# **DELTA HF** integrale

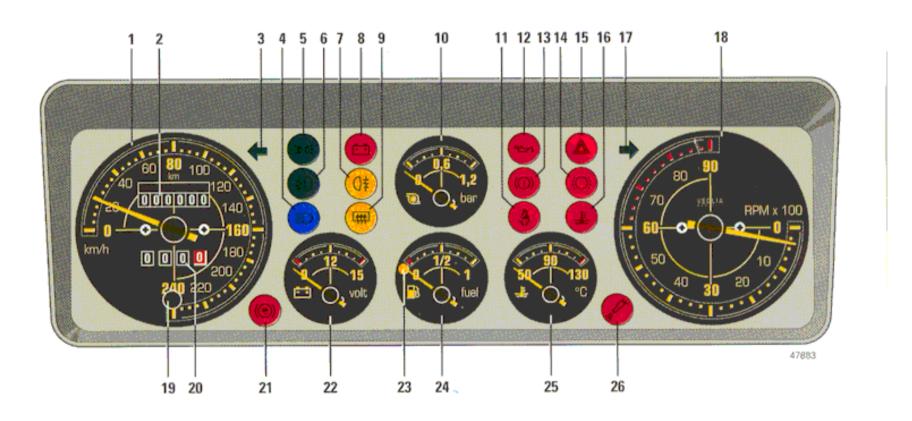




# Owner Handbook Supplement

This supplement contains information regarding the Delta HF integrale models. Refer to the Owner Handbook for further details.

# Instrument Panel (version without check panel)

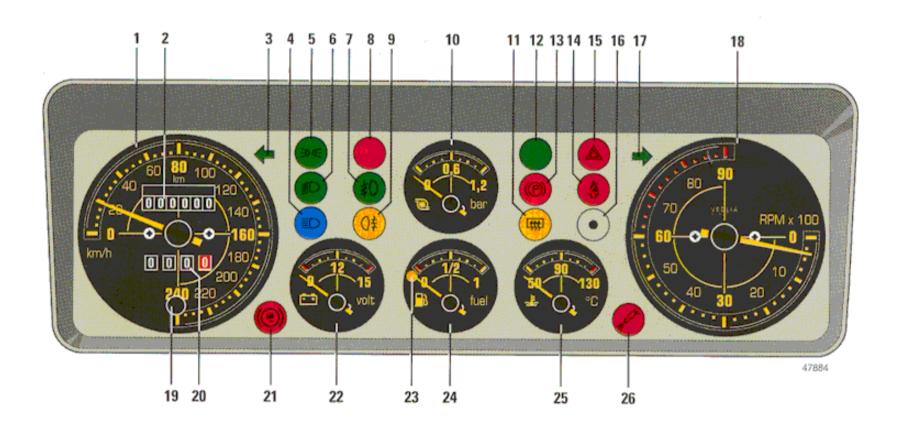


<sup>\*</sup> In the "kat" version indicator 26 signals maximum turbocharger capacity (see p. 10).

- Speedometer.
- Odometer.
- Left direction indicator.
- 4. High beam headlight indicator.
- Side light indicator.
- 6. Fog light indicator.
- Rear fog-guard light indicator.
- 8. Battery warning light.
- 9. Rear window defroster indicator.
- 10. Turbo pressure gauge.
- 11. Seat belts not buckled warning light.
- Low oil pressure warning light.
- Low brake and clutch fluid warning light.
- Brake pad wear warning light.

- 15. Hazard warning indicator.
- 16. Coolant temperature warning light.
- 17. Right direction indicator.
- Rev counter.
- 19. Trip odometer zeroing button.
- 20. Trip odometer.
- 21. ABS system malfunction warning light.
- 22. Voltmeter.
- 23. Fuel reserve warning light.
- 24. Fuel gauge.
- 25. Coolant temperature gauge.
- Injection system malfunction warning light (16v version).

# Instrument Panel (version with check system)



<sup>\*</sup> In the "kat" version indicator 26 signals maximum turbocharger capacity (see p. 10).

- 1. Speedometer.
- 2. Odometer.
- Left direction indicator.
- 4. High beam headlight indicator.
- 5. Side light indicator.
- 6. Low beam indicator.
- 7. Fog light indicator.
- 8. Main warning light.
- 9. Rear fog-guard light indicator.
- Turbo pressure gauge.
- 11. Rear window defroster indicator.
- All systems operative indicator.
- 13. Handbrake warning light.
- 14. Seat belts not buckled warning light,

- 15. Hazard warning indicator.
- 16. Available indicator position.
- 17. Right direction indicator.
- 18. Rev counter.
- 19. Trip odometer zeroing button.
- 20. Trip odometer.
- 21. ABS system malfunction warning light.
- 22. Voltmeter.
- 23. Fuel reserve warning light.
- 24. Fuel gauge.
- 25. Coolant temperature gauge.
- Injection system malfunction warning light (16v version).

# DIGITAL CLOCK

# Digital clock

#### Features

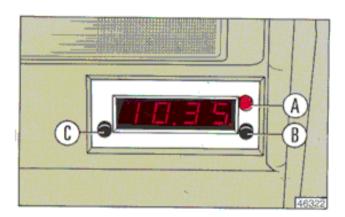
The clock displays four digits and two points.

The right point only appears when the clock is being used as a chronometer.

The display turns on only when the ignition key is turned to MAR. If you wish to see the time without inserting the key, press button A.

Display buttons B and C will not operate without the ignition key.

The digital clock may be used as a chronometer or to display the current time. Press button A to switch between these functions.



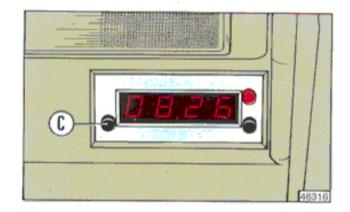
#### Clock mode

The time is displayed when the key is turned on.

If a power interruption occurs the digits will flash. The car's electrical system should be checked and the clock reset to the correct time.

Press button C to display minutes and seconds.

Press again to return to the hour/minute display.

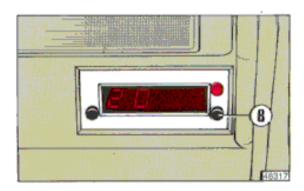


# DIGITAL CLOCK

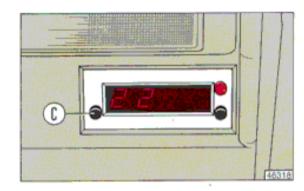
## Setting the time

Use this procedure to set the correct time:

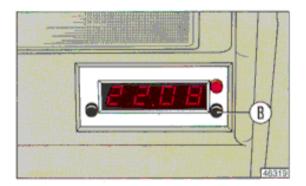
 Press button B once to select hours, twice for minutes, and three times for seconds.



 Press button C to set the hour or minutes. If button C is pressed after seconds have been selected, they will be reset to zero. When C is released the seconds function will resume.



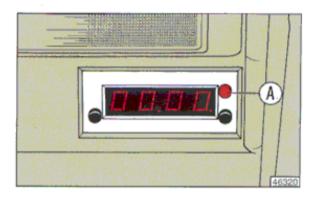
 After setting the correct time press button B a fourth time to display the time in hours and minutes.



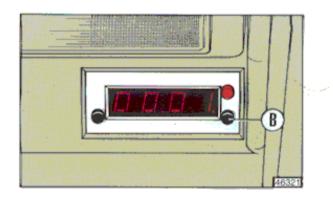
## DIGITAL CLOCK

#### Chronometer

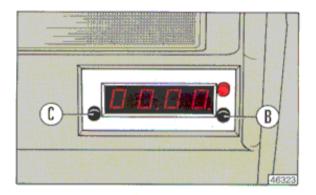
Press button A to select the chronometer. The display will show 00.00.



Press button B to start the chronometer. Stop and start timing using button B.



The chronometer operates in three modes: minutes and seconds, seconds and tenths of a second, and hours and minutes. Press button C to select the mode desired.



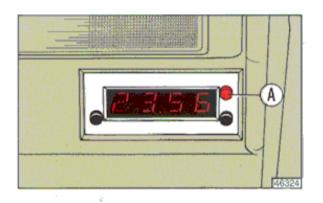
The chronometer can display up to 9h59min, so it may be used to time a trip.

Press button C if you wish to return to the minute/second mode.

The mode may be changed while the chronometer is operating.

Press button B and C at the same time to reset zero the display.

# DIGITAL CLOCK - FOG LIGHTS



The current time can be displayed during chronometer operation by pressing button A.

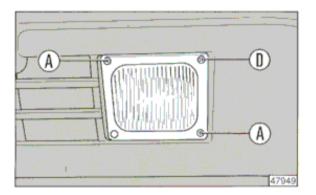
Press button A to restore clock mode after you have finished using the chronometer.

# Fog Lights

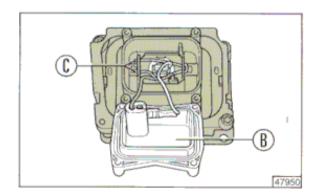
Press switch B to turn on the fog lights when the key is at MAR (see p. 30 in the Owner Handbook).

Bulb replacement procedure:

- · Unscrew the two screws located near the lens.
- Disconnect the wiring from the back of the fog light unit and then remove it.



- Unscrew the four screws and remove guard B.
- · Release retention spring C.



- Remove the 125V/55W bulb from the housing and disconnect the power lead.
- Use screw D for vertical alignment of the fog light beam.

#### INTEGRATED FUEL SUPPLY-IGNITION SYSTEM

#### Operation

Four injectors, fed at a constant pressure with respect to the absolute pressure in the intake manifold, inject fuel above the inlet valve of each cylinder.

The injectors are actuated by intermittent electrical impulses of variable duration coming from a control unit.

The unit determines the amount of fuel to be injected by varying the duration of the impulses determining the duration of injector operation.

Engine rpm, air temperature and absolute pressure in the intake manifold are transmitted to the control unit to determine the amount of fuel to be metered and the ignition advance.

Engine fuel supply and the ignition advance are constantly adjusted on the basis of engine operating conditions. The above parameters are integrated with the coolant temperature, accelerator pedal position and the percentage of oxygen in the exhaust (only "kat" version).

#### Starting the engine

The injection system control unit automatically determines the optimum fuel mixture for starting under all temperature conditions.

Turn the key to AVV without depressing the accelerator pedal. Release the key as soon as the engine starts.



"Emergency" operation warning light for the integrated fuel supply-ignition system (16v version).

This warning light should turn on when the engine is being being started and then turn off when it is running. If the warning light turns on while the car is moving, you

may continue to drive. However, the system is not operating properly. Take the car to a LANCIA Service Centre for repair.



# Maximum turbocharger capacity indicator ("kat").

The indicator will turn on when you fully depressed the accelerator pedal engine speeds at higher than 2250 rpm and in the absence of detonation phenomena. It will remain on as long as the accelerator pedal is fully depressed unless one of the other parameters is not fulfilled.

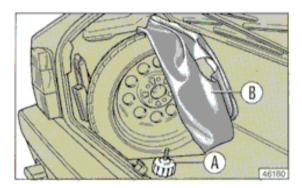
## Injector maintenance

If the car will not be used for a long period of time, remove the fuel from the tank and then put back a maximum of 5 litres of petrol mixed with 3% motor oil. Start the engine and let it idle for about 15 minutes.

#### DRIVING INFORMATION

# Spare Tyre

The small spare tyre can removed by unscrewing A and pulling back cover B.



The spare should only be used to drive the distance required to reach a garage for repair.

Never exceed 80 km/h (50 mph).

Snow chains cannot be used with the spare.

Because of its size the spare is designed for temporary use. Do not use the spare on any other vehicles or attempt to put a standard sized tyre on the spare rim.

# **Driving Information**

- The Delta HF integrale is easy to drive in snow, mud and steep dirt roads. However, it is not an off-road vehicle because of its ground clearance.
  - Efficient use of engine power is achieved even on poorly surfaced roads thanks to the four-wheel drive system. Care should be exercised under all conditions when braking.
- Snow tyres and low-profile snow chains (max, 12 mm) may be used with the Delta HF integrale. Chains can only be fitted on the front wheels.
- The HF integrale is equipped with a special TORSEN rear differential. Never attempt to start the engine when the car is jacked up or a wheel is off the ground (e.g., when balancing the wheels; all balancing operations should be performed by a specialised garage).
- If you stop immediately after driving at high speeds or under severe conditions, let the engine idle for several minutes to prevent oil from overheating around the turbocharger bearings and to avoid overheating of the coolant present in the cylinder head.

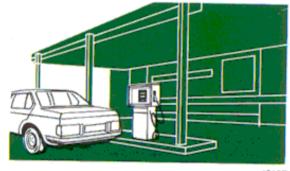
# Refilling the Fuel Tank

#### 16v version

Either leaded or unleaded premium petrol may be used. (Minimum octane number 95).

#### "kat" version

Only unleaded fuel (as per DIN standard 51607) must be used owing to the emission-control systems installed in the car.



45197

The octane number of the fuel should be at least 95.

The internal diameter of the fuel filler tube is designed to accommodate a small, unleaded petrol nozzle preventing the use of leaded petrol. Never attempt to fill the fuel tank using any other methods.

Petrol containing lead will permanently damage the catalytic converter.

# Emission-Control Systems ("kat" version only)

#### Lambda sensor

This sensor controls fuel injection by monitoring the amount of oxygen in the exhaust. This information is transmitted to a control module where the amount of fuel to be injected and the air-fuel mixture are determined.

#### Three-way catalytic converter

Carbon monoxide, oxides of nitrogen and unburned hydrocarbons are the main polluting components of exhaust gases. The catalytic converter, once it reaches operating temperatures, reduces a significant percentage of these emissions into harmless compounds.

The gases pass through a ceramic substrate evenly coated with noble metals, which is contained in a metal housing.

#### Fuel evaporation canister

Fuel evaporation emissions are also polluting, although less so than exhaust emissions.

However, evaporation can occur even when the engine is not running.

Since it is impossible to prevent the formation of these emissions, an activated-charcoal canister traps them during engine operation.

# EMISSION-CONTROL SYSTEMS

# Preventing damage to emission-control systems

Unburned fuel can cause the catalytic converter to overheat, and may damage it.

Therefore, difficulty in starting and/or engine operation which is not "smooth" owing to ignition or other malfunctions allow the unburned air-fuel mixture to enter the catalytic converter.

You should not insist in your attempts to start the engine, especially by push-starting or towing. The car should only be started using another battery.

If the engine begins to operate poorly, drive slowly without accelerating rapidly.

If any of the above mentioned problems occur, the car should be taken to a LANCIA Service Centre for a tune-up.

# Parking the car

During normal operation of the catalytic converter high temperatures are generated both in the converter and the tailpipe. If the engine is not operating properly, the temperature may be higher than normal.

For this reason, never stop the car near inflammable material. Remember that grass, dry leaves and pine needles can ignite as a result of the heat generated.

#### Heat shields

Do not install heat shields or remove factory-installed shields from the catalytic converter or exhaust pipes.

# Application of anti-corrosion compounds

The catalytic converter, Lambda sensor and exhaust pipe should never be sprayed with these compounds. They should be covered whenever spraying is done.

## MAINTENANCE

The following operations should be carried out in addition to those listed in the Owner Handbook to guarantee the emission control systems are operating properly. These operations refer to the "kat" version, except operations marked with an asterisk which apply to both versions.

## Free Service Coupon

Proper injector installation is checked. %CO at idle is checked and adjusted if necessary. The distributor cap is checked. Ignition advance is checked. Intake/exhaust manifold bolts are checked. Valve clearance is checked and/or adjusted. E.G.R. system components are checked. The following are replaced:

- Engine oil
- Cartridge oil filter
- Manual transmission oil
- Rear differential oil

#### Service Schedule Maintenance

		1.0				
Thousands of km	15	30	45	60	75	90
Months	12	24	36	48	60	72
Check toothed balancing shaft drive belt *		+		+		+
Replace transaxle oil *				+		
Check transaxle oil *		+		'		+
Replace rear differential oil *		+		+		+
Check intake/exhaust manifold bolts		+		+		+
Check Lambda sensor operation			+			+
Check/adjust carbon monoxide level at idle	*+::	+	+ "	+	+	+
Check fuel evaporation control system			+			+
Check EGR system components	+		+		+	

### Every 105,000 km

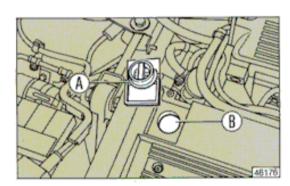
- Replace toothed balancing shaft drive belt.

#### Engine oil

The engine oil should be checked when the car is parked on level ground about 10 minutes after switching off the engine.



When topping up or changing the oil, run the engine for a couple of seconds then wait a few minutes before rechecking the level.



The oil level should always be between the MIN and MAX marks on the dipstick. When the level drops below the MIN mark add oil through filler hole B after removing cap A until reaching the MAX mark on the dipstick. Never exceed the MAX mark. The difference between MIN and MAX corresponds to about 1 litre of oil.

The oil can be drained by removing the sump plug. Let the oil drain for at least 10 minutes. Removing the filler cap and dipstick will facilitate draining.

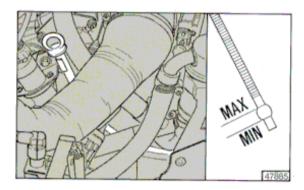
The oil should always be drained when the engine is hot.

Never change the oil of a new engine before driving 1000-1500 km (600-900 miles).

When the car is mainly driven in dusty areas or in the city, the oil and cartridge filter should be changed more frequently than recommended.

#### Transaxle

When the car is on level ground the transaxle oil should always be between the MIN and MAX marks on the dipstick.



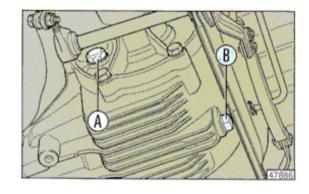
When the level is near or below MIN, top up through the dipstick housing until reaching MAX.

To change the transaxle oil, drain it by removing the screw plug under the transmission case.

Let the oil drain for around 1 minutes before replacing the plug.

#### Rear differential

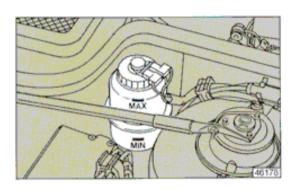
The oil level should reach the lower edge of screw plug A. Drain the oil by removing plug B. Let the oil drain completely before refilling.



#### Brake and Clutch Fluid

Check the fluid every week to ensure it is at the maximum level. The level can be checked visually without removing the reservoir cap.

The fluid warning light should be checked occasionally. Press the reservoir cap when the key is at MAR and ensure the panel warning light turns on.

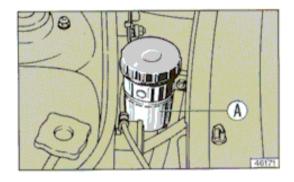


Use only DOT 4 class brake fluid for topping up. Tutela DOT 4, used when the car is manufactured, is recommended. Fluids with different characteristics will damage the rubber seals.

Hydraulic fluid is corrosive. Do not let it come in contact with the body paint. If fluid accidentally drips onto to the body wash it immediately with water.

## Power Steering Fluid

Ensure the power steering fluid level does not drop below the mark on reservoir A.



Top up using fluids having the same specifications as the hydraulic power steering fluid in the system.

When the fluid is hot it may rise above the reservoir mark.

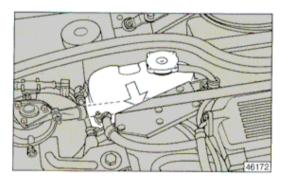
#### AIR CLEANER

#### Coolant

Check the fluid every week to ensure it is at the maximum level. The level should only be checked when the engine is cold.

The reservoir level is correct when the fluid is a couple of millimetres above the mark (indicated by the arrow in the figure).

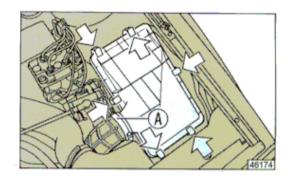
Versions with a check system have a sensor to indicate when the level is too low.



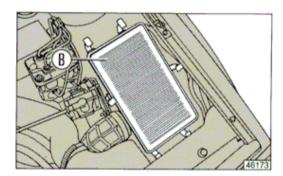
Top up or change the coolant using a 50-50 mixture of antifreeze and distilled water. **FIAT Paraflu**<sup>11</sup> is the recommended antifreeze. When the engine is hot never remove the expansion tank cap to prevent being scaled.

#### Cleaning/replacing the filter element

Loosen the screw of clamp A and release the 6 spring clips (indicated by arrows in the figure) to reach the air cleaner element.



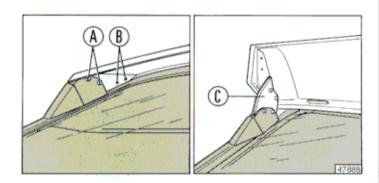
Remove the housing cover. Clean or replace filter element B.



#### REFILLING THE FUEL TANK

#### Changing the spoiler position

The spoiler can be placed in three different positions. The figure at left shows the fully lowered position.



If you wish to raise the spoiler, unscrew the four screws A (2 on each side), and reattach the spoiler at holes B using the same screws.

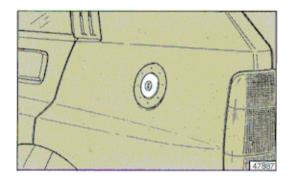
To place the spoiler in the highest position use brackets C supplied with the car (one on each side). Refer to the figure above at right.

The highest position is not recommended for ordinary driving as fuel consumption is higher and overall vehicle speed will be lower.

#### Fuel filler cap

Place the key in the lock and turn it counterclockwise to unlock the fuel filler cap.

Unscrew and remove the cap to fill the tank.



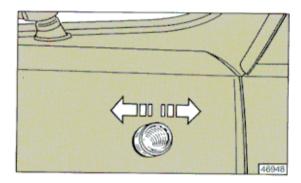
Note

The fuel tank is pressurized to prevent evaporation. Is is normal to hear the sound of air escaping when loosening the cap.

# DIRECTION INDICATOR REPEATERS

#### Replacing the bulbs

If one of the direction repeater bulbs burns out, remove the entire unit from inside the wheel arch.



Move the lens slightly forward or towards the rear of the car. Rotate gently to remove the bulb holder. Remove and replace the capless 5W bulb.

# **HEADLAMPS**

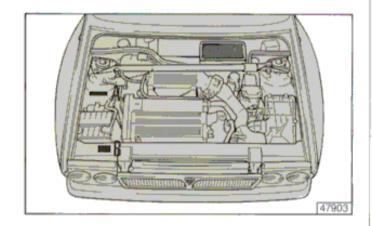
Aligning the headlight beams from inside the car (if fitted)

Knob position	Location of cargo
0	Driver only. Driver and front seat passenger.
1	5 occupants. Driver + 75 kg in luggage compartment.
2	5 occupants + 75 kg in luggage compartment. Driver + 200 kg in luggage compartment. Driver + load (280 kg max) in the space obtained by tilting down the rear seat back.
3	Do not use.

Use intermediate positions for other load conditions.

## VEHICLE IDENTIFICATION

	16v	kat
Body type code		831 AB024S 831 C5.046



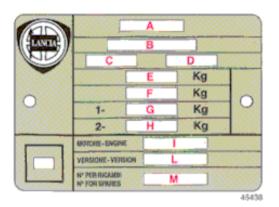
#### A. Chassis marking

- Type of vehicle:

(ZLA 831 AB0)

- Chassis serial number.

## B. Model plate



- A. Manufacturer.
- B. Homologation number.
- C. Vehicle ID 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.

# **ENGINE**

		16v	kat
Cycles		4-cycle	4-cycle
Number of cylinders .		(supercharged) inline-4	(supercharged) inline-4
Bore × stroke	mm	84 × 90	$84 \times 90$
Displacement	cm <sup>3</sup>	1995	1995
		8 to 1	7.5 to 1
Maximum power *	{ (EEC)kW	144	130
	(DIN)bhp	200	180
at	rpm	5500	5250
Maximum torque	f (EEC)	298	290
manage wide	(DIN)kgm	31	30
at	rpm	3000	2750

# Timing

	16v	kat
Overhead cams; no. of OHC's	2	2
Cam drive	toothed belt	toothed belt
Inlet opens (BTDC)	8°	8°
Inlet closes (ABDC)	35°	42°
Exhaust opens (BBDC)	30°	42°
Exhaust closes (ATDC)	0°	1°
Valve clearance for timing check, inlet and exhaust	0.80 mm	0.80 mm
Valve clearance, cold operation:		
- inlet	$0.35 \pm 0.04 \text{ mm}$	0.35 ± 0.04 mm
- exhaust	$0.40 \pm 0.03 \text{ mm}$	$0.40 \pm 0.04 \text{ mm}$

<sup>\*</sup> Do not verify engine power on a roller test bench using only one of the axles.

#### Fuel Supply - Ignition

Integrated electronic injection-ignition system, A single control unit controls the system elaborating the injection time and ignition advance.

Air volume aspirated measured using the speed-density method\*.

Air cleaner: dry, with paper element.

Fuel pump: in fuel tank.

Superchanging by water-cooled turbocharger with air/air heat exchanger and continuous electronic control of superchanging adjustment.

Firing order ...... 1 - 3 - 4 - 2

	16v	kat
Engine idle speed rpm	$900 \pm 50$	825 ± 50
%CO at idle:		
- upstream of catalytic converter	-	$0.6\% \pm 0.2\%$
- in exhaust	$1.5\% \pm 0.5\%$	< 0.35%
Reference advance at idle	15° ± 2°	10°±2°
Spark plugs:		
Bosch	WR6DTC	WR6DTC
Spark plug gap	0.8-1.0 mm	0.8-1.0 mm

Analytical method used to determine the amount of fuel to be metered using the engine speed, air temperature and absolute pressure (density) in the intake manifold.

# Wastegate (16v version)

Turbocharger pressure is regulated by a wastegate governed by a 3-way solenoid, which in turn is driven by an electronic control unit.

The wastegate ensures that the pressure of the exhaust gases that turn the turbine remain uniform both at intermediate speeds and at maximum power and torque.

# Steering

Turning circle diamete	 10.4 m
Turns, lock-to-lock	 . 2.835

#### Clutch

Hydraulically controlled with self-adjusting mechanism.

#### Manual transmission

Five-speed synchromesh manual transmission.

#### Gear ratios:

1st gear			+	,	,				+	,	+			,	+	+	+	,	+	,									3.5	ļ	
2nd gear																													2.1	7	6
3rd gear	į	į						+		+				,								+	 . ,		+	+	+		1.5	2	4
4th gear																							 						1.1	5	6
5th gear												,	+	,					+			+	 					(	0.9	1	7
Reverse													ı			ı	ı						 	 					3.5	4	5

Final drive ratio: 18/56, spur gear pair with helical teeth.

Central differential: epicyclic front/rear torque splitting; ratio: 47/53.

Viscous-coupling-controlled central differential.

Drive ratio to rear axle: 43/19, hypoid gears.

Rear axle has hypoid gears with 19/43 ratio and TORSEN (torque-sensing) rear differential.

Three-part propeller shaft with a constant-velocity joint and two universal joints.

Four axle halfshafts with constant-velocity joints for transmission of power from the front and rear differentials.

#### Brakes

Two independent circuits (front and rear).

Vacuum servo.

Rear brake circuit pressure regulator valve.

Air ports for front disc cooling may be present instead of the auxiliary headlights.

#### Antilock Braking System (optional)

The antilock braking system is combined with the conventional braking system to prevent the wheels from locking up when braking rapidly, or when braking on uneven or icy roads.

#### Operation

An electronic module monitors the signal coming from the wheels. It determines which wheel is about to lock up, and signals an electronic hydraulic modulator to lower, maintain or increase the fluid pressure to the wheel brake cylinder preventing wheel lock-up.

Under normal driving conditions the system is not operative.

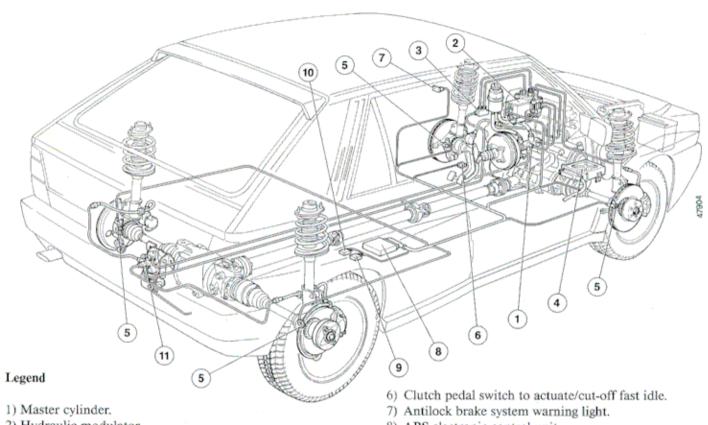
When the brakes are fully applied, as in an emergency, the system is actuated. You can tell the system is operative when slight pulses are felt on the brake pedal. The antilock braking system has the following advantages:

- maintenance of driving stability and steerability when braking;
- a reduction in stopping distance through optimal utilization of the adhesion between the tyres and the road;
- rapid matching of the braking force to different adhesion coefficients.

However, this system does not compensate for careless driving. Be particularly careful when driving on icy, wet or snowcovered roads.

If the antilock braking system is not operating perfectly, it is automatically deactivated, although the car's conventional braking system continues to operate. A red warning light will turn on if a system malfunction occurs.

The parameters monitored by the electronic control unit (wheel speed and acceleration) are influenced by the rim/tyre size and suspension components (e.g., control arms). Therefore, cars equipped with ABS should only have factoryapproved wheels, tyres and brake pads.



- 2) Hydraulic modulator.
- 3) Three-way coupling.
- 4) Electronic injection control unit.
- 5) Wheel-speed sensors.

- 8) ABS electronic control unit.
- 9) Longitudinal deceleration sensor.
- 10) Transverse deceleration sensor.
- 11) Brake proportioning valve.

## Wheels and Tyres

Rims	
Tyres	

Spare has a 3½B×16" H2 rim and T115×70 R16 tyre.

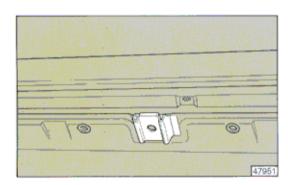
This small spare should only be used to drive to the nearest garage for tyre repair.

Never exceed 80 km/h (50 mph).

Spare tyre inflation pressure: 4.2 bar.

#### Replacing a wheel

The car's jack should be placed under the bracket located near the centreline of the front door.



If the jack is placed at any other position, it may be dangerous to lift the car and damage to the lower body moulding can occur.

# Wheel alignment (unladen vehicle)

Front wheel toe-in	 0-2 mm
Rear wheel toe-in	 3-5 mm

#### Front mud flaps

It is advisable to mount front mud flaps to prevent paint abrasion which may be caused by gravel or dirt kicked up when driving.

#### Raising the car

The jack should generally be placed under one of the side members. If necessary, the car may be raised from the front using a hydraulic jack positioned under the transmission case. Always put a thick hardwood board between the jack and the transmission. Leave the bonnet open when jacking up the car from the front.

# Towing the car

Tow the car with all four wheels on the ground. If impossible, the car must be lifted onto a tow truck. The transmission will be damaged if you tow the car with only the front wheels raised.

# Electrical System (12 volts)

## Battery (negative earth):

Capacity, 20-h discharge rate	45 Ah
	225 A

#### Alternator

Nine-diode rectifier with integral voltage regulator. Current sent to battery as soon as engine starts.

# Performance

Maximum speeds after running in; km/h.

	16v	kat
1st gear	60	60
2nd gear	98	96
3rd gear	140	137
4th gear	185	182
5th gear	220	212
Reverse	60	60

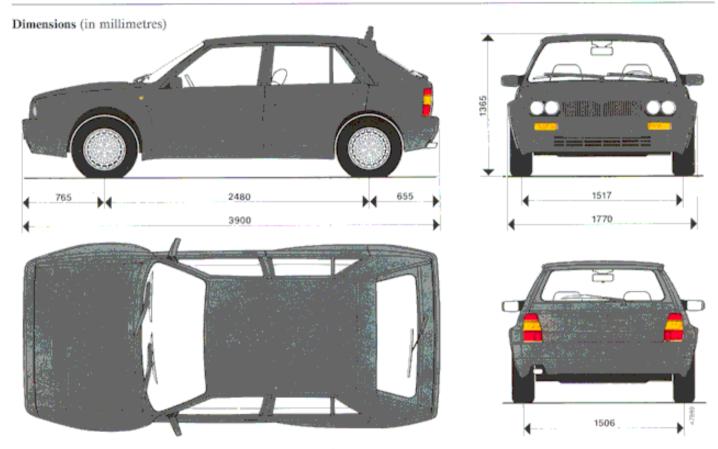
# Maximum gradeability. Fully laden car; %:

	16v	kat
1st gear	58	56
2nd gear	40	39
3rd gear	25	24
4rd gear	17	17
5th gear	12	12
Reverse	68	66

# Weights

Kerb weight (fuel, spare, tools and acces-	
sories)	1300 kg
Payload (5 people + 100 kg cargo)	450 kg
Maximum gross vehicle weight	1750 kg

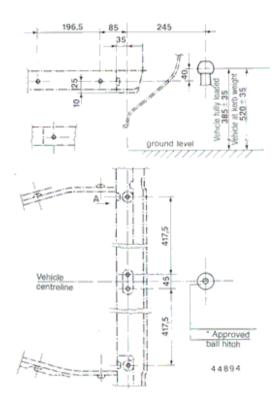
# DIMENSIONS



Luggage compartment volume (VDA standards): 200 dm<sup>3</sup>. Cargo area (rear seat folded down) (VDA standards): 940 dm<sup>3</sup>. Heights indicated for unladen cars.

Capacities	dm³ (Imp. units)	kg (lb)	
Fuel tank	57	_	Premium petrol (min. octane number 95).
	(12.5 gal)		
including a reserve of	6-9	-	
	(1.3-2.0 gal)		
Cooling system (radiator, engine and expansion tank).	6.2	_	Distilled water and FIAT Paraflu <sup>11</sup> mixture
	(5.5 qt)		(refer to p. 109 in Owner Handbook)
Engine sump	4.90	4.40	
·	(4.3 qt)	(9.7)	
Engine sump and filter	5.30	4.80	See table on p. 108 of Owner Handbook
	(4.7 gt)	(10.6)	
Sump, filter and lines	5.90		
	(5.2 qt)		
Transmission and centre differential	3.80	3.40	Testalo 2C 90C ell
	(3.3 qt)	(7.5)	Tutela ZC 80S oil
Rear differential	1.10	1	Totals W00/MD 4 -:1
	(0.95 qt).	(2.2)	Tutela W90/MDA oil
Hydraulic power steering	0.75		Totals CIVA Social
	(1.3 pt)		Tutela GI/A fluid
CV joint cavities and boots	-	0.10	Tutela MRM 2 grease
		(3.5  oz)	
Front/rear brake and clutch hydraulic circuits	0.56	. 7	T. I. DOT 45
·	(0.9 pt)		Tutela DOT 4 fluid
Windscreen washer liquid	2	_	Water and Autofa n. 9 DP1 mixture
_	(3.5 pt)		(refer to p. 109 in the Owner Handbook)

# Installing a Tow Hitch



The tow hitch installer is required to fasten a plate at the same level as the hitch bearing the following information: MAXIMUM LOAD AT THE COUPLING 70 kg.

# **Fuel Consumption**

Fuel consumption as per EEC directives - litres/100 km (miles/Imp. gal.)

	16v	kat
City driving	11.2 (25.2)	11.1 (25.5)
Constant speed ( 90 km/h)	7.9 (35.8)	8.2 (34.5)
Constant speed (120 km/h)	10.5 (26.9)	10.8 (26.2)

Fuel consumption (only kat) as per FTP 75 standard litres/100 km (miles/Imp. gal)

City	10.8 (26.8)
Highway	8.1 (34.9)
Combined	9.6 (29.4)

# Tyre Inflation Pressures

	Front	Rear
Medium load	2.2 bar	2.2 bar
Fully laden	2.5 bar	2.5 bar