

LANCIA



LANCIA k

1st Volume



Workshop
Manual



Interior

In order to place the greatest emphasis on comfort, the interior fittings have been the subject of modifications.

The most apparent change involves the seats which have new foam and modified covers to guarantee comfort and give an improved wraparound effect.

CHARACTERISTICS AND TECHNICAL SPECIFICATIONS

There follows the main technical specifications of the Lancia k SW and saloon 96 range for the 5 engine types.

Other characteristics and technical specifications, in addition to the repair instructions are given in the specific Service Manual updates identified by print nos. 506.475/08, /14, /16 for the 96 range saloon and nos. 506.475/12 and/15 for the Lancia k Station Wagon.

LANCIA k 2.0 20v

- Bodywork version code:	
Saloon Power Drive and Comfort Drive	838 AG 1AA
Saloon Automatic Transmission	838 AG 11A
Station Wagon Power Drive	838 BG 1AA
- Engine marking	838 A6.000
- Total capacity (5 cylinder)	1998 cc
- Max power CEE	114 kW (155 CV)
- Corresponding speed	6500 rpm
- Max torque CEE	186 Nm (19,0 kgm)
- Corresponding speed	4000 rpm
- Timing	T OHC
- Engine balancing	through 1 counter-balance shaft
- Fuel system	Bosch Motronic electronic injection
- Ignition	integrated with the electronic injection
- Type of fuel recommended	unleaded petrol (95 RON min)
- Top speed	
Saloon Power Drive (in 5th gear)	212 km/h
Saloon Comfort Drive (in 4th gear)	212 km/h
Saloon C.A. (in 4th gear)	210 km/h
Station Wagon (in 5th gear)	205 km/h

C.A. = electronically controlled automatic transmission (AISIN)

4/5

LANCIA k 2.0 turbo

- Bodywork version code:	
Saloon	838 AB 1AA
Station Wagon	838 BB 1AA
- Engine marking	838 A4.000
- Total capacity (4 cylinder)	1998 cc
- Max power CEE	151 kW (205 CV)
- Corresponding speed	5600 rpm
- Max torque CEE	298 Nm (30,4 kgm)
- Corresponding speed	2750 rpm
- Timing	T OHC
- Engine balancing	through 2 counter balance shafts
- Fuel system	Bosch Motronic electronic injection and supercharging with GARRET turbocharger
- Ignition	integrated with the electronic injection
- Type of fuel recommended	unleaded petrol (95 RON min)
- Top speed:	
Saloon (in 5th gear)	235 km/h
Station Wagon (in 5th gear)	230 km/h

LANCIA k 2.4 20v

- Bodywork version code:	
Saloon	838 AC 1AA
Station Wagon	838 BC 1AA
- Engine marking	838 A2.000
- Total capacity (5 cylinder)	2446 cc
- Max power CEE	129 kW (175 CV)
- Corresponding speed	6100 rpm
- Max torque CEE	230 Nm (23,5 kgm)
- Corresponding speed	3750 rpm
- Timing	T OHC
- Engine balancing	through 1 counter-balance shaft
- Fuel system	Bosch Motronic electronic injection
- Ignition	integrated with the electronic injection
- Type of fuel recommended	unleaded petrol (95 RON min)
- Top speed	
Saloon (in 5th gear)	218 km/h
Station Wagon (in 5th gear)	212 km/h



LANCIA k 2.4 td

- Bodywork version code:
 - Saloon 838 AH 1AA
 - Station Wagon 838 BH 1AA
- Engine marking 838 A7.000
- Total capacity (5 cylinder) 2387 cc
- Max power CEE 91 kW (124 CV)
- Corresponding speed 4000 rpm
- Max torque CEE 265 Nm (27 kgm)
- Corresponding speed 2000 rpm
- Timing S OHC
- Engine balancing through 1 counter-balance shaft
- Fuel system indirect injection with electronically controlled pump and IHI turbocharger
- Type of fuel recommended diesel
- Top speed
 - Saloon 193 km/h
 - Station Wagon 190 km/h

LANCIA k 3.0 V6 24v

- Bodywork version code:
 - Saloon 838 AD 1AA
 - Saloon C.A. 838 AD 11A
 - Station Wagon C.A. 838 BD 11A
- Engine marking 838 B.000
- Total capacity (6 cylinder) 2959 cc
- Max power CEE 150 kW (204 CV)
- Corresponding speed 6300 rpm
- Max torque CEE 270 Nm (27,5 kgm)
- Corresponding speed 4500 rpm
- Timing T OHC for each cylinder head
- Fuel system Bosch Motronic electronic injection
- Ignition integrated with the electronic injection
- Type of fuel recommended unleaded petrol (95 RON min)
- Top speed
 - Saloon (in 5th gear) 225 km/h
 - Saloon C.A. (in 4th gear) 220 km/h
 - Station Wagon C.A. (in 4th gear) 218 km/h






































C.A. = electronically controlled automatic transmission (AISIN)

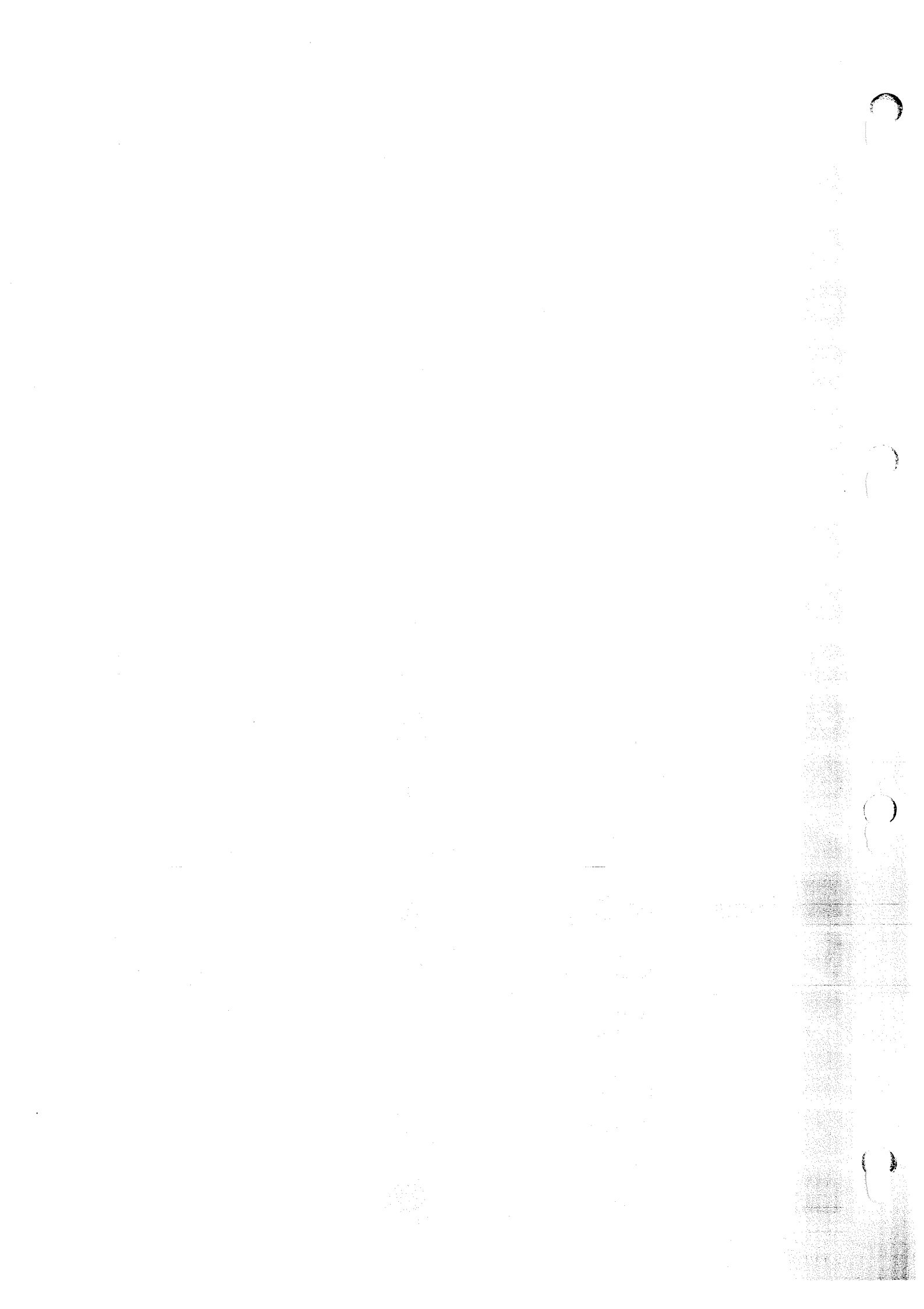
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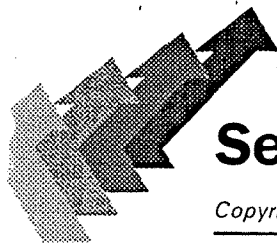
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4

	Removing Disconnect		Inlet
	Refitting Connect		Exhaust
	Dismantling Disassembly		Operation
	Fitting Composition		Tolerance Difference in weight
	Tighten to torque		Pre-loading
	Tighten to torque plus angle		Rotation
	Fully tighten		Compression ratio
	Stake nut		Selection Classes
	Adjustment Regulation		Oversize Greater than Maximum
	Visual inspection Check		Undersize Smaller than Idling
	Warning		Number of revs
	Lubricate Grease		Ratio
	Replace Genuine spares		Pressure
	Bleed braking system		Temperature
	Work surface Machined surface		Temperature < 0°C Cold Winter
	Interference Force fit		Temperature > 0°C Hot Summer
	Distance to be measured Measurement - Check Thickness - Clearance		Windscreen wiper with electric washer pump
	Rolling torque		Rearscreen wiper with electric washer pump
			Engine





Service News

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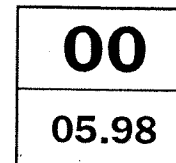
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Servizi Post Vendita

LANCIA k

version: all versions



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LANCIA k 98 RANGE

New aesthetic features and new engine types

OPERATIONS IN PRODUCTION

The new LANCIA k 98 range is distinguished through the introduction of the following improved features:

- new engine types;
- new aesthetic features;
- new optional equipment and higher specification level offered as standard.

New engine types

There are two new engine types fitted on the 98 range: a 2000 cc 5 cylinder, 20 valve turbo petrol version (2.0 turbo 20v) replacing the 2.0 turbo 16v and a 2400 indirect injection turbo Diesel version (2.4 JTD) replacing the 2.4 TD.

There follows a list of the main characteristics of these new engine types:

2.0 turbo 20v

- Engine marking 175A3.000
- Bodywork version code
 - Saloon 838AM1AA 19
 - Station Wagon 838BM1AA 20
 - Coupé 838CM1AA 21
- Total capacity 1998 cc
- Number of cylinders 5 with 4 valves per cylinder
- Max. power CEE 162 kw (220 CV)
- At a speed of 5750 rpm
- Max. torque CEE 310 Nm (31,6 kgm)
- At a speed of 2500 rpm
- Timing TOCH with phase transformer
- Fuel system Bosch sequential timed electronic injection
Motronic M 2.10.4 with turbocharger
- Ignition electronic, static advance, integrated with the injection
- Top speed
 - Saloon 243 kph
 - Station Wagon 235 kph
 - Coupé 243 kph

2.4 JTD

- Engine marking 838A8.000
- Bodywork version code
 - Saloon 838AL1AA 17
 - Station Wagon 838BL1AA 18
- Total capacity 2387 cc
- Number of cylinders 5 with 2 valves per cylinder
- Max. power CEE 100 kw (136 CV)
- At a speed of 4000 rpm
- Max. torque CEE 304 Nm (31 kgm)
- At a speed of 2000 rpm
- Timing SOHC
- Fuel system Bosch electronically controlled direction injection
Common Rail with turbocharger
- Top speed
 - Saloon 202 kph
 - Station Wagon 200 kph

New aesthetic features

- New design leather steering wheel with 4 spokes.
- Bodymatched, wraparound bumpers.
- New body paintwork/interior fittings colour combinations (see tables on page 5/5).
- New armrest between the front seats with a closed compartment which can house a radiophone which can be comfortably used by passengers in the front and the back, folding over the armrest or placing it in one of the pre-set intermediate positions.
- The 2.0 20v turbo version differs through the fact that it is available in the following 5 exclusive colours: Apollo Blue, Uranus Grey, Pluto green, Nobile Red and Black; the window surrounding trims are in "gunmetal grey", the handles are bodymatched and the interior trims are in alcantara in distinctive natural colours. In addition, 16" alloy wheels with 5 bolts are fitted as standard (currently fitted on the Coupé version) with 205/55 R16 W91 tyres.

New optional equipment/standard specification level

In order to further improve vehicle safety and comfort, the following optional equipment has been introduced or extended to all versions:

- exhaust gas headlamps;
- Side Bags;
- Passenger Air Bag with passenger sensor;
- Radio-navigator.

In addition all versions have a passenger compartment light control unit fitted as standard which controls the operation of the courtesy lights including when a door is opened, even if the door locks are unlocked with the remote control and when the engine is switched off and the key is extracted from the ignition.



Exhaust gas headlamps

This optional equipment, already available on the Coupé version, is now also available on the Saloon version.

The exhaust gas headlamps have special xenon bulbs with a special reflective surface and have automatic alignment (which is essential given the intensity of the light) and an electronic control unit.

Compared with conventional halogen headlamps (with iodine bulbs), exhaust gas headlamps ensure improved light emission in terms of luminosity, distribution (spectrum) and the bulbs last longer.

Side Bag

In the case of side impacts, this type of Air Bag increases the level of protection provided by the vehicle, mainly protecting the occupant's chest and abdomen.

Side Bags are made up of a module fitted by special brackets in the front seat backrest and an electronic control unit housed in the centre pillars.

The Side Bags are fitted on the seat (unlike systems which are fitted in the doors) and therefore, if they are activated, the bag is always in an optimum position in relation to the occupant, irrespective of the position of the seat or the height of the occupant.

The Side Bag module is made up of the following main components:

- nylon bag with a volume of around 12 litres;
- gas generator;
- metal container;
- cover;
- fixing brackets.

The entire module is fixed under the seat covering which does not look very different from a regular seat; obviously the covering (whether it is cloth, velour, alcantara or leather) does differ because the stitching must open up in a precise controlled manner to allow the rapid and correct unfolding and inflation of the bag without tearing.

A side impact is detected by two sensors positioned in the centre pillars (one on each side) and is transmitted in the form of an electric signal to the Air Bag control unit which only operates the Air Bag module for the side affected by the impact.

Passenger Air Bag with passenger sensor

The passenger sensor is a device capable of identifying whether a weight (and consequently a person) is present on the front passenger seat cushion.

The sensor transmits this information to the Air Bag control unit which, if there is no front passenger, disables the front and side Air Bags (if fitted) and the passenger side pre-tensioner.

Please advise Customers to always observe the general warnings in the Owner's Handbook dealing with the use of seat belts and child restraint systems.

Radio-navigator

The radio-navigator is a mobile communication system which by integrating a radio with a navigation unit is capable, by means of visual and auditory suggestions, of describing a complete route for reaching a programmed destination.

The main components of the radio-navigator system are as follows:

- High quality radio with cassette player, twin receiver (tuner), connection cable for Compact Disc player (CD changer) and display which, in addition to the normal Radio - Cassette - CD instructions, is also capable of displaying the following messages:
 - turn symbols (left arrow or right arrow);
 - distance until the next turn;
 - total distance to reach destination;
 - name of the road being driven along;
 - name of the next road to drive along;
- Navigation unit in the luggage compartment including:
 - an eight channel GPS receiver;
 - a gyroscope for detecting the changes in direction made by the vehicle;
 - a CD-ROM which contains the database (road maps) and the software necessary for navigation.
- Aerial fixed to the roof of the vehicle, powerful, but small in size; a GPS/GSM type aerial is used and it can simultaneously be used for the radio-navigator and the radio phone.

A female voice is used for the audio messages, using the radio system speakers and it is available in a choice of 6 different languages.

OPERATIONS IN THE NETWORK

For the complete description of the procedures for removing-refitting the new components, refer to the specific update for the Service Manual currently being prepared.

For the operations on the new engine types, refer to the specific updates for the Overhauling Petrol Engines Manual and the Overhauling Diesel Engines Manual currently being prepared.

Planned maintenance

The introduction of the new engine types also alters the Planned Maintenance Programme and repair times which will be appear in the next edition of S.N.

AVAILABILITY OF SPARE PARTS

For the part number and the interchangeability of the specific 98 range components, refer to the updated microfiches or CD ROMs.



Body paintwork and interior fittings colour combinations - Saloon and Station Wagon Versions

EXTERIOR COLOURS		INTERIOR FITTING COLOURS													
COLOURS	CODES	Velour			Alcantara			Embroidered alcantara			Skin				
		Wine 101	Blue 139	Grey 216	Blue 834	Charcoal Grey 858	Beige 812	Wine (1/2) 610	Charcoal Grey 608	Beige 615	Blue 444	Charcoal Grey 448	Beige 502	Wine (1/2) 449	Cream 412
LANCIA BLUE (*)	435	●	●			●	●				●		●		
ICE WHITE (●)(*)	249		●		●	●					●	●			
NOBLE RED (**)	106			●		●	●		●	●		●	●		●
PLUTO GREEN (**)	384			●		●	●		●	●		●	●		●
APOLLO BLUE (**)	425		●	●		●	●	●		●	●	●	●	●	●
IVORY (**)	204	●	●		●	●					●	●			
MERCURY GREY (**)	609	●		●	●	●					●	●			
VENUS GREY (**)	672	●	●		●		●					●	●		
URANUS GREY (**)	616		●		●	●			●		●	●			
BLACK (**)	632	●		●		●	●	●		●		●	●	●	●

(●) Saloon version only
 (*) Pastel
 (**) Metallescent

Bodywork and interior fitting colour combinations - Coupé Version

EXTERIOR COLOURS		INTERIOR FITTING COLOURS															
COLOURS (all metallescent)	CODES	Alcantara										Skin					
		Green 603	Charcoal Grey 626	Ice 611	Wine 610	Cream 412	Desert 432	Skin 405	Cartier 452	Brick 442	Must 462	Blue 403	Charcoal Grey 480	Violet 472	Dark Green 430	Mauve 482	Turquoise 492
LANCIA BLUE	475	●		●	●	●	●	●	●	●		●			●	●	●
STORM BLACK	805		●	●		●	●	●	●	●		●			●	●	●
PLUTO GREEN	384			●	●	●	●	●					●			●	
ENERGY BLUE	452		●	●		●	●	●					●				
MERCURY GREY	609		●	●						●	●	●	●	●	●	●	●
POWER RED	198	●			●	●	●	●					●				
SATURN LIGHT BLUE	420		●		●							●	●				

SERVICE MANUAL COMPOSITION












At present, November 1997, the LANCIA k 1st volume manual is composed of the following booklets:

Print N°	Sections	Page Nos.	Versions	Comments
506.475 With binder (IX/94)	00	1 ÷ 107	All versions	Introduction - Technical data
	10	1 ÷ 16	1998 20 v 2446 20 v	Removing-refitting power unit Replacing auxiliary shaft belt - Replacing timing belt
		1 ÷ 43	1998 20 v	Fuel system: Bosch Motronic M 2.10 MPI injection/ignition system
		1 ÷ 11	2446 20 v	Fuel system: Bosch Motronic M 2.10 MPI injection/ignition system
		1 ÷ 25	2959 24v	Removing-refitting power unit Replacing auxiliary shaft belt - Replacing timing belt
		1 ÷ 25	2959 24v	Fuel system: Bosch Motronic M 3.7 MPI injection/ignition system
		1 ÷ 17	2387 TD	Removing-refitting power unit Replacing auxiliary shaft belt - Replacing timing belt
		1 ÷ 24	2387 TD	Fuel system
		1 ÷ 15	All versions	Diagrams: Fuel system - Lubrication - Cooling system
		18	1 ÷ 9	All versions
	21-27	1 ÷ 22	1998 20 v 2446 20 v	Removing-refitting - Drive shafts - Intermediate shaft - Reverse with synchromesh - External controls
		1 ÷ 17	2959 24v	Removing-refitting Viscodrive viscous coupling
		1 ÷ 14	2387 TD	Removing-refitting
	33	1 ÷ 41	All versions	Anti-lock brakes - Front brakes - Rear brakes - Handbrake - Hydraulic operation







Cont'












Print N°	Sections	Page Nos.	Versions	Comments
506.475 With binder (IX/94)	41	1 ÷ 14	1998 20 v 2446 20 v 2387 TD	Removing-refitting Power assisted steering
		1 ÷ 10	2059 24v	Servotronic Removing-refitting
	44	1 ÷ 18	All versions	Removing-refitting Wheel geometry
506.475/03 (II/95)	00	1 ÷ 3	1998 20v	Introduction - Technical data
	21-27	1 ÷ 65	Electronic automatic transmission	AISIN automatic gearbox Composition and operation Overhauling and adjustments
506.475/04 (XII/94)	00	7 ÷ 8 9 ÷ 10 19 ÷ 20	All versions	I.S. 12/94
506.475/05 (III/95)	00	Preface Foreword 5 ÷ 6 27 ÷ 28 73 ÷ 74 75 ÷ 76 77 ÷ 78 79 ÷ 80 81 ÷ 82 83 ÷ 84	All versions	Technical data: update
		5 ÷ 6 25 ÷ 26	1998 20v	Fuel system: update
	10	15 ÷ 16	2387 TD	Removing-refitting timing belt: update
		23-24-25		Fuel system: update
		1 ÷ 32	1995 16v turbo	Removing-refitting power unit - Replacing auxiliary shaft belts- Re- placing timing belt- Removing-re- fitting cylinder head
		1 ÷ 27		Fuel system: Bosch Motronic M2.7 MPI injection/ignition system
506.475/06 (X/95)	44	1 ÷ 27	All versions	Controlled damping suspension

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Print N°	Sections	Page Nos.	Versions	Comments
506.475/07 (V/95)	00	59 ÷ 60	 24v Electronic automatic gearbox	Technical data: update ZF automatic gearbox Composition and operation Overhauling and adjustments
	21 - 27	1 ÷ 43		
506.473/10 (X/95)	10	15 ÷ 17	 20v  20v	I.S. 09/95
	33	31 ÷ 32	All versions	
	44	5 ÷ 6 7 ÷ 8		
506.475/08 (IV/96)	00	58	All versions	Technical data: 96 range
		1 ÷ 3	 20v 	Technical data: 96 range
	10	44 ÷ 45	 20v	Fuel system: 96 range
		1 ÷ 2 25 ÷ 30	 24v	Fuel system: 96 range
	33	1 ÷ 18	96 range versions	Anti-lock brakes Bosch ABS 5.3
506.475/14 (VI/96)	00	36	96 range versions	Update: Technical data
		1 ÷ 2	 20v 	Update: Technical data
	10	27 ÷ 28	 24v	Update: Fuel system
		11 ÷ 23	 TD	Replacing auxiliary shaft belt - Replacing timing belt: update - Removing-refitting injection pump
		23 ÷ 24		Update: Fuel system
	33	1 ÷ 2 3 ÷ 4 7 ÷ 8	96 range versions	Update: anti-lock brakes Bosch ABS 5.3
	44	7 ÷ 7/I 7/II ÷ 8 15 ÷ 16 17 ÷ 18	All versions	Update: Front and rear suspension
		1 ÷ 11	96 range versions	Rear suspension

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Print N°	Sections	Page Nos.	Versions	Comments
506.475/18 (X/96)	00	7 ÷ 8 67 ÷ 68	All versions	Update: Technical data
	10	1 ÷ 2	 24v 96 range	Replacing auxiliary shaft drive belt - Replacing timing belt
		23 ÷ 25	 TD	Procedure for draining / refilling cooling circuit
506.475/17 (II/97)	00	1 ÷ 46	All versions	Planned maintenance operations
506.475/19 (VI/97)	00	1 ÷ 2 3 ÷ 4 5 ÷ 6 7 ÷ 8 15 ÷ 16 19 ÷ 20 25 ÷ 26 39 ÷ 40 57 ÷ 58 61 ÷ 62 73 ÷ 74 85 ÷ 86 99 ÷ 100	All versions	Update: Technical data
		1 ÷ 2	 20v 	Update: Technical data
	10	15 ÷ 16	 20v  20v	Update: Replacing timing belt
	44	7/II ÷ 8 15 ÷ 18	All versions	Update: Front and rear suspension - Wheel geometry
		9 ÷ 10	96 range versions	Update: Rear wheel geometry

Print N°	Sections	Page Nos.	Versions	Comments
506.475/07 (V/95)	00	59 ÷ 60	 24v Electronic automatic transmission	Technical data: update ZF automatic gearbox Composition and operation Overhauling and adjustments
	21 - 27	1 ÷ 43		
506.475/10 (X/95)	10	15 ÷ 17	 20v  20v	I.S. 09/95
	33	31 ÷ 32	All versions	
	44	5 ÷ 6 7 ÷ 8		
506.475/08 (IV/96)	00	58	All versions	Technical data: 96 range
		1 ÷ 3	 20v  20v	Technical data: 96 range
	10	44 ÷ 45	 20v	Fuel system: 96 range
		1 ÷ 2 25 ÷ 30	 24v	Fuel system: 96 range
	33	1 ÷ 18	96 range versions	Anti-lock brakes Bosch ABS 5.3
506.475/14 (VI/96)	00	36	96 range versions	Update: Technical data
		1 ÷ 2	 20v  20v	Update: Technical data
	10	27 ÷ 28	 24v	Update: Fuel system
		11 ÷ 23	 TD	Replacing auxiliary shaft belt - Replacing timing belt: update - Removing-refitting injection pump
		23 ÷ 24		Update: Fuel system
	33	1 ÷ 2 3 ÷ 4 7 ÷ 8	96 range versions	Update: anti-lock brakes Bosch ABS 5.3
	44	7 ÷ 7/I 7/II ÷ 8 15 ÷ 16 17 ÷ 18	All versions	Update: Front and rear suspension
		1 ÷ 11	96 range versions	Rear suspension

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Summary

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Publication no.	Sections	Page number	Versions	Notes
506.475/18 (X/96)	00	7-8 67-68	All versions	Update: Technical data
	10	1-2	 24v96range	Replacing auxiliary component belt - Replacing timing belt
		23-25	 TD	Procedure for draining/filling cooling circuit
506.475/17 (II/97)	00	1-46	All versions	Programmed maintenance operations
506.475/19 (VI/97)	00	1-2 3-4 5-6 7-8 15-16 19-20 25-26 39-40 57-58 61-62 73-74 85-86 99-100	All versions	Update: Technical data
		1-2	 20v 	Update: Technical data
	10	15-16	 20v  20v	Update: Replacing timing belt
	44	7/II-8 15-18	All versions	Update: Front and rear suspension systems - Wheel geometry
		9-10	1996 range versions	Update: Rear wheel geometry
506.475/20 (XI/97)	10	5-6 23-33	 TD 1997 version	Fuel system with hot film debimeter
	33	32/1-32/2 32/3-32/4	All versions	Update: Parking brake