## WORKSHOP MANUAL



The illustrations and descriptions in this booklet are indicative only and the manufacturer reserves itself the right to introduce any modification it may deem necessary for better performance or for constructive or commercial reasons at any time and without prior notice.


## DIRECTION FOR A CORRECT USE OF THE VEHICLE

We remind that this model, due to its exceptional peculiarities, is almost a racing bike requiring a sport riding.
For this reason it meets so much fans'favour but, as for racing bikes, the technique of its use must be adequate.
First of all we have to evaluate that it fits carburettors with fuel feed pumps and when throttle control is not correctly operated in connection with engine revolutions per minute, a petrol overflood can be determined, causing coming out by the same carbs. and finishing inside the air cleaner.
When riding at idle speed or better, at a low r.p.m. range, it is necessary that throttle valve opening is graduated since a larger quantity of fuel could be not absorbable by the engine; at a very high r.p.m. range, also with strong accelerating action, fuel is totally absorbed and used, giving the bike that smart acceleration it is famous for.

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\section*{2 MAIN SPECIFICATIONS}

\section*{ENGINE}
- cylinder configuration
- bore
- stroke
- total capacity
- compression ratio
- max.torque
- fiscal rating

VALVE TIMING
FUEL FEEDING

\section*{LUBRICATION}

\section*{ALTERNATOR/GENERATOR}

IGNITION
- ignitiondata
- breaker points gap
- ignition spark plugs
- spark plugs electrodes gap
- ignition coils

STARTING

\section*{TRANSMISSIONS}

CLUTCH

PRIMARY TRANSMISSION
GEARBOX
- gearbox ratios: 1st 2nd 3rd 4th 5th

4-stroke, twin cylinders
\(90^{\circ}\) «V » twin
88 mm
78 mm
948.8 cc

10:1
8.43 kgm a 6250 r.p.m.

12 HP
O.H.C. with rods and rocker arms
no. 2 Dell'Orto carbs. PHM 40 ND (R.H.)
PHM 40 NS (L.H.) type.
forced lubrication system with gear pump - wirenet and cartridge filters installed in the sump - standard lubricating pressure \(3.8 \div\) \(4.2 \mathrm{~kg} / \mathrm{cmq}\) (controlled by a special valve installed on the sump) electric transmitter for insufficient pressure indication on the crankcase
installed on the front side of crankshaft (14V-20A)
by ignition distributor with double breaker and automatic advance by centrifugal masses
first advance (fixed) \(\quad 8^{\circ} \pm 1^{\circ}\)
automatic advance \(\quad 26^{\circ} \pm 2^{\circ}\)
total advance (fixed + automatic) \(34^{\circ} \pm 1^{\circ}\)
\(0.37 \div 0.43 \mathrm{~mm}\)
BOSCHW5 DC
0.6 mm
no. 2 installed on the frame above the engine
electric by start motor (12V - 0.7 KW ) equipped with electromagnetic control coupling crown gear fixed to the engine flywheel START push button placed right side on the handlebar
dry type with two driven discs positionned on the engine flywheel controlled by lever on the left side of handlebar
by gears, ratio \(1.235: 1(Z=17 / 21)\)
five speed constant-mesh gearbox, front coupling. Built-in flexible coupling;
control by pedal placed on the L.H. side of vehicle
\begin{tabular}{lll}
1 & \(: 2\) & \((Z=14 / 28)\) \\
1 & \(\vdots 1.388\) & \((Z=18 / 25)\) \\
1 & \(\vdots 1.047\) & \((Z=21 / 22)\) \\
1 & \(\vdots 0.869\) & \((Z=23 / 20)\) \\
1 & \(: 0.750\) & \((Z=28 / 21)\)
\end{tabular}
\begin{tabular}{|c|c|}
\hline SECONDARY TRANSMISSION & by shaft with universal joint and gears
\[
1: 4.714 \quad(Z=7 / 33)
\] \\
\hline - final drive ratio (engine-to-whe & el): \(4.714 \quad(2-7133)\) \\
\hline 1st speed & 1: 11.647 \\
\hline 2nd speed & 1 ': 8.088 \\
\hline 3 rd speed & 1 : 6.100 \\
\hline 4th speed & 1 : 5.063 \\
\hline 5 th speed & 1 : 4.367 \\
\hline FRAME & decomposable double cradle with tubular structure \\
\hline \multicolumn{2}{|l|}{SUSPENSIONS} \\
\hline - front & telescopic fork "MOTO GUZZI patent" with hydraulic shock-absorbers \\
\hline - rear & swinging fork with adjustable springs concentric to the hydraulic shock-absorbers \\
\hline WHEELS & in light alloy with rims \\
\hline - front & 16 MT 2.50 H 2 \\
\hline - rear & 18 MT 3.00 H 2 \\
\hline \multicolumn{2}{|l|}{TYRES} \\
\hline - front & 120/80 V 16" \\
\hline - rear & 130/80 V 18" \\
\hline & Type:Tubeless or Tube-Type \\
\hline \multicolumn{2}{|l|}{BRAKES} \\
\hline - front & floating disc with fixed caliper and twin braking cylinder - manually controlled by handlever placed R.H. on the handlebar - hydraulic \\
\hline & transmission independent from the rear brake: \\
\hline & \(\emptyset\) disc 270 mm \\
\hline & \(Ø\) braking cylinder 38 mm \\
\hline & Ø pump 12.7 mm \\
\hline - rear & floating disc with fixed caliper and twin braking cylinder - pedal control placed on the R.H. centre of the vehicle: \\
\hline & \(\varnothing\) disc 270 mm \\
\hline & \(\emptyset\) braking cylinder 38 mm \\
\hline & \\
\hline & the rear brake is connected by hydraulic transmission to the L.H. front brake having in its components the same dimensions as the \\
\hline & R.H. front brake, hand controlled \\
\hline \multicolumn{2}{|l|}{DIMENSIONS AND WEIGHTS} \\
\hline - pitch (laden) & 1.514 m \\
\hline - max. length & 2.160 m \\
\hline - max. width & 0.680 m \\
\hline - max. height (windscreen) & 1.220 m \\
\hline - min. height from ground & 0.120 m \\
\hline - dry weight & 215 Kg . \\
\hline \multicolumn{2}{|l|}{PERFORMANCES \(230 \mathrm{Km} / \mathrm{h}\) with driver only} \\
\hline - max. speed & \(230 \mathrm{Km} / \mathrm{h}\) with driver only \\
\hline - fuel consumption & \[
5.41 . / 100 \mathrm{Km}
\] \\
\hline \multicolumn{2}{|l|}{REFUELINGS} \\
\hline \multicolumn{2}{|l|}{- fueltank 24I. Super petrol (97 NO-RM/min)} \\
\hline \multicolumn{2}{|l|}{(4l. reserve)} \\
\hline - engine sump & 31. of «Agip SINT 2000 SAE \(10 \mathrm{~W} / 50\) " oil \\
\hline - gearbox & 0.7501 . of «AGIP Rotra MP SAE \(80 \mathrm{~W} / 90\) " oil \\
\hline (bevel gears lubrication) & and 0.20 I. of "Agip Rocol ASO/R» type oil \\
\hline - telescopic fork (each leg) & 0.1501. of «Agip F. 1 ATF Dexron» fluid \\
\hline - front and rear brakes & «Agip F. 1 Brake Fluid-SAE J 1703» fluid \\
\hline
\end{tabular}

\section*{5 CHECKING DEVICES AND CONTROLS}

\subsection*{5.1 DASHBOARD (fig. 306)}

1 Key switch for connection as follows: "OFF» in line with «C" mark: stopped vehicle. Key may be removed (no connection).
"A» in line with «C» mark (key turned in clockwise direction): vehicle ready to start. All devices are connected. Key cannot be removed.
«B» in line with «C» mark (key turned in clockwise direction): stopped vehicle. With «A» switch of fig. 307 in «PARK» position parking light is on. Key may be removed.
2 Voltmeter.
3 Rev. counter
4 Speedometer.
5 Trip recorder zeroing knob.
6 Warn. light (green light) for L.H. blinker.
7 Warn. light (green light) R.H. blinker.
8 Warn. light (bleu light) high beam on.
9 Warn. light (green light) parking lights on.
10 Warn. light («Neutral» green light) neutral pos. of gearbox. It is on only when gearbox is in this position.
11 Warn light (red light) generator current delive\(r y\). To be off when engine has reached a certain r.p.m. range.

12 Warn. light (red light) oil pressure. To be off when pressure is sufficient to insure engine lubrication. If the warn. light does not estinguish, pressure is not the prescribed one; in this case it is necessary to stop engine at once and investigate for the reason.
13 Warn. light (red light) starting the insufficient fluid level in the front L.H. and rear brake master cylinder. When this indicator is lit, fluid level has to be restored, at the same time checking that there is not leakage from the hydraulic system.
14 Emergency flashers switch (placed on the L.H. support of headlight).

\subsection*{5.4 LIGHTS SWITCH - HORN PUSH-BUTTON AND DIRECTION INDICATORS (fig. 307)}

Placed L.H. on the handlebar.

\section*{«A" switch}
"PARK" position parking lights.
«ON» position
«OFF» position bilux lamp on lights off.
```

"B" switch
position R.H. turn indicator.

```
"C" push-button
horn control.


\subsection*{5.6 START PUSH-BUTTON LIGHTS CONTROL SWITCH AND ENGINE STOP SWITCH (fig. 308)}

Installed on the R.H. side of handlebar.
With «A" mark on the key in line with the "C» mark (see fig. 306) vehicle is ready to start. To start engine act as follows:
- make sure that " B " switch is on central position;
- strongly pull the clutch lever ("D" in fig. 307);
- is engine is cold, bring the «starter" lever on starting position;
- press on «A" start push-button.

To stop engine act on the ignition switch placed on dashboard.
To stop in an emergency case, "B" switch has to be turned upwards or downwards.
Once engine is stopped, turn key in the switch (fig. 306) in anticlockwise direction until the "OFF" mark is not in line with «C» mark, then extract the key.

\section*{«E»switch}

With "A" switch (fig. 307) in «ON» position:
«LO» position «HI» position «Flash» position
low beam.
high beam.
flashing light.

\subsection*{5.18 FUSE HOLDER (fig. 309)}

Placed in the central zone of motorcycle; to have access to it, remove the saddle.
In this seat you will find five fuses of 15 A .
Before replacing one fuse or more, the fault determining the blowing up must be detected (see "Electric system legend").
1 Emergency flashers.
2 Direction indicators - Parking lights - Instrument cluster lights - Parking lights indicator.
3 High and low beams - Front brake "stop" light hydraulic control - Voltmeter - Brake fluid level, engine oil pressure, generator and neutral warn. lights.
4 Horn solenoid.
5 Starting solenoid and rear brake "stop" light hydraulic switch.

\subsection*{5.23 SADDLE LOCKING DEVICE (fig. 310)}

Saddle is locked by a "A" special lockset placed L.H. in the rear side of motorcycle.

To unlock it, turn key a quarter of a turn in anticlockwise direction and strongly push the lockset. Saddle will be automatically lifted, so being removable.
To lock it, it is necessary to insert it into its seat on the frame and press on it.



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\section*{6 MAINTENANCE AND ADJUSTMENTS}

\subsection*{6.1 CLUTCH LEVER ADJUSTMENT (fig. 311)}

To adjust play between lever and handlebar connection, if higher or lower than \(3 \div 4 \mathrm{~mm}\)., act as follows: have the rubber diaphragm pulled back and actuate " \(A\) " setscrew up to the prescribed figures. Adjustment may be arranged also on " \(B\) " wire-stretcher, after having loosened "C" counternuts placed R.H. on the gearbox.

\subsection*{6.2 R.H. FRONT BRAKE LEVER ADJUSTMENT (fig. 312)}

A certain play is foreseen between master cylinder float and control lever end.
It is possible to adjust this play, changing the «B" washers quantity placed on the STOP "A" switch positionned under the master cylinder transparent body.

\subsection*{6.4 REAR DAMPERS ADJUSTMENT (figg. 313 and 314)}

Rear suspension spring load can be adjusted in three different positions, using special wrench "A" shown in fig. 313.
Moreover it is possible to adjust the damping effect of rear suspensions actuating «A» disc in fig. 314. In accoradance with the specific needs and the bike load, there are four adjusting positions:
- 1 position very soft for a light load;
- 2 position for bike use as solo or pilot plus pillion on good roads (for instance: highways);
- 3 position for sport use as solo or pilot plus pillion with luggage;
- 4 position very stiff, for use as pilot plus pillion and heavy luggage.
After some time of use and long journeys, to compensate the natural loss of damping effect, an higher adjustment of rear suspension could be necessary.
If you ascertain that damping effect of shock-absorbers is not correct or regular, have them checked at an authorized workshop of our dealers.
N.B. - For a good stability of motorcycle it is always advisable to ascertain that both shockabsorbers are adjusted on the same position, for what concerns the setting disc and the spring charge as well.



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\subsection*{6.8 HEADLIGHT BEAM ADJUSTMENT (fig. 315)}

Headlight has always to be directed at the correct height for a better security during riding and not to disturb the other vehicles met on the roads.
For the «horizontal» orientation, actuate "A" setscrew, while for "vertical» orientation use «C» setscrew up to reach the prescribed height.
At a distance of 3 m . the center of high beam has not to be higher than 0.833 m . with the motorcycle on the ground and pilot on the saddle.
Actuating « B » lever it is possible to quickly modify the vertical orientation in order to conform it to the loading conditions (with one or two passengers on the saddle).


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MAINTENANCE AND LUBRICATION OPERATIONS
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline ITEMS COVERED MILEAGE & 1500 km & 3000 km & 6000 km & 9000 km & 12.000 km & 15.000 km & 18.000 km & 21.000 km & 24.000 km & 27.000 km & 30.000 km \\
\hline Engine oil & R & R & R & R & R & R & R & R & R & R & R \\
\hline Oil filter cartridge & R & & & & & R & & & & & R \\
\hline Wire gauze oil filter & C & & & & & C & & & & & C \\
\hline Air filter & & & c & R & & C & R & & & R & \\
\hline Ignition timing & A & A & A & A & A & A & A & A & A & A & A \\
\hline Spark plugs & A & A & A & R & A & A & R & A & A & R & A \\
\hline Rocker clearance & A & A & A & A & A & A & A & A & A & A & A \\
\hline Carburation & A & A & A & A & A & A & A & A & A & A & A \\
\hline Nuts and bolts & A & & & & & A & & & & & A \\
\hline Fuel tank, filters and pipes & & & & C & & & C & & & c & \\
\hline Gear box oil & A & A & A & R & A & A & R & A & A & R & A \\
\hline Rear drive box oil & A & A & A & R & A & A & R & A & A & R & A \\
\hline Wheel and steering bearings & & & & & & & & A & & & \\
\hline Fork legs oil & & & & & & & & R & & & \\
\hline Starter motor and generator & & & & & & & & A . & & & \\
\hline Brake system fluid & A & A & A & A & A & R & A & A & A & A & R \\
\hline Brake pads & A & A & A & A & A & A & A & A & A & A & A \\
\hline
\end{tabular}

\footnotetext{
\(A=\) Maintenance - Check - Adjustment - Eventual replacement \(/ C=\) Cleaning \(/ R=\) Replacement.
Time by time inspect battery electrolyte level and lubricate the control joints and hoses, every 500 Km . check the engine oll level.
in all cases renew oll at leat once per year.
}

12 ENGINE OVERHAULING AND CHECKING

12.6 VALVES AND VALVE-GUIDES (fig. 317)


\subsection*{12.8 VALVE SPRINGS (fig. 318)}

Check that springs are not out of shape or without any load; hereunder we state the involved data:

\section*{Outer spring}
- free, it is 56 mm . long;
- with closed valve, it is 36 mm . long and it has to deliver \(39 \pm 3 \% \mathrm{Kg}\). load;
- with open valve, it is 26.5 mm . long, ant it has to deliver \(58 \pm 3 \% \mathrm{Kg}\). of load;
- in package, it is \(22.0 \div 22.5 \mathrm{~mm}\). long.

Inner spring
- free, it is 45 mm . long;
- with closed valve, it is 31 mm . long and it has to deliver \(16.7 \pm 3 \% \mathrm{Kg}\). of load;
- with open valve, it is 22 mm . long and it has to deliver \(27.4 \pm 4 \% \mathrm{Kg}\). of load;
- in package, it is \(19.75 \div 20.25 \mathrm{~mm}\). long.

If the springs do not correspond to the above specifications, they have to be renewed.


\subsection*{12.12 CYLINDERS}

Cylinders range (mm)
\begin{tabular}{|c|c|c|}
\hline ASIZE & BSIZE & CSIZE \\
\hline \(88.000 \div 88.006\) & \(88.006 \div 88.012\) & \(88.012 \div 88.018\) \\
\hline
\end{tabular}

\subsection*{12.13 PISTONS}

Pistons range ( mm )
\begin{tabular}{|c|c|c|}
\hline ASIZE & BSIZE & cSIZE \\
\hline \(87.968 \div 87.974\) & \(87.974 \div 87.980\) & \(87.980 \div 87.986\) \\
\hline
\end{tabular}

Pistons of an engine have to be balanced; only a difference of 1.5 gr . in weight is admissible.
When installing a piston, pay attention to the "SCA" (exhaust) wording to be directed towards the exhaust hole in the cylinder.


\section*{CRANKSHAFT BALANCE CHECKING}

To statically balance the crankshaft it is necessary to apply to the crankpin a load of \(1.650 \div 1.652 \mathrm{Kg}\).

\section*{13 TIMING}

\subsection*{13.1 TIMING DATA}

The timing diagram with 1 mm . valve clearance is as follows:

\section*{Inlet}
- opens \(29^{\circ}\) before T.D.C.
- closes \(60^{\circ}\) after B.D.C.

\section*{Exhaust}
- opens \(58^{\circ}\) before B.D.C.
- closes \(31^{\circ}\) after T.D.C.

\subsection*{13.7 TAPPET CLEARANCE (fig. 320)}

After the first \(500 \div 1500 \mathrm{~km}\). and afterwards every 3000 Km . or when timing adjustment becomes too noisy, check clearance between valves and rocker arms.
Adjustment must be made with cold engine, the piston being at T.D.C., compression stroke (closed valves).
After removal of head cover, act as follows:
1 loosen nut «A";
2 screw in or out setscrew "B» until getting the following data:
- inlet valve 0.20 mm .
- exhaust valve 0.25 mm .

Seizes have to be taken using a special feeler gau-


320 ge «C".
Take into account that when clearance is higher than the stated one, tappets are noisy, on the contrary valves do not close correctly causing the following inconveniences:
- pressureloss;
- engine overheating;
- valves burned out, ecc.

\section*{15 FUELFEEDING}

\subsection*{15.1 CARBURETORS (fig. 321)}

No. 2 Dell'Orto «PHM 40 ND» (R.H.) and «PHM 40 NS" (L.H.) type.

\section*{Carburetors control:}
- throttle handgrip R.H. on the handlebar;
- "starter" control lever (with cold engine installed on the L.H. side of cranckase.

\section*{Setting data}

Atomizer
Throttle valve
Spray nozzle
\(\varnothing 40 \mathrm{~mm}\)

Main jet
268 AB
Idle jet
145
Starting jet
57
Startingjet
Needle jet
Float
35
K19 (3rd notch)
10 gr
Idle mixture setscrew: \(1 \frac{1}{2}\) turn.


\subsection*{15.6 AIR CLEANER REPLACEMENT}

Every 6000 Km . check the filtering unit condition and eventually clean it with compressed air; every 9000 Km . replacement is prescribed.
This air cleaner is installed on a special box together with the oil breather assembly, above the engine block.


\section*{2021 SUSPENSIONS}

\section*{FRONT FORK LEGS LUBRICATION (fig. 323)}

For fluid renewal inside the front fork legs, act as follows:
- with the vehicle con the central stand, loosen "C" side screw fastening the steering head to the fork leg; disconnect the balance pipe and at the same time unscrew the "B" upper hex. head cap; then remove "A" draining plug;
- slightly press downwards the front sie of motorcycle, you will obtain «B" cap coming out (this one being in one piece with the damper body).
- reinstall "A" plug and fill up with the prescribed quantity of fluid ( 150 cc . «Agip F. 1 ATF Dexron») through the space between the inner diameter of fork leg and damper body;
- reinstall "B" cap after having lifted the front side of the bike, and lock the side screw again. Repeat the same operations for the other side too. - connect the balance pipe again and reset the dampers pressure in compiance with the prescribed figures.

\section*{OIL-PNEUMATIC SUSPENSIONS}

The operation and charge pressure of front suspensions is as follows:
\(1.5 \div 2.5 \mathrm{Kg} / \mathrm{cm}^{2}\)
For pressure checking, the use of a correct pres-sure-gauge is advisable, having a pipe as short as possible (without any pipe should be perfect), since the inner capacity of pipe could inflüence the pressure figure existing inside the shockabsorber.
In order to ascertain how much your pressure gauge reduces pressure inside the shock-absorber at every gauging, it is enough to arrange two successive measurements: difference between the two readings shows the pressure reduction operated at every gauging.
This measurement has to be taken with motorcycle on the central stand and cold shock-absorbers; for shock-absorbers charge use air without any trace of moisture.
N.B. - For more accuracy in checking, use the special pressure gauge no. 00950053.


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FRONT FORK (fig. 325)
- Stroke 140 mm .
- Sleeve inner diameter:
\(40.010 \div 40.050 \mathrm{~mm}\)
- Fork legs outer diameter:
\(39.975 \div 39.950 \mathrm{~mm}\)




Values in mm.

22 SWINGING FORK


\subsection*{23.20 FRONT WHEEL (fig. 331)}

To remove this wheel from the vehicle, act as follows:
- place the vehicle on the central stand and have wheel lifted from the ground;
- unscrew screws "A" fastening calipers to the fork legs and remove calipers "B" with installed their pipes from the same fork legs;
- unscrew nut «C" fastening the axle on the R.H. side;
- loosen screws «E" fastening fork legs to the axle;
- extract axle «F» paying attention to installation of spacer «D";
- extract front wheel from the fork legs;
- for installation, follow an inversed sequence, paying attention to the correct position of spacer; then repeatedly operate the brake levers in order to have caliper pistons at their normal position again.
NB - In accordance with the tyre type installed, it is neessary to deflate wheel before removal.



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\subsection*{23.21 REAR WHEEL (fig. 333)}

In order to remove the rear wheel from the swinging fork arm and transmission box, act as follows: - place the motorcycle on the central stand;
- undo nut "A» with washer "B" on the spindle, box side;
- loosen screw fastening spindle «D» on the swinging fork arm;
- extract spindle «C» from the box, from the hub. and the fork arm;
- remove plate "E» after having unscrewed "F» screws fastening caliper «G» to the same plate;
- position caliper "G " in such a way it is possible to fix it to the frame;
- bend and extract wheel from the swinging fork arm and from the transmission box.
In order to re-install wheel, follow an inversed sequence, taking into account to insert the complete plate with caliper on the L.H. arm stop of the swinging fork.


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\subsection*{23.22 TYRES}

Prescribed pressures are:
- front wheel: with one or two passengers: 2.2 \(\mathrm{kg} / \mathrm{cm}^{2}\);
- rear wheel: with one passenger: \(2.4 \mathrm{~kg} / \mathrm{cm}^{2}\);
with two passengers \(2.7 \mathrm{~kg} / \mathrm{cm}^{2}\).

Above stated figures are for touristic riding. For use at high continued speed, or highways use, an increase in pressure of \(0.2 \mathrm{Kg} / \mathrm{cm}^{2}\) to the above figures is recommended.

\subsection*{23.23 BRAKE HYDRAULIC SYSTEMS}

\section*{Pads wear checking}

Every 5000 km . check pad thickness, to be:
- new pad 9 mm .;
- pad at wear limit 6 mm . about.

If thickness is lower that the wear limit, pads have to be renewed. After above renewal, brake system bleeding is not necessary, but it is sufficient to actuate lever «H" in fig. 308 repeatedly until the caliper pistons are returned to their normal position.
When renewing pads, check the conditions of hoses; if damaged, they have to be immediately replaced.
NB - In case of pads renewal it is advisable, during the first 100 km ., to use brakes gently, with the purpose to allow a correct pads bedding.
R.H. front brake system and R.H. front brake control pump (fig. 335)



Air bubble bleeding from brake systems: rear and L.H. front braking circuit.
Instructions are as for 1000 SP and 1000 G5 models workshop manual, exept the following points:
1 If the case, fill up the pump feeding tank;
2 Arrange bleeding acting on «F» caliper, after having removed it from the supporting flange and placed in such a position that «L» bleeding plug is directed upwards (fig. 338).


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\section*{24 ELECTRICSYSTEM}

\section*{IGNITION}

\section*{Advance figures}
- Initial advance (fixed) \(8^{\circ} \pm 1^{\circ}\)
- Automatic advance \(26^{\circ} \pm 2^{\circ}\)
- Total advance (fixed + automatic) \(34^{\circ} \pm 2^{\circ}\)

Breaker point gap \(0.37 \div 0.43 \mathrm{~mm}\).

\section*{Spark plugs}

Spark plug types to be used are:
Bosch W 5DC.
Electrode gap: 0.6 mm .
For cleaning use petrol, metallic bi ush and a needle for inner cleaning.
When installing spark plugs again, pay attention they are correctly fitted and easily screwed in their seats; in case of bad connection they should be damaged in the head thread; by consequence we suggest to hand-screw them for a few turns, then to use the special wrench in the kit, avoiding to tighten.
Even if spark plugs appear in very good conditions, after 9000 Km . about they have to be renewed.


\section*{25 ELECTRIC SYSTEM SCHEME}

\section*{Electric system scheme legend}

1 Headlight.
2 High and low beam (55/60 W bulb).
3 Parking light (4 W bulb).
4 15-way connector (Molex).
5 9-way connector (Molex).
6 9-way connector (Molex).
7 3-position ignition switch.
8 Voltmeter (3W bulb).
9 Speedometer (3 W bulb).
10 Rev. counter (3 W bulb).
11 R.H. blinkers warn. lighi (1.2 W bulb).
12 Brake fluid level warn. light (1.2 W bulb).
13 Oil pressure warn. light (1.2 W bulb).
14 Generator warn. light (1.2 W bulb).
15 Neutral gear warn. light (1.2 W bulb).
16 Parking light warn. light (1.2 W bulb).
17 High beam warn. light (1.2 W bulb).
18 L.H. blinkers warn. light (1.2 W bulb).
19 Simultaneous flasher switching.
20 R.H. front direction indicator ( 21 W bulb)
21 L.H. front direction indicator (21 W bulb).
22 R.H. rear direction indicator ( 21 W bulb).
23 L.H. rear direction indicator ( 21 W bulb).
24 High and low beam control device - Light fla-shing-engine starting.
25 Horns device - Lights control switch and direction indicators.
26 Bi-tonal trumpets.
27 Front brake STOP switch.
28 Rear brake STOP switch.
29 Rectifier.
30 Alternator ( 14 V 20 A 21 ).
31 Regulator.
32 Battery.
33 Starting solenoid.
34 Start motor.
35 Fuseholder.
36 Rear STOP light.
37 Rear parking and number plate light.
38 Tail light.
39 Flashing device (12 V 42/92 W).
40 Brake fluid level signal.
41 Neutral pos. signal.
42 Oil pressure signal.
43 Coils.
44 Spark plugs.
45 Breaker.
46 Trumpet solenoid.
47 80 \(-2 W\) resistance.

Fuse 1: Emergency blinkers light.
Fuse 2: Direction indicators, Parking lights, instrument cluster lights, parking light warn. light.
Fuse 3: High and low beam, front stop light switch, voltmeter, neutral pos. warn. light, generator, oil pressure, brake fluid.
Fuse 4: trumpet solenoid.
Fuse 5: Starting solenoid, rear stop light switch.
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