

Fiat Automobil AG

Fiat Automobil AG · Postfach 1763 · 7100 Heilbronn

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Bankkonto:

Baden-Württ. Bank AG, Heilbronn
(BLZ 620 300 50) Konto.-Nr. 700 236 50 00
Commerzbank AG, Heilbronn
(BLZ 620 400 60) Konto.-Nr. 2 100 600
Deutsche Bank AG, Heilbronn
(BLZ 620 700 81) Konto.-Nr. 1 69 425
Dresdner Bank AG, Heilbronn
(BLZ 620 800 12) Konto.-Nr. 7 007 085
Postgiroamt Stuttgart
(BLZ 600 100 70) Konto.-Nr. 115 29-708

Ihre Zeichen, Ihre Nachricht vom

telef. 21.04.88

Unsere Zeichen

TTO-dr
8503H

☎ (071 31) 107-0
Durchwahl 107-

283

Heilbronn, Salzstraße 140

21.04.1988

Zulassung von Fahrzeugen Modell 124 Spider (US-Ausführung) Typ 124 CS1 im Geltungsbereich der StVZO

Sehr geehrter Herr Ottenstreuer!

Die Motore 132 Al.031.5 und 132 Al.031.6 sind völlig identisch. Bei der abweichenden letzten Ziffer handelt es sich lediglich um ein Produktionskennzeichen.

Der Motortyp 132 Al.031.6 ist wiederum, was die technischen Daten betrifft - ausgenommen der Motorleistung (da unterschiedliche Vergaser) - identisch mit dem Motor-Typ 132 Al.040.6. Aus diesem Grunde senden wir Ihnen anliegend auszugsweise aus der Betriebsanleitung die kompletten Daten des Motors 132 Al.040.6 und als Beilage die abweichenden Daten des Motors 132 Al.031.6. Die Unterlagen können Sie für das von Ihnen angefragte Fahrzeug für die Zulassung anwenden.

Hinsichtlich des Abgasverhaltens erhalten Sie anbei das entsprechende Certificate of Conformity Nr. FIAT-LDV-4 vom 05.11.1976 sowie Nr. FIAT-LDV-5 vom 09.09.1977.

Mit freundlichen Grüßen

Fiat Automobil AG

i.V.

W. Bechtold

i.A.

K. Dannenhauer

Anlagen

FIAT LANCIA

Vorsitzender des Aufsichtsrates: Josef Ferdinand Graf von Oppersdorff
Vorstand: Fausto Gardoni, Vorsitzender: Franz Hink, stellvertr. Vorsitzender
Mitglieder: Reinhard Bley, Dr. Adriano Frascaroli, Gerhard Katscher
Sitz der Gesellschaft: Heilbronn - Handelsregister Heilbronn HRB 257

Fiat 124 Sport Spider

Catalytic Converter Version

in, fully laden
m.p.h.
28
50
75
102
105

le, fully laden
50%
25%
15%
10%
8%

2 250 lbs
atal 430 lbs):
0 lbs of luggage
2 680 lbs
city 2 persons
2 in front

***The previous sections
should be consulted for all items
not covered in this section***

ATIONS

AE net 83 HP

ER 32 ADFA 14

SYSTEM

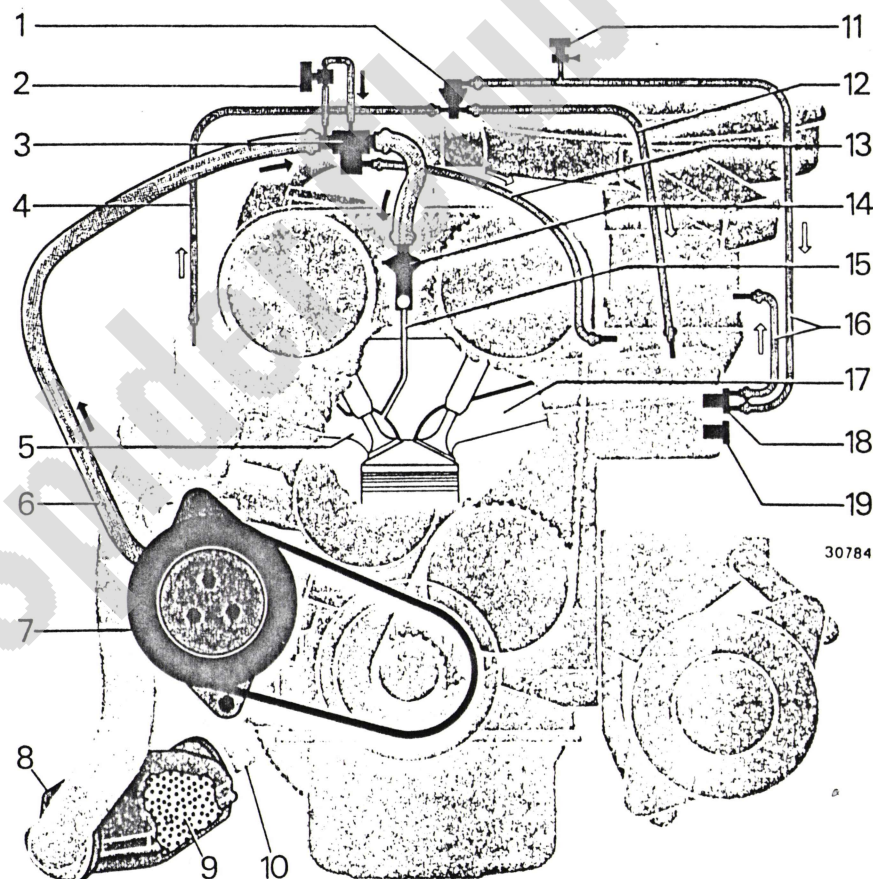
ffects:
or diverter valve
g of electrovalve for

..... 2 260 lbs
acity (total 430 lbs):
0 lbs) + 130 lbs of
ully laden) 2 690 lbs

Exhaust Emission Control System

A catalytic converter has been added to further oxidize the hot gases during post-combustion process.

1. Exhaust gas recirculation (EGR) control valve -
2. Electrovalve, normally closed, for diverter valve -
3. Diverter valve -
4. Exhaust gas recirculation tapping line -
5. Exhaust manifold -
6. Air distribution line -
7. Air pump -
8. Catalytic converter
9. Inner pellets -
10. Exhaust pipe -
11. EGR cut-out thermostatic switch on 5th gear -
12. Exhaust gas feedback line -
13. Vacuum tapping line, intake manifold, for diverter valve -
14. Air injection non-return valve -
15. Air injector -
16. Vacuum tapping line, carburetor, for EGR valve -
17. Intake manifold -
18. EGR thermostatic switch -
19. Electrovalve 2 thermostatic switch.



124 Sport spider / us /

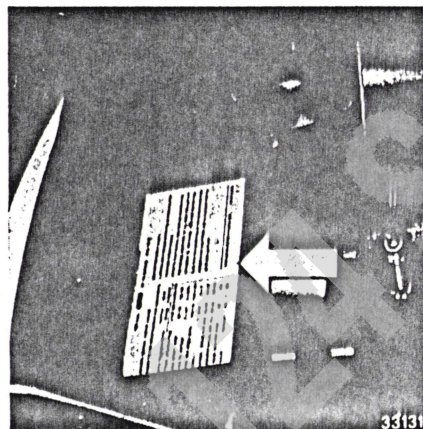
IDENTIFICATION DATA

Engine Type 132 A1.031.6

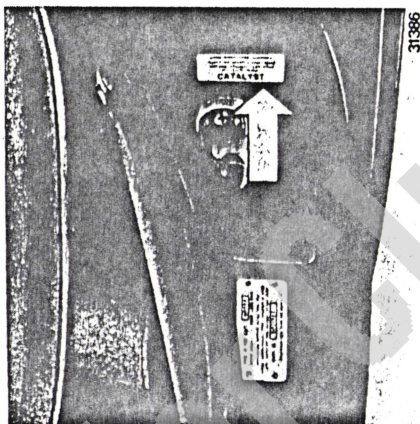
■ **Vehicle Emission Control Information Label** - Located on left door pillar.

■ **E.P.A. and California Regulations Conformity Tag**

Engine family 132 C.C. air pollution control specifications for correct engine tuneups and adjustments.



50



OPERATION

WARNING

Fuel Refilling

Strictly adhere to the label on glove compartment lid and on filler cap.

UNLEADED FUEL ONLY

Leaded fuel will damage the catalytic converter beyond repair. Always refill at Service Stations which carry unleaded fuel (small pump nozzle).

SPECIFICATIONS

ENGINE

Max. power - SAE net 83 HP

Fuel System

Carburetor: WEBER 32 ADFA 14

ELECTRICAL SYSTEM

Fuses

Fuse **A** also protects:

- Electrovalve for diverter valve
- Relay winding of electrovalve for diverter valve

WEIGHTS

Curb weight 2 260 lbs

Vehicle load capacity (total 430 lbs):

2 adults (300 lbs) + 130 lbs of luggage

Gross weight (fully laden) 2 690 lbs

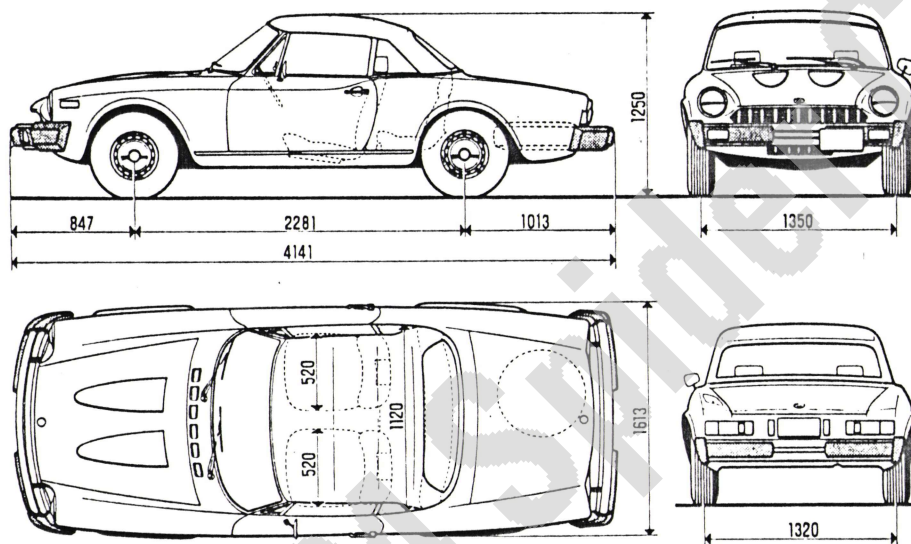
Exhaust En

A catalytic c
to further oxi
post-combus

1. Exhaust ga
- valve - 2. El
- for diverter v
4. Exhaust ga
5. Exhaust m
- line - 7. Air p
9. Inner pelle
- EGR cut-out
12. Exhaust g
- um tapping li
- ter valve -
- valve - 15. Ai
- ping line, car
- Intake manife
19. Electrova

MAIN DIMENSIONS

mm	520	847	1 013	1 120	1 250	1 320	1 350	1 613	2 281	4 141
in.	20.5	33.4	39.9	44	49.2	52	53.2	63.5	89.7	163



Overall height is measured with unladen car. Trunk volume: 180 cu. dm (6.4 cu. ft).

PERFORMANCE

Speeds

Maximum speeds after break-in, fully laden

	m.p.h.
1st gear	28
2nd gear	50
3rd gear	75
4th gear	102
5th gear, over	105

Gradeability

Maximum grades climbable, fully laden

1st gear	50%
2nd gear	25%
3rd gear	15%
4th gear	10%
5th gear	8%

WEIGHTS

Curb weight 2 250 lbs

1021,5 kg

Vehicle load capacity (total 430 lbs):

2 adults (300 lbs) + 130 lbs of luggage

Gross weight (fully laden) . . . 2 680 lbs

Designated seating capacity . . . 2 persons

Occupant distribution 2 in front

anchored to body through 5
- 4 longitudinal and 1 trans-
springs, hydraulic double-
pic shock absorbers. Asym-
motions stabilized by elastic
action rods.

G AND WHEELS

L.H.D.
screw and roller, ratio 1/16.4.
in three sections, incorporat-
universal joints; breakaway
and symmetric track rods to
with central link rod. Seal-
articulations.
able-acting damper on relay

10.4 m
(34 ft 2 in.)
amber, measur-
0 to 6 mm (.00 to .24 in.)
or 30' ± 30'
pe-in, measured
3 ± 2 mm
(.118 to .079 in.)
ata apply to cars laden to
ent of 2 adults (300 lbs) plus
luggage.

id Tires

ventilated, with
10 J x 13"
ht-alloy wheels.
res, size . . . 165 SR-13"
or 165 HR-13"

ELECTRICAL SYSTEM

Voltage 12 Volts

Alternator

Continuous current rating . . . 55 Amps
Incorporated current rectifiers.
Automatic voltage regulator.
Cut-in speed at starting of engine (with
users off).

Battery

With grounded negative; capacity at 20-hr
discharge rate 60 Amp.hr.
Cold (-18°C) high-discharge
test current 255 Amp.

Starter

Power rating 1.3 kW
Direct engagement by solenoid and free-
wheeling pinion.

Heater Fan Motor

Power rating 20 W

Engine Radiator Fan Motor

Power rating 110 W

Windshield Wiper Motor

Power rating 28 W

Fuses

Eight 8-Amp fuses, one 25-Amp and
one 16-Amp fuses.

Bulbs

Location	SAE Standard	FIAT Std. Part No.
Headlights (high and low beams)	« Sealed Beam » headlight unit 7031	
Front lamps	—	Norm. 1/41460/90
turn signal		
Rear lamps		
turn signal		
back-up	No. 1073 (32 cp)	Norm. 1/41469/90
stop		
Front lamps	No. 67 (4 cp)	Norm. 1/41459/90
parking		
Rear lamps		
tail		
license plate	—	12V-5W
Courtesy light		
Ideogram illumination optical fiber light source	—	Norm. 1/08630/90
Turn signal indicator	No. 158 (2 cp)	12V-5W Norm. 1/41441/90
Headlight high beam indicator		
Battery charge indicator		
Insufficient oil pressure indicator		
Fuel reserve indicator		
Parking and tail lamps indicator		
Instrument cluster lights		
Fasten belts indicator		
Vehicular hazard warning signal in- dicator		
Low brake fluid level and hand brake ON indicator		
Side marker lights	—	12V-1.2W Norm. 1/41437/90
Vehicular hazard warning signal switch light		
Trunk lamp		
Cigar lighter housing indicator		

Ignition System

Firing order 1-3-4-2
Basic ignition timing at
850 rpm 0° (TDC)
Automatic advance 36°
Dwell angle, for distributor
contacts gap check
(at 850 ± 50 rpm) 55°
Breaker additional points gap
.31 - .49 mm (.012 - .019 in.)

Spark plugs:

standard type		resistor type	
CHAMPION	N9 Y	CHAMPION	RN9 Y
AC DELCO	42-XLS	AC DELCO	R42-XLS
MARELLI	CW 7LP	MARELLI	CW 7LPR
BOSCH	W 7D	BOSCH	WR 7D

Thread size 14 x 1.25 mm
Gap

— standard type .6 to .7 mm (.023-.027 in.)
— resistor type .7 to .8 mm (.027 - .031 in.)

POWER TRAIN

Clutch

Single plate, dry, with disk engagement spring, mechanically controlled.
Pedal free travel abt. 25 mm (1 in.)

Transmission

Five forward speeds (all synchronized) and reverse.

Gear ratios to 1:

1st	2nd	3rd	4th	5th	Reverse
3.667	2.1	1.361	1	0.881	3.526

Propeller Shaft

Tubular propeller shaft in two sections, with rubber mounted central pillow block. Front section connected to transmission by flexible joint and slip yoke. The second section is connected to the first and to rear axle by universal joints.

Rear Axle

Final drive hypoid gear:
ratio 10 to 43

BRAKES

Service

Hydraulic disk brakes, of the floating caliper type, on all wheels, with one cylinder to each wheel, pedal operated through vacuum servo and dual master cylinder. Independent front and rear circuits. Proportioning valve in rear circuit for car load and deceleration rate variation compensations. Device for automatic take-up of friction pad clearance as wear progresses.

Parking

Mechanical, operating on rear wheel brake pads.

SUSPENSIONS

Front

Independent wheels, by swinging arms, with coil springs and hydraulic, double-acting telescopic shock absorbers. Stabilizer bar. Sealed-for-life articulations.

Rear

By rigid axle anchored to body through 5 reaction rods - 4 longitudinal and 1 transversal. Coil springs, hydraulic double-acting telescopic shock absorbers. Asymmetric wheel motions stabilized by elastic mounts of reaction rods.

STEERING AND WHEELS

Steering

Standard L.H.D.
Control: worm screw and roller, ratio 1/16.4. Steering shaft in three sections, incorporating two universal joints; breakaway mount.

Independent and symmetric track rods to each wheel, with central link rod. Sealed-for-life articulations.

Hydraulic, double-acting damper on relay support.

Turning circle 10.4 m
(34 ft 2 in.)

Front wheel camber, measured at rim 0 to 6 mm (.00 to .24 in.)
or 30' ± 30'

Front wheel toe-in, measured at rim 3 ± 2 mm
(.118 to .079 in.)

The above data apply to cars laden to the equivalent of 2 adults (300 lbs) plus 130 lbs of luggage.

Wheels and Tires

Disk wheels, ventilated, with rim size 5 J x 13"

Optional: light-alloy wheels.

Radial-ply tires, size 165 SR-13"
or 165 HR-13"

ELECTRICAL

Voltage

Alternator

Continuous current
Incorporated cut-out
Automatic voltage
Cut-in speed at
users off).

Battery

With grounded
discharge rate
Cold (—18°C)
test current

Starter

Power rating
Direct engagement
wheeling pin

Heater Fan

Power rating

Engine Radiator

Power rating

Windshield

Power rating

Fuses

Eight 8-Amp fuses
one 16-Amp fuse

SPECIFICATIONS

ENGINE

Type	132 A1.040.6
Number of cylinders, in line	4
Bore and stroke	84 x 79.2 mm (3.31 x 3.12 in.)
Total piston displacement .	1756 cc (107.13 cu. in.)
Compression ratio	8 to 1
Maximum power (SAE net)	86 HP

Valve Gear

O. H. V. Twin O. H. camshafts driven by toothed timing belt with tensioner.

Intake	Opens: B.T.D.C.	5°
	Closes: A.B.D.C.	53°
Exhaust	Opens: B.B.D.C.	53°
	Closes: A.T.D.C.	5°

Tappet clearance adjustment, for valve timing
.80 mm
(.031 in.)

Final tappet operation clearance adjustment, **cold engine**:

Intake45 mm (.018 in.)
Exhaust50 mm (.020 in.)

Lubrication System

Forced circulation by gear pump.

Pressure limiter valve on delivery circuit.

Normal lubrication pressure at rated engine rpm and oil temperature
4.5 to 6 kg/cm² (64 to 85.3 psi)

Full-flow cartridge oil filter.

Fuel System

Vertical dual-barrel downdraft WEBER 32 ADFA 11 carburetor with differential opening of secondary throttle, automatic butterfly valve choke and accelerating pump. Idle stop device (comes into operation when engine is switched off).

A vacuum bellows controls the partial opening of the 1st barrel throttle from the idling position (fast idle operation setting adjustment).

Fuel filter and pressure regulator in the feed line from pump to carburetor.

Paper cartridge air cleaner with silencer.

Carburetor feed by mechanical pump.

Emission Control Systems

Engine feed system provided with fuel recirculation (closed circuit) and evaporative emission control system.

Crankcase emission control (CEC) system (closed circuit) by recirculation of blow-by gases and oil vapors.

Exhaust emission control system (reduces air pollution from the exhaust by gas recirculation and post-combustion process) separate from the CEC system.

Cooling System

Radiator and translucent expansion tank.

Water circulated by centrifugal pump.

Thermostat with controlled by-pass on cylinder head water outlet duct.

Four-blade fan driven by electric motor controlled by thermostatic switch on radiator: cut-in temperature about 90° C.

Fiat Automobil AG

Hauptabteilung Technik
- Homologation
C.A. *Carabinieri*

U.S. ENVIRONMENTAL PROTECTION AGENCY CERTIFICATE of CONFORMITY

WITH THE CLEAN AIR ACT OF 1970 ISSUED TO:

Fiat S.p.A.
Corso Giovanni Agnelli, 200
10100 Torino, Italy

Pursuant to section 206 of the Clean Air Act (42 U.S.C.1857f-5) and 40 CFR Part 86, this Certificate of Conformity is hereby issued with respect to test vehicles which have been found to conform to the requirements of the regulations on Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines (40 CFR Part 86) and which represent the following models of new motor vehicles, by engine family, more fully described in the application of the above named manufacturer:

The following vehicles are certified as having demonstrated conformance with Federal emission standards only at elevations equal to or lower than 1,219 meters (4,000 feet):

131 Mirafiori-4 door, 131 Mirafiori-2 door, 131 Estate, 124 Sport Spider 1800, Lancia Beta 1800 Sedan, Lancia Beta 1800 Coupe', Lancia Beta 1800 HPE, Lancia Beta Scorpion.

This Certificate covers engine family 132-CC1, including 107.13-CID engines with air injection, exhaust gas recirculation, catalytic converter, carbon canister, and closed crankcase emission control systems, meeting emission standards specified in 40 CFR 86.077-8(a)(2), 86.077-8(b), and 86.077-8(c). These vehicles are equipped with an emission control device which the Administrator has determined will be significantly impaired by the use of leaded gasoline. This Certificate is issued subject to the conditions specified in 40 CFR 80.24.

This Certificate covers only those new motor vehicles which conform, in all material respects, to the design specifications that applied to those vehicles described in the Application for Certification and which are produced during the 1977 model year production period of the said manufacturer, as defined in 40 CFR 86.077-2(b).

It is a term of this Certificate that the manufacturer shall consent to all inspections described in 40 CFR 86.077-7(c) which concern either the vehicle certified, or any production vehicle covered by this Certificate, or any production vehicle which when completed will be claimed to be covered by this Certificate. Failure to comply with all the requirements of §86.077-7(c) with respect to any such vehicle may lead to revocation or suspension of this Certificate as specified in 40 CFR 86.077-30(c). It is also a term of this Certificate that this Certificate may be revoked or suspended for the other reasons stated in §86.077-30(c) or (d).

Catalyst-equipped vehicles, otherwise covered by this Certificate, which are driven outside the United States, Canada, and Mexico will be presumed to have been operated on leaded gasoline resulting in deactivation of the catalysts. If these vehicles are imported or offered for importation without retrofit of the catalyst, they will be considered not to be within the coverage of this Certificate unless included in a catalyst control program operated by a manufacturer or a United States Government Agency and approved by the Administrator.



Fiat-LDV-4
Certificate No.

November 5, 1976
Date

James M. Marzen
Office of Air and Waste Management

CERTIFICATE OF CONFORMITY

WITH THE CLEAN AIR ACT OF 1970 ISSUED TO:

FIAT S.p.A.
Corso Giovanni Agnelli, 200
10100 Torino, Italy

Pursuant to section 206 of the Clean Air Act (42 U.S.C. 1857f-5) and 40 CFR Part 86, this certificate of conformity is hereby issued with respect to test vehicles which have been found to conform to the requirements of the regulations on Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines (40 CFR Part 86) and which represent the following models of new motor vehicles, by engine family and evaporative emission family, more fully described in the application of the above named manufacturer:

The following vehicles are certified as having demonstrated conformance with Federal emission standards only at elevations equal to or lower than 1,219 meters (4,000 feet):

FIAT: 131 Mirafiori - 2 door, 131 Mirafiori - 4 door, 131 Estate, 124 Sport Spider 1800.

This certificate covers engine family 132-CC1/evaporative emission family EVAP 2C, including 107.13-CID engines with air injection, exhaust gas recirculation, catalytic converter, charcoal canister, and closed crankcase emission control systems, meeting emission standards specified in 40 CFR 86.078-8(a), 86.078-8(b), and 86.078-8(c). These vehicles are equipped with an emission control device which the Administrator has determined will be significantly impaired by the use of leaded gasoline. This certificate is issued subject to the conditions specified in 40 CFR 80.24.

This certificate covers only those new motor vehicles which conform, in all material respects, to the design specifications that applied to those vehicles described in the application for certification and which are produced during the 1978 model year production period of the said manufacturer, as defined in 40 CFR 86.078-2.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 86.078-7(c) which concern either the vehicle certified, or any production vehicle covered by this certificate, or any production vehicle which when completed will be claimed to be covered by this certificate. Failure to comply with all the requirements of §86.078-7(c) with respect to any such vehicle may lead to revocation or suspension of this certificate as specified in 40 CFR 86.078-30(c). It is also a term of this certificate that this certificate may be revoked or suspended for the other reasons stated in §86.078-30(c) or (d).

Catalyst-equipped vehicles, otherwise covered by this certificate, which are driven outside the United States, Canada, and Mexico will be presumed to have been operated on leaded gasoline resulting in deactivation of the catalysts. If these vehicles are imported or offered for importation without retrofit of the catalyst, they will be considered not to be within the coverage of this certificate unless included in a catalyst control program operated by a manufacturer or a United States Government Agency and approved by the Administrator.



FIAT-LDV-5
Certificate No.

September 9, 1977
Date

RC Hanning
Office of Air and Waste Management