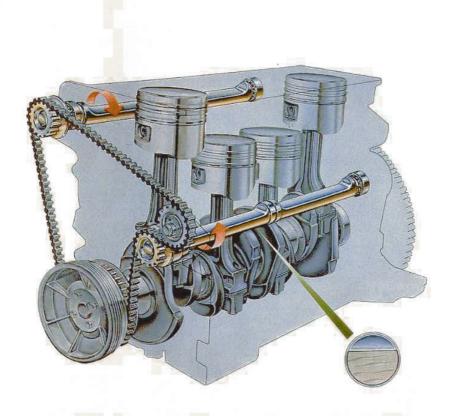
	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
Type	835 A5.000	835 A4.000
Cycles	4-cycle	Supercharged diesel
Number of cylinders	4, in line	4, in line
Bore x stroke mm	84×90	82.6×90
Engine capacity cm ³	1995	1929
Compression ratio	9.5	19.2
Maximum power { kW(CEE)	86	66
CV(DIN)	120	92
at rpm	5750	4100
Maximum torque { Nm(CEE)	162	186
kgm(DIN)	16.8	19.4
at rpm	3300	2400

Balancing shafts

The engines of the Dedra 1.8 i.e. and 2.0 i.e. are equipped with counterrotating balancing shafts. They rotate at a speed

twice that of the crankshaft, and serve to absorb and equilibrate dynamic stress not absorbable by the crankshaft itself.

As a result, these engines operate very smoothly at all speeds.



ENGINE

Timing

	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
Overhead cam(s); no. of camshafts	1	2	2	1
Camshaft drive	Toothed belt	Toothed belt	Toothed belt	Toothed belt
Inlet { opens (BTDC)	6° 46°	5° 53°	7° 52°	6° 26°
Exhaust { opens (BBDC) closes (ATDC)	47° 7°	53° 5°	53° 6°	26° 6°
Valve clearances for timing check (inlet and exhaust mm	0.80	0.80	0.80	0.50
Valve clearances, cold operation:	1005	1.00		
- inlet mm	$0.40^{+0.05}_{-0.07}$ *	0.43 ± 0.04	0.40 ± 0.04	0.30 ± 0.05
– exhaust mm	$0.50^{+0.05}_{-0.07}$ *	0.48 ± 0.04	0.48 ± 0.04	0.35 ± 0.05

^{*} Tolerance values determined for new engines manufactured utilizing automated systems. When servicing, the valve clearances should be set to within ± 0.05 mm of nominal values.

Fuel metering - ignition

Integrated electronic injection/ignition system. A single electronic control unit governs both functions elaborating the injection time (petrol metering) and the ignition advance.

Air cleaner: dry, with paper filter element.

Fuel pump: in-tank pump.

Firing order 1-3-4-2

	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.
Electronic injection system	"Centrajet" single-point	"I.A.W." multi-point	"I.A.W." multi-point
Injection pressure bar	1	3	3
Idle speed rpm	850 ± 50 **	820 ± 50	820 ± 50
CO at idle%	$1^{+0.5}_{-0}$	1.5 ± 0.5	1.5 ± 0.5
Reference ignition advance at idle	12° ± 2°	15° ± 2°	15°±2°
Maximum digital advance	40° ± 2°	43° ± 2°	43° ± 2°
Spark plugs:			1.0
Fiat	V4LSR	V45LSR	V45SLR
Magneti Marelli	F7LCR	F8LCR	F8LCR
Bosch	WR7DC	WR6DC	WR6DC
Champion	RN9YC	RN7YC	RN7YC
Plug gap	0.7 mm	0.7 mm	0.7 mm

^{*} Analytical method for determining air flow. The information from the engine speed, air temperature and absolute intake manifold air pressure sensors are elaborated by the electronic control unit.

** Automatically regulated by a stepper motor.

ENGINE

Fuel metering (Dedra 2.0 turb	o ds)		
System	Indirect charged	injection,	super-
Turbocharger - main components	Turboch	cleaner ele arger with watercooler.	
Turbocharger pressure			0.8 bar
Injector calibration pressure		15	50 +8 bar
Injection pump	nor lled auton		W 1020
- Silent low-speed operation	on		
Injection order		1	-3-4-2
Idle speed		900 ±	20 rpm

Lubrication

Forced-feed gear pump with pressure relief valve.

Full-flow cartridge oil filter.

Dedra 2.0 turbo ds: oil radiator.

Normal lubrication pressure with oil at 100°C 3.4-4.9 bar (3.5-5 kg/cm²)

Cooling system

The engine cooling system comprises a radiator, centrifugal pump and expansion tank.

Bypass thermostat on the secondary recirculation circuit delivers the coolant to the radiator from the engine.

Thermostatically-controlled radiator fan.

TRANSMISSION

Clutch

Self-adjusting; no pedal free travel.

Mechanically controlled for left-hand drive cars; hydraulically controlled for right-hand drive cars. Pedal height position (not depressed) adjustable only for mechanical control clutch.

Clutch disc friction facing is asbestos-free.

Transaxle

Five forward gears and reverse; forward gears fully synchronised.

Single longitudinal transmission linkage shaft with three transverse connecting rods (engagement, selection, reaction).

Pinion and spur gears and differential incorporated in the transmission case.

Gear ratios:

	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
1st gear	3.909	3.545	3.545	3.909
2nd gear	2.267	2.267	2.267	2.267
3rd gear	1.469	1.541	1.541	1.440
4th gear	1.043	1.156	1.156	1.029
5th gear	0.891	0.875	0.891 or 0.875	0.823
Reverse	3.909	3.909	3.909	3.909
Final drive ratio	17/64	15/58	17/57 or 16/57	19/58

Power transmitted to the front wheels by axle halfshafts linked to the transaxle and wheels with constant-velocity joints.

SUSPENSION

Service brakes

Diagonally split hydraulic brake circuits.

8" brake servo unit.

Asbestos-free brake linings.

Front: disc brakes.

Rear:

- Dedra 1.6 i.e.: Drum brakes with "thermoclip" controlled self-adjusting incremental micrometre system.
- Dedra 1.8 i.e. 2.0 i.e. 2.0 turbo ds: disc brakes.
- Dedra 1.6 i.e. with ABS (option): disc brakes.

Optional: Antilock braking system (ABS):

- Four-channel for Dedra 2.0 i.e. and 2.0 turbo ds
- Two-channel for Dedra 1.6 i.e. and 1.8 i.e.

Parking brake

Mechanical, lever-type, acting on rear brakes. Handbrake lever travel can be adjusted from the passenger compartment.

Suspension

Front

Independent, McPherson suspension with negative reaction rod.

Antiroll bar linked to control arms with rods.

Offset coil springs and conical-dome dampers.

Double-acting, telescoping, gas-filled dampers.

Suspension components with differential action: coil spring retention plate and rubber bushing countering damper shaft motion.

Rear

Independent, with longitudinal control arms and antiroll bar.

Coil springs.

Double-acting, telescoping, gas-filled dampers.

Optional (Dedra 2.0 i.e.)

Electronic ASC (Automatic Suspension Control) system.

STEERING - WHEEL ALIGNMENT

Rims and tyres

Standard equipment

Rims pressed steel.

Tyres tubeless radials.

Dimensions

	Rims	Tyres
1.6 i.e. 2.0 turbo ds	5½J-14″H*	175/65 R14-82T
1.8 i.e. 2.0 i.e.	5½J-14"H**	185/60 R14-82H

Optional equipment

Rims aluminium alloy.
Tyres tubeless radials.

Dimensions (all versions)

Important

Never use inner tubes in tubeless tyres.

- * Rims with 43-mm camber.
- ** Rims with 47.5-mm camber, mounted with a 4.5-mm spacer plate. Remove this plate when mounting light alloy wheels (43-mm camber).

Snow chains

Steering

Permanently lubricated rack-and-pinion steering.

Hydraulic power steering (optional for Dedra 1.6 i.e.); fluid reservoir in engine compartment.

Shock absorbing steering column with rake adjustment.

Wheel alignment values

The values given are for an unladen car in running order.

ELECTRICAL SYSTEM

System voltage: 12 volts

Battery

Negative earth

	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
Capacity, 20-h	40 Ah	40 Ah	45 Ah	70 Ah
discharge rate	45 Ah *	45 Ah *	60 Ah *	
Cold cranking	200 A	200 A	225 A	400 A
power (-18°C)	225 A *	225 A *	320 A *	

^{*} Batteries for versions with air conditioning.

Alternator

Nine-diode rectifier with integral voltage regulator. Battery starts charging as soon as engine starts.

	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
Maximum nominal output	65 A	65 A	70 A	70 A
	90 A *	90 A *	90 A *	90 A *

^{*} Maximum nominal output values for alternators in cars with air conditioning.

PERFORMANCE - WEIGHTS

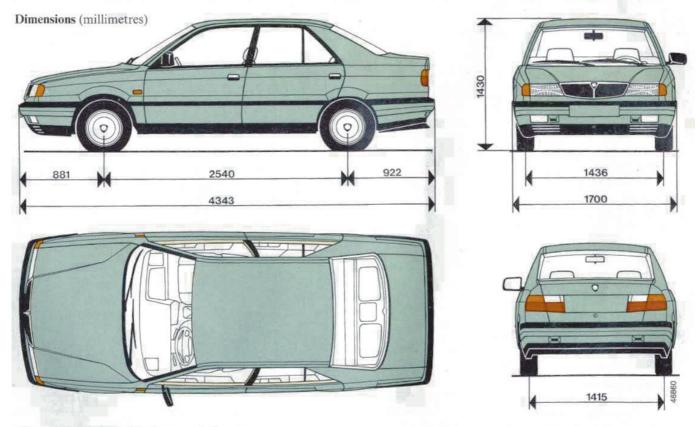
Performance

	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
Maximum speeds - after running in (km/h)				
1st gear	45	55	55	40
2nd gear	80	85	85	65
3rd gear	120	125	125	105
4th gear	170	170	165	150
5th gear	180	192	200	180
Maximum gradeability - fully laden vehicle (expressed in %)				
1st gear	36	36	36	39
2nd gear	21	21	21	24
3rd gear	12	13	13	14
4th gear	8	9	9	9
5th gear	6	6	6	6
Reverse	40	40	41	43

Weights (kg)

£-	Dedra 1.6 i.e.	Dedra 1.8 i.e.	Dedra 2.0 i.e.	Dedra 2.0 turbo ds
Kerb weight (including fuel, spare, tools and accessories)	1090	1180	1200	1230
Payload (5 adults + 50 kg of luggage + 100 kg equally distributed over the two axles) Maximum gross vehicle weight	500 1590	500 1680	500 1700	500 1730

DIMENSIONS



The height illustrated is for an unladen car.

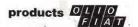
Luggage compartment volume (VDA standards): 480 dm³.



Capacities	Dedra 1.6 i.e.		Dedra 1.8 i.e.		Dedra 2.0 i.e.		Dedra 2.0 turbo ds		Recommended fuels and	
Capacities	dm ³ (Imp. units)	kg	dm³ (Imp. units)	kg	dm³ (Imp. units)	kg	dm³ (Imp. units)	kg	products *	
Fuel tank	63	-	63	4	63		- 2	2	1	
including a reserve of	(13.2 gal.) 5-8 (1.1-1.8 gal.)	=	(13.2 gal.) 5-8 (1.1-1.8 gal.)	s .	(13.2 gal.) 5-8 (1.1-1.8 gal.)	- -	-	-	Premium petrol *	
Fuel tank	(1.1-1.0 gai.)	-	(1.1-1.0 gal.) -	- **	(1.1-1.6 gai.) -	-	63	-	ĺ	
including a reserve of	-	-	-	-	-	-	(13.2 gal.) 5-8	-	Diesel fuel (see p. 75)	
Cooling system	4.90 (4.3 qt.)	-	6.90 (6.1 qt.)	(2	6.90 (6.1 qt.)	-	(1.1-1.8 gal.) 8.90 (7.8 qt.)	-	50-50 mixture of distilled water and Fiat Paraflu" ***	
Engine sump	3.35 (2.9 qt)	3.00 (6.6 lb.)	4.80	4.30 (9.5 lb.)	4.80 (4.2 qt.)	4.30 (9.5 lb.)	4.30 (3.8 qt.)	3.30 (7.3 lb.)		
Engine sump and filter	3.75 (3.3 qt.)	3.30 (7.3 lb.)	(4.2 qt.) 5.20 (4.6 qt.)	4.70 (10.4 lb.)	5.20 (4.6 qt.)	4.70 (10.4 lb.)	5.00 (4.4 qt.)	4.40 (9.7 lb.)	See facing page	
Engine sump, filter and lines 1st in-factory filling	4.25	3.75	5.75	5.20	5.75	5.20	6.00	5.30		
Transaxle	(3.7 qt.) 1.40	(8.3 lb.) 1.25	(5.1 qt.) 1.40	(11.5 lb.) 1.25	(5.1 qt.) 1.40	(11.5 lb.) 1.25	(5.3 qt.) 1.40	(11.7 lb.) 1.25 (2.8 lb.)	Tutela ZC 80/S	
Steering gear	(2.8 qt.) -	(2.8 lb.) 0.08 (2.8 oz.)	(2.8 qt.) -	(2.8 lb.) 0.08 (2.8 oz.)	(2.8 qt.)	(2.8 lb.) 0.08 (2.8 oz.)	(2.8 qt.)	0.08 (2.8 oz.)	Tutela K 854	
Hydraulic power steering	0.75 (1.3 pt.)	(1.3 pt.)	0.75 (1.3 pt.)	(2.0 02.)	0.75 (1.3 pt.)	(2.0 02.)	0.75 (1.3 pt.)	(2.0 02.)	Tutela GI/A	
CV-joint cavities and boots (each)	-	0.095 (3.3 oz.)	-	0.095 (3.3 oz.)	-	0.095 (3.3 oz.)	-	0.095 (3.3 oz.)	Tutela MRM 2	
Front/rear brake circuits	0.405 (0.71 pt.)	(5.5 02.)	0.43 (0.76 pt.)	-	0.43 (0.76 pt.)	-	0.43 (0.76 pt.)	(8.6.2.7)		
Brake circuits with antilock braking system (ABS)	0.46 (0.81 qt.)		0.525 (0.92 pt.)	3	0.525 (0.92 pt.)	2	0.525 (0.92 pt.)	-	Tutela DOT3	
Windscreen, rear screen and headlight washer reservoir	4.80 (4.2 qt.)	-	4.80 (4.2 qt.)	-	4.80 (4.2 qt.)	-	4.80 (4.2 qt.)	=	Mixture of water and Autofà DP 1 ***	

Product specifications are given on pp. 144-5.
 Petrol engines are designed to operate with leaded or unleaded premium petrol (minimum octane no. 95).

^{***} See A note about some fluids on the next page.



Oil change and filter replacement after free service coupon

	Recommended oil	Change interval		
		Oil	Filter	
Dedra 1.6 i.e.	SELENIA	20,000 km or 12 months	20,000 km	
Dedra 1.8 i.e. Dedra 2.0 i.e.	SELENIA	15,000 km or 12 months	15,000 km	
Dedra 2.0 turbo ds	SELENIA Turbo Diesel	7,500 km or 12 months	15,000 km	

It is recommended you do not top up with oils having different specifications.

Oil consumption

The average oil consumption (grams/100 km) values are:

Dedra 1.6 i.e.		50
Dedra 2.0 i.e.	***************************************	90-100
Dedra 2.0 turb	oo ds	100

A note about some fluids

- A 50-50 mixture of FIAT **Paraflu**¹¹ coolant and distilled water gives freeze protection down to −35 °C.
- Mix thirty centilitres of Autofà n. 9 DP1 liquid with a litre
 of water for summer use; in cold climates where temperatures can go down to -20 °C mix equal amounts of water
 and Autofà n. 9 DP1. When temperatures may go lower
 than -20 °C use Autofà n. 9 DP1 undiluted.

LUBRICANT AND FLUID SPECIFICATIONS

Product characteristics

USE	CHARACTERISTICS	RECOMMENDED LUBRICANTS AND FLUIDS	SPECIFIC APPLICATION
Petrol engine lubricants	SAE 15W/40 semisynthetic multigrade oil; exceeds API, SG and CCMC-G4 specifications, CUNA NC 610-01 CL-G2.	SELENIA	Operating range – 15°C-40°C*
Diesel engine lubricants	SAE 15W/40 semisynthetic multigrade oil; exceeds API-CD and CCMC PD2 specifications, CUNA NC 610-01 CL-PD1.	SELENIA Turbo diesel	Operating range – 15°C-40°C*
	SAE 80 W/90, non-EP anti-wear oil.	TUTELA ZC 90	Transaxles without hypoid gears
	SAE 80 W EP oil; meets API-GL-4 and MIL-L-2105 specifications.	TUTELA ZC 80/S	Manual transmissions and differentials
Lubricants and greases for power transmission components	SAE 80 W/90 EP oil for standard and limited-slip differentials; meets API-GL-4 and MIL-L-2105 specifications.	TUTELA W 90/MDA	Hypoid differentials Limited-slip differentials Steering gear
components	Molybdenum disulphide, lithium-soap base grease; NLGI consistency no. 2	TUTELA MRM 2	Constant-velocity joints
	Lithium-soap grease; NLGI consistency no. 3	TUTELA MR 3	Wheel bearings Steering tie rods
Steering gear lubricant	Lithium-soap grease; NLGI consistency no. 000; contains molybdenum sulphide.	K 854	Si .

^{*} For temperatures below -15°C use SAE 10 W/30 oils (Selenia 10 W/30 or Selenia Turbo diesel 10 W/30 are recommended).

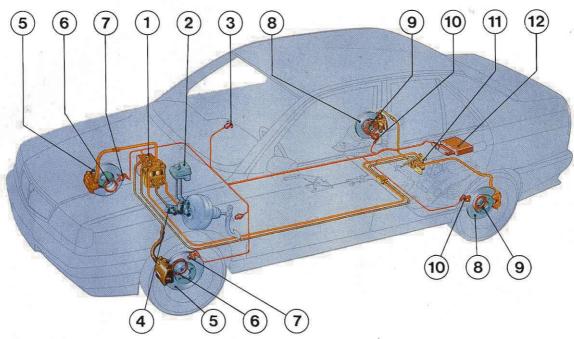
:-(Lost page.

:-(Lost page.

APPENDIX

	Page
Antilock braking system (ABS)	
Dedra 2.0 i.e. and 2.0 turbo ds	148
Antilock braking system (ABS)	
Dedra 1.6 i.e. and 1.8 i.e.	149
Installing a radio	150
Installing a tow hitch	152
Installing an alarm system	154
Automatic suspension control system	156

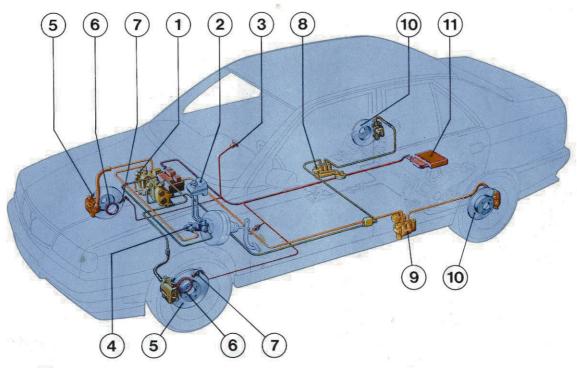
If any accessories not described in this handbook are to be installed, the relevant electrical connections to the vehicle's system must be made via a relay connected to the ignition switch.



- 1. Hydraulic modulator.
- 2. Brake fluid reservoir.
- 3. Warning light.
- 4. Master cylinder.
- 5. Front wheel discs.
- 6. Front pulse rings.

- 7. Front wheel speed sensors.
- 8. Rear wheel discs.
- 9. Rear pulse wheels.
- 10. Rear wheel speed sensors.
- 11. Rear wheel pressure proportioning valve.
- 12. Electronic control unit.

ANTILOCK BRAKING SYSTEM (ABS) - Dedra 1.6 i.e. and 1.8 i.e.



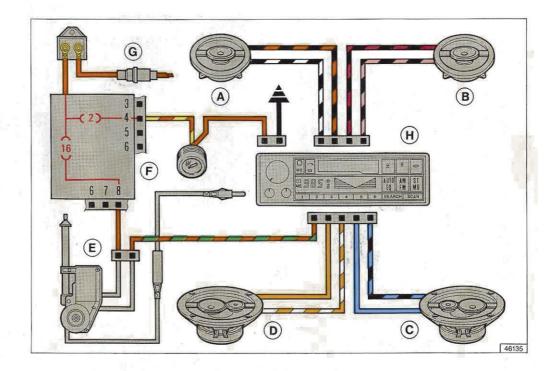
- 1. Hydraulic modulator.
- 2. Brake fluid reservoir.
- 3. Warning light.
- 4. Master cylinder.
- 5. Front wheel discs.
- 6. Front pulse rings.

- 7. Front wheel speed sensors.
- 8. Right rear wheel pressure proportioning valve.
- 9. Left rear wheel pressure proportioning valve.
- 10. Rear wheel discs.
- 11. Electronic control unit.

Schematic showing additional wiring

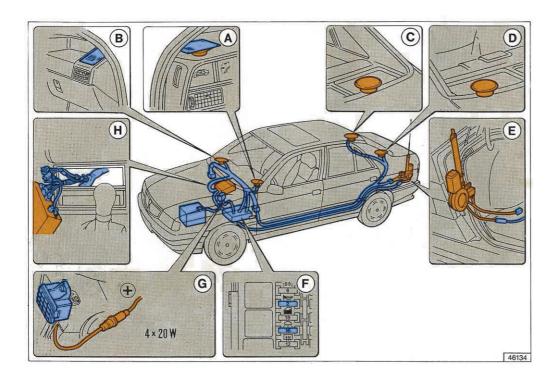
- A. Left front speaker.
 B. Right front speaker.
 C. Right back speaker.
 D. Left back speaker.
 E. Power antenna.

- F. Fuse box.
- G. Supplementary amplifier power supply fuse (only if system installed has power exceeding 4 × 20W).
- H. Radio.



RADIO INSTALLATION

Location of components



- A. Left front speaker housing.
 B. Right front speaker housing.
 C. Right rear speaker housing.
 D. Left rear speaker housing.
 E. Power antenna housing.
 F. Position of fuses in box protecting radio circuit

- F. Position of fuses in box protecting radio circuit.

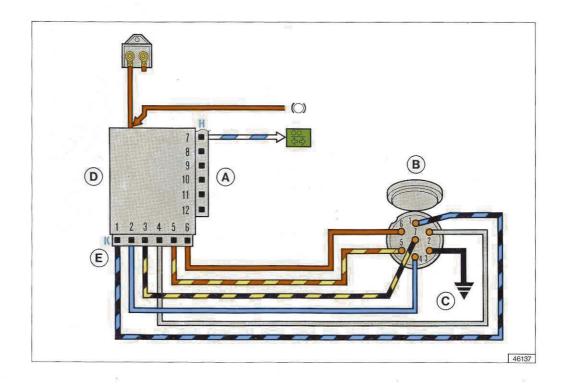
 G. Supplementary fuse cutout (only if amplifier power is greater than 4 × 20 W).

 H. Radio housing.

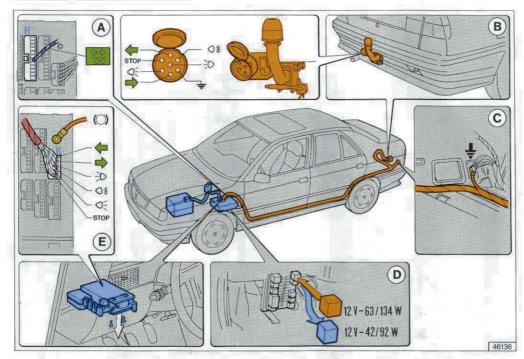
Wiring schematic

- A. Terminal "H" in the fuse box for trailer direction indicators.

- Provided the second of the sec



Location of connections and hitch



- Cable connection of the trailer direction indicators (terminal "H" in fuse box).
- B. Installation of coupling and 7-pin socket.
- C. Ground cable from 7-pin socket.
- Replacement of the direction indicator flasher unit.
- E. Cable connection from 7-pin socket to terminal "K" in the fuse box. The trailer's electric braking system must be connected to a branch which is directly connected to the battery.

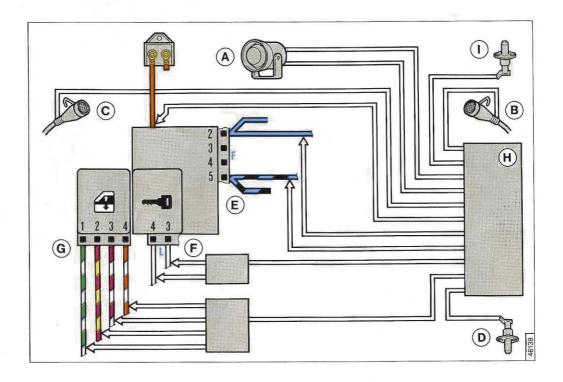
NB - The tow hitch installer is required to attach a clearly legible plate next to the coupling made of an appropriate material with the following stamped on it:

MAXIMUM LOAD AT THE COUPLING 84 kg MAXIMUM LOAD AT THE COUPLING 90 kg (for vehicles with a maximum permissible trailer weight of 1200 kg). (for vehicles with a maximum permissible trailer weight of 1300 kg).

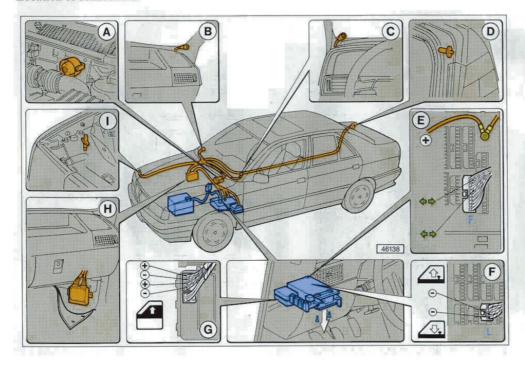
Installation schematic

- A. Siren.
- B. Ultrasonic detector.
- C. Ultrasonic detector.
- D. Boot opening detector.
 E. Fuse box terminal "F"
 for wiring connections
 enabling the alarm
 system to flash the car's
 direction indicators.
- F. Fuse box terminal "L" for connections enabling the alarm system to directly control the car's power locks.

 G. Power window control
- unit connections for direct control by the alarm system.
- H. Alarm system control unit.
- I. Bonnet opening detector.

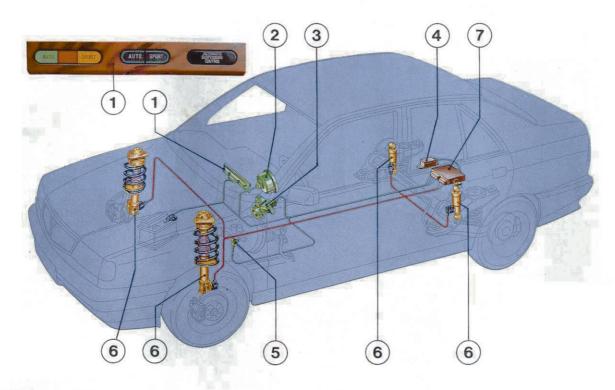


Location of connections



- A. Siren installation (in en-
- gine compartment).

 B. Installation of right ultrasonic detector.
- Installation of left ultrasonic detector.
- D. Installation of boot opening detector.
- E. Connection to give alarm system control of the direction indicators (fuse box terminal "F"). Connect the alarm system power supply cable to a branch which is directly connected to the battery.
- F. Connection to give alarm system control of the power locks (fuse box terminal "L").
- G. Connection to give alarm system control of the power windows.
- H. Alarm system control unit installation.
- I. Installation of bonnet opening sensor.



- 1. Dashboard control panel.
- 2. Vehicle speed sensor.
- 3. Steering wheel position and rotational speed sensor.
- 4. Vertical acceleration sensor.

- 5. Brake system sensor.
- 6. Damper with solenoid.
- 7. Electronic control unit.

INDEX

+	Page		Page
Appendix	147	Checking fluid levels	104
Body maintenance and care	121	Child restraints	52
Driving your car	73	Cigarette lighter	67
Getting to know your car	5	Cleaning plastic parts	125
Maintenance and servicing	99	Cleaning the car	123
Specifications	127	Cleaning the car's interior	124
What to do if	81	Cleaning the engine compartment	125
What to do II	0.1	Cleaning the engine compartment Cleaning the windows	125
			25
A		Clock	23
ABS, antilock braking system	55,148-9	Contract Con	115
Adjusting the front seats	48	adjusting pedal height	
Air cleaner, replacing the filter element	111	specifications	136
Air conditioner	38,119	Comfort when driving	76
Air vents	31,35,39	Coolant	107
Alarm system	154	Coolant temperature gauge	20
Alternator	115,139	Courtesy and spot lights	67,90
Alternator belt	115,155	Courtesy lights	67
adjusting the tension	115	replacing the bulbs	90-91
Ashtray	67		
Ashtray	07	D	
B		Defogging	
AND COURSE		rear screen	46
Battery	Verie	windows	33,36,40
jump starting	95	Defrosting	
maintenance	113	rear screen	46
recharging	95	windscreen and side windows	33,36,40
specifications	139	Diesel fuel additive for winter	7.5
Bonnet		Dimensions	141
opening and closing	64	Direction indicators	44
Boot light	91	replacing the bulbs	87.89
Boot, luggage compartment		Direction indicators	07,05
capacity	141	control stalk	44
increasing stowage area, opening/closing	60	replacing the bulbs	87.89
Brake fluid	106	Doors	07,0
		childproof locks	58
C		nower looks	50
	142	power locks	5
Charles	142	power windows	59
Check panel	18	remote control	35

per l	Page		Page
E		Glove compartment light	91
	120	Gradeability	140
Electrical system	139		
Electronic control units	114	Н	
Electronic ignition	134	n	
Electronic injection	134	Hazard warning lights	
Emergency starting	75		46
Engine		switch	65
specifications	131	Headlamp alignment	
	135	Headlamp washers	119
Engine cooling system	133	Headlamp wipers	119
Engine oil		Headlights	
changing the oil	104,143	alignment	65
checking the level	104	control stalk	43
Exterior lights, control lever	43	low beam load compensators, alignment	65
13 444 0 0 000 11:60 0 14 16:0 16 16:0 16 16:0 16:0 16:0 16:0 16:		replacing the bulbs	86
F.			49
F		Headrests	77
EUV d. C. Lee I.	66	Heater plugs (diesel engine)	29
Filling the fuel tank		indicator	
Free service coupon	100	High beam headlights	43
Front fog lights	0.250	replacing the bulbs	86
replacing the bulbs	88		
Front seats		Tip Control of the Co	
adjusting seat position	48	E.	
Fuel	66	Ignition	9
Fuel consumption	146	Indicators and warning lights	28
Fuel economy	77		146
	23	Inflation pressures, tyres	140
Fuel economy gauge	112	Instrument cluster	11 10 14
Fuel filter		petrol versions10	,11,12,14
Fuel gauge	21	Turbo diesel version	13-14
Fuel metering	134-135	Instrument panel	6-7
Fuel reserve	21,142	Instrument panel dimmer	15,47
Fuel tank	66	THE BOTH OF THE POLYTEE AND THE PROPERTY OF A DESCRIPTION OF THE POLYTEE AND THE PROPERTY OF THE PROPERTY OF THE POLYTEE FOR T	
Fuses	92	J	
G		Jack	82-84
M		Jacking up the car	
Gear ratios	136	using a hydraulic floor jack	96
Glove compartment	66,91	using the car's jack	82

	Page		Page
K		Oil pressure gauge	24 15
Keys	9	Opto-electronic instruments	13
		P	
L			
		Parking brake	
Low beam headlight load compensators	65	adjustment	116
Low beam headlights	43	indicator	28
replacing the bulbs	86	specifications	137
Lubricants		Passenger compartment climate control	
engine oil	143	air conditioner	39
specifications	144	automatic system	34
Lubrication servicing	102	manually regulated system	30
Lubrication system specifications	135	Performance	
Luggage compartment		gradeability	140
capacity	141	speeds	140
increasing the stowage area	60	Power locks	56
opening the boot lid	60	Power steering fluid	106
Luggage/ski rack	68	Power windows	57
М		R	
Maximum vehicle speeds	140	Radiator fan	64
Model plate	129	Radio	70,150
·, 701		Rear fog-guard lights	44
		Rear screen heater	46
N -		Rear screen washer	45,118
		Rear screen wiper	11812530363
Number plate lights		cleaning/replacing the blades	118
replacing the bulbs	88	control stalk	45
		Rear seats	
		folding down the backrest for increased loading area.	60
0		Rearview mirrors	66
		Replacing a wheel	82
Oil consumption	143	Replacing the bulbs	82 89 23
Oil filter	110	Rev counter	23

	Page		Page
		m At	
Reverse lights	10	T	
replacing the bulbs	89	Timing	133
Rims and tyres	138	Tow hitch	78
		installation	80,153
		wiring schematics	79,152
S			78,152
Safety when driving	76	Towing a trailer	10,132
Seat belts	50	Transmission	120
	52	gear ratios	136
regulatory information	32	oil level, draining	105
Service brakes	55 1 10 0	selecting gears	76
	55,148-9	Transmission oil	
specifications	137	checking the level, changing the oil	105
Service schedule maintenance	101	Trip computer	26
Side lights	43	Trip odometer	22
replacing the bulbs	85,89	Turbocharger	100
Snow chains	117,138	pressure warning light	29
Spare	82		23
Spark plugs		Tyres	146
maintenance	114	inflation pressures	
types and specifications	134	maintenance	117
		puncture	82
Speedometer	22	snow chains	117,138
Starting a diesel engine	74	types	138
Starting a petrol engine	74		
Starting the car	76	S.I.	
Steering			
specifications	138	Valve clearance values	133
Steering column lock	9	Vehicle identification	128
Steering wheel		Ventilation	33,36,40
rake adjustment lever	47	· Circulation	,,
Steering wheel rake adjustment	47		
Stop lights		W	
replacing the bulbs	89	Weights	140
	62	Wheel alignment (toe-in)	138
Storing skis in the boot		Windscreen/rear screen washing liquid	110
Storing your car	126		45.118
Sun roof	69	Windscreen washer	43,110
Suspension	5206	Windscreen wiper	110
automatic suspension control system	54	cleaning/replacing the blades	118
specifications	137	control stalk	45



Fiat Auto S.p.A. – S. A. – Divisione Lancia – Assistenza Tecnica 10134 TORINO (Italy) - Corso E. Giambone, 33 Publication no. 603.06.354 - 3rd edition (V-1991- 3.000) Printed in Italy - G. Canale & C. S.p.A. - Borgaro T.se (Turin)

