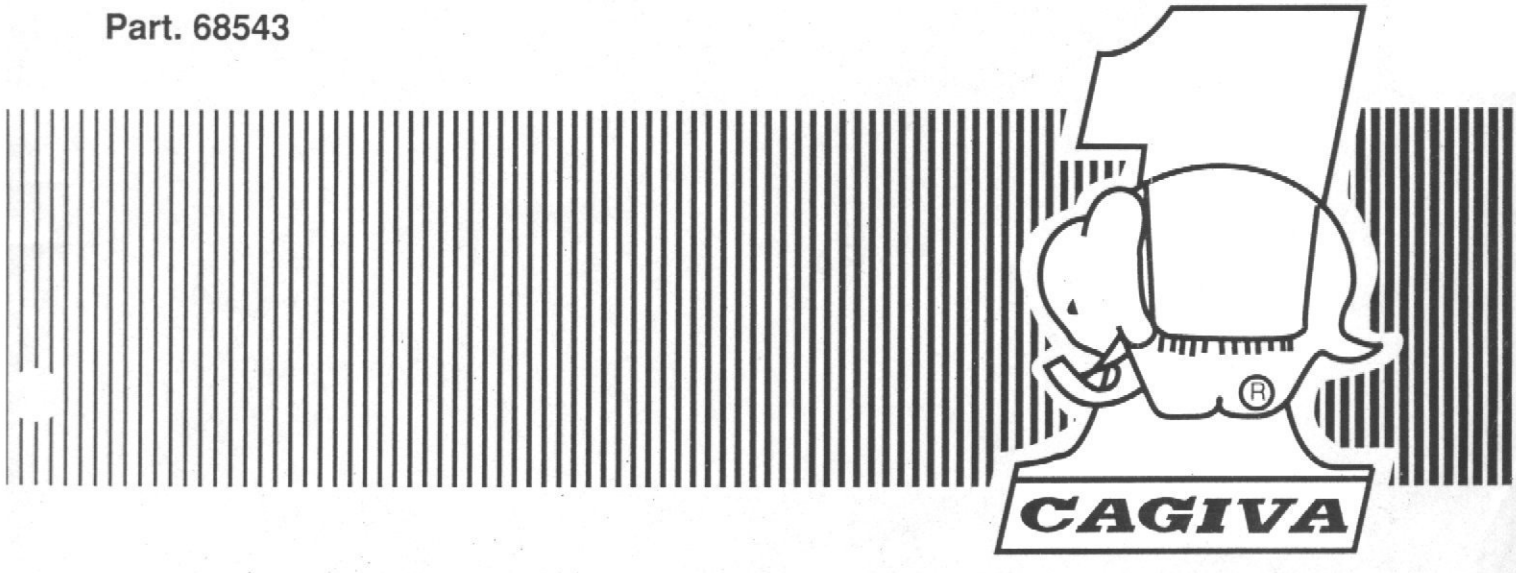
WORKSHOP MANUAL

MITO

Part. 68543



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Part. N. 68543 (10-90)

Foreword

*This publication intended for **CAGIVA** Workshops has been prepared for the purpose of helping the authorized personnel in the maintenance and repair work of the motorcycles herewith dealt with. The perfect knowledge of the technical data contained herein is essential for a more complete professional training of the operator.*
The paragraphs have been completed with schematic illustrations evidencing the subject concerned, in order to enable a more immediate understanding.
This manual contains information with particular meanings:

Accident prevention rules for the operator and for the personnel working near by.

Possibility of damaging the vehicle and/or its components.

Additional information concerning the operation under way.

Useful suggestions

***CAGIVA** suggests, in order to prevent troubles and in order to have an excellent final result, to generically comply with the following instructions:*

- *in case of repair work, weigh the impressions of the Customer who complains about the improper operation of the motorcycle, and formulate proper clearing questions about the symptoms of the trouble.*
- *detect clearly the cause of the trouble. This manual gives the theoretical bases which however shall be integrated by the personal experience and by the attendance to training courses periodically organized by **CAGIVA**.*
- *rationally plan the repair work in order to prevent dead time as for instance procurement of spare parts, tool preparation, etc.*
- *reach the component to be repaired and perform only the required operations. In this connection, it will be useful to consult the disassembly sequence contained in this manual.*

General instructions for repair work

1. Always replace the seal rings and split pins with new components.
2. When loosening or tightening nuts or bolts, always start from the bigger ones or from the center. Lock at the prescribed torque wrench setting following a crossed run.
3. Always earmark the components or positions which could be mistaken one for another at the time of assembly.
4. Use original ***CAGIVA*** spare parts and the lubricants of the recommended brands.
5. Use special tools, where specified.
6. Consult the **Service Bulletins** as they may contain up-dated adjustment data and repair methodologies.

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BEWARE!

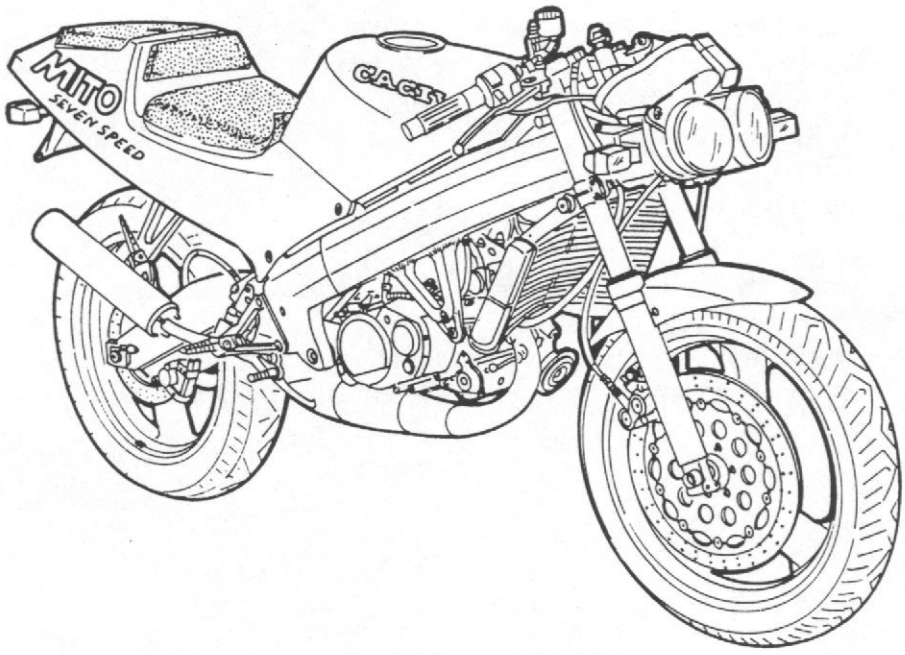
The bike is equipped with separate lubrication and warning light for oil reserve. For a correct operation of the motorcycle always make sure that, by turning the key to position «ON», the oil warning light goes «ON» together with the neutral warning light; when you go into a gear both of them will come OFF.

CAUTION

FUEL

— *With temperature lower than -5°C fill up the fuel tank with 1% mixture rather than petrol only.*

— *Do not start engine with battery disconnected from connection cables of electric system; warn. lights and parking lights should be damaged.*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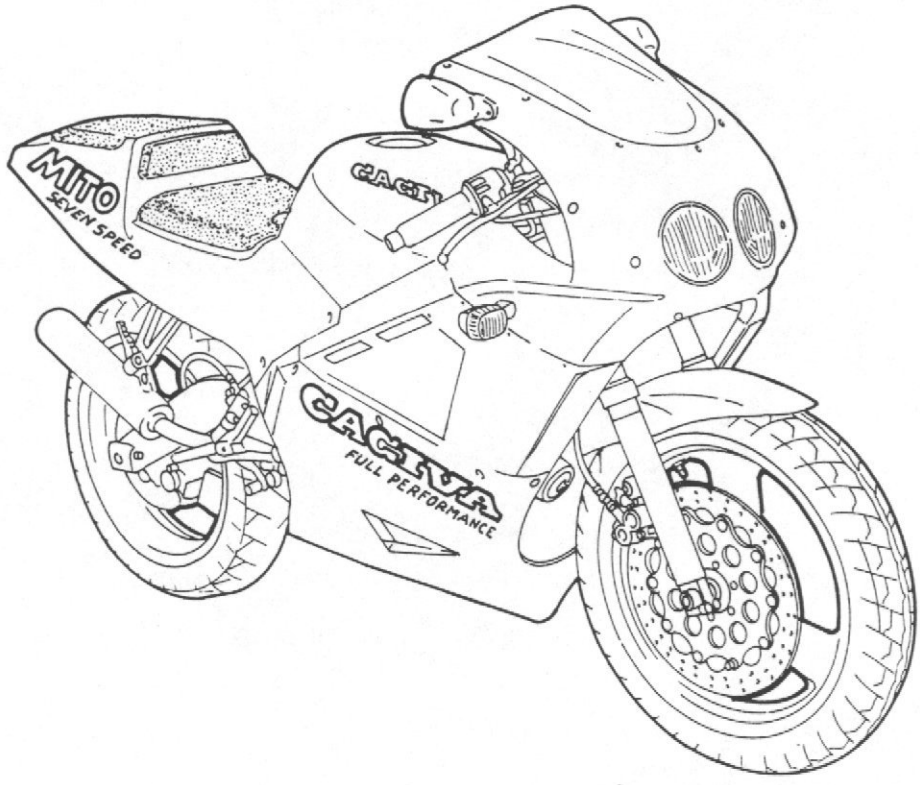
SEVEN SPEED
CAGIVA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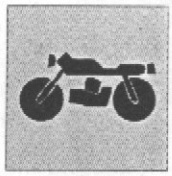
FULL PERFORMANCE

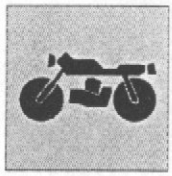
Summary



Section

A

Part. N. 68543 (10-90)



ENGINE

Single-cylinder, two-stroke engine, with lamellar suction and electronic control C.T.S. valve on the exhaust system.

Bore	2.204 in.
Stroke	1.992 in.
Capacity	7.602 cu.in.
Compression ratio (with closed lights)	6,3:1

FUEL FEEDING

Intake setting by lamellar valve.

DISTRIBUTION DIAGRAM

TRANSFER:	124°
EXHAUST:	
With closed valve	170°
With open valve	192°
Carburetor	Dell'Orto PHBH 28 RD

LUBRICATION

ENGINE

Through variable delivery pump.

SHIFTING and MAIN TRANSMISSION

Through the oil contained in the engine block.

COOLING

With liquid circulation through a pump.

Big bent radiator, constrained to the frame.

IGNITION

Electronic.

Make	KOKUSAN
Ignition advance:	14° 30' before T.D.C. (corresponding to 0.039 in. of piston stroke before T.D.C)
Spark plug	type CHAMPION N2C
Electrode gap	0.019 in.

STARTING

Electric.

TRANSMISSION

Cluster constant-mesh gears.

Primary ratio	Z 20/65=1:3.25

Gear ratios

1st	2,727
2nd	1,857
3rd	1,411
4th	1,142
5th	0,956
6th	0,863
7th	0,818
Final drive ratio	Z 14/43=1:3,071
Gearing chain	5/8"x1/4"

Total ratios

1st	27,224
2nd	18,538
3rd	14,092
4th	11,408
5th	9,548
6th	8,621
7th	8,167

Oil-bath multi-disc clutch type.

BRAKES

Front brake

Perforated fixed disc, with hydraulic control and floating caliper.

Disc diameter	12.59 in.
Brake caliper	BREMBO
Pad area	6.076 sq.in.

Rear brake

Perforated fixed disc, with hydraulic control and fixed caliper.

Disc diameter	9.055 in.
Brake caliper	BREMBO
Pad area	3.41 sq.in.

FRAME

Double cross-member with extruded tubular and aluminium melted parts; rear tailpiece with square steel pipes.

Steering angle	30° for side
Steering axis angle	25°
Front fork caster	3.858 in.

SUSPENSIONS

Front suspension

Tele-hydraulic fork with possible adjustment of the inner spring preload.

Producer	MARZOCCHI
Legs diameter	1.496 in.
Front wheel bump position (on the sliding axis)	4.842 in.

Rear suspension

Light alloy floating fork with "banana" shaped R.H. arm. Progressive leverage suspension (SOFT DAMP system) and hydraulic mono-damper with helical spring. The spring preload can be adjusted.

Damper make	MARZOCCHI
Rear wheel vertical travel	5.255 in.

WHEELS

Three-spoke light alloy **front** rim.

Make	GRIMECA
Dimensions	2,75"x17"

Three-spoke light alloy **rear** rim.

Make	GRIMECA
Dimensions	4,00"x17"

TYRES

Front (*)

Manufacturer and type	PIRELLI TUBELESS MT75
Dimensions	100/80-17"
or:	
Manufacturer and type	MICHELIN TUBELESS RADIAL
Dimensions	110/70-R17"
Inflation pressure (in cold condition)	
driver only	2,0 bar PIRELLI; 1,9 bar MICHELIN
with passenger	2,1 bar PIRELLI; 2,0 bar MICHELIN

Rear (*)
Manufacturer and type ..... PIRELLI TUBELESS MT75
Dimensions ..... 140/70-S17"
or:
Manufacturer and type ..... MICHELIN TUBELESS RADIAL
Dimensions ..... 150/60-ZR17"
Inflation pressure (in cold condition)
driver only ..... 2,1 bar PIRELLI; 2,0 bar MICHELIN
with passenger ..... 2,3 bar PIRELLI; 2,2 bar MICHELIN

(*) In alternative, **PIRELLI** and **MICHELIN** on model without fairing.
MICHELIN on model with fairing.

ELECTRIC SYSTEM

The ignition system is composed by:
- Generator: 12V-120W for a full battery recharge;
- Starting motor 12V-500W;
- Electronic coil;
- Electronic device;
- Voltage rectifier;
- Solenoid starter;
- Starting control system;
- Ignition spark plug.

The electronic control of the exhaust valve is composed by the following parts:
- Opening valve control system;
- Valve control motor 12V-3,3 W.

The components of the electric system are:
- Double headlight with bilux lamps 12V-25/25W and parking light bulbs 12V-5W;
- Dashboard with instruments bulbs 12V-2W and warning lights 12V-1,2W;
- Blinker with bulb 12V-10W;
- Battery 12V-9A;
- NO. 4 fuses 15A, two spare-fuses;
- Tail light with stop light 12V-21W and parking light bulb 12V-5W.

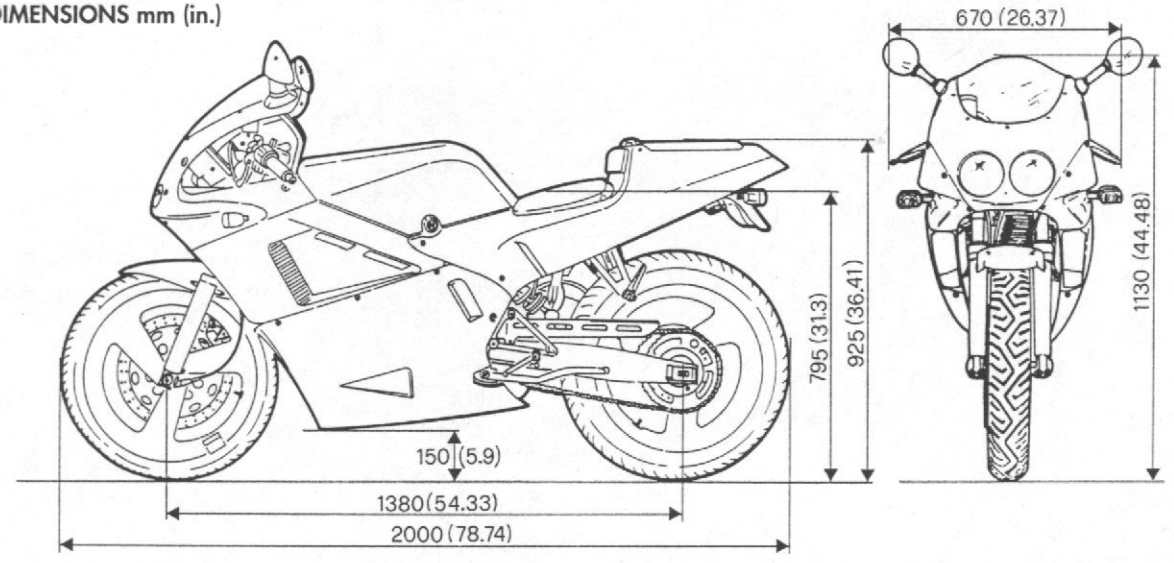
PERFORMANCES

Max. actual speed ..... 96.1 mile/h
Fuel average consumption ..... 9.3 mile/l

WEIGHTS

Total dry wheight (model with fairing) ..... 266.75 lb.
Total dry wheight (model without fairing) ..... 259.04 lb.

OVERALL DIMENSIONS mm (in.)



SUPPLY	TYPE	QUANTITY (liters)
Fuel tank	Super fuel 98-100 ON (min)	18
Reserve	(warning lamp comes ON)	4
Fuel mixture oil	AGIP 2T RACING PLUS	1
Change gear and main transmission oil	AGIP F.1 SUPERMOTOROIL SAE 15W50	0,800
Front fork oil	Specific "MARZOCCHI" SAE 7,5	(see page I.5)
Cooling system fluid	AGIP NUOVO PERMANENT EXTRA	1,5
Hydraulic brake fluid	AGIP BRAKE FLUID DOT 4	—
Drive chain lubrication	AGIP CHAIN AND DRIVE SPRAY	—
Flexible connections	AGIP GREASE 30	—

REMARK - At temperature lower than –5°C fill up the fuel tank with 1% mixture rather than petrol only.

WARNING! - Use of additives in fuel or lubricants is not allowed.