

IDENTIFYING DATA

Every motorcycle has an identification number stamped on both frame and engine.

Fig. 8

For the engine:

Identification number is stamped on the right crankcase bottom, near the oil plug.



Fig. 9

For the frame:

On the right bracket securing the pillion footrest and the muffler.

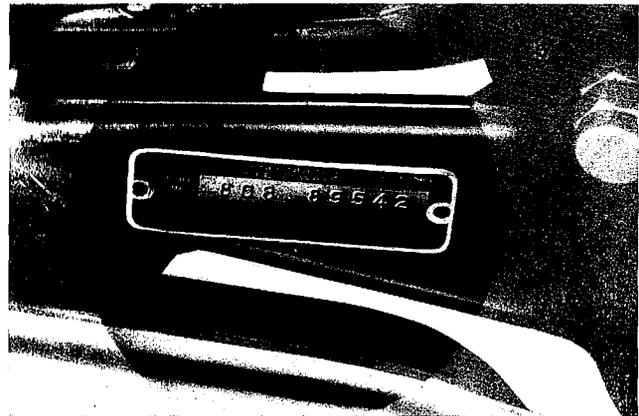
This number is for the lawful identification of the motorcycle, and is quoted on the motorcycle's certificate of origin.

Fig. 10

For model:

A metal label showing the model number of the motorcycle can be found on the right support of the muffler.

It must always be quoted in orders for spare parts.



GENERAL CHARACTERISTICS

ENGINE

Single-cylinder, four-stroke, overhead-valve, rod-and-rocker-driven gas engine.
Flywheel magneto ignition.
Gas-operated (**minimum 90 O.N.**)
Forced lubrication.
Air-cooled.
Four-speed, pedal-shift gearbox.
Multi-plate clutch.
Primary helical gear transmission.
Secondary chain transmission.

VEHICLE

Steel tube frame.
Telescopic front suspension.
Rear-pivot-fork, with-hydraulic shock-absorbers.
Tangent-spoke wheels, with expanding brakes.
Lighting equipment, with 3-lights headlamp, rear number-plate light and stop light, electric horn.

PERFORMANCES

Maximum speed: 62 m.p.h. (approx.).
Fuel consumption: 117 m.p.g. (approx.) according to C.U.N.A. standards.
Maximum gradient: 33%.
Fuel-tank range: 310 miles (approx.).
The above performances are based on the motorcycle, with the rider only, travelling on good roads.

MEASUREMENTS AND WEIGHTS

Wheelbase 4'1" approx.
Maximum length 6'3" approx.
Maximum width 2'6" approx.
Maximum height 3'3" approx.
Ground clearance 6⁷/₈" approx.
Weight, without fuel 194 lbs. (approx.)

GAS AND OIL CAPACITIES

Fuel-tank: 2.77 gallons (approx.).
Oil tank: 3¹/₂ lbs. (approx.).

DESCRIPTION

ENGINE

« 106 SS » model, 4-stroke.
Number of cylinders 1
Bore 52 mm. (about 2¹/₁₆")
Stroke 50 mm. (about 2")
Cubic capacity 106.132 cubic cm.
Compression ratio 8.5:1
Maximum power About 9 HP
Maximum power rate 8300 r.p.m.

Valve diameters: { Inlet valve: 0.82"
 { Exhaust valve: 0.75"

Aluminium cylinder, with cast iron chamber.
Treated aluminium alloy cylinder head, with big cooling finning and cast iron valve seats. High resistance connecting rod with big-end bearing.

Distribution (see fig. 11)

Push rod and rocker driven overhead valves.
The distributing axle drives the push rods by means of tappets.

Inlet:

— Start: 28° before top dead center.
— End: 64° after bottom dead center.

Exhaust:

— Start: 64° before bottom dead center.
— End: 28° after top dead center.

The above data must be checked with a clearance of .012" between the valves and the rockers. Normal clearance between rockers and valves, with cold engine:

— Inlet .004"
— Exhaust: .006"

Fuel supply

The carburetor is fed by gravity from the gas tank, through a two-way pipe and taps. To use the reserve, close one tap.

Carburetor and its adjustment

Dell'Orto ME 18 BS, with 4078 air filter and silencer.
Diffuser diameter: mm. 18.
Main jet: winter 85 - summer 80.
Pilot jet: 35.
Air screw: open 1 turn.

DISTRIBUTION DIAGRAM

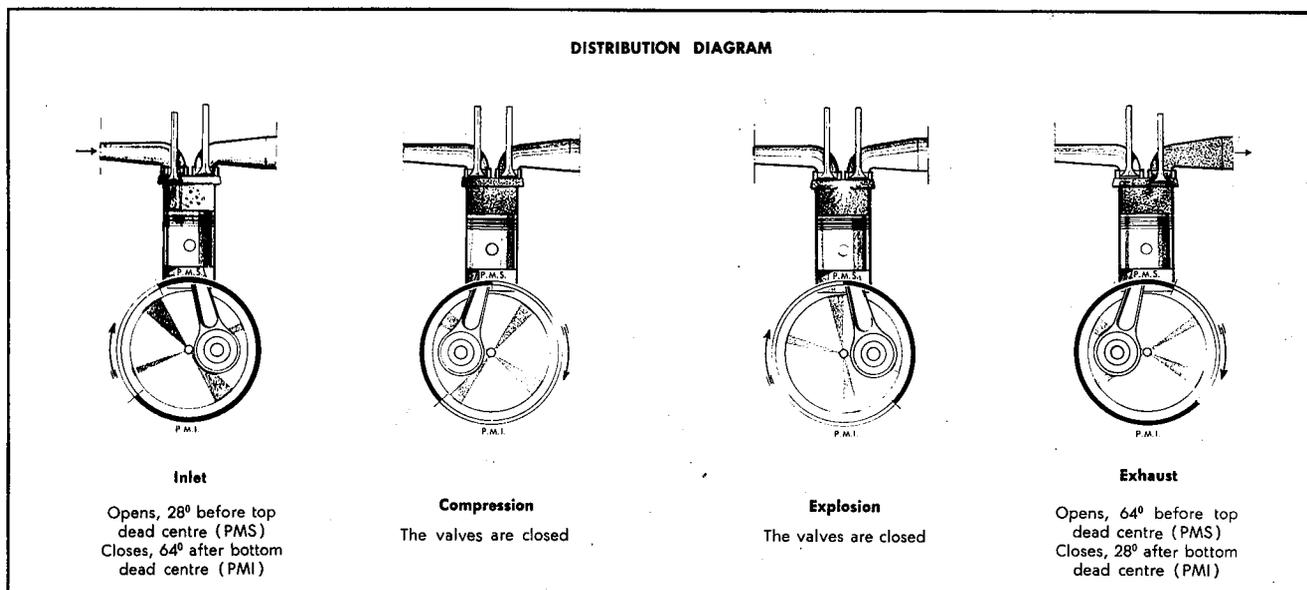


Fig. 11

No. 50 throttle valve.
Needle on the 2nd notch.
No. 258/A atomizer.
Filter SF 1/9.

The throttle valve screw opens with a three-quarter turn.

Air control: this closes by pressing rod « A » (fig. 16), and automatically opens when the throttle valve is opened.

Ignition

- 1) Flywheel magneto ignition with contact breaker and built-in automatic advance.
The automatic advance has the following:
Set timing : 25° ÷ 28°
Automatic timing: 20°
Total advance : 45° ÷ 48°
- 2) Ignition coil, fitted under the upper frame tube, in the tank opening.
- 3) Spark plug, with heat rating equal to 260 of the Bosch scale. Diameter and thread .55" x .05" (long thread).

Lubrication (see fig. 12)

By forced circulation to the driving axle and rockers, with geared pump and detachable filter.

Cooling

Air-cooling, by means of an adequate finning on the cylinder, head and rocker cover.

Drive

Primary: By helical gears.
Gear ratio: 3,895 (74/19).
Secondary: Chain drive (1/2" x 5/16"), with rubber shock absorbers, fitted between the brake drum and the wheel hub.
Driving ratio: 3,785 (53/14).

Clutch

Multi-plate clutch.
4 Lined driving plates.
3 Steel driven plates.

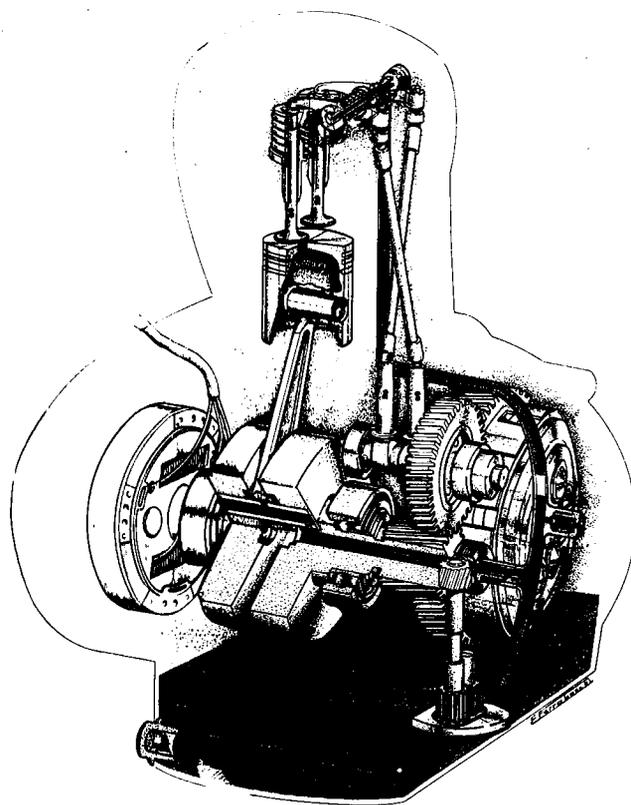


Fig. 12

Gear box

Cascade four-speed gear-box, with gears always engaged and sliding, controlled by a foot-change pedal.

Gearbox ratios (fig. 13)

1st Gear	1,94 (33/17)
2nd »	1,174 (27/23)
3rd »	0,786 (22/28)
4th »	0,613 (19/31)

Overall engine-wheel ratios with 53 teeth wheel sprocket and 14 teeth engine sprocket.

1st Gear	28,616 (3,895 x 1,941 x 3,785)
2nd »	17,308 (3,895 x 1,174 x 3,785)
3rd »	11,588 (3,895 x 0,786 x 3,785)
4th »	9,037 (3,895 x 0,613 x 3,785)

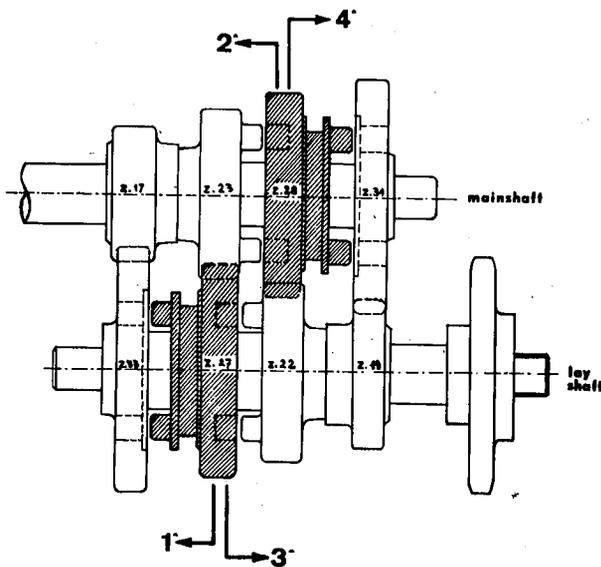


Fig. 13

VEHICLE

Frame

Cold-drawn tubes, electric or oxyacetylene welded, according to requirements.

Front suspension

Telescopic fork, with hydraulic damping, at the end of the run.

Rear suspension

Swinging arm with hydraulic shock-absorbers.

Brakes

Internal expanding jaw-type brakes, on both wheels, acting on the diameters of 4.84".

Wheels

Tangent spoke wheels.
17 x 2¹/₄" steel rims.

Tires

Front tire: Ribbed, 2.50 x 17" - Rear tire: Heavy tread, 2.75" x 17" R.

Tire pressures

With rider only: Front tire 23 lbs. - Rear tire 24 lbs.
With rider and passenger: Front tire 24 lbs. - Rear tire 29 lbs.

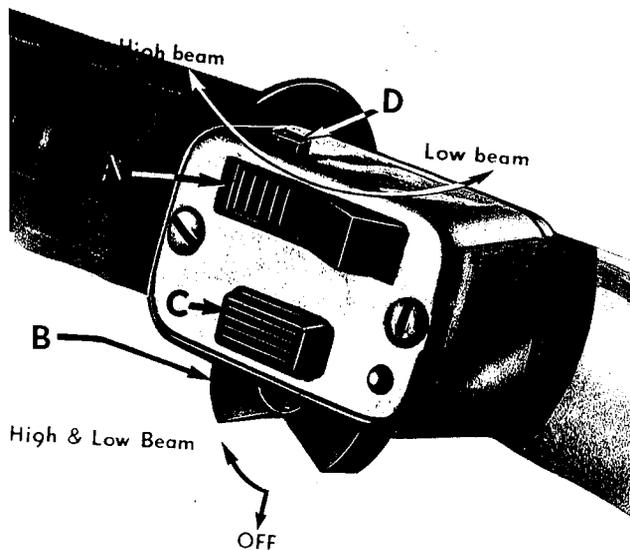
LIGHTING SET

(see fig. 15)

The lighting set is composed of the following equipment.

- 1) Flywheel magneto 31.6 W. - 6 V - clockwise rotation.
The contact breaker is incorporated on the inducts plate, which is fixed to crankcase with three screws.
- 2) Electric horn 24 W. (approx.).
- 3) Lighting equipment: 130 mm. headlamp fitted with:
Speedometer light 6 V - 0.6 W (12 V - 3 W).
1 Sealed beam unit - 6 V - 30/30 W.
1 High-beam warning light - 6 V - 0.6 W.
1 Switch (see fig. 14) fitted on handlebar, complete.
- 4) Tail light, with reflector and 6 V - 3/15 W stop lamp, number plate and parking lamp.

Fig. 14



- a) High and low beam switch.
- b) Light switch.
- c) Horn button.
- d) Engine stop-button.

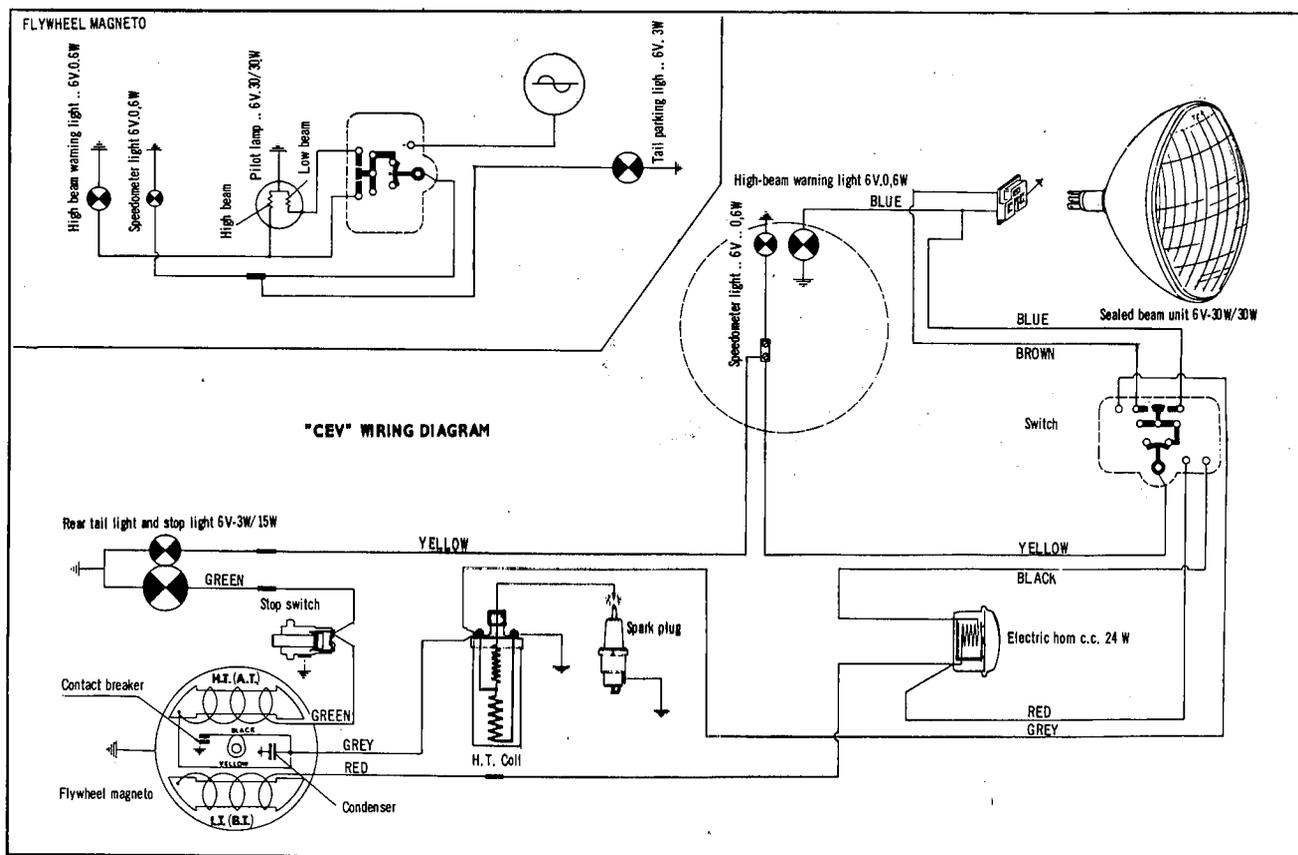


Fig. 15

“ CAUTION ,,”

At times, it may occur that when using the rear brake, the engine stops. This may be caused by:

- 1) The “Stop,, light bulb being burnt out, or missing.
- 2) The wire from the stop-light switch to the lamp-socket broken.

To have the engine working again replace the “Stop,, light bulb, or repair the wire.

DRIVING INSTRUCTIONS

Be sure that

1. There is gas in the tank.
2. The oil is at the correct level, i.e. touching the filler plug hole.
3. The gas tap is open (lever in vertical position).
4. The gear shift lever is in neutral position.

Starting

Close choke by pushing rod A down on carburetor (fig. 16). Open throttle control for about 1/8 total movement. Then depress the kick-starter (fig. 17 - A position) with force. If engine does not start, repeat operation, turning throttle, more, or less, as needed. Avoid quick acceleration of the engine, especially when cold, to allow oil to circulate fully.

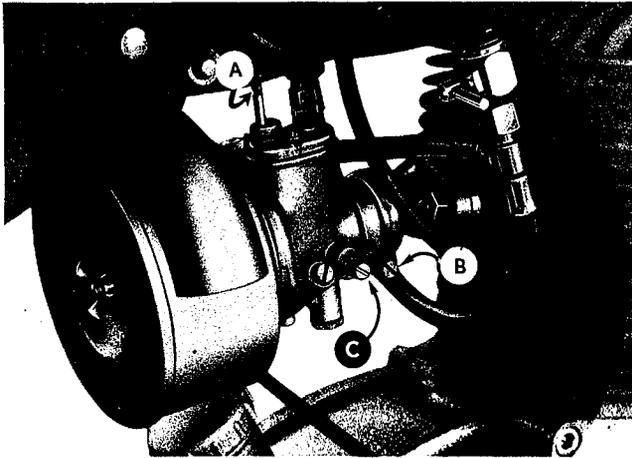


Fig. 16

Starting and riding

After having started the engine, as described above, the motorcycle is ridden as follows:

Pull the clutch lever as far as it will go, push the gear-box pedal upwards to pass from neutral (0) to 1st gear (see fig. 18). Then gradually release the clutch lever at

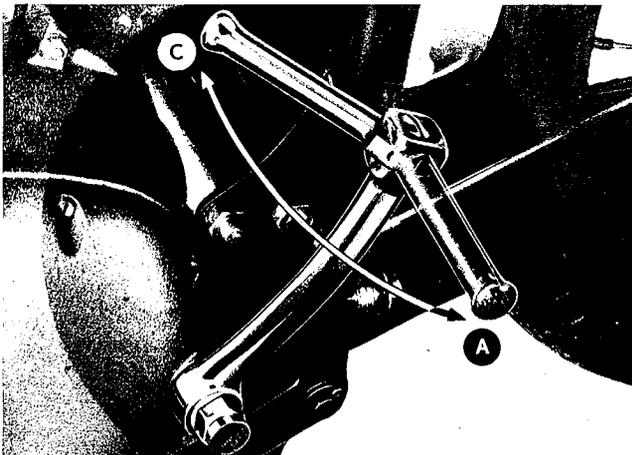


Fig. 17

the same time, gradually increasing the engine speed. When the motorcycle has reached a speed of about 12 m.p.h., close throttle quickly, pull clutch immediately, and shift to second gear by pushing shift down.

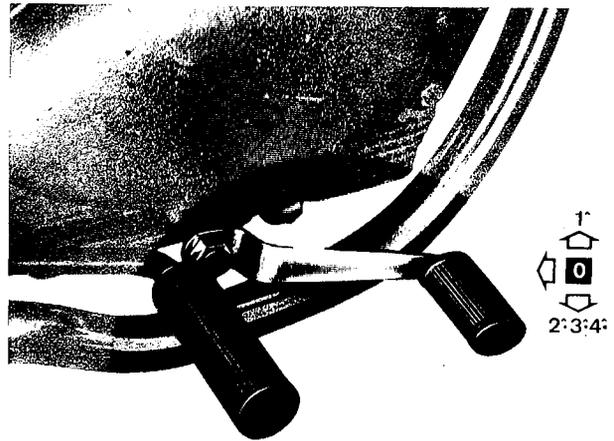


Fig. 18

Then release clutch while accelerating engine. When speed is 22 m.p.h., shift into 3rd gear. When speed is 32 m.p.h., shift into 4th gear. Use same method for shifting as used for second gear: close throttle, shift by pushing lever down, release clutch, and accelerate engine.

To shift from a higher to a lower speed, proceed as follows:

Close throttle, pull clutch lever, push gearbox pedal upwards. Then release clutch lever, accelerating engine at the same time.

Important advice

When the motorcycle is new, it should be broken-in to permit a gradual mechanical bonding of the parts. For the first 600 miles, do not exceed the following speeds:

In 1st gear	11 m.p.h.
» 2nd »	19 m.p.h.
» 3rd »	28 m.p.h.
» 4th »	37 m.p.h.

From 600 to 1800 miles, gradually increase the above speeds, after the breaking-in period, as follows:

In 1st gear	17 m.p.h.
» 2nd »	28 m.p.h.
» 3rd »	43 m.p.h.
» 4th »	56 m.p.h.

After 1800 miles gradually increase the above speeds until the top performance is reached.

MAINTENANCE RULES

The efficiency and service of the motorcycle depend on proper maintenance. Before starting maintenance and mechanical adjusting operations, thoroughly clean the motorcycle, removing all dust, grease, and mud.

For the paintwork, use clear water and dry with a piece of chamois leather. If necessary, apply kerosene oil with a brush, and dry well with clean cloths.

ADJUSTMENTS

ENGINE

1. Check the oil level in the sump. This must be level with the threaded part of the filler-plug hole.

In case of new motorcycles, the oil must be changed after the first 310 miles. This replacement is to be carried out as follows: Remove the filter cap and filter, fully discharge the oil; then replace the filter and its cap and pour 1 pint of new oil in. Start the engine, allowing it to run at the minimum for about five minutes.

Then drain out the oil again, to clean out any possible residue of old oil. Fill the sump with fresh oil. After this, change the oil every 1250 miles. We advise the use of HD SAE 40 oil for summer, and HD SAE 30 for winter.

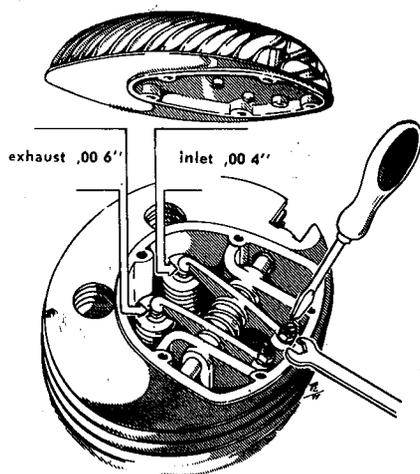


Fig. 19

2. Adjusting clearance between rockers and valves (see fig. 19).

(This operation is to be performed on a cold engine). Remove the rocker cover, which is held in place by 5 bolts. Loosen the rocker-adjusting nut with a 10 mm. spanner. Adjust the rocker-adjusting screws with a screwdriver to obtain the following clearances:

.004" for the inlet valve.

.006" for the exhaust valve.

After checking with a gauge, tighten the locknut which holds the adjusting screw.

3. Carburetor adjusting.

Make sure that the gas valve runs freely, without excessive play, in its seating. Clean the various holes, jets, and jet holders, with air blasts to remove any dirt. The carburetor has been adjusted at the factory to give the best performance. However, accidental causes may alter the factory-made adjustment. To re-adjust, proceed as follows:

Minimum adjustment

This is performed by turning screws C and B (see fig. 16) which, respectively, adjust the position of the valve and the minimum passage of air until the correct mixture is found, so as to obtain the required minimum. At this stage, when slowly opening the throttle, the engine should not misfire or stop. If the engine misfires or stops, tighten the minimum air screw until this weak point disappears. Usually it is sufficient to open the minimum air screw by a turn, or a turn and a half, of the complete closing.

Adjustment of the maximum and of the passage

If the jets, valves, and needle are of the described gauge, and are not unduly worn, the adjustment should be in order. If the adjustment is not in order because of variations in the density of the gas being used, or sudden changes in air temperature, change the maximum jet or the position of the needle.

If the density of the gas increases or the air temperature lowers, it is necessary to add more gas to the mixture by moving the needle upward or to increase the jet size, and viceversa if the gas density diminishes and the air temperature increases.

4. Adjusting the clutch (see fig. 20).

If the cable adjuster nut A is at the end of its thread, screw it home again. Then adjust both screw B and nut A until a clearance of $\frac{1}{8}$ at the tip of the lever on the handlebar is achieved.

When the motorcycle is running, turn the adjuster near the clutch control on the handlebar (see fig. 24).

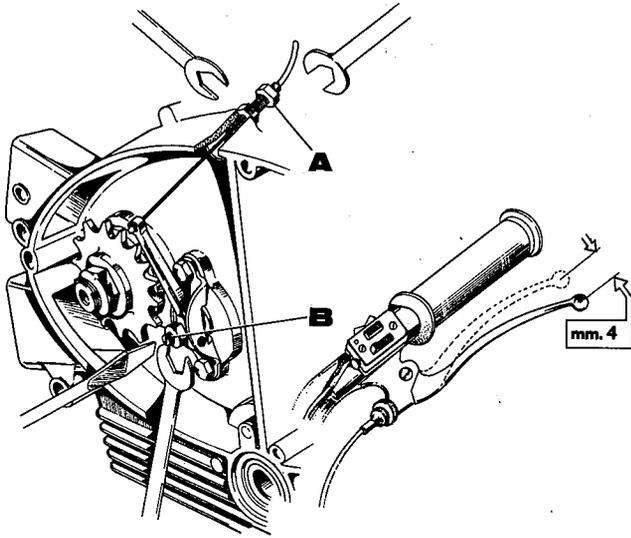


Fig. 20

5. Contact breaker adjustment (see fig. 21).

Check conditions of contact points « a » every 3.500 miles. If dirty, clean with a cloth dipped in gas, and dry well.

If the flat surfaces of the contacts should in any way be uneven, file them flat with a special file, being sure to wipe away all filings; set gap between the contacts at $.014''/.016''$, using a screwdriver on screw « e » and on cam « f ».

Lubricate felt « b » with a few drops of fluid oil.

Checking of ignition timing (see fig. 21)

Have piston at TDC in compression phase.

In this moment the TDC reference mark on the flywheel magneto must be in line with the reference mark « c » on the crankcase and the contact breaker points gap must be $.014''-.016''$ (check with a thickness gauge).

Turn flywheel counterclockwise of about 180° until the medium reference mark « d » is lined up with the reference mark « c » on the crankcase. In this moment the contact breaker points must start to open.

If not:

- 1) Reset the points gap by operating on screw « e » and cam « f » always leaving the above mentioned gap.
- 2) Loosen screws « g », which lock the induction coils plate and turn it clockwise or counterclockwise so that contact breaker points start to open in correspondence with the reference marks « d » and « c » marked respectively on the flywheel and on the crankcase.

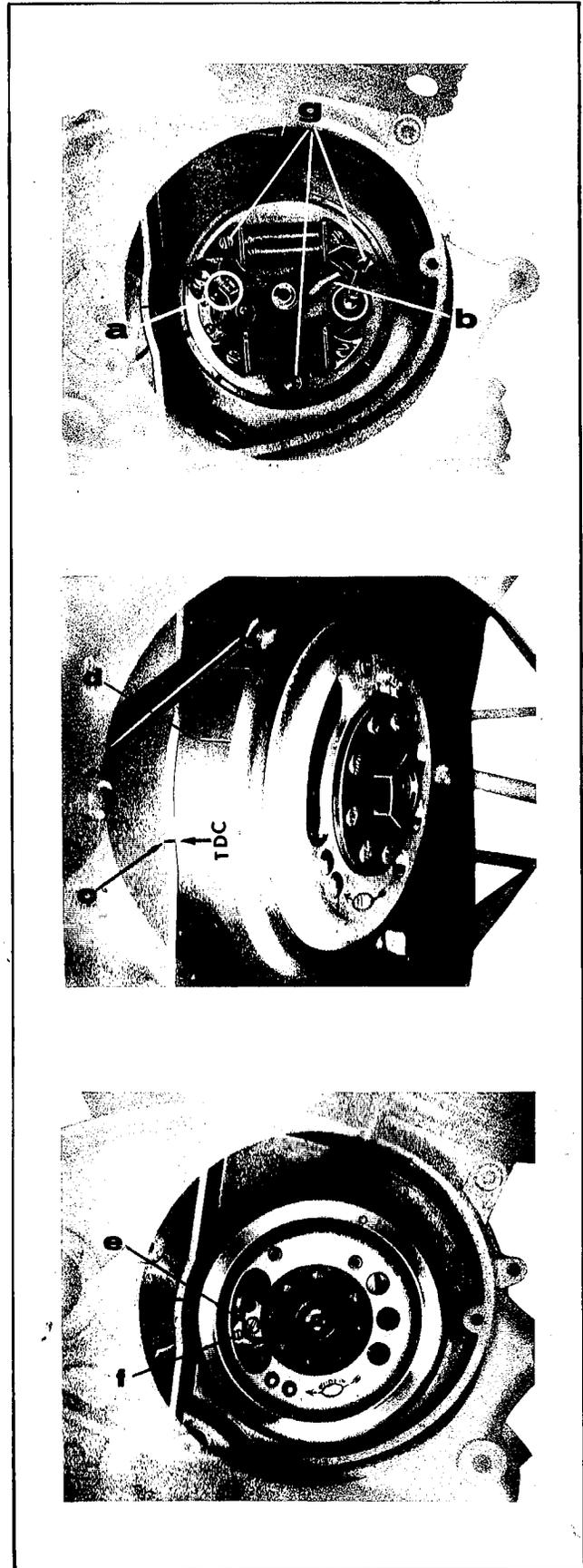


Fig. 21

VEHICLE

1. Chain

To adjust the chain, proceed as follows:

- a) place the motorcycle on its center stand;
- b) loosen the nut fixing rear wheel spindle;
- c) loosen the nut fixing chainguard;
- d) operate chain tensioners uniformly in order to obtain in the lower portion of chain, at the distance of $7\frac{7}{8}$ " from wheel axis, a vertical arrow of $\frac{3}{4}$ " (see fig. 22).

When the operation is completed, tighten the nuts fixing chainguard and rear wheel.

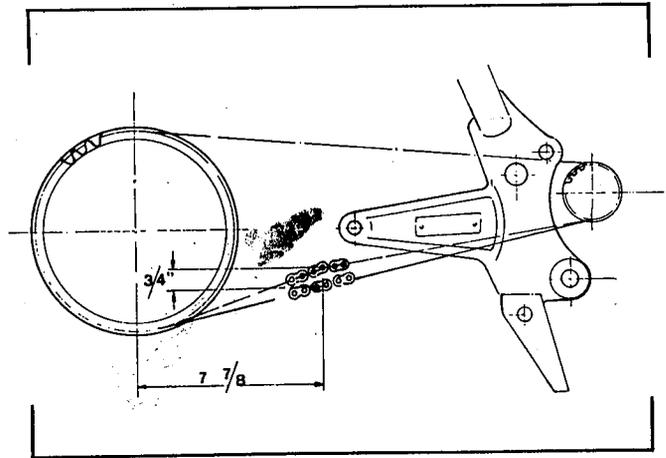


Fig. 22

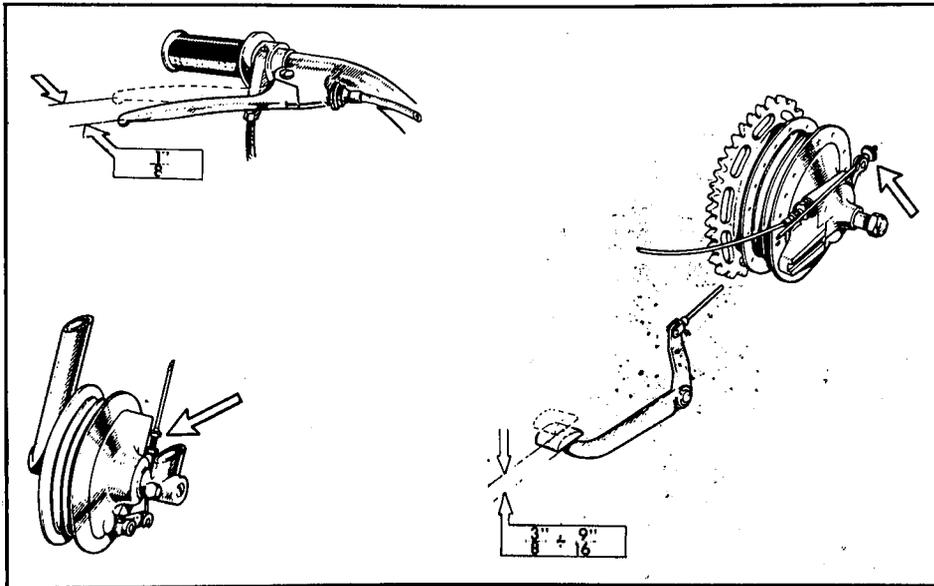


Fig. 23

2. Brakes (see fig. 23)

The adjustment of the front brake-control is performed by operating on the cable adjuster, positioned on the brake drum. When the cycle is in movement, turn the adjuster near the brake control on the handlebar (see fig. 24). It is necessary to leave $\frac{1}{8}$ " play at the tip of the brake lever on the handlebar.

The rear brake is adjusted by operating on the knurled knob, screwed on the control rod. Adjust up to leave a play of $\frac{3}{8}$ " - $\frac{9}{16}$ " at the tip of the pedal.

3. Front wheel.

To remove the front wheel, proceed as follows:

- 1) Remove brake cable from its control on handlebar and from brake cam lever on brake plate.
- 2) Remove the nut on the right side of the wheel spindle.
- 3) Loosen the small closing bolt on the left prong of the fork.

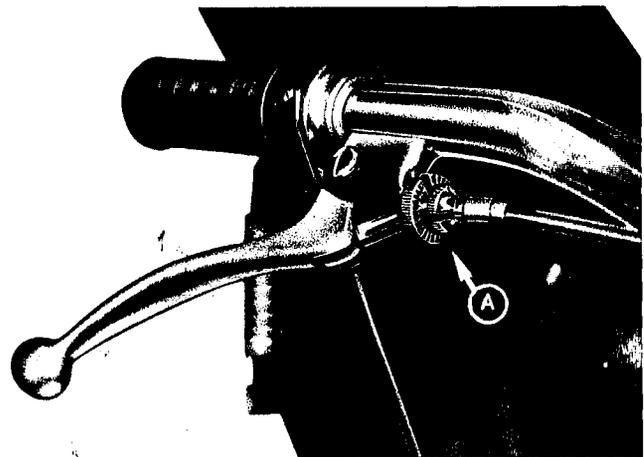


Fig. 24



Fig. 25

- 4) Slide the wheel spindle from the left side, by knocking on the top of the threaded right end of the spindle itself.
- 5) Remove the wheel, downwards.

Replace wheel using side spacer. Slide brake shoe in position of the left fork prong. From same side, lock spindle to right prong, using appropriate nut. Then lock the spindle by means of the small clamp-end bolt.

4. Front suspension (see fig. 25).

The telescopic fork does not require special maintenance.

The oil contents is 5.5 cu.in. for each leg. Use oil Motor HD 20 W/20.

Check oil carefully every 3000 miles. If oil is in good condition, add only the quantity of oil necessary to maintain 5.5 cu.in. in each leg.

To drain the oil out, remove the lower inclined plug (2), positioned near the wheel spindle on the right leg. Fill through the upper plug (1), positioned on the fork top.

5. Rear suspension.

Except for occasionally lubricating the fork oscillating stud, no other maintenance is required. In the event that the hydraulic shock-absorbers, built-in with the suspension, are not efficient, we advise that they be sent to your nearest Sears, or to any Sears-authorized service station.

HOW TO CHECK YOUR MACHINE

The most probable causes of unsatisfactory engine performance can be divided into three groups:

1. Fault deriving from bad carburation.

- A) Repeated sputtering, especially at high speed and with full load.

This may be caused by clogged carburetor tubes and jets, or water in the gas. In the former event, remove the carburetor jets, and clean them, by blowing through them; in the latter case, completely change the gas in the tank.

- B) Uneven firing and unusual heating of the engine. This may be caused by an unbalanced or insufficient air-gas mixture. In this case, try tightening screw B with a screwdriver (see fig. 16). If the sputtering increases, this indicates that the mixture is too strong; correct by lowering needle or reducing main jet.

2. Faults caused by uneven ignition.

- A) Too advanced ignition (metallic knocking caused by uneven stresses on the piston) or too retarded ignition (abnormal heating of the engine, explosions in exhaust).

Check ignition phasing.

- B) Self-ignition by excessive heating of carbon deposits on the crown of the piston, or the combustion chamber (head knocking of the engine). Disassemble and clean parts.

- C) Sputtering due to misfiring.

In this case, remove the spark-plug, clean it and check the distance between the electrodes (.020"-.027"). If the trouble is not caused by the spark-plug, check if cable of spark-plug is broken; then check the contact breaker points, as described above.

EXPLODED VIEW OF ENGINE

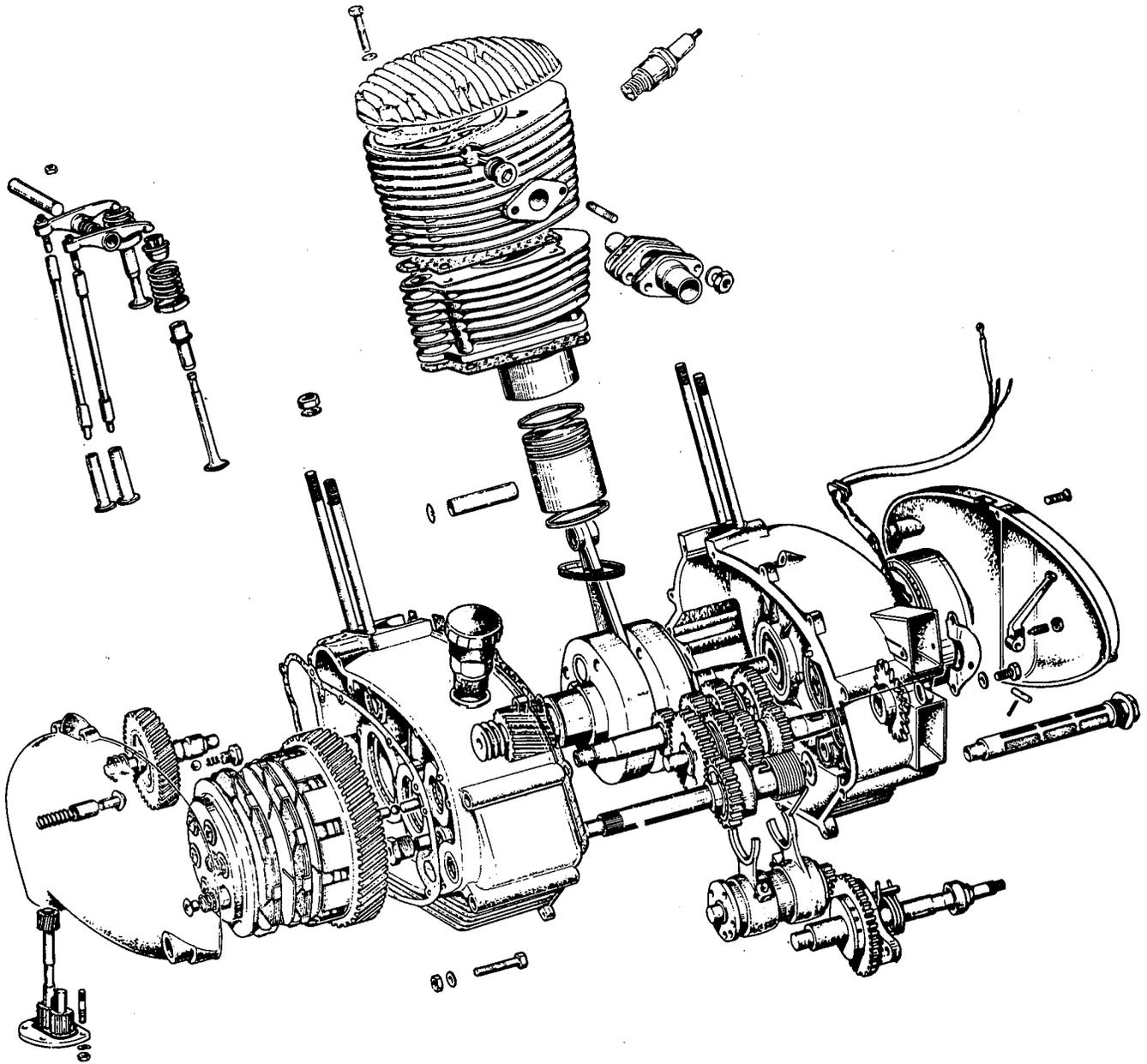


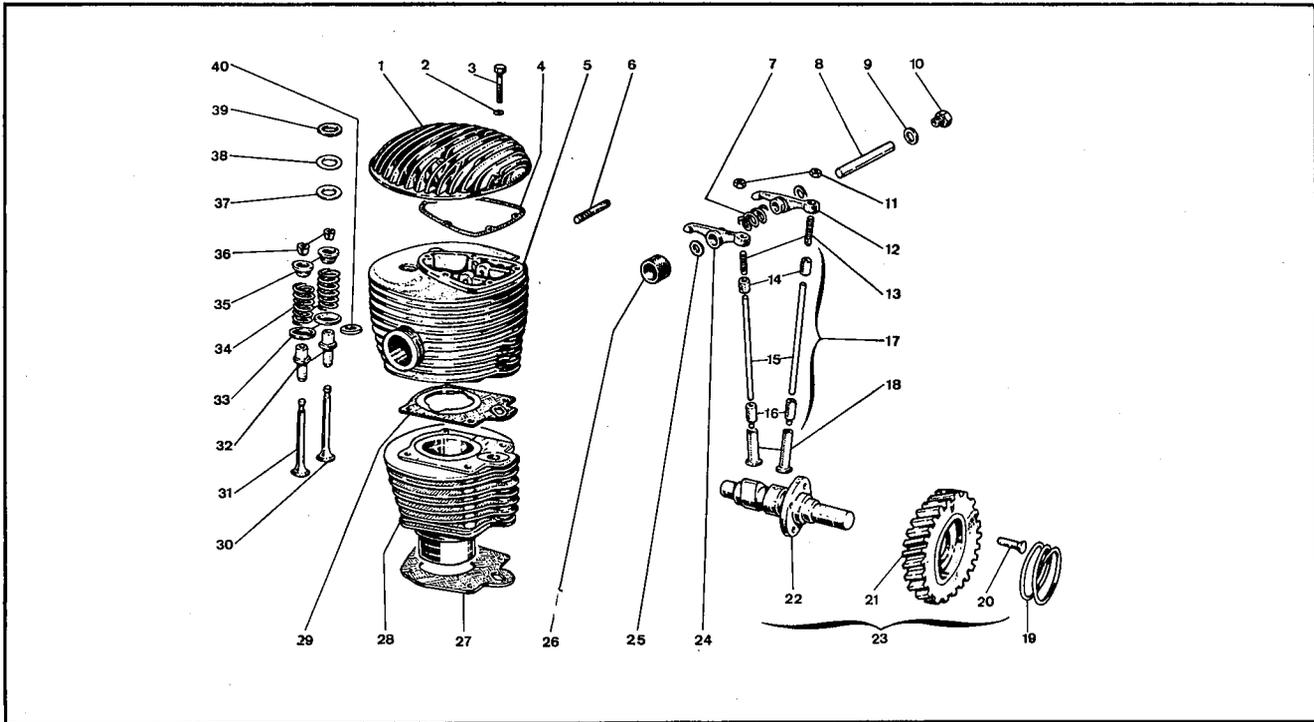
Fig. 26

GENERAL INDEX OF TABLES

ENGINE	Table 1 - Cylinder block - Cylinder head - Distribution	Page 18
	Table 2 - Crankcase assembly - Breather	» 19
	Table 3 - Crankshaft - Oil pump - Filter	» 20
	Table 4 - Clutch assembly	» 21
	Table 5 - Selector and its control	» 22
	Table 6 - Gearbox - Starter - Chain	» 23
	Table 7 - Carburetor	» 24
FRAME	Table 8 - Frame - Rear suspension - Center stand - Footrests	» 25
	Table 9 - Fenders - Tool box - Chain guard	» 26
	Table 10 - Fuel tank - Saddle - Exhaust system	» 27
	Table 11 - Front suspension	» 28
	Table 12 - Handlebar and its controls	» 29
	Table 13 - Front wheel and brake	» 30
	Table 14 - Rear wheel and brake	» 31
ELECTRICAL SET	Table 15 - Front and rear lights	» 32
	Table 16 - Horn - Speedometer - Wiring harness - Stop switch	» 33
	Table 17 - Flywheel magneto - H.T. coil - Spark plug	» 34
TOOLS	Table 18 - Standard tools	» 35

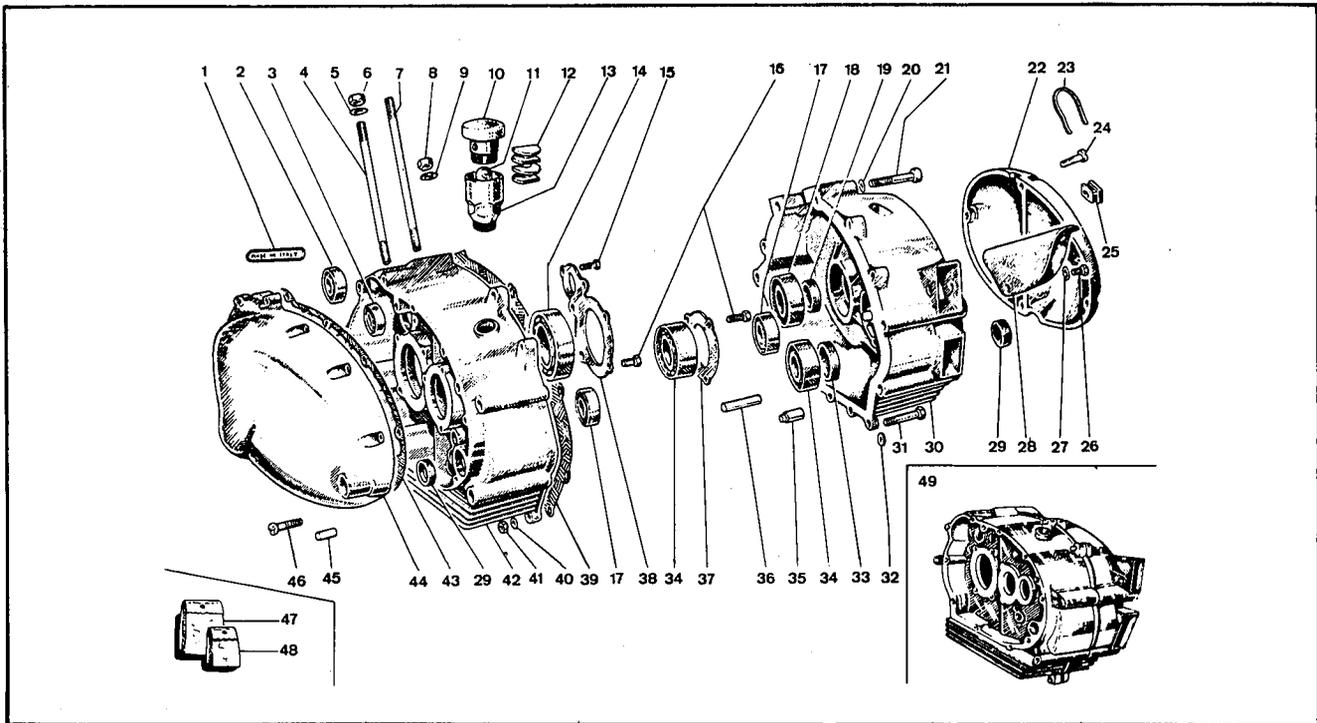
Table 1

Cylinder block - Cylinder head - Distribution



Item	Part number	Description	Q.ty
1	29995	Cover, rocker arms	1
2	21558	Washer, for screw 29645	5
3	29645	Bolt, rocker cover (6 x 1 mm.)	5
4	29559	Gasket, rocker arms cover	1
5	64110	Head, cylinder	1
6	42066	Stud, flange (8 x 1.25 mm.)	2
7	11066	Washer, for nut 11065	1
8	11065	Nut (14 x 1.25 mm.)	1
9	29412	Spring, rocker arms	1
10	29994	Spindle, rocker	1
11	21022	Nut (6 x 0.75 mm. - UNI 208)	2
12	29991	Rocker arm, intake	1
13	26353	Adjuster (6 x 0.75 mm.)	2
14	29104	Cap, push rod upper	2
15	29103	Push rod	2
16	29677	Cap, push rod lower	2
17	29339	Push rod, assembly	2
18	29556	Tappet	2
19	29711	Spring, camshaft	1
20	29682	Rivet, camshaft (∅ 4 x 13 mm.)	4

Item	Part number	Description	Q.ty
21	29680	Gear, camshaft	1
22	64028	Camshaft	1
23	64027	Camshaft, assembly	1
24	29992	Rocker arm, exhaust	1
25	29635	Washer	2
26	64375	Oil seal, valve guide	1
27	29552	Gasket, cylinder base	1
28	64008	Cylinder	1
29	64011	Gasket, cylinder head	1
30	29122	Valve, intake	1
31	29325	Valve, exhaust	1
32	29322	Valve guide	2
33	29327	Cup, valve spring	2
34	29533	Spring, valve	2
35	29329	Cup, valve spring	2
36	29330	Keeper	4
37	9998	Washer	A.R.
38	21893	Washer	A.R.
39	26404	Washer	A.R.
40	64156	Washer	2

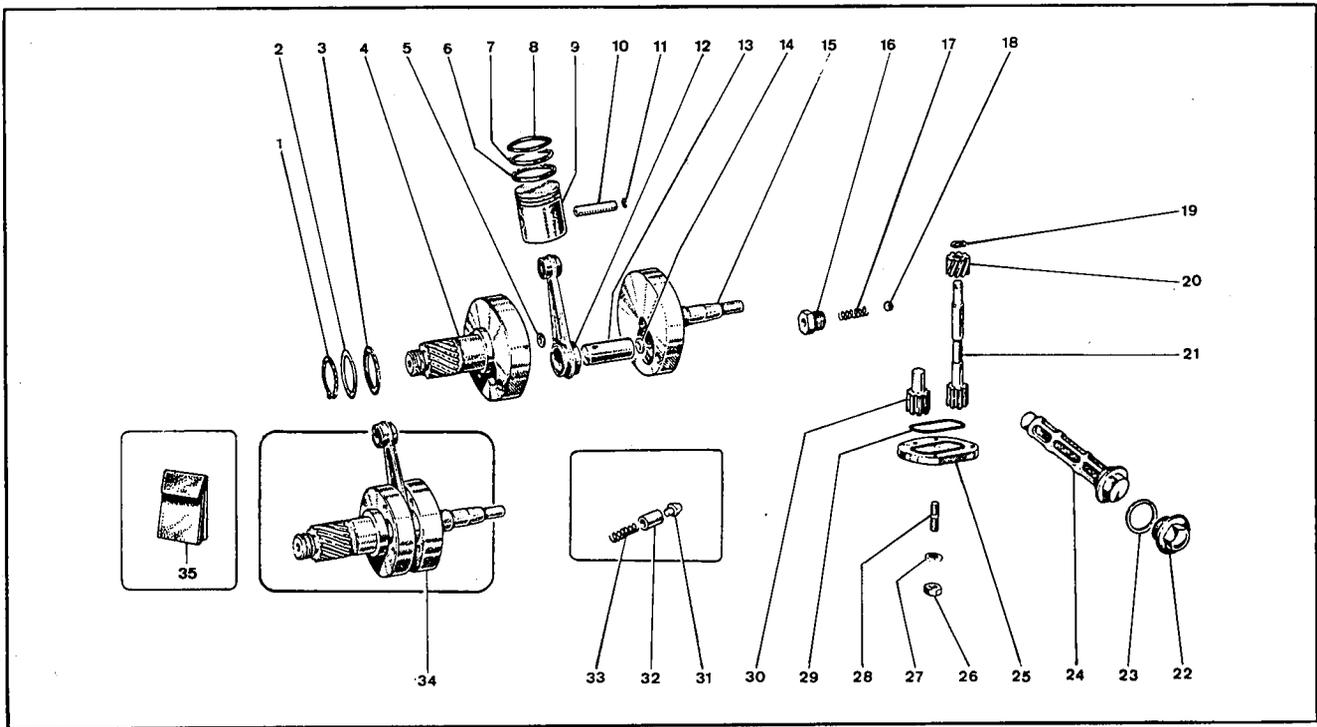


Item	Part number	Description	Q.ty
1	42552	Decal, « Made in Italy » . . .	1
2	01.2016	Bearing (12 x 32 x 10 mm.) . . .	1
3	29704	Bearing (10 x 30 x 9 mm.) . . .	1
4	29361	Stud, cylinder and head . . .	3
5	28723	Washer	3
6	21025	Nut (8 x 1 mm.)	3
7	29993	Stud drilled	1
8	29881	Nut (10 x 1 mm.)	1
9	28724	Washer	1
10	27820	Breather, top	1
11	27821	Ball, breather	1
12	26241	Core, breather	1
13	26242	Breather, bottom	1
14	29570	Bearing (40 x 68 x 15 mm.) . . .	1
15	29706	Bolt (6 x 1 mm.)	1
16	6505	Bolt (6 x 12 mm. - UNI 187) . . .	8
17	21667	Bearing (12 x 37 x 12 mm.) . . .	2
18	64014	Bearing (20 x 52 x 21 mm.) . . .	1
19	11733	Oil seal (17 x 30 x 7 mm.) . . .	1
20	10935	Washer	2
21	29645	Screw (TCE 8 x 50 mm. - UNI 2383)	2
22	64013	Cover, crankcase right	1
23	29582	Gasket, chain guard	1
24	6119	Screw (6 x 35 mm. - UNI 244)	1

Item	Part number	Description	Q.ty
25	26338	Grommet	1
26	6267	Bolt (6 x 8 mm. - UNI 187) . . .	2
27	6280	Washer	2
28	29710	Chain guard	1
29	26091	Oil seal (15 x 24 x 7 mm.) . . .	2
30	64261	Crankcase, right	1
31	29353	Bolt (6 x 35 mm. - UNI 183) . . .	9
32	6280	Washer	9
33	29571	Oil seal (28 x 38 x 7 mm.) . . .	1
34	7749	Bearing (17 x 47 x 14 mm.) . . .	2
35	29568	Pin, selector plate	2
36	29569	Pin, quadrant spring	1
37	29775	Plate, thrust	1
38	29380	Plate, thrust	1
39	29563	Gasket, crankcase	1
40	45148	Lock washer	9
41	29524	Nut (6 x 1 mm. - UNI 207) . . .	9
42	64289	Crankcase, left	1
43	29564	Gasket, left cover	1
44	64012	Cover, crankcase left	1
45	29423	Pin, crankcase guide	4
46	7922	Screw (6 x 25 mm. - UNI 244)	13
47	64016	Engine gaskets set	1
48	64017	Engine oil seals set	1
49	64260	Crankcase, assembly	1

Table 3

Crankshaft - Oil pump - Filter

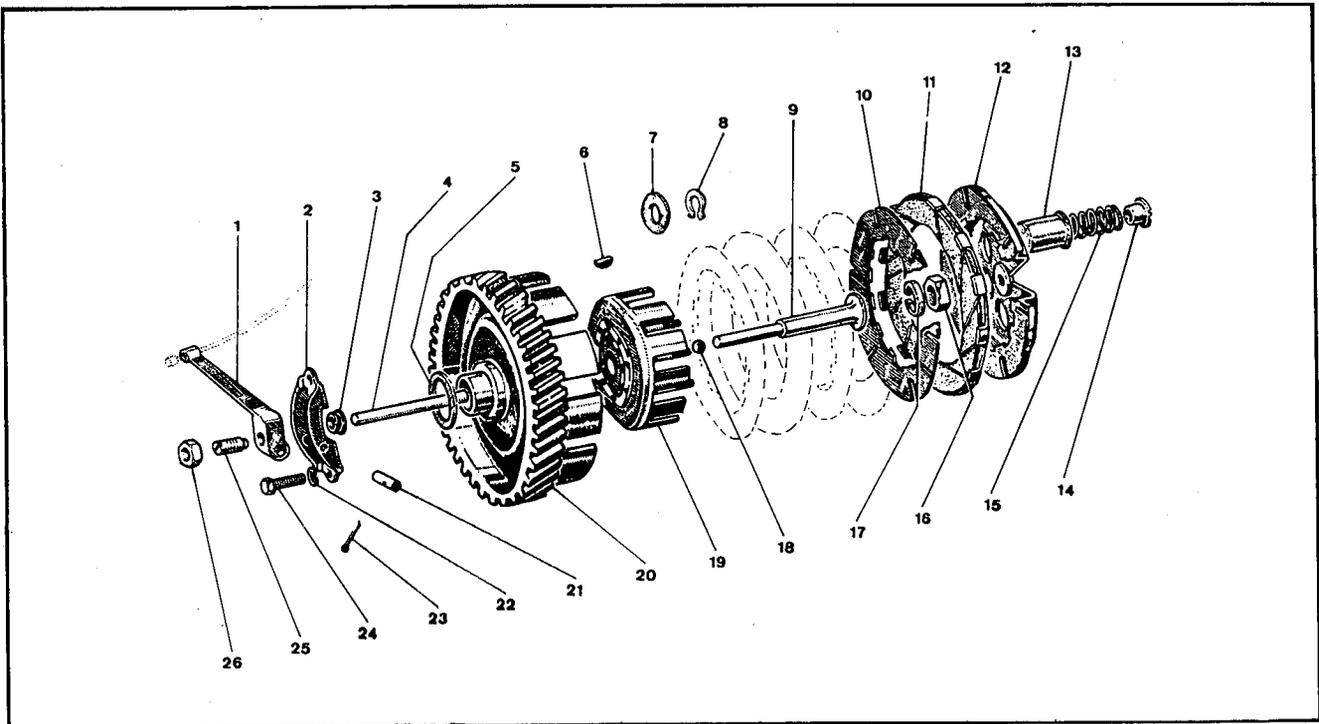


Item	Part number	Description	Qty
1	6563	Circlip (40 E - UNI 3653) crankshaft retaining	1
2	29691	Shim washer	A.R.
3	29690	Washer, crankshaft	1
4	29155	Flywheel, left	1
5	12398	Plug (16 - UNI 1663) for flywheel left	1
6	64026	Oil scraper	1
6	2064026	Oil scraper - 0.2 mm. oversize	1
6	4064026	Oil scraper - 0.4 mm. oversize	1
6	6064026	Oil scraper - 0.6 mm. oversize	1
7	64025	Second ring	1
7	2064025	Second ring - 0.2 mm. oversize	1
7	4064025	Second ring - 0.4 mm. oversize	1
7	6064025	Second ring - 0.6 mm. oversize	1
8	64024	Top ring	1
8	2064024	Top ring - 0.2 mm. oversize	1
8	4064024	Top ring - 0.4 mm. oversize	1
8	6064024	Top ring - 0.6 mm. oversize	1
9	64023	Piston	1
9	2064023	Piston - 0.2 mm. oversize	1
9	4064023	Piston - 0.4 mm. oversize	1
9	6064023	Piston - 0.6 mm. oversize	1
10	29905	Piston pin	1
11	22010	Circlip, piston pin fixing	2
12	64019	Connecting rod, assembly	1

Item	Part number	Description	Qty
13	29017	Crank pin, with cap	1
14	11125	Plug (20 - UNI 1663)	1
15	64021	Flywheel, right	1
16	64155	Plug, oil pressure valve	1
17	29391	Spring, oil pressure valve	1
18	8066	Ball (1/4") oil pressure valve	1
19	42370	Circlip, retaining gear 29844	1
20	29844	Gear, oil pump driving	1
21	29845	Gear, oil pump	1
22	64030	Plug, oil sump	1
23	29095	Gasket, oil plug	2
24	64029	Oil filter	1
25	29421	Cover, oil pump	1
26	29524	Nut (6 x 1 mm. - UNI 207)	4
27	21558	Washer	4
28	42462	Stud, oil pump (6 x 1 mm.)	4
29	29422	Gasket, oil pump	1
30	26276	Gear, oil pump	1
31	29832	Oil injector	1
32	29831	Pusher, oil injector	1
33	6090	Spring, oil injector	1
34	64018	Crankshaft, assembly	1
35	64251	Set of rings	1
35	2064251	Set of rings - 0.2 mm. oversize	1
35	4064251	Set of rings - 0.4 mm. oversize	1
35	6064251	Set of rings - 0.6 mm. oversize	1

Clutch assembly

Table 4

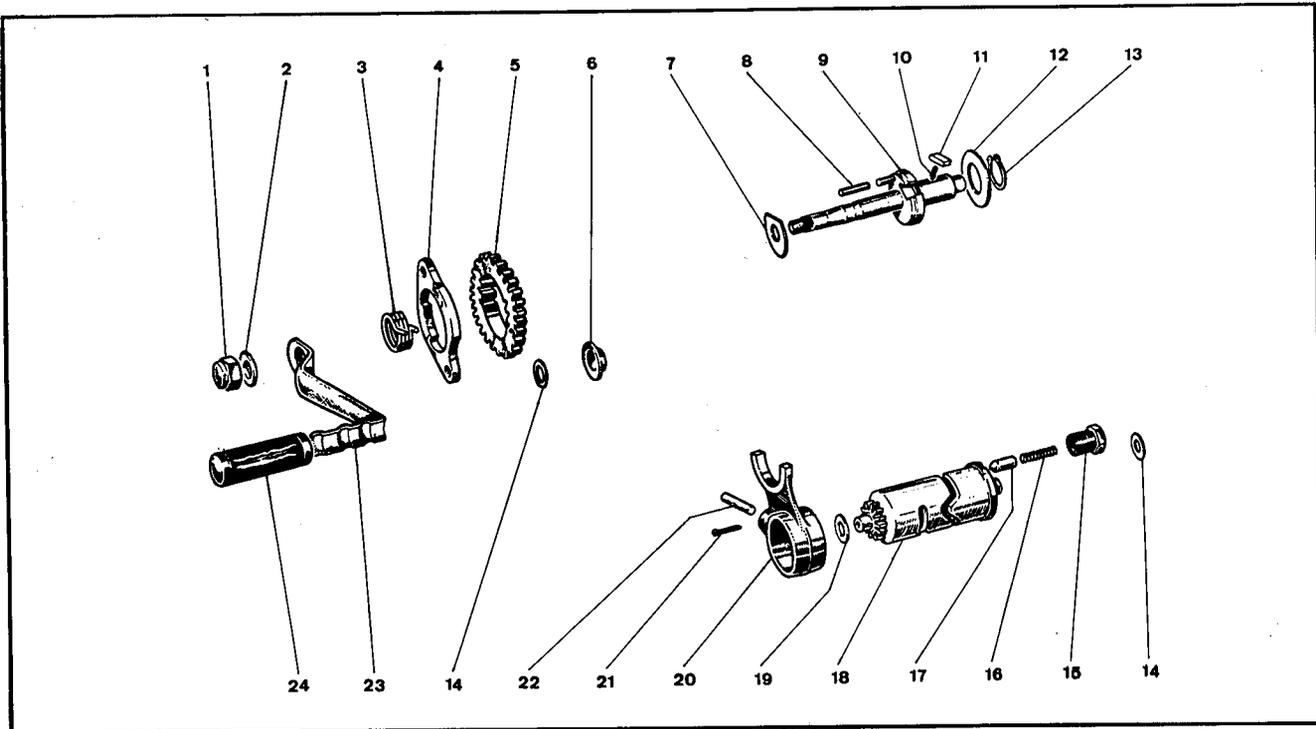


Item	Part number	Description	Q.ty
1	29431	Arm, clutch control	1
2	29430	Support, for clutch control arm	1
3	29613	Oil seal, clutch rod	1
4	29789	Rod, clutch operating	1
5	22442	Washer thrust	1
6	01222	Key	1
7	29579	Washer	A.R.
8	11534	Circlip (17 E - UNI 3653)	1
9	29429	Rod, clutch operating	1
10	22600	Plate, steel	3
11	27522	Plate, lined	4
12	22601	Pressure plate	1
13	22603	Cup, clutch spring	6
14	22604	Nut (7x1 mm.) clutch spring	6

Item	Part number	Description	Q.ty
15	21102	Spring	6
16	29415	Nut (14 x 1.25 mm.)	1
17	6481	Lock washer (A 15 - UNI 1751)	1
18	8066	Ball (1/4")	1
19	29168	Hub, inner clutch	1
20	29776	Clutch drum	1
21	29433	Pin, clutch arm	1
22	6476	Spring, washer (A 6.7 UNI 1751)	2
23	21614	Cotter pin (A 2 x 18 mm. - UNI 1336)	1
24	6669	Bolt (6 x 1 mm.)	2
25	29432	Adjuster, clutch arm	1
26	6116	Nut (6 x 1 mm.)	1

Table 5

Selector and its control

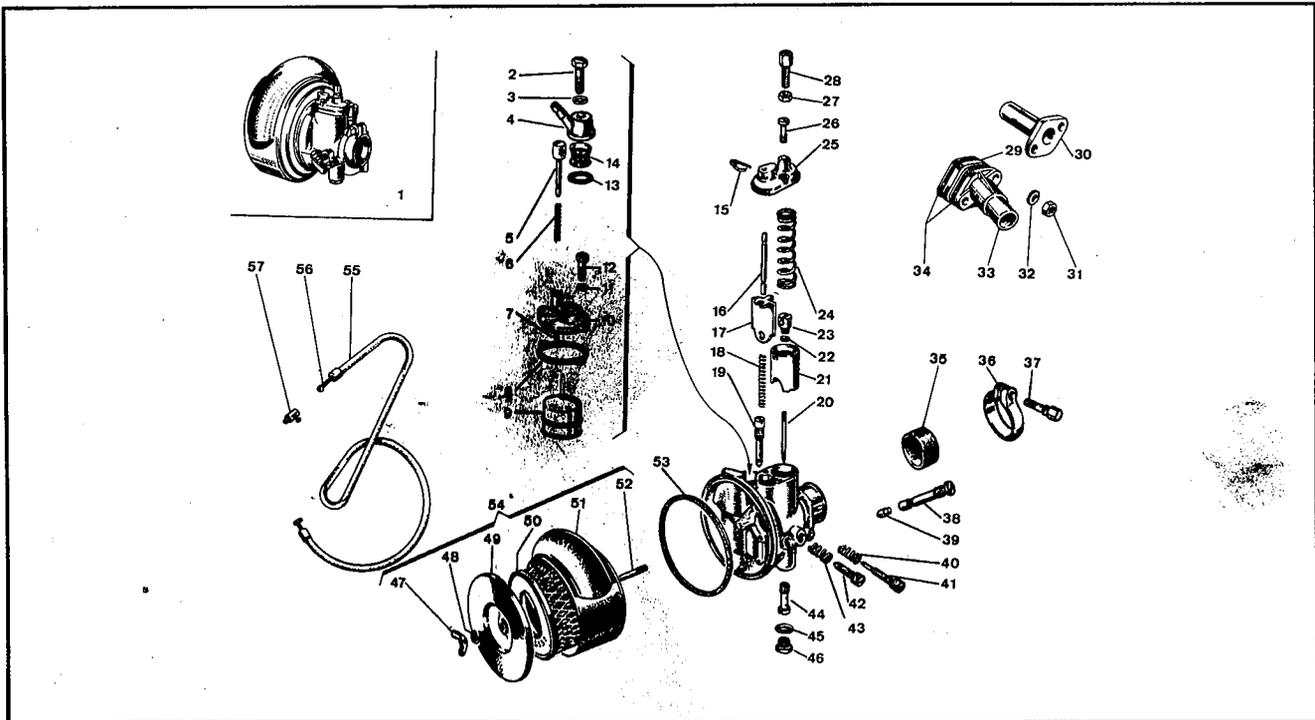


Item	Part number	Description	Q.ty.
1	21414	Nut (10 x 1 mm.)	1
2	64032	Lock washer	1
3	29625	Spring, shift lever return	1
4	42168	Stop plate, selector	1
5	29163	Quadrant, shift drum driving	1
6	29397	Cup, oil seal protecting	1
7	29787	Washer	1
8	42065	Pin, loading spring	1
9	29786	Shaft, selector operating	1
10	29790	Spring, selector pawl	2
11	42063	Pawl, selector	2
12	29791	Washer	1

Item	Part number	Description	Q.ty.
13	10416	Circlip (25 E - UNI 3653)	1
14	26253	Washer	A.R.
15	29631	Plug, shift drum pawl	1
16	22176	Spring, shift drum pawl	1
17	29630	Pawl, shift drum	1
18	64290	Shift drum	1
19	29635	Washer	A.R.
20	29887	Fork, shifting	2
21	29087	Cotter pin	2
22	29633	Pin, shift fork	2
23	28579	Lever, gearshift	1
24	64031	Rubber, gearshift lever	1

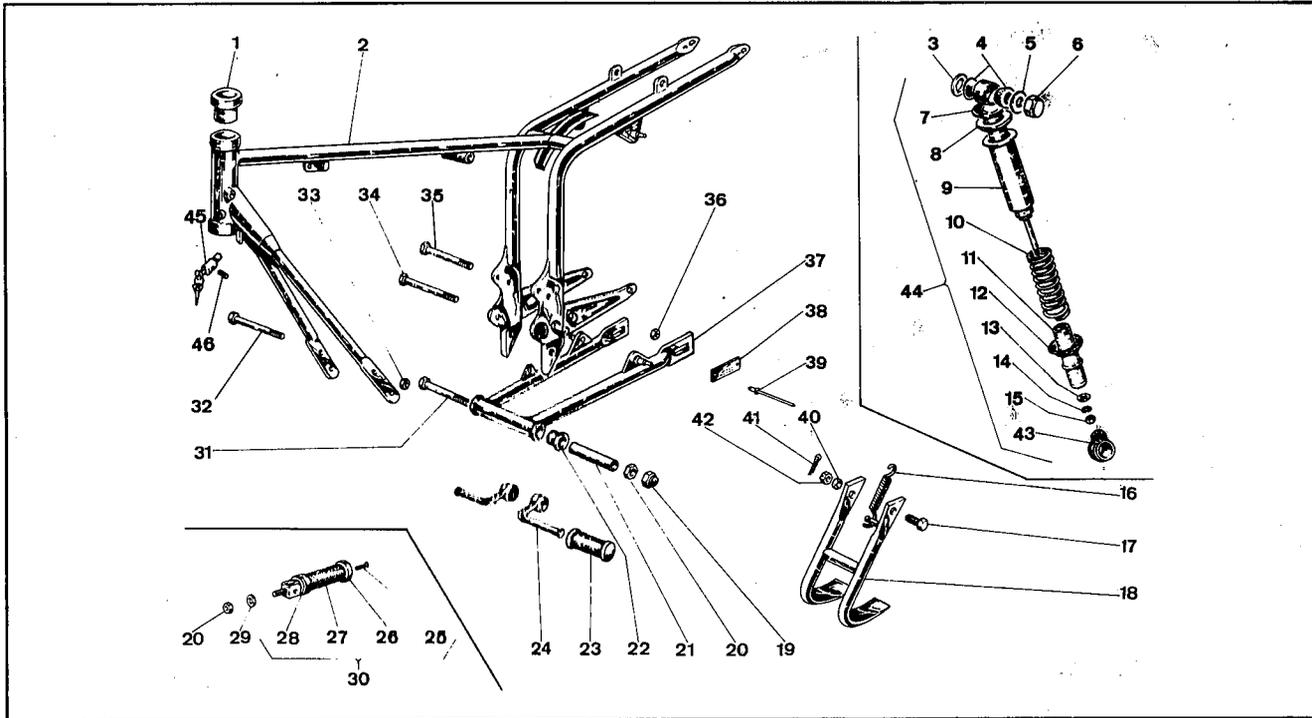
Table 7

Carburetor



Item	Part number	Description	Q.ty
1	64145	Carburetor (ME 18 BS), assembly	1
2	28300	Screw, banjo fixing	1
3	28301	Gasket	1
4	—	Not supplied separately (Request assembly No. 29067)	—
5	28304	Tickler	1
6	28305	Spring, tickler	1
7	28313	Circlip, tickler	1
8	28306	Gasket	1
9	28319	Float	1
10	28318	Cover, float chamber	1
11	28491	Washer	2
12	28314	Screw, float chamber cover	2
13	28442	Gasket	1
14	28345	Fuel filter	1
15	28311	Spring	1
16	28269	Rod, air slide	1
17	28333	Air slide	1
18	28312	Spring, air slide	1
19	28342	Jet, pilot	1
20	28338	Taper needle (G. 4)	1
21	28337	Throttle valve	1
22	28336	Anchor, for taper needle	1
23	28335	Nipple, throttle cable	1
24	28334	Spring, throttle valve	1
25	28332	Cover, mixing chamber	1
26	28329	Screw	2
27	28331	Nut	1
28	28330	Adjuster	1
29	29159	Spacer	1

Item	Part number	Description	Q.ty
30	29160	Intake inner tube	1
31	7358	Nut	2
32	22907	Washer (∅ 8 mm. - UNI 3704)	2
33	29027	Intake flange	1
34	29026	Gasket	3
35	29318	Insulating bush	1
36	28343	Strap, sleeve clamp	1
37	28498	Screw, sleeve clamp	1
38	28340	Nozzle	1
39	28346	Jet, main (80)	1
39	28266	Jet, main (75)	1
39	28267	Jet, main (85)	1
40	44823	Spring, for screw 44824	1
41	44824	Adjuster, pilot air	1
42	28327	Adjuster, throttle valve	1
43	28326	Spring, for adjuster 28327	1
44	28323	Atomizer	1
45	28324	Gasket	1
46	28325	Cap, holding	1
47	42396	Wing nut, air filter	1
48	42401	Lock washer	1
49	48214	Cover, air filter	1
50	28492	Filter, paper	1
51	48213	Body, air filter	1
52	28495	Stud, air filter	1
53	28322	Gasket	1
54	48034	Air filter, assembly	1
55	29999	Throttle cable, complete	1
56	28772	Inner cable, throttle	1
57	42699	Coupling, throttle cable	1

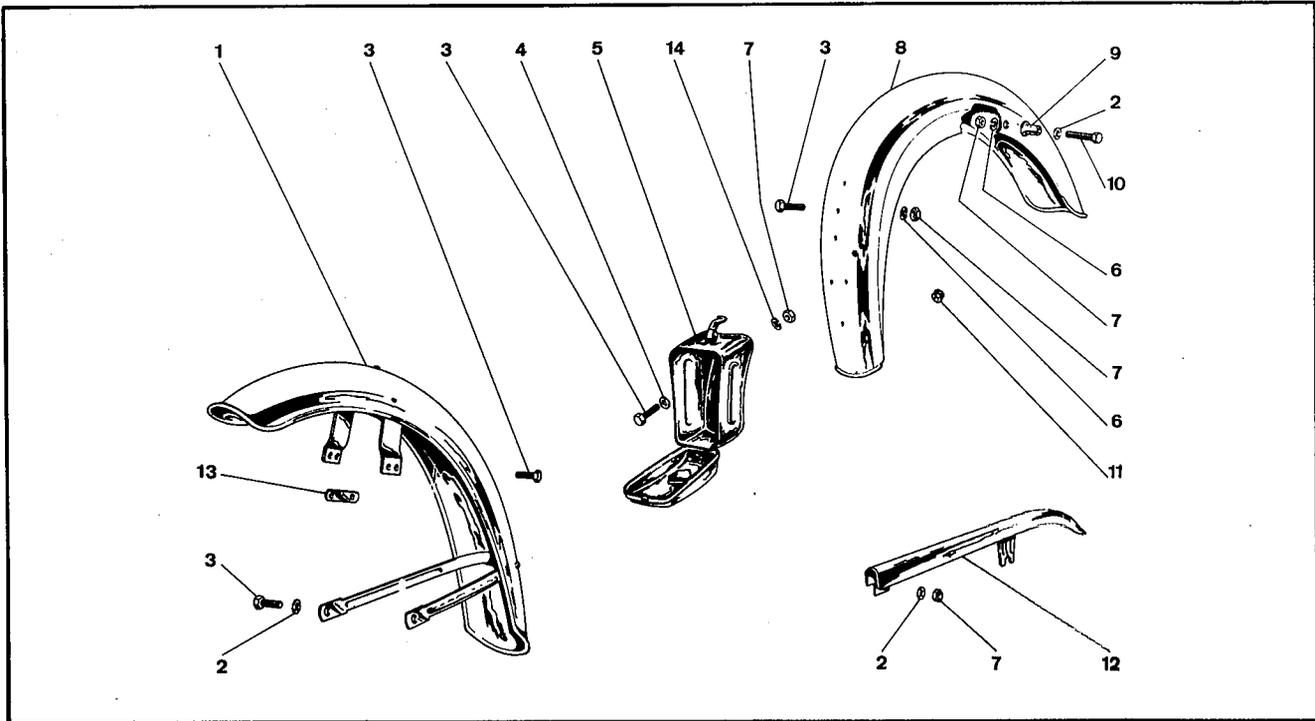


Item	Part number	Description	Q.ty
1	22937	Steering cup	2
2	64263	Frame	1
3	11822	Washer (15.2 mm.)	4
4	64239	Rubber insert	8
5	22114	Washer (12 mm.)	4
6	11164	Nut (12 x 1.25 mm.)	4
7	64232	Body	2
8	64235	Cup, upper	2
9	64234	Cover, upper	2
10	64233	Spring	2
11	64237	Cover, lower	2
12	64236	Cup, lower	2
13	21766	Washer	2
14	6477	Spring washer	2
15	10146	Nut	2
16	21349	Spring, center stand	1
17	29876	Bolt (8 x 1.25 mm.)	2
18	29480	Center stand	1
19	21180	Lock nut (12 x 1.25 mm.)	1
20	0154412	Nut (12 x 1.25 mm.)	3
21	29465	Spacer	1
22	29737	Bush, rear fork	2
23	64078	Footrest rubber	2
24	62252	Footrest	2
25	28780	Screw	2
26	28779	Cup	2
27	28778	Footrest rubber, pillion	2

Item	Part number	Description	Q.ty
28	28781	Washer	2
29	64033	Spring washer (∅ 13 mm.)	2
30	42134	Footrest, pillion	2
31	29464	Spindle, rear fork	1
32	29489	Bolt (8 x 1 mm.)	2
33	21391	Nut (∅ 8 x 1 mm.)	2
34	29487	Bolt (10 x 1 mm.)	1
35	29491	Bolt (∅ 10 x 1 mm.)	1
36	21528	Nut (10 x 1 mm. - UNI 208)	2
37	64240	Rear fork	1
38/A	64333	Model No. plate (808.895403)	1
38/B	64334	Model No. plate (808.895413)	1
38/C	64335	Model No. plate (808.895423)	1
38/D	64336	Model No. plate (808.895433)	1
39	64065	Rivet	2
40	29486	Spacer	2
41	21614	Cotter pin (A 2 x 18 mm. - UNI 1336)	2
42	7358	Nut (8 x 1.25 mm.)	2
43	64238	Bottom	2
44	64231	Shock absorber, assembly	2
45	64218	Steering lock	1
46	64219	Screw, steering lock	1

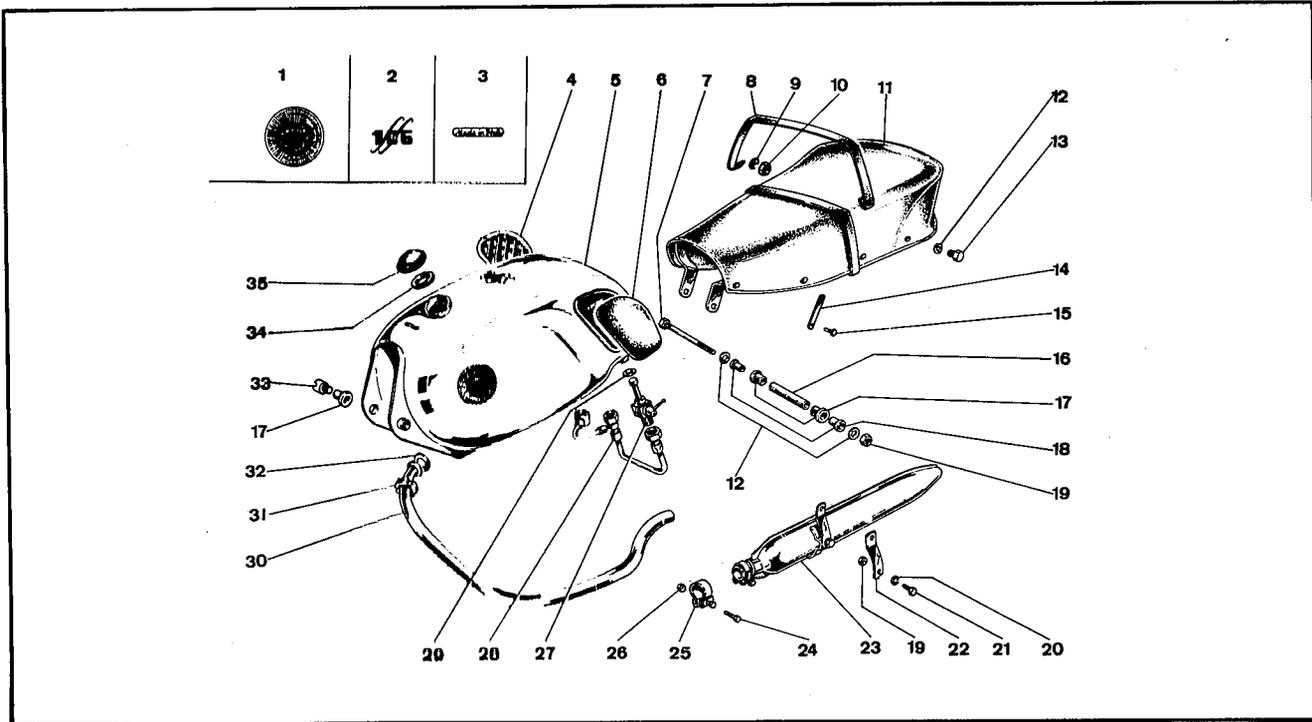
Table 9

Fenders - Tool box - Chain guard



Item	Part number	Description	Q.ty
1	64072	Fender, front	1
2	6280	Washer (Ø 6.4 mm.)	5
3	6505	Bolt (6 x 12 mm. - UNI 187)	12
4	01.4519	Washer (Ø 6.5 mm.)	3
5	64095	Tool box, assembly	1
6	6476	Spring washer (Ø 6.7 mm. UNI 1751)	5
7	6116	Nut (6 x 1 mm.)	9

Item	Part number	Description	Q.ty
8	64076	Fender, rear	1
9	29459	Spacer	2
10	29379	Bolt (6 x 1 mm.)	2
11	22901	Grommet	1
12	29695	Chain guard	1
13	22067	Safety plate	2
14	45148	Lock washer	3

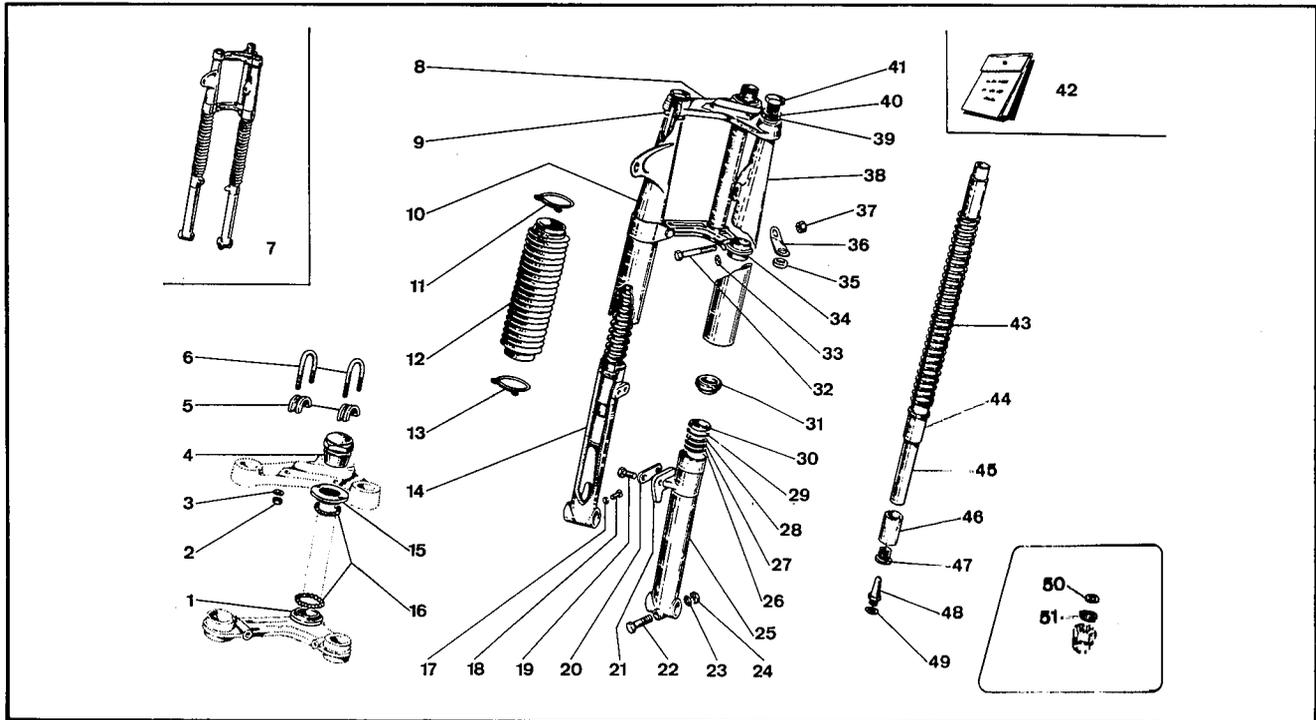


Item	Part number	Description	Q.ty
1/A	62288	Sears metalal (Blue ground) for fuel tank n. 64081	2
1/B	64376	Sears metalal (Red ground) for fuel tank n. 64083 - 64085 - 64268	2
2	64088	Decal « 106 SS »	1
3	42552	Decal « Made In Italy »	1
4	64089	Knee grip, RH	1
5/A	64081	Fuel tank, red color	1
5/B	64083	Fuel tank, blue color	1
5/C	64085	Fuel tank, grey color	1
5/D	64268	Fuel tank, black color	1
6	64090	Knee grip, LH	1
7	64092	Bolt (8 x 1,25 mm)	1
8	64384	Handhold, saddle	1
9	6280	Washer (∅ 6,4 mm)	2
10	29524	Nut (6 x 1 mm)	2
11	64094	Saddle	1
12	6468	Washer (∅ 8,5 mm)	4
13	6362	Bolt (8 x 1,25 mm)	2
14	64258	Plate, securing saddle	8
15	64259	Rivet	8

Item	Part number	Description	Q.ty
16	29836	Spacer	1
17	26233	Insert, rubber	4
18	29835	Bush	2
19	7358	Nut (8 x 1,25 mm)	1
20	6477	Spring washer (8,4 mm-UNI 1751)	1
21	6187	Bolt (8 x 1,25 mm)	1
22	64148	Plate, muffler fixing	1
23	64107	Muffler, assembly	1
24	6095	Bolt	1
25	64358	Strap, assembly	1
26	29524	Nut	1
27	7063	Fuel cock	2
28	29067	Fuel line with coupling	1
29	6369	Gasket	2
30	64106	Exhaust pipe	1
31	29514	Collar	1
32	29513	Gasket	1
33	22637	Screw, tank fixing	2
34	64271	Gasket	1
35	64270	Cap, assembly	1

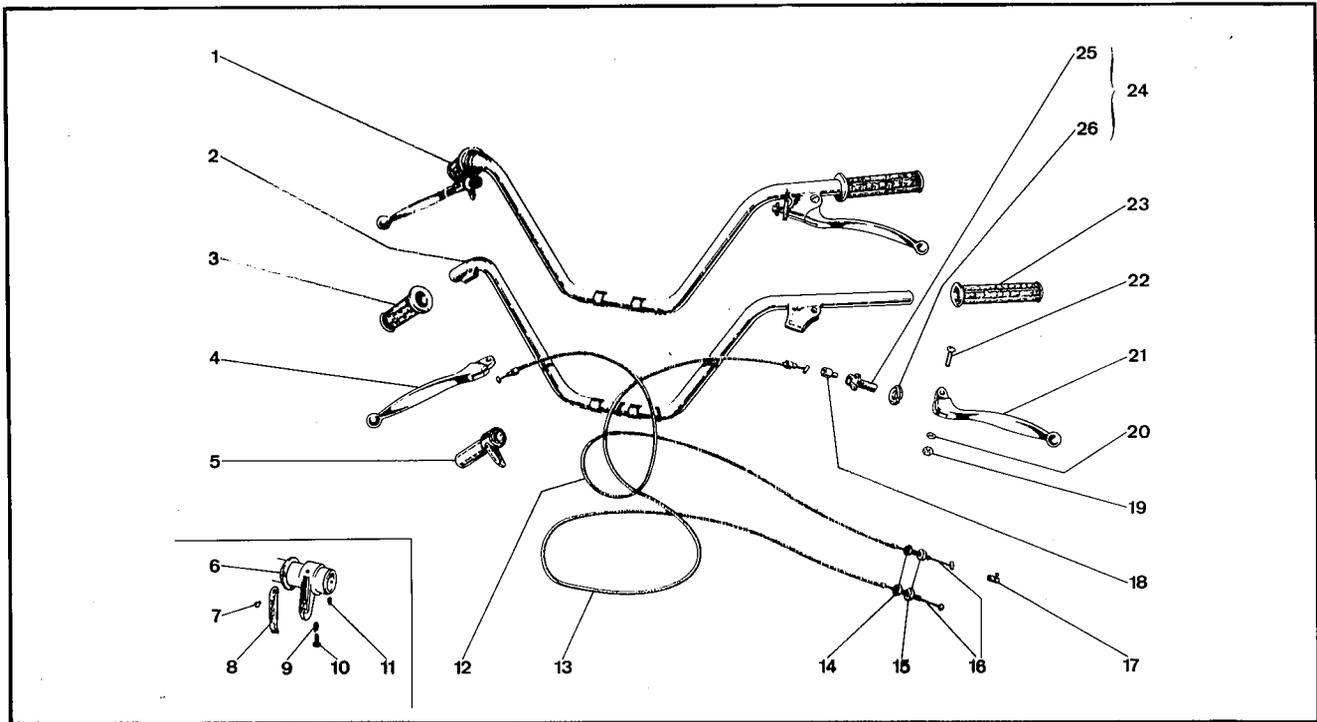
Table 11

Front suspension



Item	Part number	Description	Q.ty
1	21315	Steering cone, lower	1
2	29524	Nut (6 x 1 mm.)	4
3	6280	Washer (Ø 6.4 mm.)	4
4	64337	Nut, assembly	1
5	22018	Support	2
6	22043	U-bolt	2
7	64293	Telescopic front fork, assembly	1
8	35052	Bridge, fork	1
9	22587	Rubber ring	2
10	64294	Cover fork, RH	1
11	42667	Circlip, upper	2
12	27961	Boot, rubber	2
13	28595	Circlip, lower	2
14	22019	Casing, fork, RH	1
15	21316	Steering cone, upper	1
16	21317	Ball (5/32")	54
17	11556	Washer (Ø 5.2 mm.)	2
18	6053	Screw (5 x 0.8 mm.)	2
19	29628	Bolt (7 x 1 mm.)	2
20	29629	Locking plate	1
21	29627	Bracket	1
22	6693	Bolt (8 x 1.25 mm.)	1
23	6468	Washer (Ø 8.5 mm.)	1
24	7358	Nut (8 x 1.25 mm.)	1
25	22020	Casing, fork LH	1

Item	Part number	Description	Q.ty
26	22030	Washer (Ø 24 mm.)	2
27	22027	Washer, rubber (Ø 24 mm.)	2
28	22546	Washer (Ø 24 mm.)	2
29	22044	Oil seal	2
30	22026	Oil seal	2
31	22023	Threaded bush	2
32	26799	Bolt (8 x 65 mm. - UNI 185)	2
33	6468	Washer (Ø 8.5 mm.)	4
34	22910	Stem, fork	1
35	22901	Grommet	1
36	29096	Plate, brake cable retaining	1
37	22661	Nut (8 x 1.25 mm.)	2
38	64296	Cover fork, LH	1
39	22040	Séal, stanchion plug	2
40	9405	Washer (Ø 18 mm.)	2
41	22033	Plug	2
42	64103	Oil seal set, fork	1
43	22034	Spring	2
44	22022	Bush, aluminum	2
45	22013	Stanchion	2
46	22031	Bush, steel	2
47	22032	Plug	2
48	22028	Stopper	2
49	26400	Washer (Ø 12.5 mm.)	2
50	64255	Badge « Sears »	1
51	29171	Badge holder	1

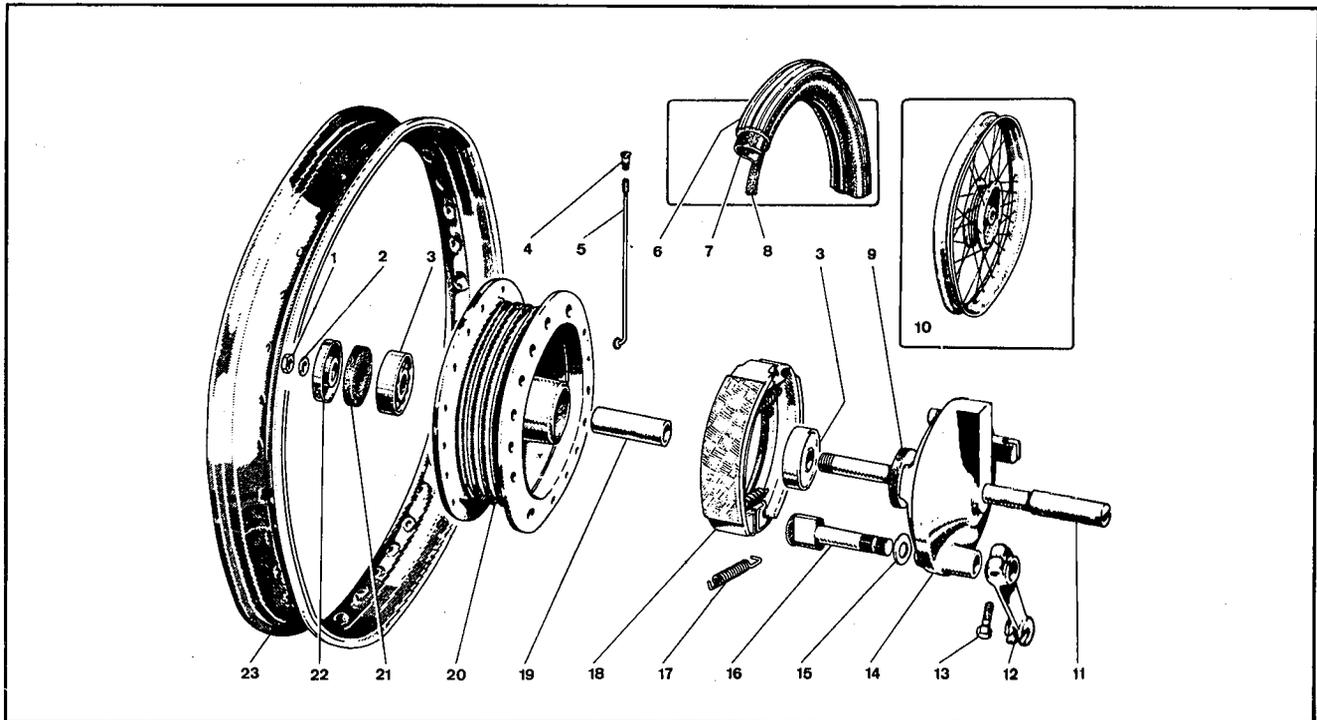


Item	Part number	Description	Q.ty
1	64108	Handlebar, assembly	1
2	64109	Handlebar	1
3	62104	Grip, RH	1
4	42619	Lever, front brake	1
5	21462	Twist grip, assembly	1
6	28722	Washer	1
7	28719	Screw	1
8	28718	Cover	1
9	28721	Spring	1
10	28720	Screw	1
11	28717	Screw	2
12	29267	Cable, front brake, assembly	1
13	29266	Cable, clutch, assembly	1
14	10145	Adjuster	2

Item	Part number	Description	Q.ty
15	10146	Nut (8 x 1 mm.)	2
16	28775	Inner cable, clutch and front brake	2
17	28856	Coupling	2
18	21698	Retainer, clutch and brake cable	2
19	6116	Nut (6 x 1 mm.)	2
20	42098	Lock washer (6 mm. - UNI 3704)	2
21	42617	Lever, clutch	1
22	42584	Screw (6 x 1 mm.)	2
23	62105	Grip, LH	1
24	42680	Adjuster, assembly	2
25	42604	Adjuster	2
26	42605	Ring	2

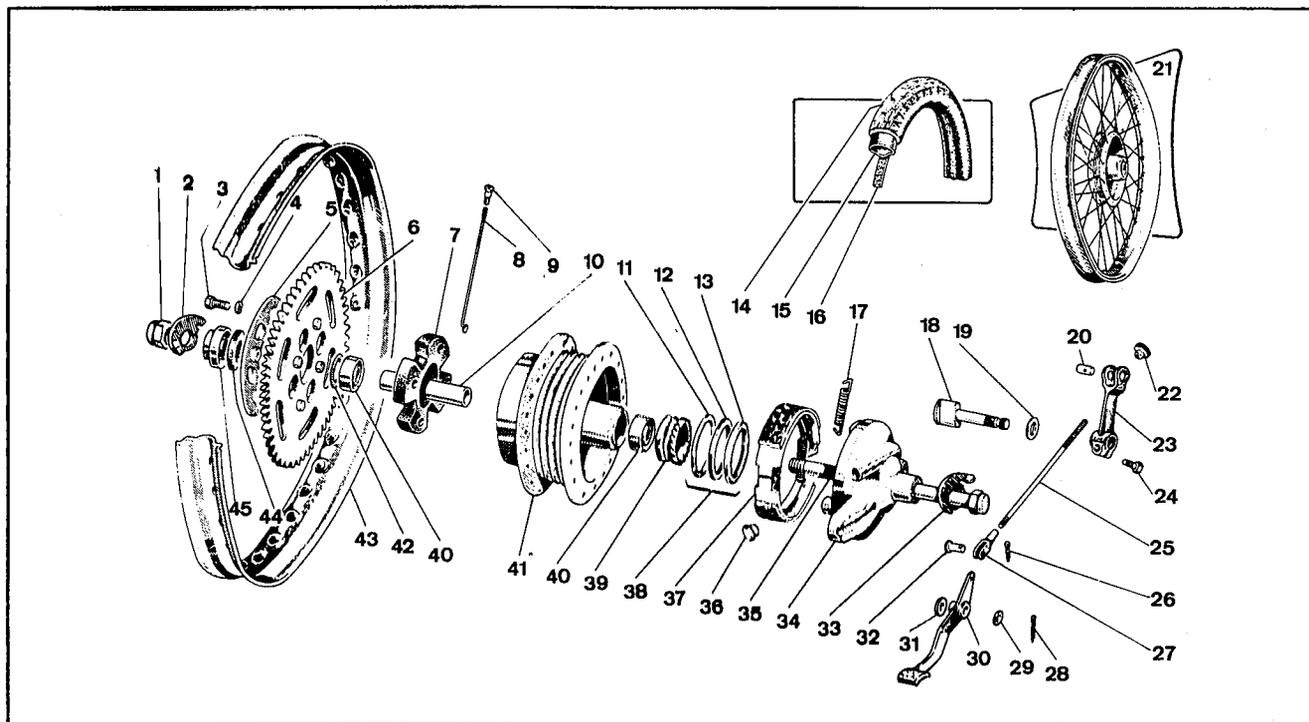
Table 13

Front wheel and brake



Item	Part number	Description	Q.ty
1	10202	Nut (12 x 1.5 mm.)	1
2	9998	Washer (Ø 12.5 mm.)	1
3	22052	Bearing, sealed (12 x 37 x 12 mm.)	2
4	7229	Nipple	36
5	28693	Spoke (3 x 156 mm.)	36
6	48100	Ribbed tire (2.50" x 17" R)	1
7	48101	Tube (2.50" x 17" R - GM)	1
8	48102	Cover, spoke nipples (17" x 1")	1
9	29917	Felt, bearing protector	1
10	64363	Front wheel	1
11	29042	Axle, front wheel	1

Item	Part number	Description	Q.ty
12	29764	Lever	1
13	9894	Bolt (6 x 1 mm.)	1
14	64367	Brake plate	1
15	9998	Washer (Ø 12.5 mm.)	1
16	29985	Cam	1
17	29748	Spring, brake shoes	2
18	29746	Brake shoes, assembly	1
19	29760	Spacer	1
20	64365	Brake drum	1
21	29749	Felt, bearing protector	1
22	64338	Dust cover	1
23	29152	Rim (17" x 2 1/4")	1

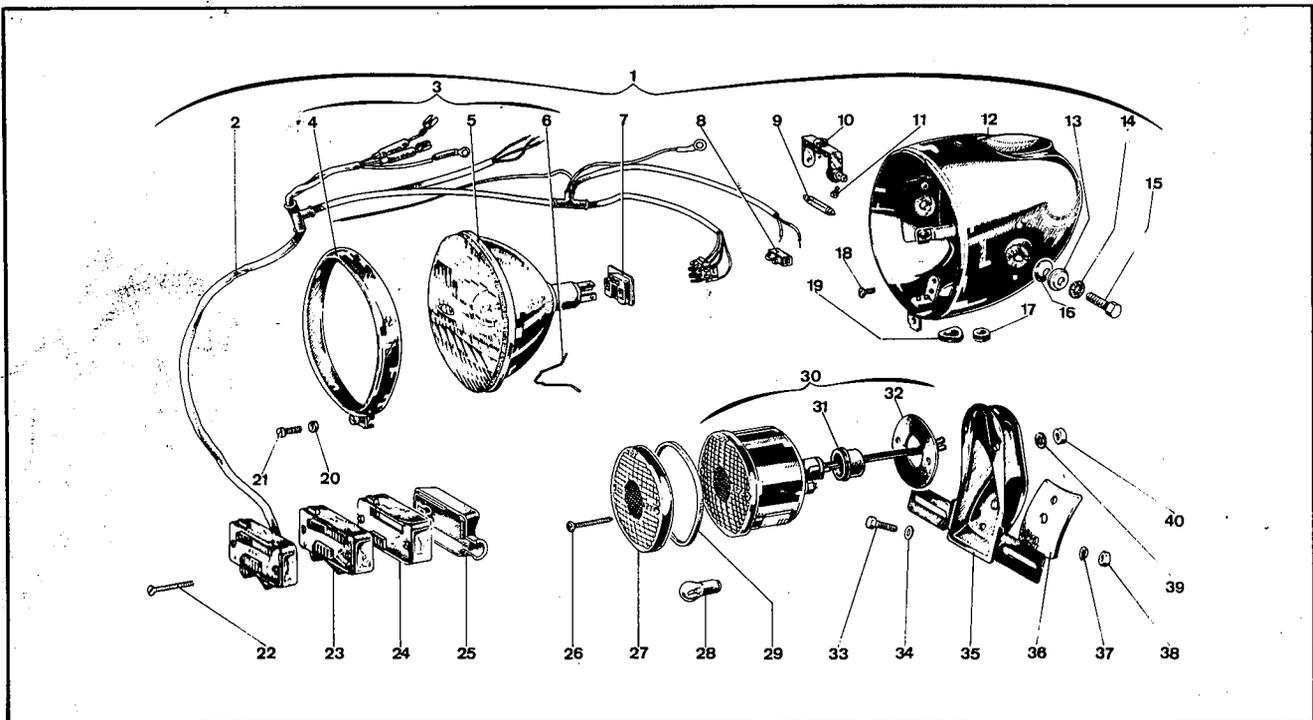


Item	Part number	Description	Q.ty
1	29512	Nut (15 x 1.25 mm.) . . .	1
2	64243	Chain tensioner, RH . . .	1
3	29751	Bolt (7 x 20 mm. - UNI 187)	4
4	24307	Spring washer (7.4 - UNI 1751)	4
5	29922	Plate	1
6	29078	Sprocket (1/2" x 5/16" - 53 teeth)	1
7	29921	Rubber damper	1
8	28693	Spoke (3 x 156 mm.) . . .	36
9	7229	Nipple	36
10	29741	Spacer	1
11	29364	Disc	1
12	29316	Felt	1
13	29363	Cup	1
14	48103	Heavy tread tire (2.75" x 17" R)	1
15	48101	Tube (2.50" x 17" GM) . . .	1
16	48102	Cover, spoke nipples (17" x 1")	1
17	29748	Spring	2
18	29985	Cam, brake	1
19	9998	Washer (Ø 12.5 mm.) . . .	1
20	21397	Pin	1
21	64369	Rear wheel	1
22	21398	Adjuster	1

Item	Part number	Description	Q.ty
23	42191	Lever	1
24	9894	Bolt (6 x 1 mm.)	1
25	64286	Brake rod	1
26	21614	Cotter pin (A 2 x 18 mm. - UNI 1336)	1
27	64287	Clevis	1
28	8061	Cotter pin (B 3 x 20 mm. - UNI 1336)	1
29	01.3880	Washer (Ø 13 mm.)	A.R.
30	42187	Brake pedal	1
31	6471	Washer (Ø 13 mm.)	1
32	01.4060	Pin	1
33	64242	Chain tensioner, LH	1
34	64373	Brake plate	1
35	29493	Axle, rear wheel	1
36	29360	Plug, speedometer drive . . .	A.R.
37	29746	Brake shoes, assembly . . .	1
38	29742	Felt carrier, assembly . . .	1
39	29819	Gear, speedometer drive . . .	1
40	01.2014	Bearing (15 x 35 x 11 mm.)	2
41	64371	Brake drum	1
42	29362	Cup, bearing protector . . .	1
43	29152	Rim (17" x 2 1/4")	1
44	29826	Felt	1
45	64339	Dust cover	1

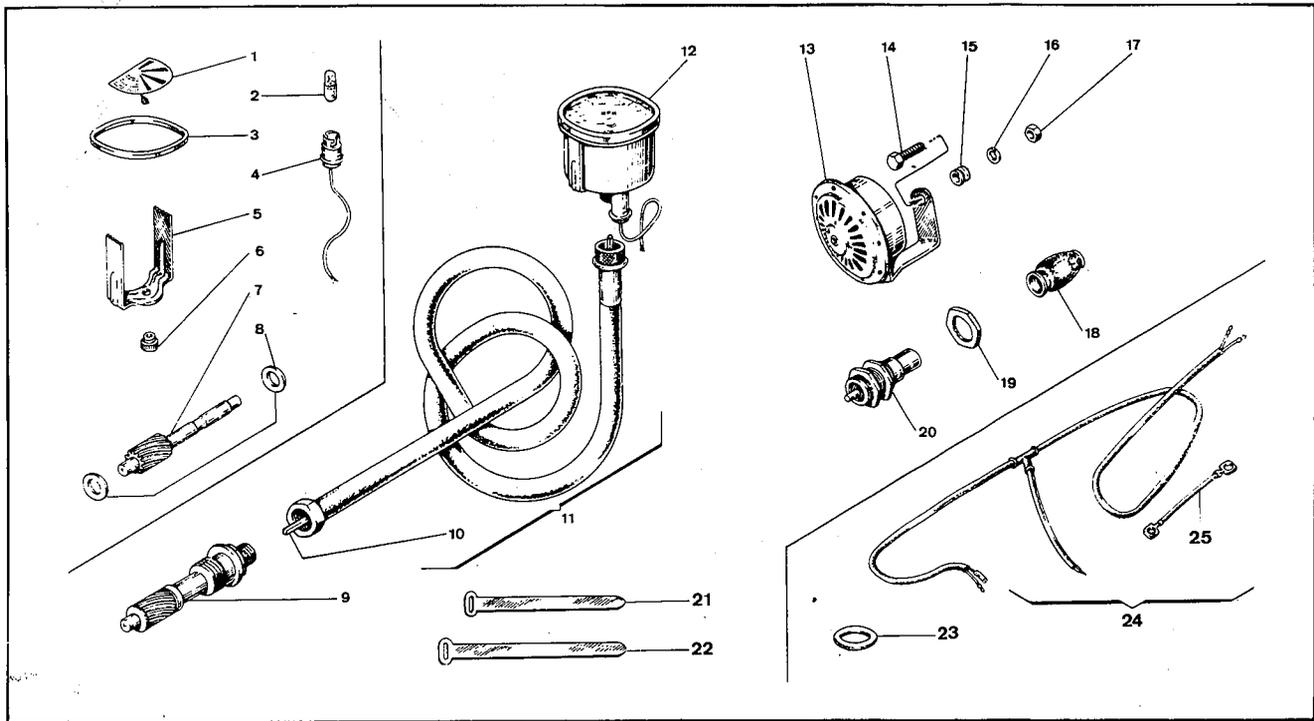
Table 15

Front and rear lights



Item	Part number	Description	Q.ty
1	64301	Headlamp assembly	1
2	64314	Switch complete with wires	1
3	64311	Sealed beam, assembly	1
4	64313	Rim	1
5	64312	Sealed beam	1
6	60532	Spring	8
7	64307	Socket	1
8	64317	Terminal board	1
9	64310	Bulb 6V - 0.6W, parking and warning light	1
10	64309	Warning light	1
11	64181	Screw	1
12	64305	Headlamp housing	1
13	64303	Spacer	2
14	64304	Lock washer	2
15	22671	Bolt	2
16		Not supplied as spare part	
17	60527	Grommet	2
18	64308	Screw	1
19	64306	Grommet	1
20	60534	Ring	1
21	22696	Screw	1

Item	Part number	Description	Q.ty
22	64194	Screw	2
23	64315	Switch	1
24	64316	Switch cover	1
25	64193	Switch base	1
26	64322	Screw	2
27	64320	Lens, plastic	1
28	25122	Two filament bulb - 6V - 3/15W	1
29	64321	Gasket for lens	1
30	64318	Tail light, assembly	1
31	64381	Rubber cap	1
32	64319	Gasket	1
33	6669	Bolt (6 x 15 mm. - UNI 187)	2
34	01.4519	Washer	2
35	64133	Tail light and licence plate bracket	1
36	64134	Packing, rubber	1
37	6476	Spring washer	2
38	6116	Nut (6 x 1 mm.)	2
39	27337	Washer	2
40	29524	Nut	2

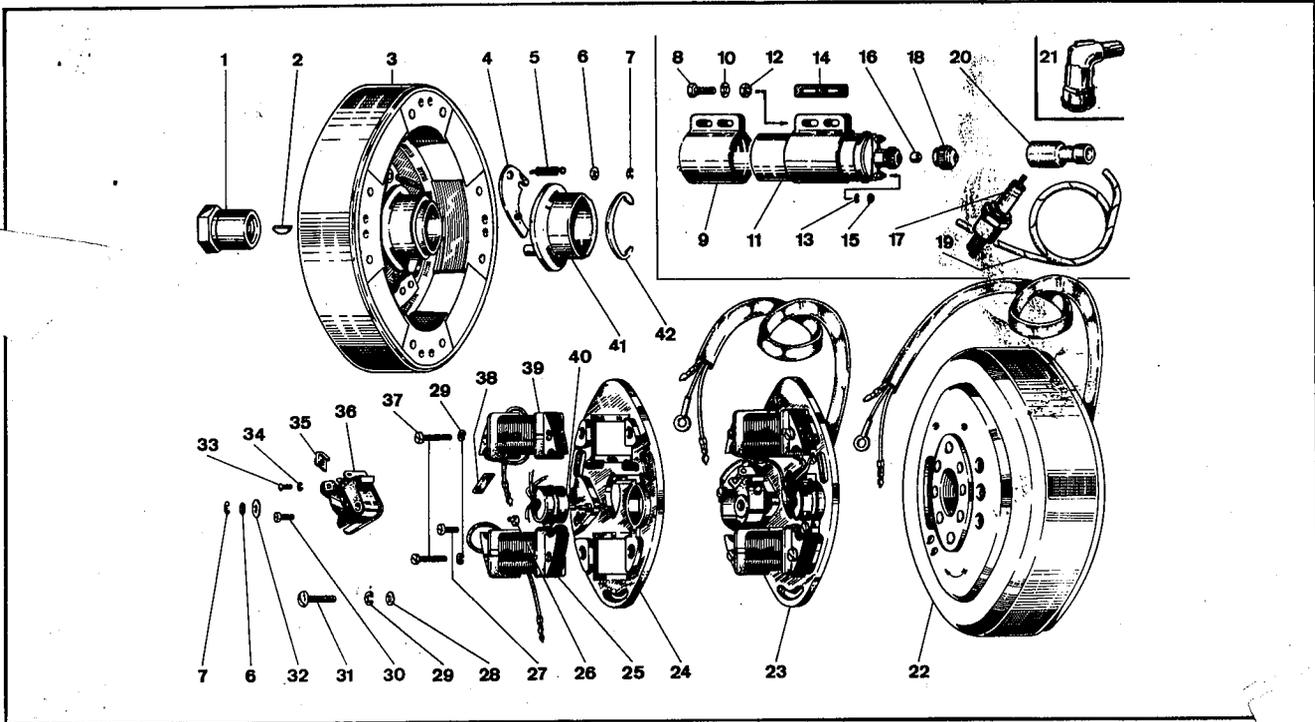


Item	Part number	Description	Q.ty
1	64360	Break-in instructions decal	1
2	64329	Bulb 6V - 0.6W	1
3	28789	Rubber gasket	1
4	64328	Bulb holder, speedometer	1
5	64326	Bracket, speedometer	1
6	64327	Knob	1
7	64332	Gear, speedometer drive	1
8	28794	Washer (6.5 x 12 x 1 mm.)	2
9	29818	Speedometer drive, assembly	1
10	64331	Speedometer inner cable	1
11	64330	Speedometer cable, assembly	1
12	64325	Speedometer (Ø 60 mm. - 100 M.P.H.), assembly	1

Item	Part number	Description	Q.ty
13	64324	Horn (6V - 24 W)	1
14	6095	Bolt (6 x 1 mm.)	1
15	29997	Rubber bushing	1
16	01.4519	Washer (Ø 6.4 mm.)	1
17	22819	Lock nut (6 x 1 mm.)	1
18	45790	Rubber cap, stop switch	1
19	42694	Nut	2
20	45788	Stop light switch	1
21	21879	Strap (110 mm.)	2
22	21877	Strap (150 mm.)	4
23	9315	Grommet	4
24	64111	Wiring connections	1
25	64163	Ground wire	1

Table 17

Flywheel magneto - H.T. coil - Spark plug



Item	Part number	Description	Q.ty
1	64154	Nut	1
2	6365	Key	1
3	64035	Flywheel, magneto	1
4	64036	Counterweight, automatic adv.	1
5	64037	Spring, automatic advance	1
6	64039	Washer	2
7	64038	Circlip	3
8	6669	Bolt (6 x 1 mm.)	2
9	45639	Clamp	1
10	6280	Washer (∅ 6.4 mm.)	2
11	45462	H.T. coil	1
12	6116	Nut (6 x 1 mm.)	2
13	6475	Spring washer (5.3 - UNI 1751)	2
14		Not supplied as spare part	
15	7166	Nut (5 mm. - UNI 207)	2
16	45729	Grommet	1
17	26984	Spark plug	1
18	45728	Cap, H.T. coil	1
19	21434	Cable, spark plug	1
20	42313	Cap, spark plug	1
21	45849	Screened cap, spark plug . A.R.	

Item	Part number	Description	Q.ty
22	64034	Flywheel magneto, assembly	1
23	64042	Induction coils, assembly	1
24	64043	Base, induction coils	1
25	64045	L.T. induction coil	1
26	45727	Contact breaker eccentric	1
27	45455	Screw	1
28	45178	Washer (4.3 mm. - UNI 1733)	3
29	9073	Spring washer (∅ 4.3 mm. - UNI 1751)	7
30	7203	Screw	1
31	21692	Screw (4 x 0.7 mm.)	3
32	64050	Washer, fiber	2
33	64048	Screw	1
34	64049	Spring washer	1
35	64047	Contact breaker base	1
36	64046	Contact breaker	1
37	45724	Screw	4
38	45721	Felt	1
39	64044	H. T. induction coil	1
40	45725	Condenser	1
41	64040	Cam, contact breaker	1
42	64041	Circlip	1