1974-79 TUNE-UP PROCEDURES
Fiat 4-Cylinder

Brava, Spider 2000, Strada, Super Brava, X1/9, 124, 128 & 131 Series

ENGINE IDENTIFICATION

Brava, Spider 2000, 124 & 131 - Engine code and identification numbers are stamped on crankcase near oil filter mount.

128, X1/9 & Strada - Engine code and identification numbers are stamped on crankcase (flywheel end).

1974 ENGINE CODES

Application	Code
124	
Special Sedan/Wagon	132A.040.4
Sport Coupe/Spider	132A1.040.4
128	128A1.040.4
X1/9	128AS.040.4

1975 ENGINE CODES

Application	Code
124 & 131	
Federal	132A1.040.5
California	132A1.031.5
128	
Federal	128A1.040.5
California	128A1.031.5
X1/9	128AS.031.5

1976 ENGINE CODES

Application	Code
124 & 131	
Federal	132A1.040.6
California	132A1.031.5
128 & 128 3P	
Federal	128A1.040.6
California	128A1.031.5
X1/9	128AS.031.5

1977-78 ENGINE CODES

Application	Code
124 & 131	
Federal	132A1.040.6
California	132A1.031.6
128 & 128 3P	
Federal	128A1.040.6
California	128A1.031.6
X1/9	
Federal	128AS.031.5
California	128AS.031.6

1979 ENGINE CODES

Application	Code
128	
Federal	128A1.040.6
California	128A1.031.6
Brava & Spider	
Federal	132C2.040
California	132C2.031
X1/9 & Strada	
Federal	138AS.040
California	138AS.031

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Model can be identified by prefix of Vehicle Identification Number, which is stamped on a plate attached to the top of instrument panel between instrument cluster and windshield.

1975 VEHICLE IDENTIFICATION NUMBERS

Application	Code
124	
Sport Coupe	124 CC1
Sport Spider	124 CS1
128	
Sedan	128 A1
Station Wagon	128 AF1
Sport L	128 AC
131	
Sedan	131 A3
Station Wagon	131 AF2
X1/9	128 AS

1976-78 VEHICLE IDENTIFICATION NUMBERS

Application	Code
124	124 CS1
128	
Sedan	128 A1
Station Wagon	128 AF1
3P (Coupe)	128 AC
131	
Sedan	131 A3
Station Wagon	131 AF2
X1/9	128 AS

1979 VEHICLE IDENTIFICATION NUMBERS

Application	Code
Brava Models	
Sedan	131 A4
Station Wagon	131 AF3
128 Models	
3P (Coupe)	128 AC
Sedan	128 A1
Station Wagon	128 AF
Spider 2000	124 CS2
Strada	138 A2
X1/9	128 AS1

VALVE CLEARANCE

VALVE CLEARANCE SPECIFICATIONS [1]

Application	Intake In. (mm)	Exhaust In. (mm)
Brava & Spider	.018 (.45)	.020 (.50)
124 & 131	.018 (.45)	.020 (.50)
128, X1/9 & Strada	.012 (.30)	.016 (.40)

[1] - Set valves with engine cold.

VALVE ARRANGEMENT

Brava, Spider, 124 & 131

Right Side - All Exhaust.

Left Side - All Intake.

128, X1/9 & Strada

E-I-I-E-E-I-I-E - Front-to-rear.

SPARK PLUGS

SPARK PLUG SPECIFICATIONS

Application	Specification
Gap	.023-.027" (.6-.7 mm)
Torque	
Brava & 131	27 ft. lbs. (37 N.m)
All Others	25 ft. lbs. (34 N.m)

SPARK PLUG TYPE

Application	Champion No.
All Models	[1] N9Y

[1] - Use N7Y on 1975 124 models.

1974-79 TUNE-UP PROCEDURES
Fiat 4-Cylinder (Cont.)

HIGH TENSION WIRE RESISTANCE

HIGH TENSION WIRE RESISTANCE

Application	Resistance (Ohms)
All Models	25,000-30,000

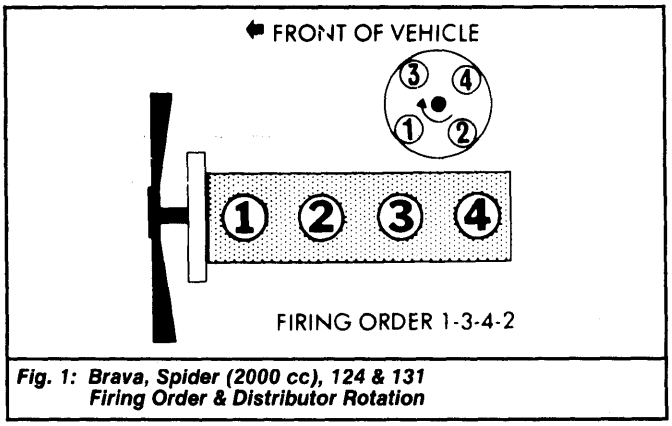

Fig. 1: Brava, Spider (2000 cc), 124 & 131 Firing Order & Distributor Rotation

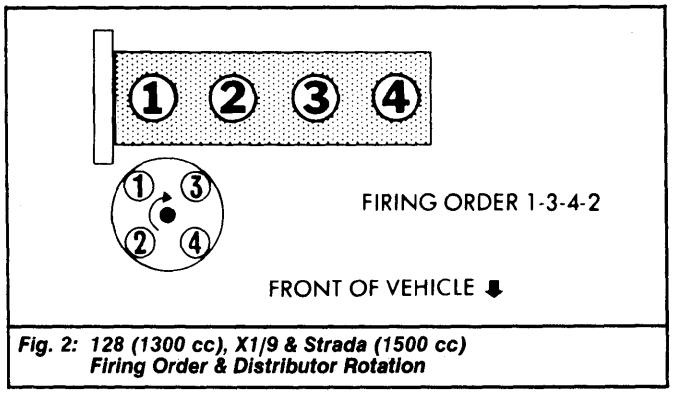

Fig. 2: 128 (1300 cc), X1/9 & Strada (1500 cc) Firing Order & Distributor Rotation

DISTRIBUTOR

All 1979 models, except 128 series, are equipped with breakerless, electronic ignition systems. All 128 and X1/9 models are equipped with Ducellier single-point distributors. All 124 and 131 models are equipped with Marelli dual-point distributors.

DISTRIBUTOR SPECIFICATIONS

Application	Specification
Point Gap	[1] .015-.017" (.37-.43 mm)
Dwell Angle	52-58°
Breaker Arm Spring Tension	16-19 ozs. (450-550 g)
Condenser Capacity	.22-.23 mfd.

[1] - On models with dual point distributors, set secondary point gap to .012-.019" (.31-.49 mm).

IGNITION TIMING

Check or adjust ignition timing with engine at normal operating temperature, manual transmission in Neutral (automatic transmission in Drive), and point gap and idle speed set to specifications. To adjust timing, align mark on drive pulley or flywheel with specified pointer by turning distributor.

1974-77 IGNITION TIMING SPECIFICATIONS

Application	Timing
All Models	TDC

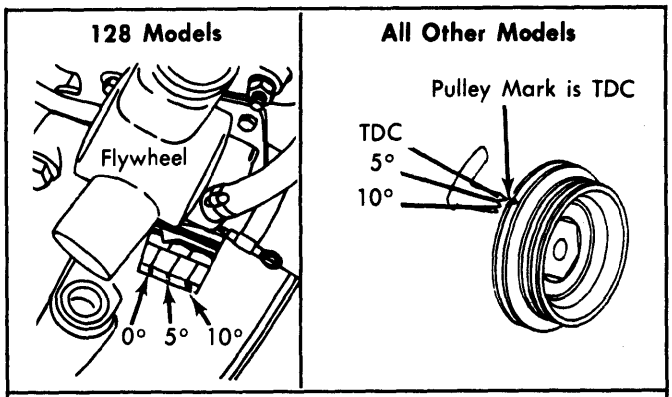

Fig. 3: Ignition Timing Mark Location

1978 IGNITION TIMING SPECIFICATIONS

Application	Timing
131	
Man. Trans.	
Federal	TDC
Calif.	5°BTDC
All Others	TDC

1979 IGNITION TIMING SPECIFICATIONS

Application	Timing
Brava & Spider	10°BTDC
128 Models	TDC
X1/9 & Strada	5°BTDC

IDLE SPEED & MIXTURE

1974 Models - 1) Idle speed is adjusted on primary throat only by idle mixture screw and throttle stop screw. First set throttle stop screw where engine does not falter (miss).

2) Then, adjust idle mixture screw to obtain specified idle RPM. Check CO% level. If incorrect, alternately adjust throttle stop screw and idle mixture screw to obtain specified idle RPM and CO% level.

1975-76 IDLE SPEED & CO% LEVEL SPECIFICATIONS

Application	Idle RPM	CO%
124 Series	800-900	.5-.8
128 & X1/9	700-750	.5-1.5

1975-76 IDLE SPEED & CO% LEVEL SPECIFICATIONS

Application	Idle RPM	CO%
Man. Trans.		
W/Catalytic Converter	800-850	1.5-2.5
W/O Catalytic Converter	800-850	.5-1.5
Auto. Trans.		
W/Catalytic Converter	700-750	1.5-2.5
W/O Catalytic Converter	700-750	.5-.9

1975-79 Models - 1) With engine at normal operating temperature and ignition timing set to specifications, connect a tachometer and exhaust gas analyzer to vehicle. On models with air induction, pinch off supply hose to reed valve. On models with air pump, pinch off air injection hose.

2) With manual transmission in Neutral (automatic transmission in Drive), turn idle speed adjusting screw to obtain specified idle RPM. Then, turn mixture adjusting screw to obtain specified CO% level. Recheck idle speed. Reconnect or unpinch air injection hose. Idle speed should increase by 50 RPM.

1974-79 TUNE-UP PROCEDURES
Fiat 4-Cylinder (Cont.)

1977-78 IDLE SPEED & CO% LEVEL SPECIFICATIONS

Application	Idle RPM	CO%
Man. Trans.	800-850	1.5-2.5
Auto. Trans.	700-750	1.5-2.5

1979 IDLE SPEED & CO% LEVEL SPECIFICATIONS

Application	Idle RPM	CO%
128 (All)	850	2.0
Brava & Spider		
Man. Trans.	800-900	1.0-2.5
Auto. Trans.	700-800	1.0-2.5
X1/9 & Strada		
Man. Trans.	800-900	1.0-2.0
Auto. Trans.	700-800	1.0-2.0

COLD (FAST) IDLE RPM

1974-78 124 & 131 Models - Depress button on firewall in engine compartment, to energize control valve, and turn fast idle adjusting screw until engine RPM is within specifications (automatic transmission in Neutral).

COLD (FAST) IDLE SPECIFICATIONS

Application	RPM
124	1550-1650
131	
Man. Trans.	1550-1650
Auto. Trans.	1250-1350

EXHAUST EMISSION SYSTEMS

See appropriate articles in EXHAUST EMISSION SYSTEMS section.

IGNITION SYSTEM

DISTRIBUTOR

All 1979 models, except 128 series, are equipped with electronic ignition systems. All 128 and X1/9 models are equipped with Ducellier single-point distributors. All 124 and 131 models are equipped with Marelli dual-point distributors.

Other Data & Specifications - See Ducellier Distributors, Bosch, or Marelli Electronic Ignition Systems in DISTRIBUTORS & IGNITION SYSTEMS section.

IGNITION COIL

1974-78 IGNITION COIL SPECIFICATIONS

Application	Specification
Primary	
Bosch Coil	2.6-3.1
Marelli Coil	3.2-3.4
Martinetti Coil	3.0-3.3
Secondary	
Bosch Coil	8500-12,000
Marelli Coil	9000-11,000
Martinetti Coil	6500-8000

1979 IGNITION COIL SPECIFICATIONS

Application	Specification
Primary	
Bosch Coil	1.1-1.7
Marelli Coil	.75-.81
Secondary	
Bosch Coil	6000-10,000
Marelli Coil	10,000-11,000

FUEL SYSTEM

CARBURETORS

1974 CARBURETORS

Application	Model
124	
Special Sedan/Station Wagon	Weber 32 DMSA 2-Bbl.
Sport Coupe/Spider	Weber 34 DMSA 2-Bbl.
128 & X1/9	Weber 32 DMTRA 2-Bbl.

1975-78 CARBURETORS

Application	Model
124 & 131	Weber 32 ADFA 2-Bbl.
128 & X1/9	Weber 32 DATRA 1-Bbl.

1979 CARBURETORS

Application	Model
128	Weber 32 DATRA II 2-Bbl.
Brava & Spider	Weber 28/32 ADHA 2-Bbl.
X1/9 & Strada	Weber 28/30 DHTA 2-Bbl.

Other Data & Specifications - See appropriate Weber Carburetor article in FUEL SYSTEMS section.