

OPERATING INSTRUCTIONS AND PARTS LIST FOR



MOTOR SCOOTER

— MODEL NUMBER 788.94370 —

This is the Model Number of your Allstate Motor Scooter. It will be found on a plate fastened to the chassis under the fuel cock. Always mention this number when communicating with us regarding the Scooter, or when ordering repair parts.

— HOW TO ORDER REPAIR PARTS —

All parts listed herein may be ordered through any Sears retail or mail order store. In ordering parts by mail from the mail order store which serves the territory in which you live, Selling Prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. The Part Number in this List.
2. The Part Name in this List.
3. The Model Number of the item.

This list is valuable. It will assure your being able to obtain proper parts service at all times. We suggest you keep it with other valuable papers.

SEARS, ROEBUCK AND CO



Fig. 1 - Sears Motor Scooter

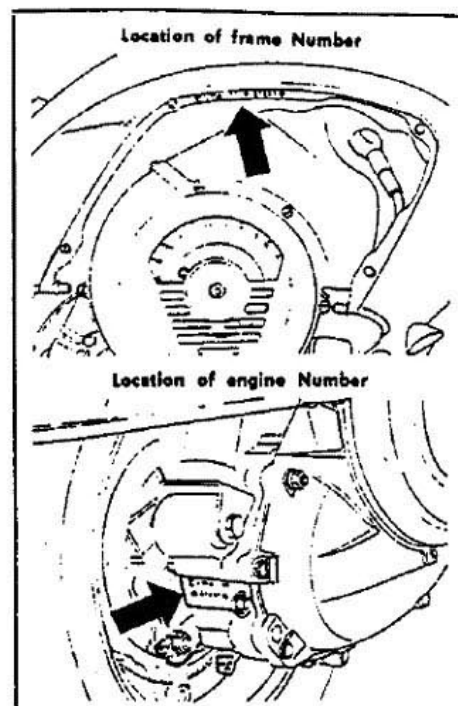


Fig. 2 - Location of serial number

Serial numbers are preceded by prefixes: VMA 1 T, for frame; VMA 1 M, for engine.

WARNING

In order to keep your scooter in perfect running condition and not to void the guarantee, always have your machine repaired at a Sears, Roebuck and Co. Store. Special care should be taken with regard to the fuel mixture which should be regular gasoline and oil of the make, grade and in the amount prescribed in this booklet.

Ethyl gasoline should never be used.

Do not use Allstate compounded motor oil or other Premium Heavy Duty Oil with detergents.

The inexperienced operator should exercise caution in applying front wheel brake, to avoid locking.

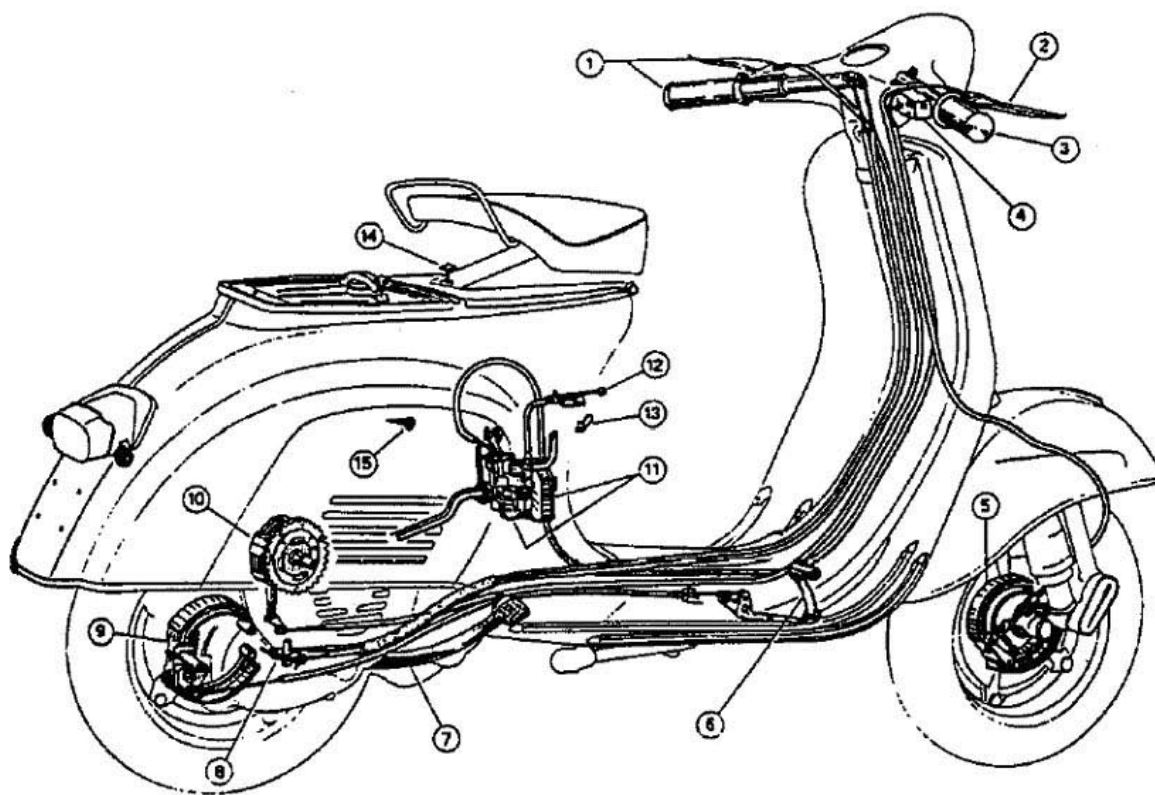


Fig. 3 - Controls of Sears Scooter

1. Gear change twistgrip with clutch control lever - 2. Front brake lever - 3. Throttle control grip - 4. Light and dimmer switch - 5. Front brake jaws - 6. Rear brake pedal - 7. Kickstarter - 8. Gear selector - 9. Rear brake jaws - 10. Clutch - 11. Carburetor, air cleaner - 12. Starter push pull rod - 13. Fuel cock - 14. Knob for adjusting engine valve - 15. Lever for removing engine flap.

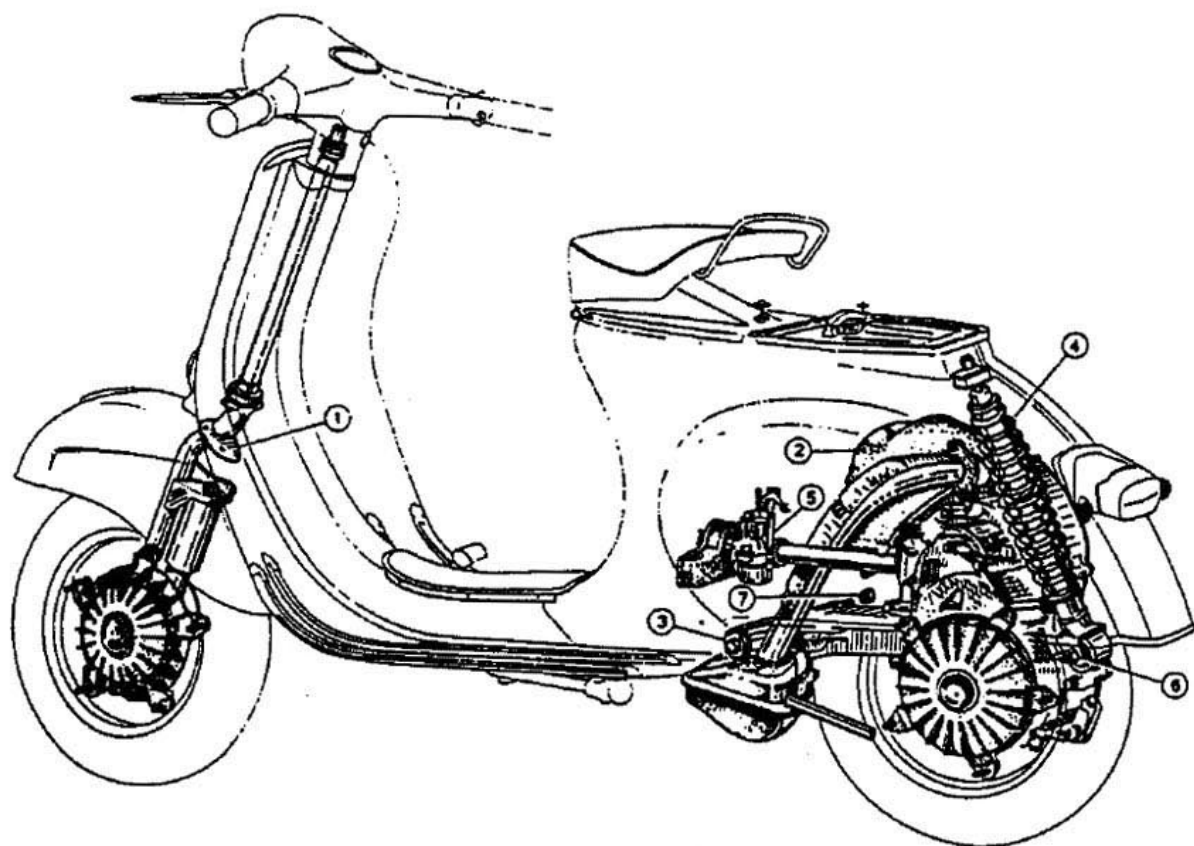


Fig. 4 - Engine installation and suspension

1. Steering column and front suspension - 2. Engine - 3. Crankcase half, clutch side, with swinging arm - 4. Rear suspension spring with hydraulic damper. - 5. Screw securing carburettor - 6. Bolt securing rear damper - 7. Bolt securing engine.

MAIN SPECIFICATIONS

Fuel consumption:

(Gasoline-oil mixture)	118 miles per gal.
Max. speed	49.7 m.p.h.
Wheel base	45.7 in.
Max. width on handlebars	26.4 in.
Max. length of the scooter	65 in.
Max. height	40 in.
Min. height of floorboard	8.9 in.
Turning circle	65 in.
Weight (unladen):	160 lbs.

Frame. - Of pressed and spot-welded steel sheet, with stream-lined monocoque-type structure.

Suspension. Both front and rear wheels: coil spring and hydraulic shock absorber.

Engine. - Two-stroke, flat cast iron cylinder and cast aluminium alloy cylinder head. Cooling effected by centrifugal fan which is embodied in the flywheel of the magneto.

Displacement	121.17 cc. (7.39 cu.in.)
Bore	55 mm. (2.16 in.)
Stroke	51 mm. (2.01 in.)
Effective power at 4500 rpm	4.8 HP
Compression ratio	7.2

Transmission. - Directly from engine to rear wheel through clutch, cushion drive and gear box.

Starting. - By means of kickstarter, right hand side of scooter.

Gear box. - 4-speed drive with mesh gears in oil bath. Its two-cable control is coupled with that of the clutch,

on left hand side of handlebars.

Engine to wheel transmission ratios:

First	14.74	to 1
Second	9.80	to 1
Third	7.06	to 1
Fourth	5.31	to 1

Clutch. - Wet type; multiplate, on the layshaft.
Ignition. - By flywheel magneto.

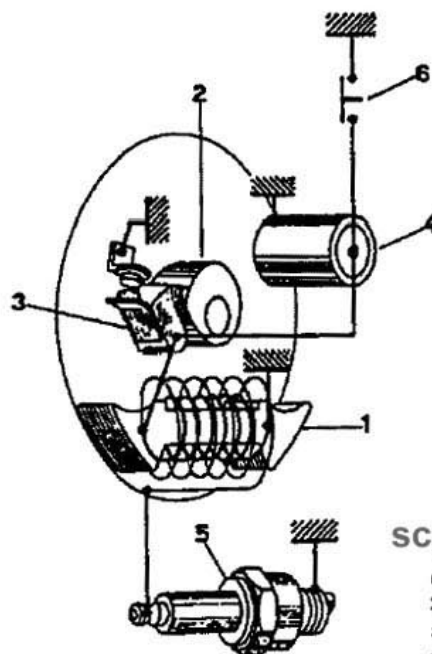


Fig. 5 - Ignition diagram

1. Hall coil in flywheel magneto - 2. Rotor cam - 3. Breaker - 4. Condenser - 5. Spark plug - 6. Engine cut out on switch.

in the normal position. The key can be extracted from the lock even if the handlebars are free.

Do not lubricate the steering lock.

Central Stand. - A two-legged stand is arranged under the floorboard. A strong return spring holds it in contact with the floorboard and keeps it from vibrating while the scooter is being ridden.

Tool Kit. - 1 box wrench (11-17-21 mm.); 2 single

open-ended wrench (7-8 mm.); 1 screw-driver. The hand tools are contained in a roll which is placed in the tool box.

Speedometer. - The speedometer has its housing in the middle of the handlebars and adds to the performance and appearance of the scooter.

Accessories (See specific Table of « Parts List »). - On request the Sears scooter can be equipped with the spare wheel and bracket, and rear pillion seat.

ELECTRIC WIRING DIAGRAM

Note - The installation diagram here carried out and the position of the various units correspond to those which are really mounted on the vehicle.

Going into details (see figure), there is to notice:

- front side: headlamp, main switch and horn units.
- in the middle, bottom: the brake pedal joined with the Stop-switch; furthermore the L. T. socket, the sparking plug, the flywheel magneto.
- rear side: tail lamp provided with two bulbs.

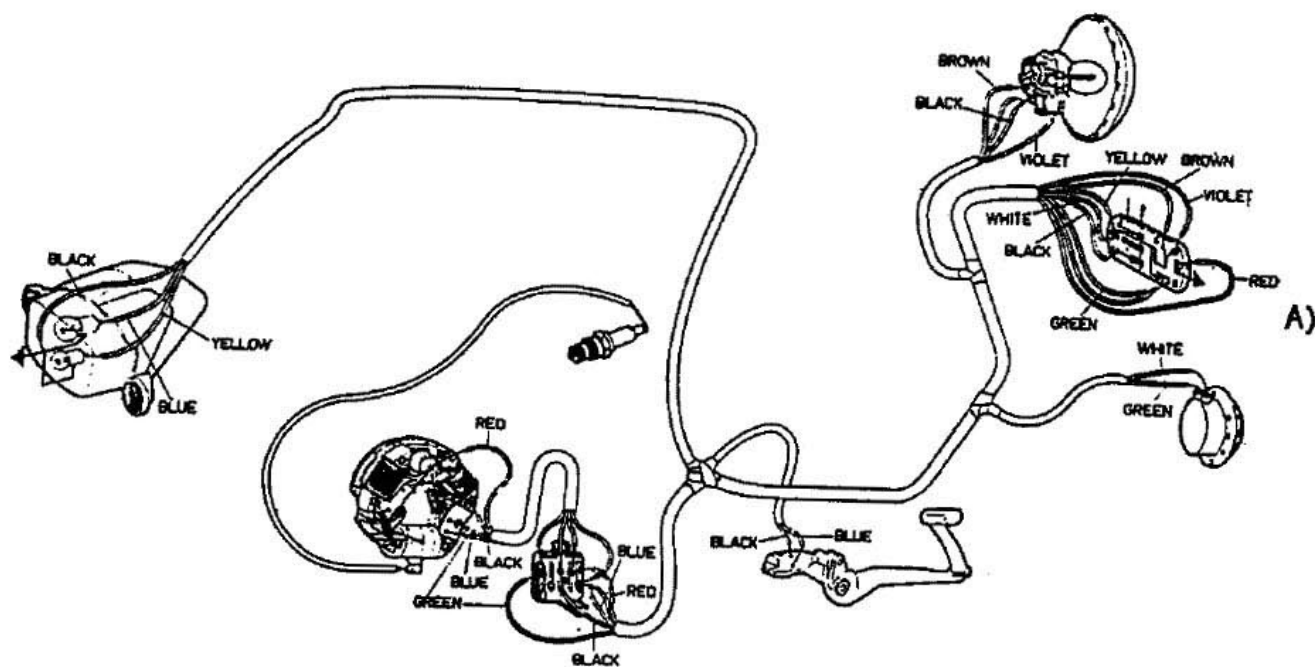


Fig. 8 - Scheme of Electric Wiring
A) Installation diagram - B) Electric scheme

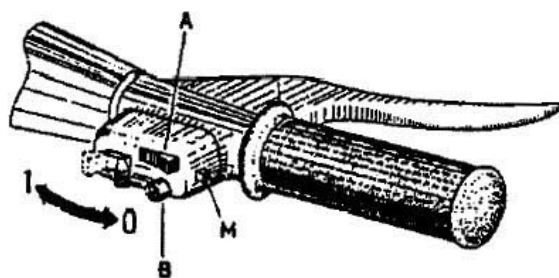
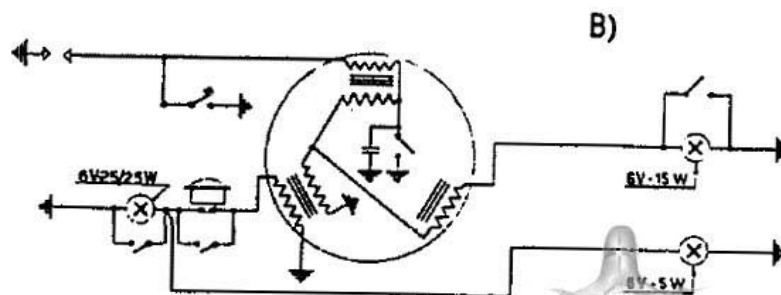


Fig. 9 - Light and dip switch

Switching lever positions:

0 - Lights off - 1 - Head lamp and tail on.

Other controls: M: Engine cut-out - A: Lever for country and traffic beam - B: Horn button.



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OPERATION

Fuel supply. - Fuel mixture, both during and after running in, should be composed of regular gasoline and pure mineral oil SAE 30 at 2%, i. e.:

— $\frac{1}{4}$ pint of oil to $1\frac{1}{2}$ gallons of gasoline.

When using pre-diluted or additive oils, or oils for out-board motors, mix $\frac{1}{4}$ pint of oil per gal.

Keep the breather of filling cap clean.

Oil level. - Remove the level screw, on crankcase, marked « OLIO » as indicated on Fig. 20, to check oil level in gear box before starting the engine.

The scooter standing upright, oil should just be about to flow out; otherwise top up with ALLSTATE REGULAR S. A. E. 30.

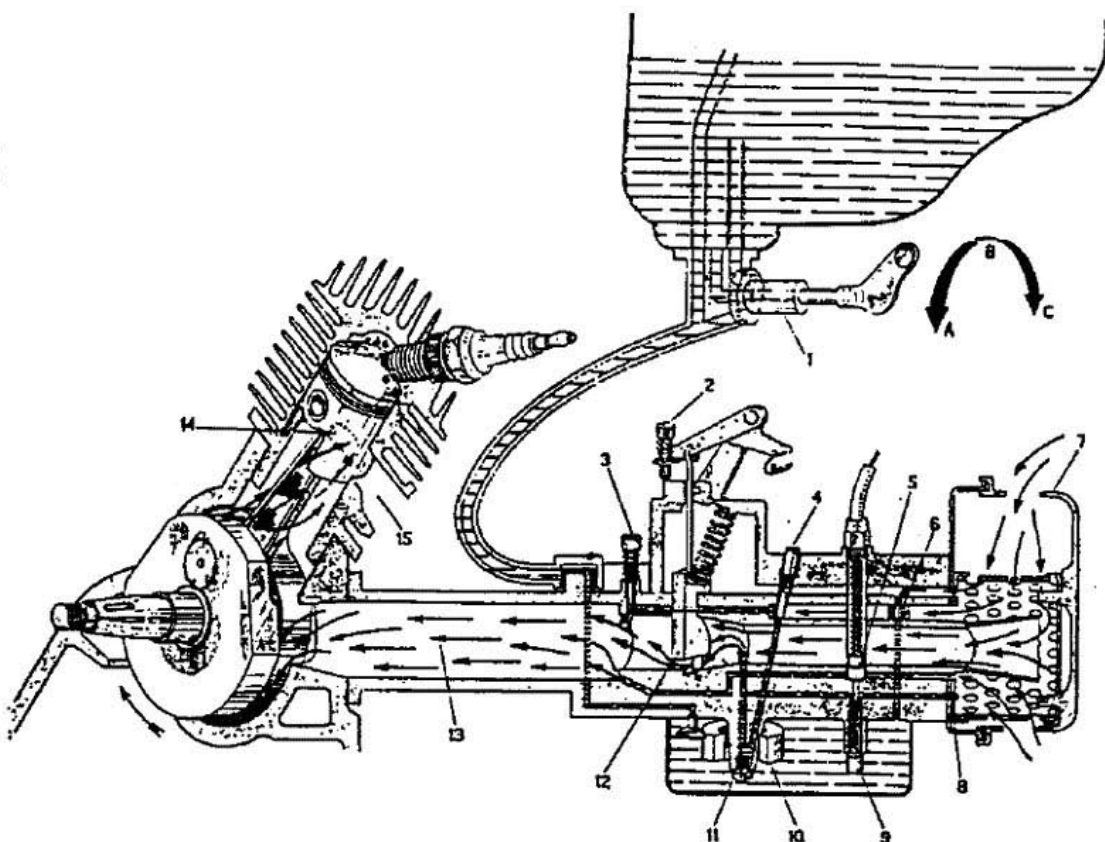


Fig. 10 - Feeding circuit

1. Fuel cock lever: A) Reserve, B) Open, C) Closed - 2. Throttle slide set screw - 3. Idling adjuster - 4. Idling jet - 5. Starter valve - 6. Air vent for idling jet - 7. Air cleaner - 8. Air vent for main jet - 9. Starter jet - 10. Float - 11. Main jet - 12. Throttle slide - 13. Inlet port - 14. Transfer ports - 15. Exhaust duct.

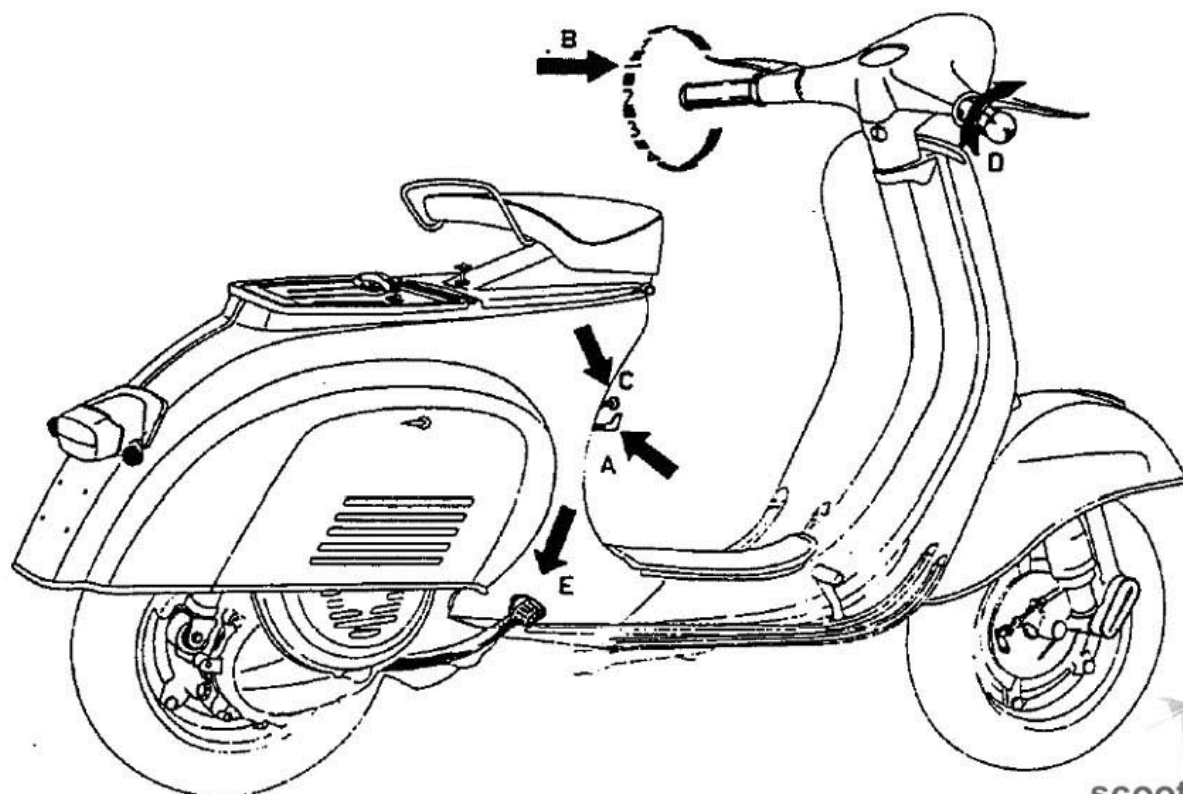


Fig. 11 - Operations to carry out for starting the engine

1. Open the fuel cock - B: select « neutral » - C: operate starter, push pull rod (with cold engine) - D: throttle control grip in idling position - E: depress the kickstarter and turn grip « D » by short strokes.

Running-in. - Important rules to be followed while running-in (600 miles):

- Do not insist by fully opening out the throttle.
- Change oil in the gear box and check that nuts and bolts are not slack after the first 600 miles.

Starting. - Open the fuel valve, put the gear box in neutral and slightly open the throttle in slow running position, kick the starting lever.

With cold engine, operate starter push pull rod. Push said rod back as soon as the engine fires.

See Fig. 10; note the three positions of the fuel valve: open, closed, reserve.

Caution. - Do not open throttle wide when releasing clutch.

In case of starting troubles, due to engine being flooded (unvaporized fuel mixture has reached the cylinder and combustion becomes therefore very difficult), proceed according to either one of the following methods:

- a) Push-start the scooter: shift into second gear, de-clutch and push the machine; quickly release the clutch lever and pull it back as soon as the engine starts.
- b) Close the fuel cock, remove the spark plug and rotate the engine by means of the kickstarter. Wipe the plug dry and replace. Open the fuel cock and kick the starting lever.

For access to the engine and remove the spark-plug, rotate the lever fig. 3 - n. 14, then take off the engine flap.

Extract the spark-plug, using the box wrench.

Setting the machine in motion. - Let the engine idle, depress the clutch and turn the gear change twistgrip so that the line engraved on it coincides with the figure « 1 » (1st gear) engraved on handlebars (see Fig. 12). Now let in the clutch gently, while opening the throttle gradually to set the machine in motion.

Gear change. - On attaining the required speed in 1st gear, quickly close the throttle, release the clutch and turn the gear change twistgrip so that the engraved line coincides with figure « 2 » (2nd gear); let in the clutch and open the throttle.

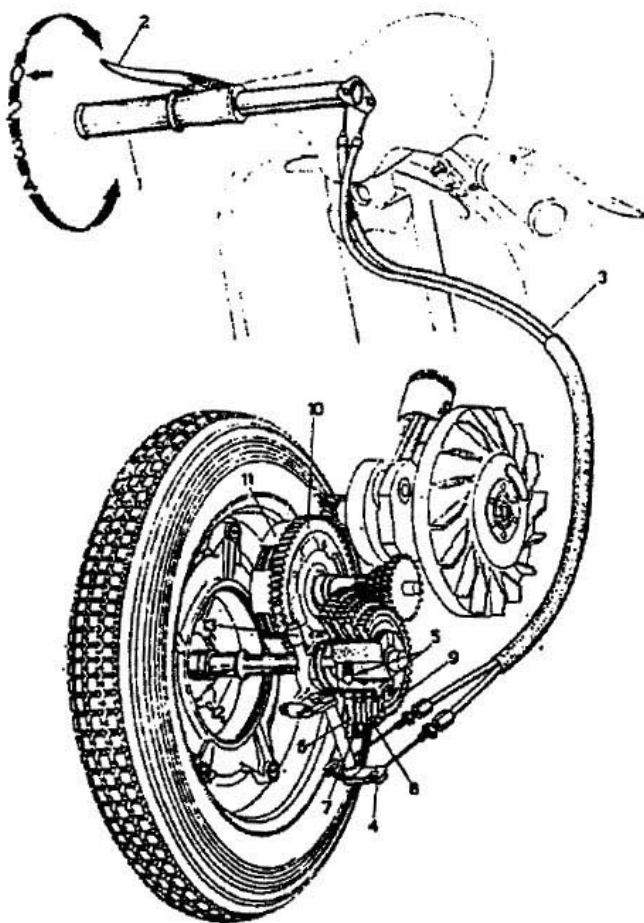


Fig. 12 - Drive system

1. Gear change twistgrip - 2. Clutch control lever - 3. Gear change control cables - 4. Gear shifter - 5. Selector group - 6. 1st gear - 7. 2nd gear - 8. 3rd gear - 9. 4th gear - 10. Cush gear - 11. Clutch - 12. Mainshaft - 13. Stirrup for gear change.

N. B. - Position 1-2-3-4 of the gear change twistgrip correspond to 1st, 2nd, 3rd and 4th gear respectively; « 0 » indicates the neutral position.

Repeat this procedure for changing into 3rd and 4th gear and for changing down.

See the drive system on Fig. 12.

When you reduce the speed of your machine, change down without delay to avoid irregular engine running and stalling at low revs.

Do not turn the gear change twistgrip while the engine is not running.

As soon as gear change troubles arise, particularly when the control becomes hard, customers should have their machines adjusted by a Sears Store.

Slow running adjustment. - No hand tool is required for this job. Pivot the seat forwards, remove the top cover, and the idling revs can be raised or reduced respectively.

simply tightening or slackening the adjuster screw « A » fig. 13 (i. e., n. 2, Fig. 10). This screw controls the throttle slide valve.

On the carburettor body is a spring-loaded screw (« C » fig. 13, i. e., n. 3 fig. 10) that controls the flow of car-

burettor air through the duct from the idling jet, and consequently the idling revs. We recommend that customers refrain from re-setting this screw (and the set screw « B », fig. 13, provided for adjusting the throttle cable play) unless absolutely necessary or during dismantling and re-assembling operations that should, anyway, be entrusted to a Sears Store.

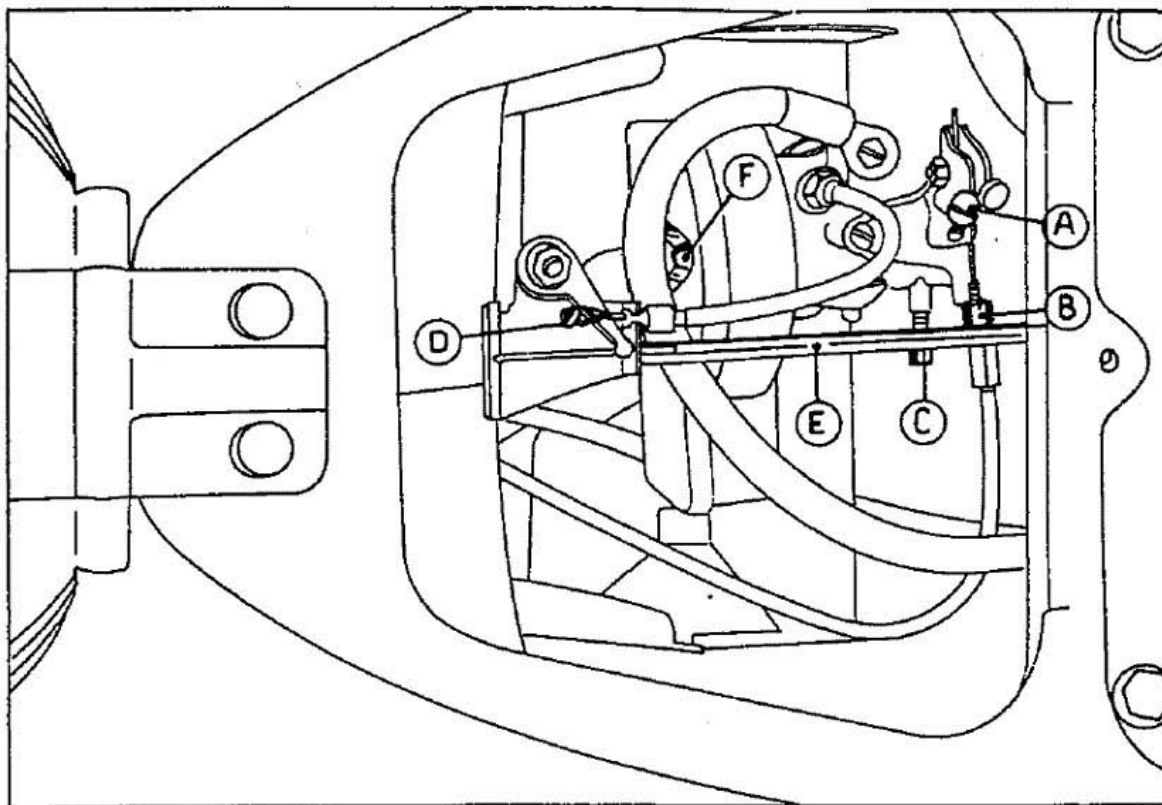


Fig. 13 - Access to carburettor and air cleaner assy.

Stopping the engine. Select in « neutral », then push the earthing button. This will leave the cylinder full of fuel vapours, and the next start will be much easier.

Tires. - The wheels are interchangeable, i. e., they can be assembled either in front or rear, provided of course that they are inflated to pressures respectively hereunder prescribed.

When a flat tire is to be replaced, unscrew the five nuts which secure the wheel to its flange, pull wheel sideways off the studs (see Fig. 14), repair it or replace with spare wheel.

To remove the tube, first deflate, then separate the wheel rims by unscrewing the nuts which join them (see Fig. 15).

Tire pressure should be $22,5 \div 23,5$ psi on rear wheel, $17 \div 18$ psi on front wheel. If the scooter is ordinarily ridden by both driver and passenger, the pressure of the rear tire should be $33 \div 35,5$ psi.

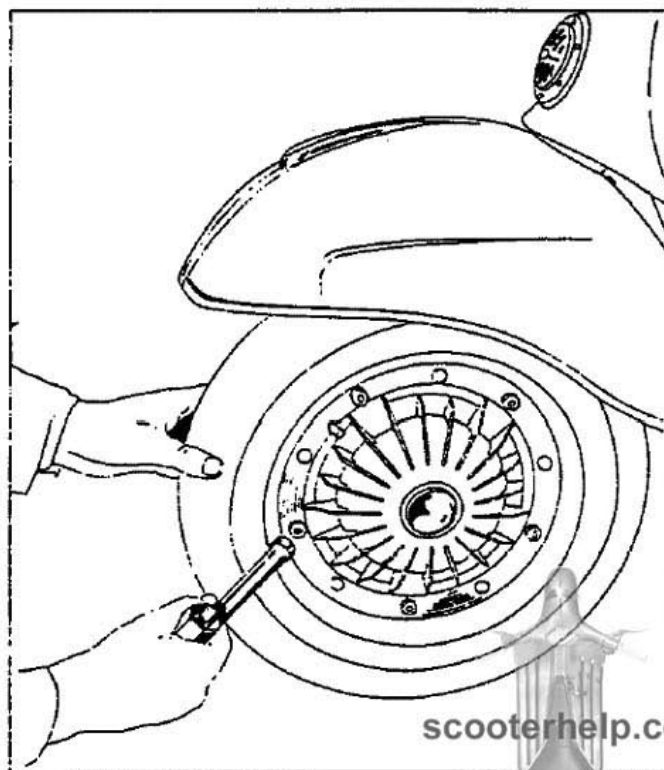


Fig. 14 - Dismantling the (front) wheel

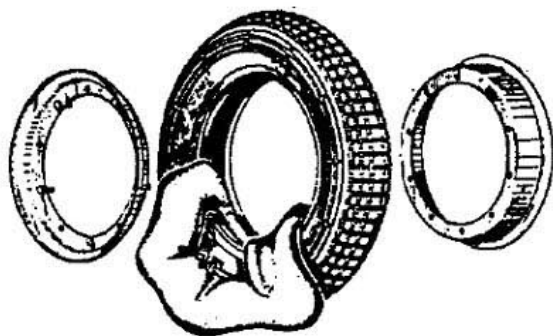


Fig. 15 - Removing the inner tube

Brake adjustment. - Brakes are properly adjusted if:

- the wheel rotates freely when respectively control lever or pedal are in resting position;
- the braking action starts as soon as respective controls are operated.

These conditions are achieved adjusting the cables by means of screws indicated with an arrow in Fig. 16.

Adjustment of clutch control. - Adjustment of clutch controls is achieved operating on adjusting nut (a), screwed to the engine stirrup (see Fig. 17).

The cable is to be tensioned or loosened, as the case may be so that control lever, on handlebars, makes a stroke of 2 mm. (0.078") before lever (b), on engine starts moving.

Wrong play in the control may cause the clutch plates burning out even in normal running conditions.

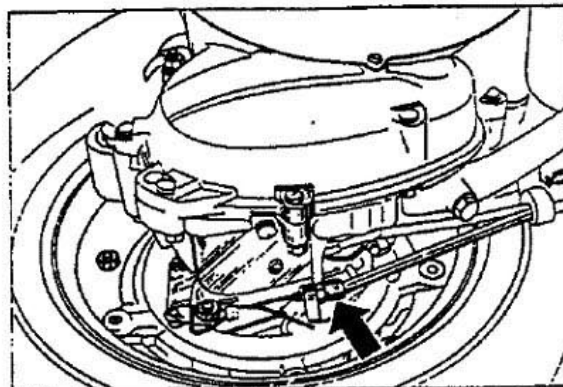
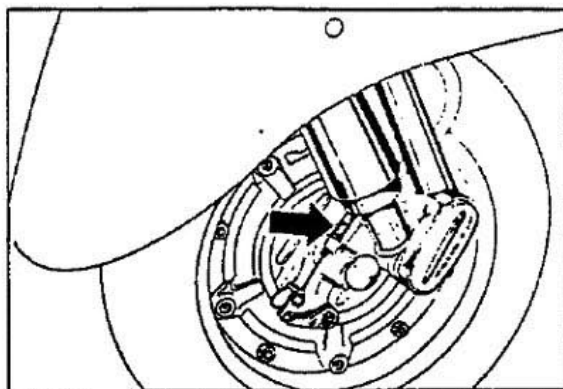


Fig. 16 - Brake adjustment

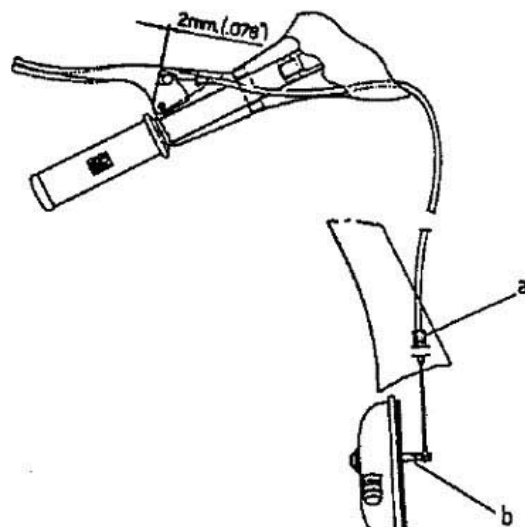


Fig. 17 - Adjustment of clutch control

MAINTENANCE

Cleaning the scooter. - Brushing kerosene and wiping dry clean rags is advisable for external cleaning of engine.

All painted surfaces should be washed with water, rinsed by means of a sponge and wiped dry with a chamois. Do not use kerosene on such surfaces, since it damages paint and turns it dull.

If necessary, blow the head lamp reflector clean or wipe off dust with a very soft feather. Do not use a cloth and keep your fingers off reflector surfaces.

Before setting the machine in motion, (if it has been delivered directly to the customer by the Factory) check oil level in gear box by unscrewing the level screw marked « OLIO » from the crankcase (see Fig. 20). The scooter standing upright, oil should just be about to flow out.

After the first 600 miles. - Replace oil in the gear box by the procedure as explained in the lubrication chart, page 12. The crankcase can be drained through the hole indicated in Fig. 20.

Every 2.500 miles:

Check oil level in the gear box (see on pages 10-12).

Grease all joints on the brake controls and the gear shifter.

Clean the sparkplug electrodes with very fine emery cloth or suitable files, and adjust the gap to 0.6 mm. (0.023").

Inspect the insulation material of sparkplug; replace the latter if the porcelain is cracked. Wash with neat gasoline.

Use the sparkplug type Marelli CW 240 N; Bosch W 240 T1; Champion L 86; AC 42 F.

Important: using the proper type of sparkplug will eliminate many engine troubles.

Pivot the seat forwards, remove the tool box and the choke control cable, then dismount the fuel tap rod (fig. 13, D-E); next unscrew the wing-nuts «F» (fig. 13) and remove air cleaner. Extract the filter, wash in gasoline and if possible air blast dry.

Remove the rubber plug of front suspension and refill with grease the concerning housing.

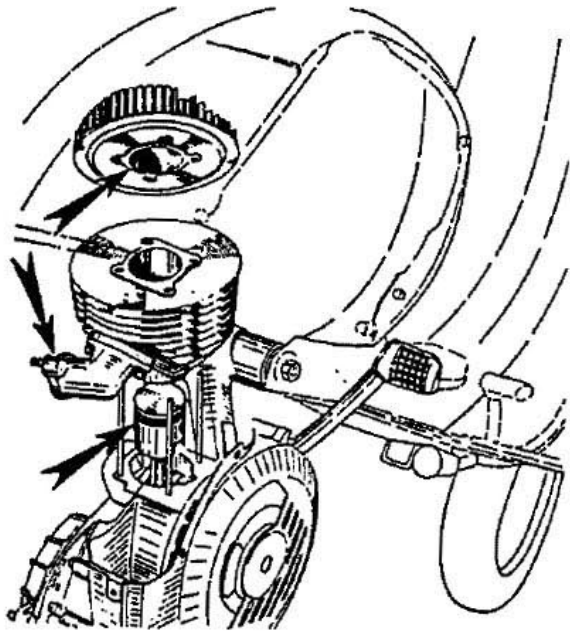


Fig. 18 - Cleaning the cylinder head, cylinder and piston

6) - Clean the lubricators on front wheel hub and refill them by means of a grease gun.

N. B. - All operations indicated hereunder should be carried out by a SEARS store.

7) - Lubricate the speedometer drive pinion and flex drive.

8) - Decarbonize the engine as explained hereunder. Remove the carburettor (screw n. 5, fig. 4), the rear wheel, the muffler, release the rear damper unit (n. 6, fig. 4), then rotate the engine downwards: remove the cooling hood, the cylinder head and the cylinder (see Fig. 18). Decarbonize the piston crown and the cylinder ports from all carbon deposits. Decarbonize the inner side of the cylinder head. Carefully clear the cylinder carbon deposits. Heat the exhaust pipe of the muffler and clean it either by scraping internally with a hooked wire or blowing air through from the other orifice; in both cases the muffler should be held so that the exhaust pipe is turned downwards.

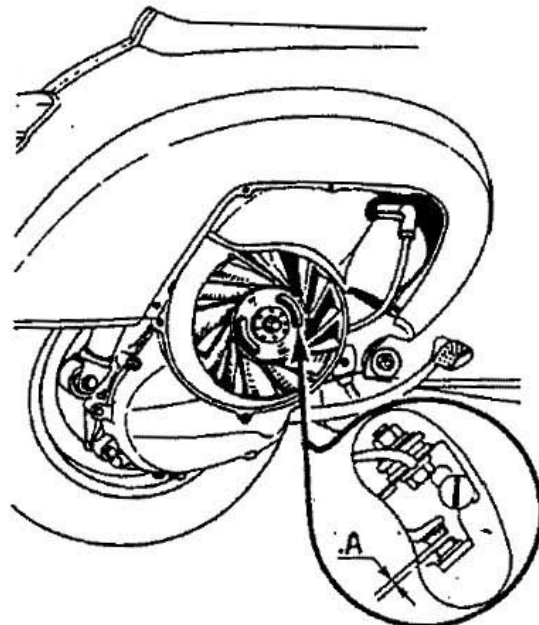


Fig. 19 - Breaker points

A) Max. gap of breaker points «A» should be 0.011" - 0.019"

Every 5.000 miles:

Clean the breaker points.

In order to avoid ignition troubles or abnormal running, have the breaker points adjusted in a Sears store; the gap should not be more than 0.011" - 0.019" (see Fig. 19) and the points should begin to open when the current in the primary ignition circuit has attained its peak value.

Grease the control cables.

In such a case, cleaning the scooter thoroughly is advisable.

With engine not running remove the spark-plug, next introduce 10 ÷ 15 cc. of **Allstate - Regular Oil SAE 30** or **Allstate Outboard Motor Oil** through the threaded hole of the latter.

3) - Change the oil in the gear box, as stated on page 12.

4) - Grease the felt wick lubricates the cam of flywheel magneto (by a Sears Store).

In case of shock-absorber troubles, overhaul or simply clean the assembly and change oil.

These operations should be carried out by your SEARS store.

Disuse:

Then operate the kickstarter three or four times.

3) - Rest the floorboard on two wooden blocks in order to take the weight off the tyres.

4) - Drain all fuel from both tank and carburettor.

5) - Grease all unpainted metal parts.



LUBRICATION CHART

PART TO BE LUBRICATED	OPERATION	TIME	TYPE OF LUBRICANT
Engine	Mix gasoline with the following amount of lubricating oil: — $\frac{1}{4}$ pint of oil to $1\frac{1}{2}$ gall. of gasoline. N. B. - With pre-diluted or additive oils, mix $\frac{1}{4}$ pint of oil to each gallon of gasoline.	At each refilling of the fuel tank.	Non - detergent SAE 30 MOTOR OIL
Gear Box	Warm up the engine and drain off oil. Pour some fresh oil in and run the engine for a few seconds. Flush and refill with new oil (about 8.5 oz.). Refill with new oil to oil level hole.	After the first 600 miles and every 5000 miles. Every 5000 miles.	Allstate Regular SAE 30.
Front wheel hub Speedometer flex drive and pinion	Lubricate with grease gun.	Every 2500 miles.	High Pressure Chassis.
Joints on brake controls	Grease.	Every 2500 miles.	Allstate all - purpose Gear Lubricator SAE 140.
Ratchet quadrant of gear shifter	Grease.	Every 2500 miles.	Allstate all - purpose Gear Lubricator SAE 140.
Control cables	Clean and lubricate.	Every 5000 miles.	Allstate all - purpose Gear Lubricator SAE 140.
Felt of flywheel cam	Small spot of grease on the felt.	Every 5000 miles.	Allstate Bearing Grease.
Shock-absorbers	Change oil.	Only when the shock - absorber is out of order.	Allstate Shock Absorber Fluid.

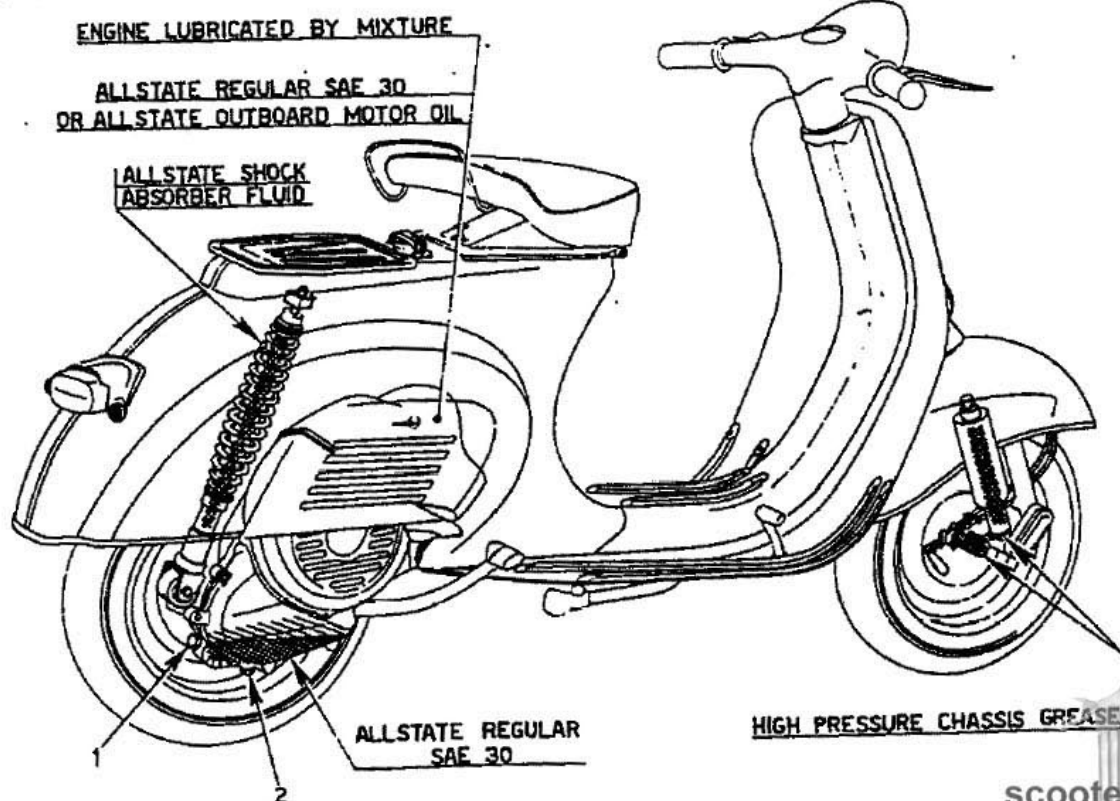


Fig. 20 - Lubrication scheme
1. Filling hole - 2. Draining hole

LOCATING TROUBLES AND RUNNING IRREGULARITIES

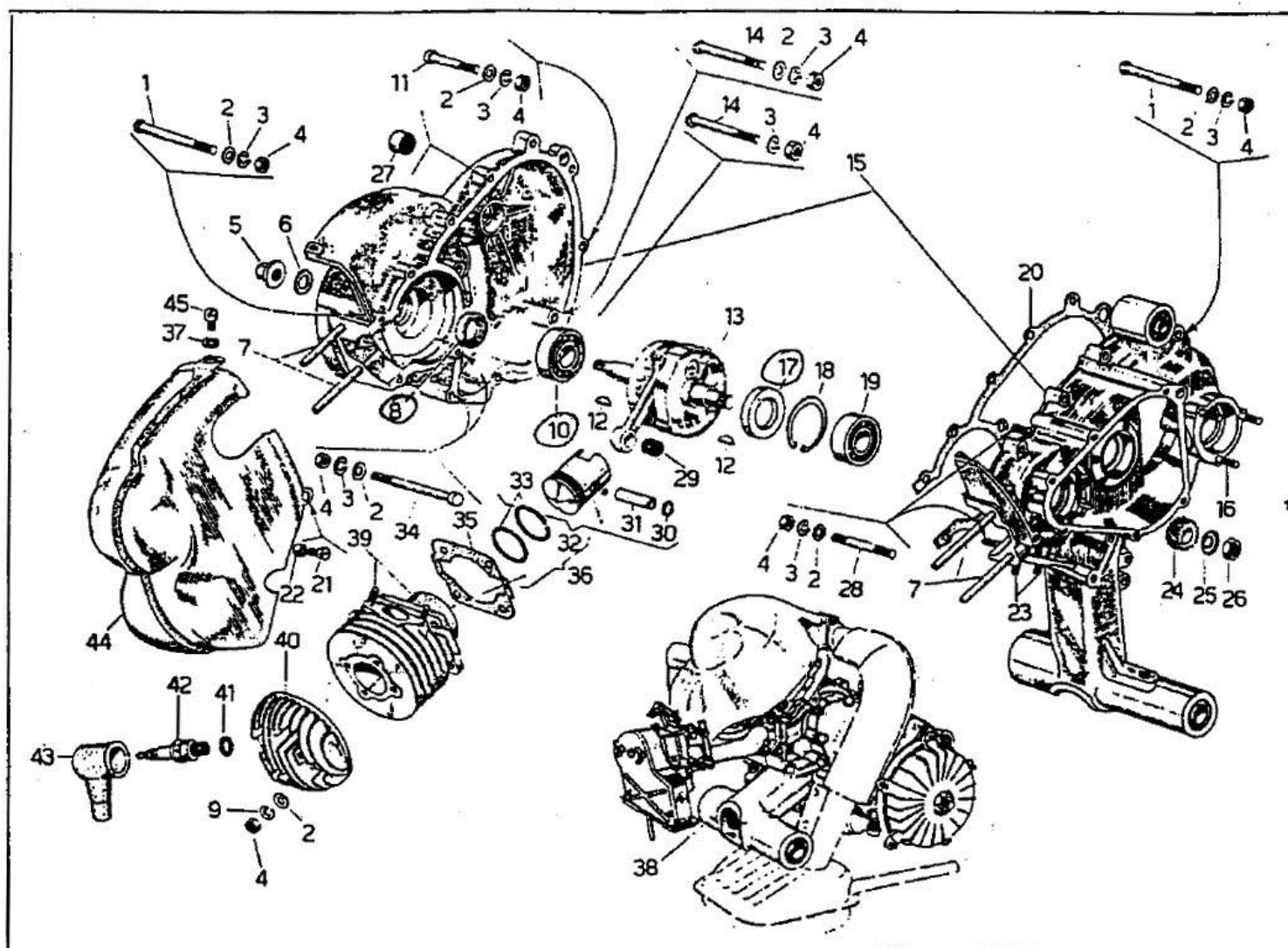
Carry out following checks when the engine does not start easily or runs irregularly.

Locating the trouble	Remedies	Locating the trouble	Remedies
DIFFICULT STARTING			
1. - Fuel system.		4. - Clutch troubles.	
Fuel tank empty.	Turn to « reserve ». Refill as soon as possible.	a) Clutch snatches: Gear pinions not lubricated properly.	Top up oil level. Tighten the screw on draining hole.
Filter on carburettor Fuel tap body Carburettor body Main jet Atomizer Packing of fuel tap	Clogged dirty	b) Clutch slips: Spring feeble. Plates worn or burnt.	Replace. Replace both plates and spring.
2. - Carburation		c) Clutch does not disengage completely: Excessive play on control cable.	Adjust (see fig. 17).
Engine flooding	See page 8.	5. - Gear pinions disengage of own accord.	Adjust.
Air cleaner choked or dirty	Clean (see page 11).	Gear change control cables out of adjustment.	Should the control have excessive play in neutral, tension control cables by screwing back the respective adjuster screw (on cable sheath end, ratchet quadrant side) with open ended wrench. If the cable tension in neutral is correct but the reference marks of the handlebars do not tally, tighten one of the adjuster screws and unscrew the other one to the same extent, so that the cable tension is not altered.
Starter valve sticking	Release.		
3. - Ignition		Dogs of gear pinions chipped or worn.	Replace the pinions.
Sparkplug dirty	Disconnect the plug lead. Check if sparking occurs between lead and crankcase when the kickstarter is operated. Clean. Correct gap to 0.6 mm. (.023").	6. - High fuel consumption.	
Porcelain of sparkplug cracked	Replace the plug.	I - Fuel level too high in carburettor:	Replace float pin.
Breaker points dirty, partially worn or pitted.	Clean with suitable files or very fine emery paper.	II - Air cleaner choked or dirty.	Clean with pure gasoline and blow dry.
Gap between breaker points incorrect.	Correct (see fig. 19).	III - Jets or vents of the carburettor blocked or dirty; incorrect or increased diameter.	Dismount and clean carburettor in gasoline and compressed air. For type and diameter of jets and vents, see page 5.
Breaker points completely worn or pitted.	Replace.	IV - Retarded ignition.	Re-time.
Timing wrong.	Re-time ignition.	V - Poor compression.	See No. 2 of this paragraph.
INCORRECT RUNNING		7. - Controls not operating properly.	
1. - Lack of power.		Inner cables rusted.	Lubricate or, if necessary, replace.
Muffler outlet pipe carbonized	Clean (see page 11).	Excessive play.	Adjust.
Exhaust port partially closed by carbon deposit.	Decarbonize cylinder, piston and cylinder head. (See page 11).	8. - Steering column becomes stiff.	
2. - Poor compression.		Top race of top ball bearing too tight.	Slacken.
Sparkplug not well screwed down in cylinder head.	Tighten (box wrench).	Bottom races of the two bearings pitted.	Replace.
Cylinder head not fitting properly into the spigot on top of cylinder	Set the head properly and tighten the nuts.	9. - Excessive play of steer. column	
Piston rings gummed up.	Clean the rings and grooves.	Top race of top bearing loose.	Tighten.
3. - Explosions at muffler or carburettor.		10. - Poor braking.	
Sparkplug carbon-coated or with excessive electrode gap	Replace or clean the plug and correct the gap 0.6 mm. (.023").	Stroke of pedal lever too long.	Adjust (see Fig. 16).
Carbon pearls on sparkplug insulation.	Clean.	Brake linings oily or worn down	Wash with gasoline or replace.
Pre-ignition.	a) Fit on a proper type of sparkpl. b) Re-time the ignition.	Brake drums and linings scratched.	Replace.
Tip of contact breaker loose.	Replace.		
Condenser screw loose.	Tighten.		
Not enough mixture flowing to the carburettor.	See paragraph « Difficult starting », No. 1.		



TABLE I

PARTS LIST



PARTS LIST FOR ENGINE

Crankcase - Cylinder - Crankshaft

(Table I)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	S. 8499	Bolt , long, for securing crankcase halves	6	686	Washer , locking
2	S. 3057	Washer , plain	7	46261	Stud , cylinder fastening
3	S. 3107	Washer , spring	8	S. 8720	Seal , spring loaded, for crankcase, flywheel side
4	S. 1107	Nut , for locking cylinder head and crankcase halves	9	S. 6977	Washer , spring, securing cylinder and head
5	S. 1545	Nut and collar	10	S. 7160	Roller bearing , flywheel side

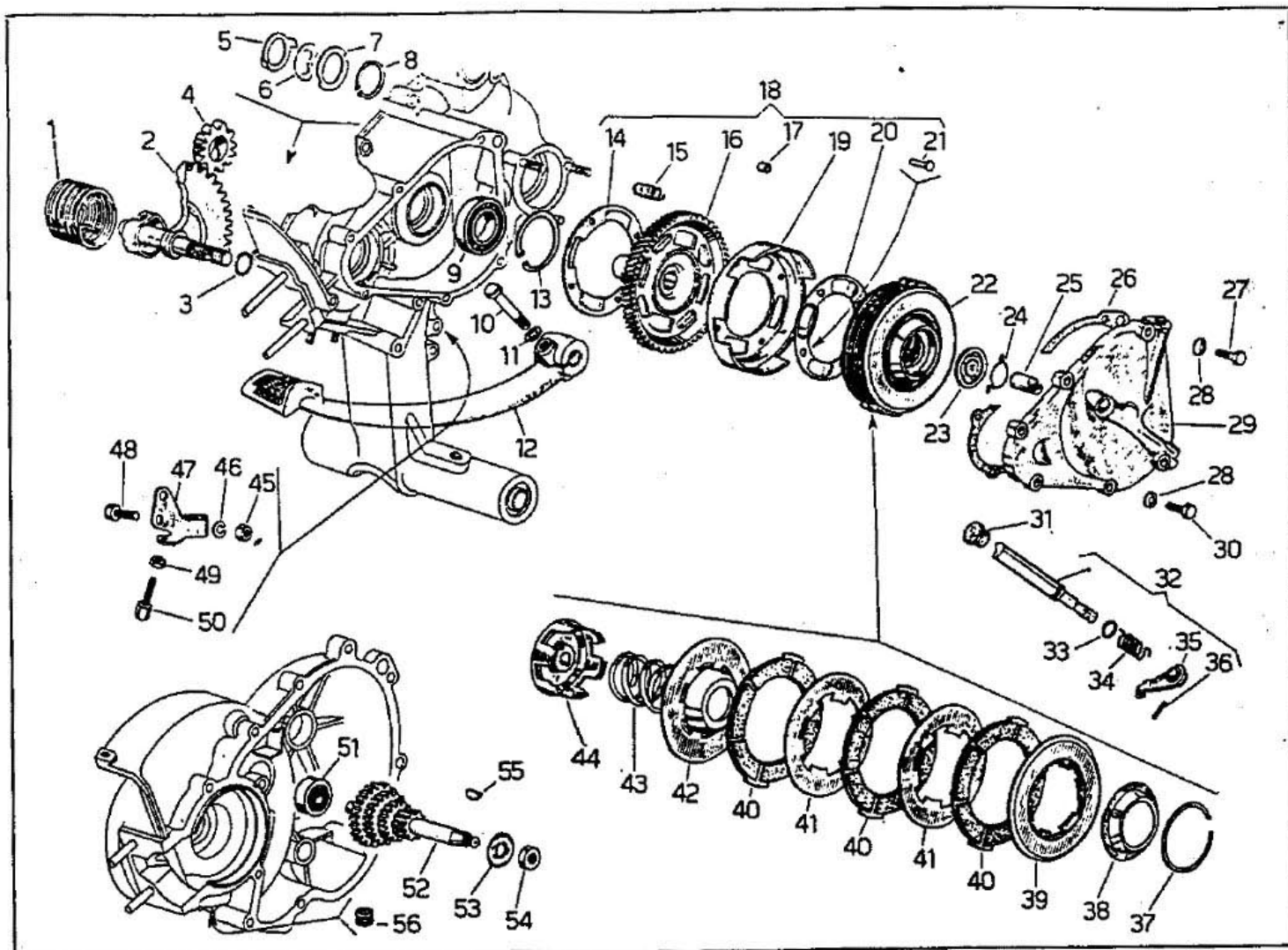


Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
11	S. 8420	Bolt , short, securing crankcase halves	32	91356	Piston , 1st o/s, wrist pin (with parts Figs. 30 - 31 - 33).
12	267	Key	32	91357	Piston , 2nd o/s, wrist pin (with parts Figs. 30 - 31 - 33).
13	111311	Crankshaft, g. a. (with part. Fig. 29).			
14	S. 8421	Bolt , securing crankcase halves	32	91358	Piston , 3rd o/s, wrist pin (with parts Figs. 30 - 31 - 33).
15	110699	Crankcase, g. a. (With parts Figs. 1 - 2 - 3 - 4 - 11 - 14 - 20 - 34 T. I; 56 T. II; 21 T. III; 34 - 35 - 36 T. VIII).	32	91359	Piston , 4th o/s, wrist pin (with parts Figs. 30 - 31 - 33).
16	S. 456	Stud , securing flange for jaw	33	110651	Ring , piston, normal
17	S. 8731	Seal , spring loaded, for crankcase, clutch side	33	91368	Ring , piston, 1st o/s.
18	S. 6647	Circlip	33	91369	Ring , piston, 2nd o/s.
19	S. 7125	Ball bearing , clutch side	33	91370	Ring , piston, 3rd o/s.
20	110711	Gasket , crankcase	33	91371	Ring , piston, 4th o/s.
21	2856	Screw , securing cooling hood	34	S. 8419	Bolt , long
22	110720	Spacer , securing cooling hood	35	110710	Gasket , cylinder base
23	S. 584	Stud , securing fuel inlet joint	36	91324	Cylinder piston g. a. (with part Fig. 32).
24	111666	Clutch , drive gear			
25	S. 1821	Washer , plain	37	S. 3056	Washer , securing cooling hood
26	S. 1510	Nut , sec. drive gear	38	150716	Engine, g. a.
27	S. 7188	Roller cage	39	S. 3918	Stud , securing exhaust pipe
28	S. 4515	Stud	40	111446	Head , cylinder
29	a) 93233	Roller cage	41	318	Gasket , copper, of sparkplug
30	S. 6615	Circlip , for locking wrist pin	42	98753	Sparkplug , with terminal
31	111307	Wrist pin , normal	43	72843	Cap , rubber, for sparkplug
32	111308	Piston , with standard wrist pin (with parts Figs. 30 - 31 - 33).	44	111734	Hood , cooling
			45	2946	Screw , hood fixing

a) Con-rods and roller cages are subdivided in 4 categories and the category number is marked on every con-rod and cage. Assy: con-rod with cage of the same category. When ordering roller cages, always indicate the wanted category.



TABLE II



PARTS LIST FOR ENGINE

Clutch - Kickstarter

(Table II)

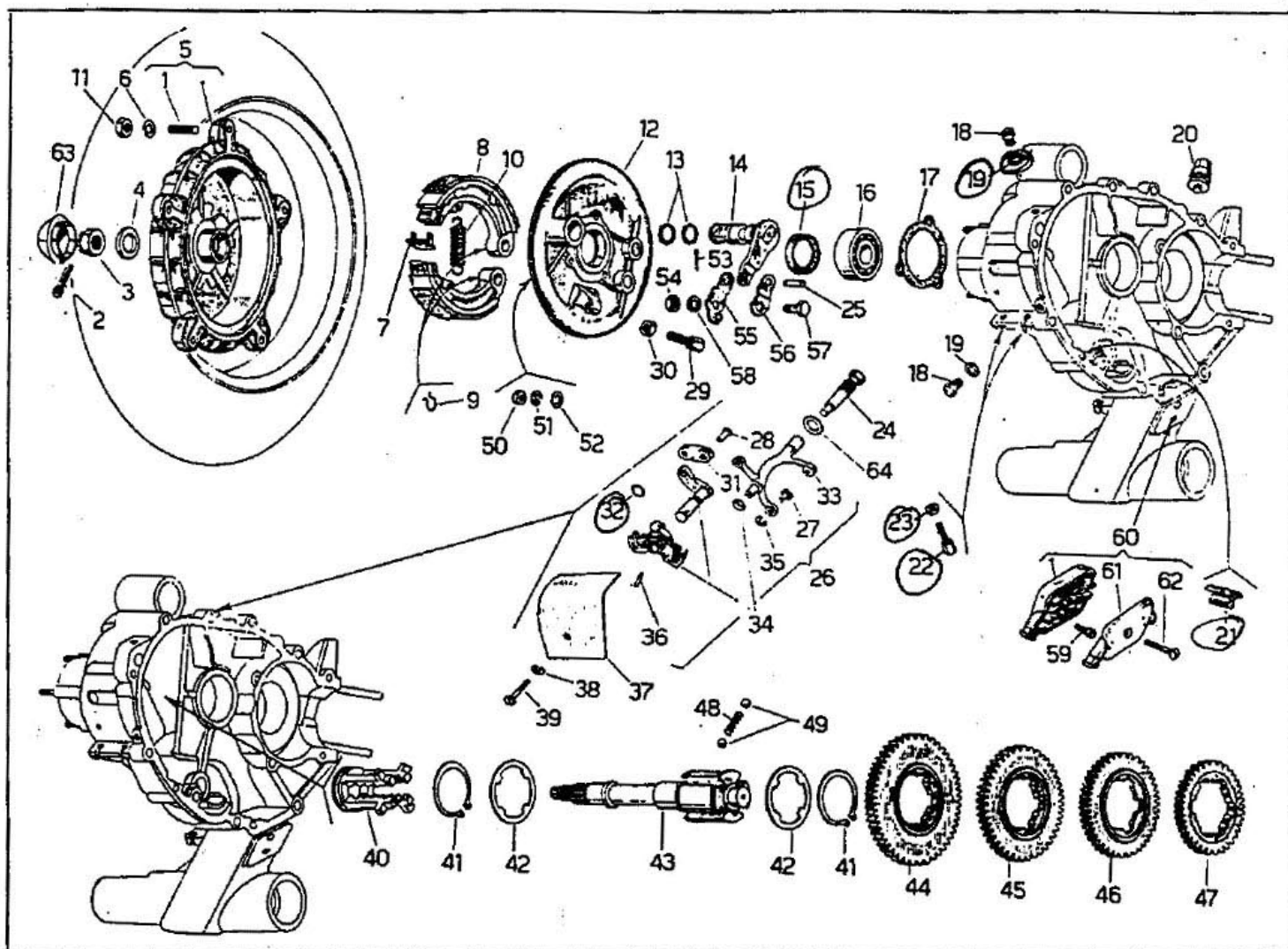
Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	78478	Spring, return, of kickstarter	8	S. 6425	Washer, spring
2	78976	Sector, starting	9	S. 7130	Ball bearing, clutch side
3	S. 6721	Packing	10	S. 906	Bolt, securing kickstarter
4	78473	Gear, starting	11	S. 12563	Washer, lock, of kickstarter
5	110387	Plaque, retaining, spring	12	79077	Kickstarter
6	77232	Spring, plate	13	S. 6647	Circlip, locking bearing
7	79670	Washer lock	14	78495	Plate, spring, of clutch



Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
15	78484	Spring, clutch	35	78450	Arm, actuating clutch
16	110921	Gear, clutch	36	S. 8818	Pin, actuating arm
17	78594	Spacer	37	79474	Ring, spring, for stopping clutch plates
18	110670	Spring gear g. a. (With parts Figs. 14 - 15 - 16 - 17 - 19 - 20 - 21).	38	150508	Ring, oil container
19	110669	Body clutch	39	79476	Plate, outer, of clutch
20	110668	Plate, spring, of clutch	40	79399	Plate, clutch, with linings
21	S. 5772	Rivet	41	79478	Plate, driven, of clutch
22	150514	Clutch, g. a. (With parts Figs. 37 - 38 - 39 - 40 - 41 - 42 - 43 - 44).	42	79469	Plate, inner, of clutch
23	16821	Plate, clutch centralizing	43	112390	Spring, clutch
24	14457	Spring, for fixing centralizing plate	44	79497	Clutch case, inner
25	2/78453	Thruster, clutch	45	S. 1107	Nut, securing bracket
26	79002	Gasket, between clutch cover and crankcase	46	S. 3107	Washer, securing bracket
27	S. 14413	Screw, securing clutch cover	47	79001	Bracket, supporting adjuster of clutch
28	S. 7631	Washer, spring	48	S. 12488	Bolt, securing bracket
29	79083	Cover, clutch	49	S. 1205	Nut, setting clutch
30	S. 12281	Bolt, securing clutch cover	50	90527	Screw, setting clutch
31	78586	Plug, actuating arm clutch	51	S. 7035	Ball bearing, of multiple gear
32	78959	Arm, actuating clutch, g. a. (With parts Figs. 35 - 36).	52	112377	Gear, multiple
33	S. 6706	Washer, actuating arm, clutch	53	S. 1822	Washer, locking clutch
34	78452	Spring, actuating arm, clutch	54	S. 1508	Nut, retaining clutch
			55	S. 11753	Key, retaining clutch
			56	87685	Plug, for hole crankcase, side flywheel magneto



TABLE III



PARTS LIST FOR ENGINE

Rear wheel hub - Gear group - L. T. socket

(Table III)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	85914	Stud, for drum of brake	8	100492	Jaw, rear brake, with lining
2	S. 12787	Split pin, for locking castle nut	9	61	Clip, spring, for brake jaws
3	S. 2314	Nut, for securing drum	10	78522	Spring, return, of brake jaws
4	150051	Washer, plain, securing drum	11	S. 1108	Nut, securing wheel
5	100484	Drum, rear brake (with fig. 1)	12	111586	Disc, support brake jaw
6	S. 3108	Washer, spring, sec. wheel	13	97497	Packing
7	24410	Plaque, for brake jaw	14	78366	Arm, rear brake centre



Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
15	3/46699	Seal, spring - loaded of main-shaft	41	S. 5901	Circlip, retaining shoulder washer
16	7563	Ball bearing, clutch side	42	a) 111996	Washer, shoulder, normal, of of gear pinions
17	90899	Packing	42	a) 112008	Washer, shoulder, 1st oversize
18	2990	Cap, filler, oil	42	a) 112009	Washer, shoulder, 2nd oversize
19	397	Packing, for cap	42	a) 112010	Washer, shoulder, 3rd oversize
20	19301	Breather	42	a) 112011	Washer, shoulder, 4th oversize
20	78578	Buffer	43	a) 111596	Mainshaft
21	90527	Screw, setting change gear	44	112378	Gear, low speed
23	S. 1205	Nut, setting change gear	45	112379	Gear, 2nd speed
24	98787	Bolt, securing stirrup	46	112381	Gear, 3rd speed
25	90306	Pivot pin, for rear brake links	47	112380	Gear, 4th speed
26	112214	Stirrup, for gear change (With parts Figs. 27 - 28 31 - 33 - 35 - 36).	48	150110	Spring, for balls
27	78945	Slide, stirrup, of gear change	49	S. 6379	Ball
28	S. 5771	Rivet, for stirrup, of gear change	50	S. 1108	Nut, securing brake jaw support disc
29	23823	Screw, setting rear brake	51	S. 3108	Washer, spring
30	S. 1207	Nut, setting rear brake	52	S. 3058	Washer plain
31	78526	Union piece, for levers	53	S. 12761	Split pin, for arm axle
32	S. 6706	Packing	54	S. 1426	Nut, for securing bolt brake links
33	110716	Stirrup, of gear change	55	94779	Link, brake
34	78597	Washer, spring, for stirrup	56	42047	Link, brake
35	S. 5962	Circlip, for stirrup	57	85673	Bolt, for securing cable to brake links
36	S. 13010	Pin	58	S. 3109	Washer, spring
37	78920	Cover, of the act. lever	59	S. 14402	Screw, for L. T. socket
38	S. 3105	Washer, spring, for cover	60	70744	L. T. socket g. a. (With parts Figs. 59 - 61 - 62).
39	99462	Screw, securing cover	61	78598	Cover, for L. T. socket
40	111589	Selector, gear	62	S. 8230	Screw, for L. T. socket

a) The total axial play of the assembly of the 4 gear pinions in respect to their seat must be contained between .002" and .012". Should this play exceed said tolerances, the normal shoulder washer must be replaced by another with proper oversize.

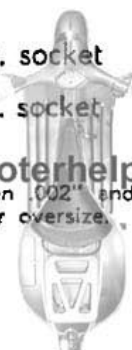
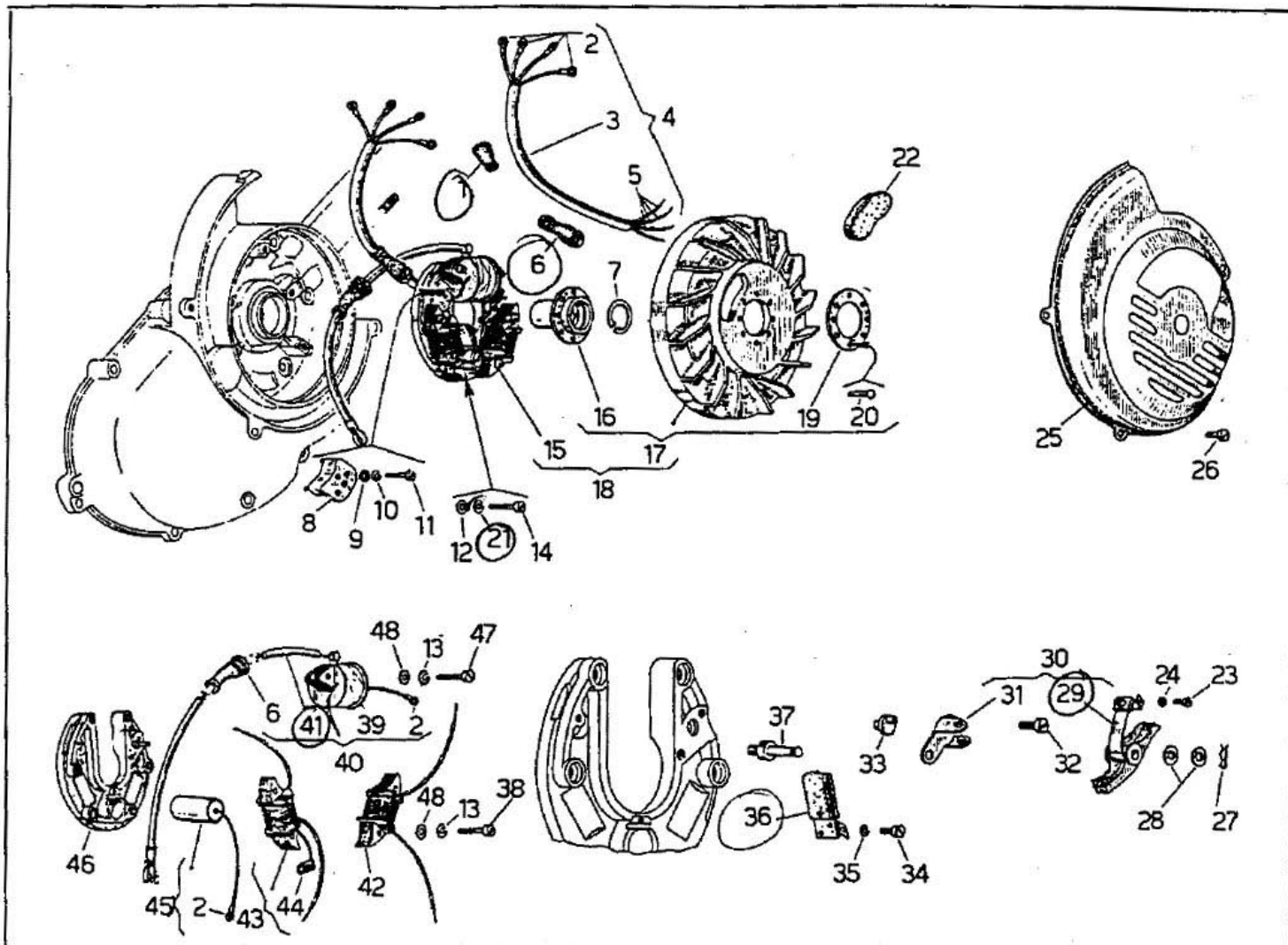


TABLE IV



PARTS LIST FOR ENGINE

Flywheel - Magneto - Fan - Coils

(Table IV)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	48170	Cap, for L. T. socket	7	S. 5981	Circlip, for flywheel extraction
2	14501	Terminal	8	79715	Clamp board
3	a) 87400	Sheath	9	S. 3054	Washer, plain, securing clamp board
4	101112	Cable harness (With parts Figs. 2 - 3 - 5).	10	S. 3104	Washer, spring, securing clamp board
5	a) 85721	Cable, to flywheel	11	S. 963	Screw, securing clamp board
6	46766	Grommet	12	90045	Washer, plain, for screw securing stator

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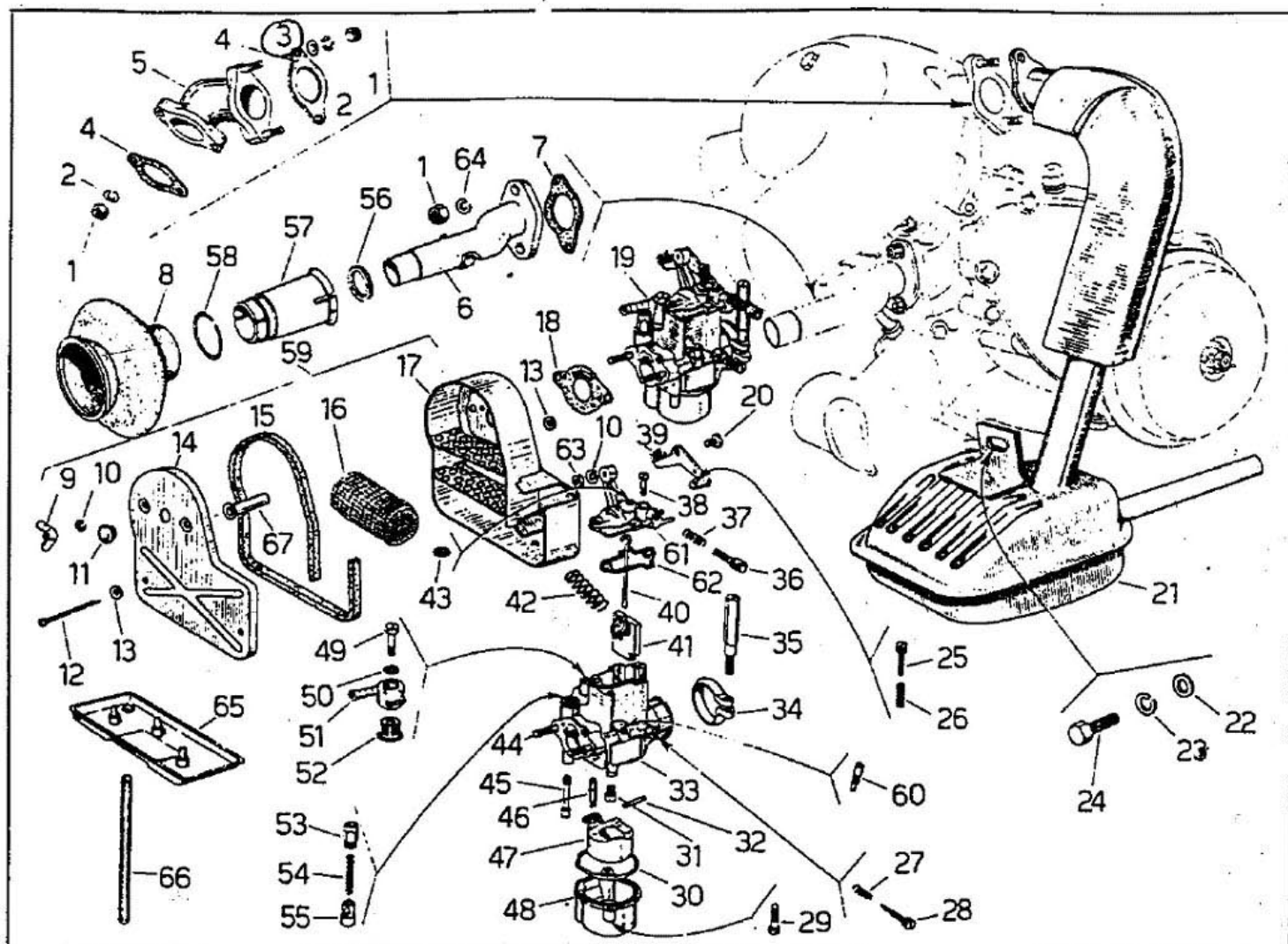


Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
13	S. 3105	Washer , spring, for screw securing coils	29	98469	Breaker (With parts Figs. 23 - 24).
14	S. 10047	Screw , for securing stator	30	98468	Gusset - breaker assy. (Figs. 29 - 31).
15	101109	Stator , g. a. (Parts Figs. 3 - 8 - 9 - 10 - 11 - 13 - 27 - 28 - 30 - 31 - 32 - 33 - 34 - 35 - 36 - 38 - 40 - 42 - 43 - 44 - 45 - 46 - 47 - 48).	31	16418	Gusset , contact
16	111584	Cam	32	S. 12332	Screw , securing gusset
17	111585	Flywheel magneto and fan (With parts Figs. 16 - 19 - 20).	33	16420	Cam
18	101108	Flywheel magneto , g. a. (Parts Figs. 15 - 17).	34	3213	Screw , securing condenser and felt blade
19	111545	Washer , plain, of cam	35	S. 3103	Washer , spring for felt blade
20	0184	Rivet , for securing cam	36	72836	Blade felt
21	S. 6965	Washer , spring, for screw securing stator	37	16417	Axle , breaker
22	110586	Plug , for flywheel fan	38	603	Screw , for securing coils
23	S. 10051	Screw , sec. cable on breaker	39	91412	Coil , H. T. (With part Fig. 2)
24	S. 12554	Washer , shake proof	40	91411	Coil , H. T., and cable (With parts Figs. 39 - 41).
25	111583	Cover , fan casing	41	150481	Cable , H. T.
26	2946	Screw , long, for securing fan casing cover	42	101110	Coil , low tension, n. 1
27	625	Fork spring	43	101111	Coil , low tension, n. 2 (With part Fig. 44).
28	622	Washer , shim, of breaker	44	662	Terminal , for coil
			45	79697	Condenser (With part Fig. 2).
			46	79444	Stator (With part Fig. 37).
			47	S. 8519	Screw , securing H. T. coil
			48	S. 3055	Washer , plain, securing coils

a) Order by meters or feet.



TABLE V



PARTS LIST FOR ENGINE

Carburettor - Air cleaner - Muffler

(Table V)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	S. 1106	Nut , for securing exhaust jointing pipe	6	78542	Inlet jointing pipe
2	S. 12533	Washer , spring securing exhaust jointing pipe	7	78543	Packing , for inlet jointing pipe
3	S. 3056	Washer , plain, for securing exhaust jointing pipe	8	71813	Cap , protective
4	79326	Packing , for exhaust jointing pipe	9	S. 12146	Nut , wing, for cover
5	79247	Exhaust jointing pipe	10	S. 6965	Washer , spring, for cover
			11	87975	Cap , rubber, for cover
			12	S. 12783	Split pin , for cover

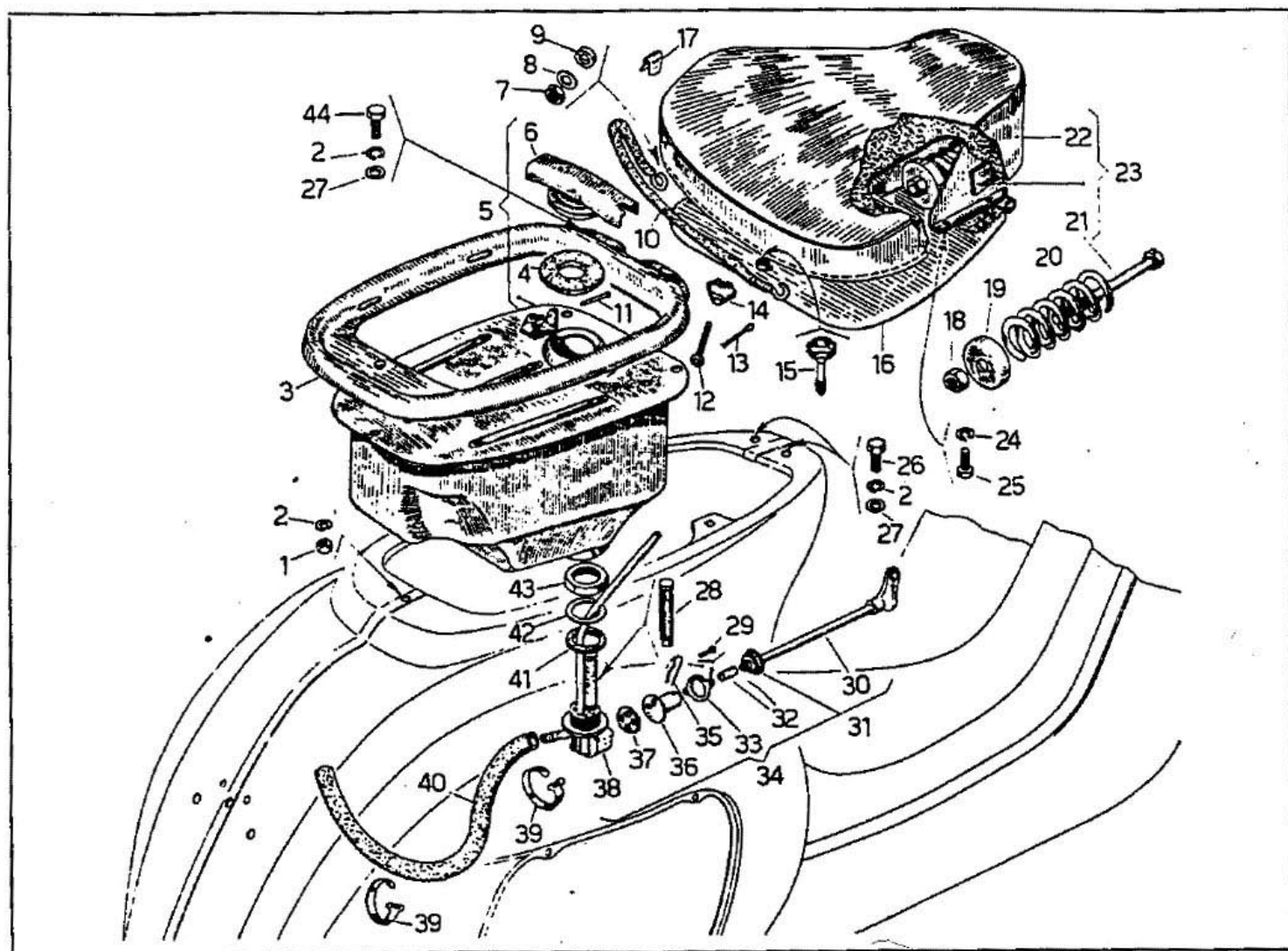


Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
13	S. 13782	Washer, plain, for cover	38	85418	Screw, securing cover
14	112479	Cover for air cleaner body	39	98141	Rocker
15	79882	Packing, for cover air cleaner body	40	98147	Rod, for throttle control cable
16	111496	Air filter	41	98084	Slide, throttle
17	112482	Air cleaner body	42	98132	Spring, of throttle slid
18	79900	Packing, for air cleaner body	43	85286	Packing
19	150600	Carburettor, Dellorto SHB 16/16 - Type g. a. (Parts Figs. 10 - 20 - 25 - 26 - 27 - 28 - 29 - 30 - 31 - 32 - 33 - 34 - 35 - 36 - 37 - 38 - 39 - 40 - 41 - 42 - 43 - 44 - 45 - 46 - 47 - 48 - 49 - 50 - 51 - 52 - 53 - 54 - 55 - 60 - 61 - 62 - 63).	44	111497	Stud, jointing air cleaner to carburettor
20	92403	Pivot pin, actuating lever	45	98433	Starter jet
21	112501	Muffler, g. a.	46	90506	Valve, needle
22	S. 13962	Washer, plain, for securing muffler	47	98430	Float
23	S. 3110	Washer, spring, for securing muffler	48	98138	Chamber of float
24	S. 12306	Bolt, for securing muffler	49	98144	Screw, securing pipe
25	98137	Screw, setting lever	50	98136	Packing, for pipe Fig. 49.
26	13991	Spring, for screw setting lever	51	98140	Pipe
27	98135	Spring, for adjusting screw	52	98142	Filter, mixture
28	98133	Screw, for slow running adjust.	53	98129	Plug, for starter device
29	98134	Screw, securing float chamber	54	98146	Spring, of plug for starter device
30	98148	Packing, for float chamber	55	98149	Starter device
31	83902	Jet, main	56	S. 8736	Packing, for inlet pipe
32	85291	Pivot, for float	57	110003	Inlet pipe
33	98431	Carburettor body (With part Fig. 44).	58	110007	Circclip, for inlet pipe
34	24645	Clip	59	112480	Air cleaner, g. a. (Parts Figs. 11 - 12 - 13 - 14 - 15 - 16 - 17 - 67).
35	98143	Screw, securing clip	60	85795	Idling jet
36	98128	Screw, for throttle slide	61	98139	Cover, for throttle slide
37	98130	Spring for screw of throttle slid	62	98145	Packing, of cover throttle slide
			63	S. 12012	Nut, securing actuating lever pivot pin
			64	S. 3106	Washer, spring, securing inlet and exhaust jointing pipe
			65	111123	Exhaust bowl, for fuel
			66	a) 87394	Exhaust pipe, for fuel
			67	112475	Tube, spacer, for air filter

a) Order by meters or feet.



TABLE VI



PARTS LIST FOR CHASSIS

Saddle - Fuel tank - Luggage carrier

(Table VI)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	S.1107	Nut , securing luggage carrier and fuel tank	6	a) 71728	Cap , filler, of fuel tank
2	S.3107	Washer , spring, securing luggage carrier, fuel tank and saddle	7	S.1108	Nut , securing grip on saddle
3	97970	Carrier , luggage	8	2383	Washer , plain, securing grip on saddle
4	71734	Packing , of filler cap	9	98501	Spacer , securing grip on saddle
5	100379	Fuel tank (With parts Figs. 4 - 6 - 11 - 12 - 13 - 14 - 31 - 34).	10	98500	Grip , on saddle
			11	8446	Rivet , of filler cap

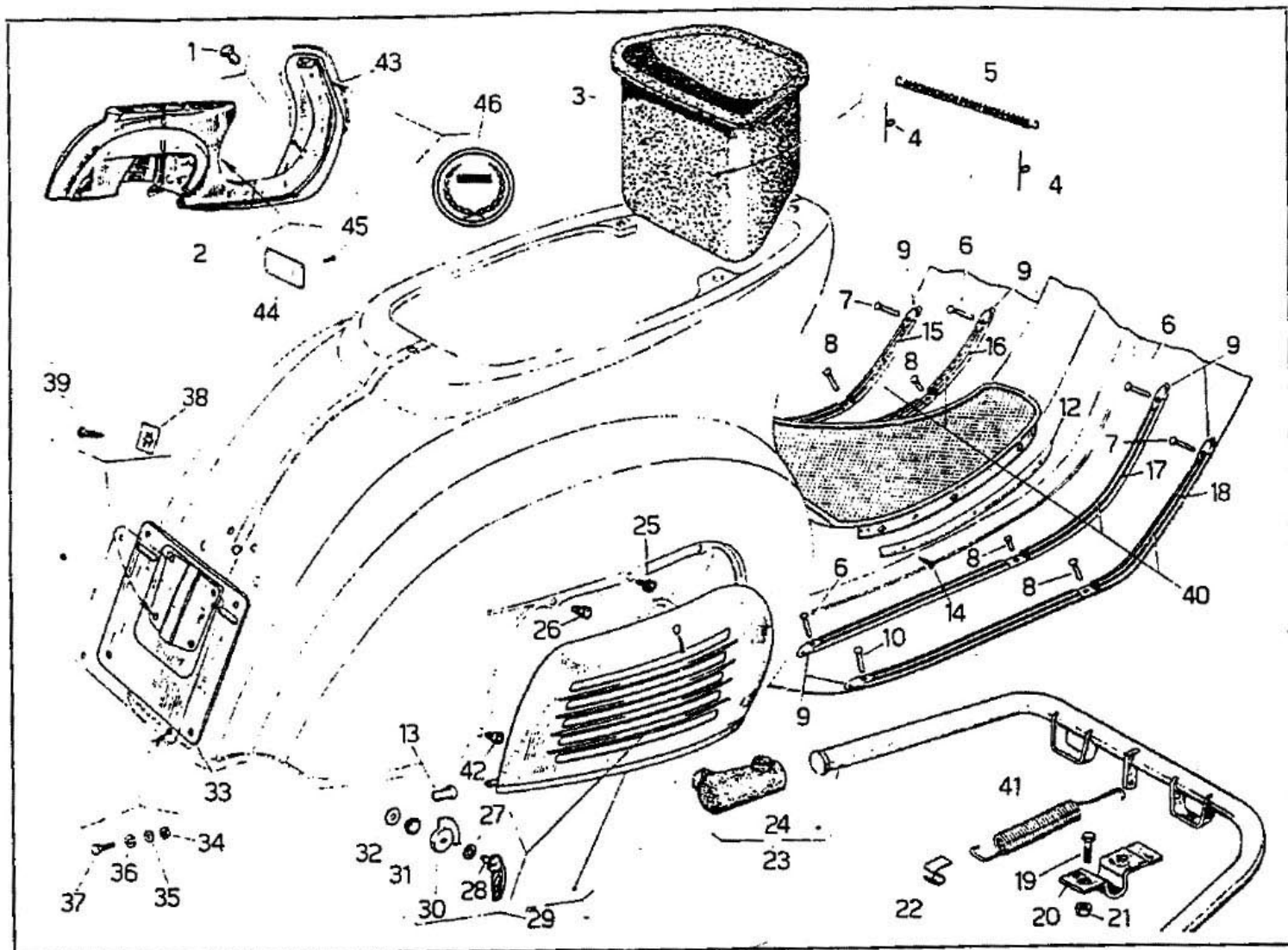


Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
12	4435	Bolt , tie, of filler cap	30	98584	Rod , tap fuel
13	S. 3212	Split pin for supporting tie bolt	31	47460	Grommet , fuel tap clip
14	92217	Nut , for filler cap	32	83139	Hose , for tap fuel rod
15	100392	Knob , securing saddle support	33	13835	Flange , tap fuel
16	71559	Support , saddle	34	98581	Tap , fuel, g. a. (With parts: Figs. 29 - 30 - 32 - 33 - 35 - 36 - 37 - 38 - 41 - 42 - 43).
17	94720	Clamp , for secur. saddle cover	35	15467	Clip , spring
18	S. 1110	Nut , saddle spring	36	46168	Cover , mixture distributor
19	71570	Cup , saddle spring	37	13836	Packing , tap fuel
20	71569	Spring , of saddle	38	98582	Body , tap, g. a. (With part Fig. 28).
21	S. 8526	Bolt , securing spring of saddle	39	71673	Strap , pipe fastening
22	71556	Cover , saddle	40	71506	Pipe , plastic, from fuel tap to carburettor
23	98503	Saddle , g. a. (With parts: Figs. 7 - 8 - 9 - 10 - 17 - 18 - 19 - 20 - 21 - 22).	41	S. 6068	Packing , between fuel tap and tank
24	S. 7631	Washer , spring, securing bolt saddle support.	42	S. 6067	Washer , plain, under nut securing fuel tap
25	S. 12263	Bolt , securing saddle support	43	9433	Nut , securing fuel tap to tank
26	S. 14441	Screw , securing saddle (front side) to frame	44	S. 10096	Bolt , securing front side of luggage carrier
27	S. 3057	Washer , plain, securing saddle (front side) to frame			
28	97573	Filter , for fuel cock			
29	S. 10011	Screw , fuel tap clip			

•) The transfer drg. B5247 for indicating gas - oil ratio of fuel 2% (applied on the cap) is also delivered.



TABLE VII



PARTS LIST FOR CHASSIS

Chassis - Tool box - Channels - Stand

(Table VII)

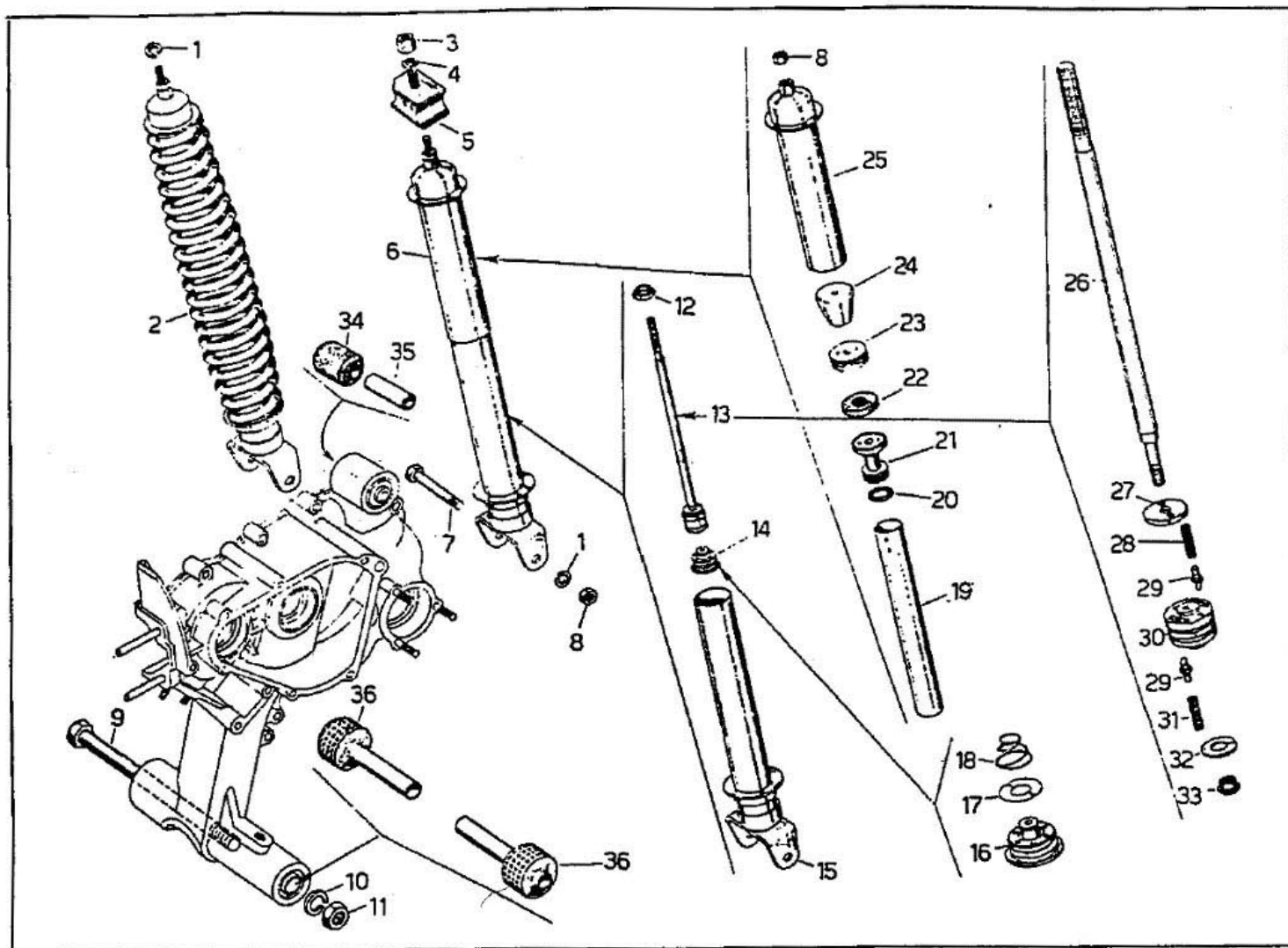
Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	90958	Plug, for spare wheel holes	8	S. 10805	Rivet, securing outer and inner strip of floorboard
2	101129	Chassis of motor - scooter (With parts: Figs. 44 - 45).	9	73405	Cap, strip
3	100389	Tool box	10	S. 10881	Rivet, securing rear cap of outer strips
4	71638	Clip for spring	11	100445	Rubber mat
5	12218	Spring, for canvas roll	12	100446	R. H. mat retainer strip
6	S. 10869	Rivet, securing inner strips cap of footboard	12	100447	L. H. mat retainer strip
7	S. 10868	Rivet, securing outer strips cap of floorboard (side front)			

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
13	100408	Buffer , for engine bonnett shutter	29	91380	Flap , bonnet, engine (With parts: Figs. 27 - 28 - 30 - 31 - 32).
14	S. 897	Screw , self locking, securing rubber mat	30	70427	Latch
15	100460	Strip , outer, L. H.	31	70428	Washer , spring
16	100462	Strip , inner, L. H.	32	S. 13884	Washer , plain
17	100461	Strip , inner, R. H.	33	101115	Registration plate
18	100459	Strip , outer, R. H.	34	S. 1106	Nut , securing plate
19	S. 12281	Bolt , securing stand	35	S. 3056	Washer , plain, registration plate
20	57226	R. H. clip , of centre stand	36	S. 3106	Washer , spring, registration plate
20	57227	L. H. clip , of centre stand	37	S. 12263	Screw , securing plate
21	S. 12138	Nut , for securing stand	38	93609	Plate , securing registration plate to frame
22	77252	Spring retainer clip	39	S. 8265	Self-locking , screw, securing registration plate
23	100477	Stand , with rubber shoes (With part Fig. 24).	40	a) 94625	Strip , rubber, of floorboard
24	101971	Shoe , R. H.	41	77269	Spring , return, of stand legs
24	101972	Shoe , L. H.	42	101783	Lower plug
25	150566	Upper plug , central	43	100456	Beading , windshield
26	98669	Upper plug , lateral	44	150899	Plate , model number
27	S. 13935	Washer , plain	45	S. 10781	Rivet , for securing model number
28	70425	Lever , lock, for engine bonnet shutter	46	151124	Name plate «Sears».

a) Order by meters or feet.



TABLE VIII



PARTS LIST FOR CHASSIS

Rear suspension spring - Rear damper

(Table VIII)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	S. 3109	Washer, spring, for shock absorber anchoring pin	6	101195	Shock - absorber, hidraulic, rear, g. a. (Parts Figs. 8 - 12 - 13 - 14 - 15 - 19 - 20 - 21 - 22 - 23 - 24 - 25).
2	70646	Spring, rear suspension	7	S. 14689	Bolt, securing shock - absorber, bottom
3	S. 12109	Nut, sucuring to frame	8	S. 1209	Nut, securing shock - absorber, bottom
4	S. 3108	Washer, spring			
5	60536	Bracket, elastic			

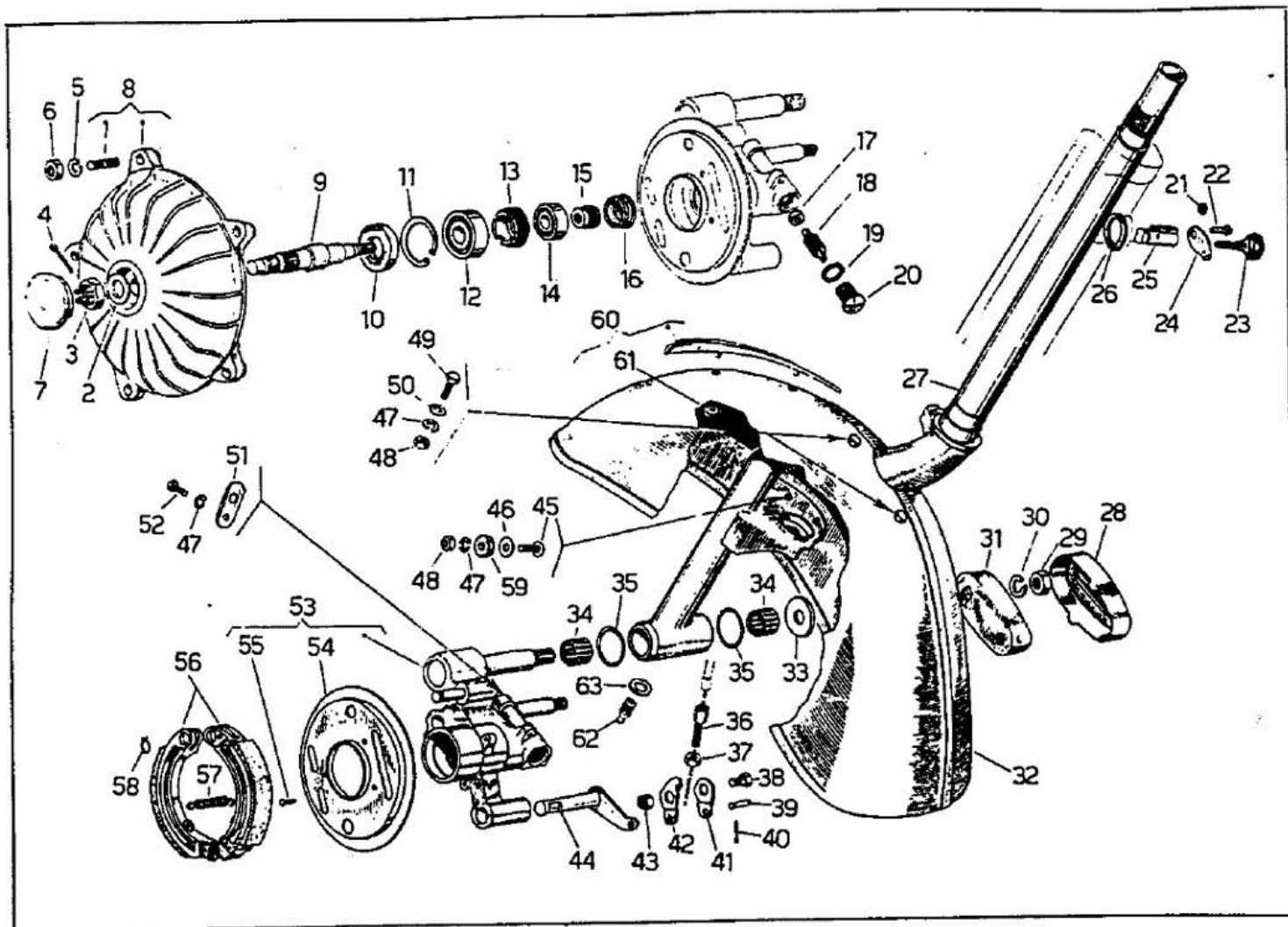
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Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
9	78588	Bolt , securing the engine to chassis	23	48591	Cap , threaded, of shock - absorber
10	S. 3110	Washer , spring	24	150264	Buffer
11	S. 1110	Nut , for securing engine to chassis	25	70635	Tube , protection, of shock - absorber
12	48596	Buffer	26	70641	Stem , of shock - absorber
13	70647	Stem , g. a. (With parts Figs. 26 - 27 - 28 - 29 - 30 - 31 - 32 - 33).	27	S. 6018	Washer , support, spring, upper
14	2/22832	Valve , discharge, g. a. (With parts Figs. 16 - 17 - 18).	28	22827	Spring , for valve pin
15	70638	Body , shock - absorber	29	17285	Pin , valve
16	22828	Valve discharging	30	93468	Piston , of shock - absorber
17	17385	Washer , seal	31	32812	Spring , for valve pin
18	84603	Spring , of seal washer	32	S. 13768	Washer , support spring, lower
19	70640	Tube , inner, of hydraulic shock - absorber	33	17122	Ring , lock, of piston
20	S. 6721	Packing	34	40316	Buffer , securing shock - absorber
21	2/83819	Bush , guide, of shock - absorber stem	35	94727	Tube , securing shock - absorber
22	90150	Seal , of shock - absorber	36	112204	Buffer , for engine suspension



TABLE IX



PARTS LIST FOR STEERING COLUMN

Steering column - Mudguard - Wheel hub - Security lock

(Table IX)

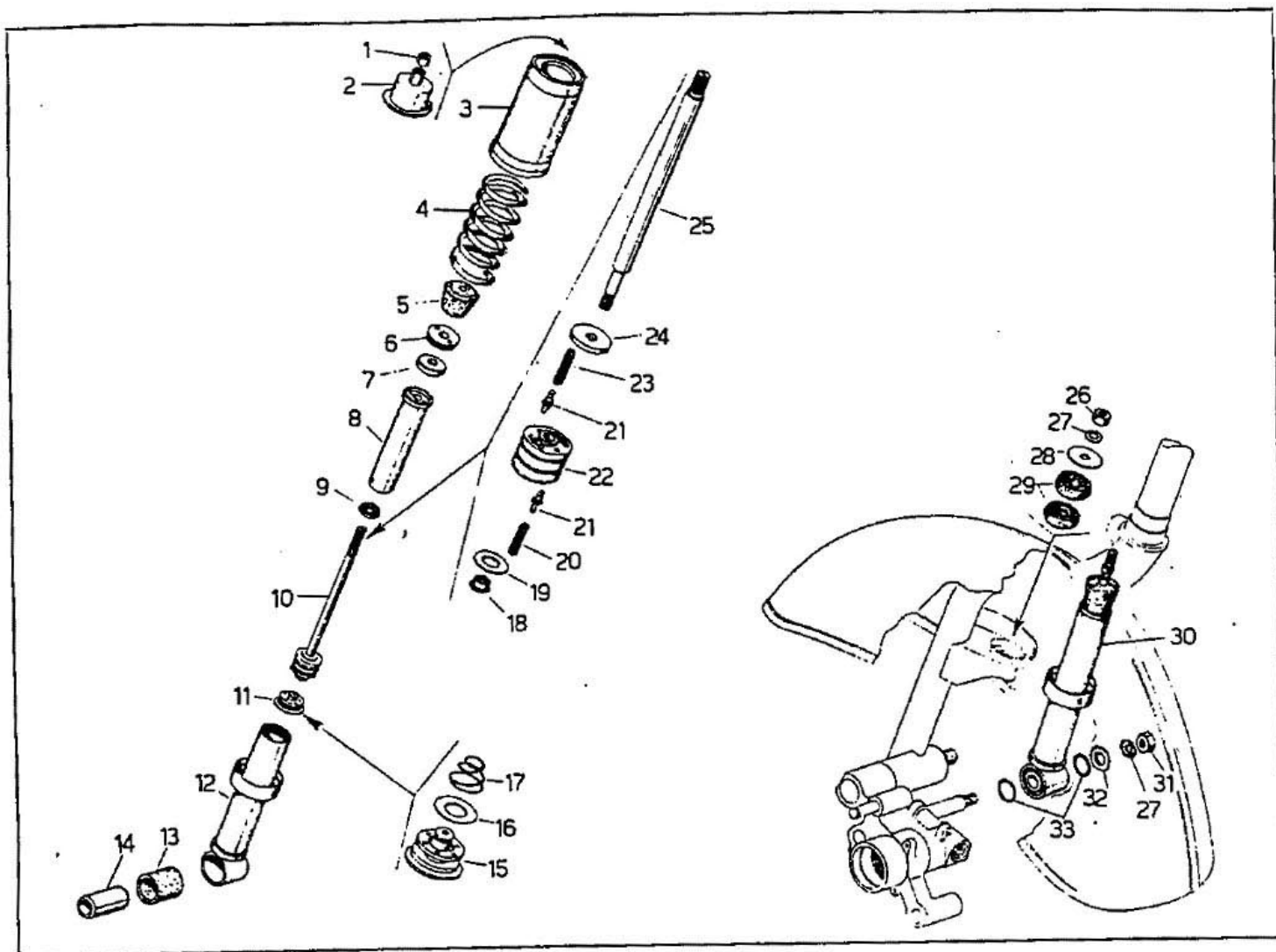
Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	85914	Stud, drum, front brake	6	S. 1108	Nut, securing wheel
2	S. 13879	Washer, plain, securing drum front brake	7	92517	Plug, for brake drum
3	S. 2314	Nut, securing drum front brake	8	100488	Drum, front brake (with fig. 1)
4	S. 12787	Split pin, securing drum front brake	9	100483	Axle, front wheel
5	S. 3108	Washer, spring, securing wheel	10	S. 8708	Seal, front wheel axle
			11	5141	Circlip, front wheel axle
			12	2802	Ball bearing, for front wheel



Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
13	57940	Ring nut, securing ball bearing	39	90305	Pin, for brake links
14	2800	Ball bearing	40	S. 12761	Split pin, on pin for brake links
15	97505	Pinion, speedometer	41	83608	Link front brake
16	71053	Cover, wheel hub	42	97108	Link front brake
17	57939	Buffer, stop	43	S. 1207	Nut, on bolt sec. brake links
18	70909	Pinion, speedometer	44	57945	Lever, front brake
19	57941	Packing, ring nut	45	S. 15123	Bolt, securing mudguard
20	57935	Ring nut, for speedometer	46	97733	Washer, plain, for bolt securing mudguard
21	70606	Washer, spring	47	S. 3105	Washer, spring for bolt securing mudguard
22	70605	Pin, security lock	48	S. 1105	Nut, for bolt sec. mudguard
23	97463	Key, security lock	49	2957	Bolt, securing mudguard
24	70604	Cover, security lock housing	50	S. 3055	Washer, plain, on bolt securing mudguard
25	70603	Housing, security lock	51	57938	Stop plate
26	90957	Packing, security lock	52	774	Screw, securing stop plate
27	150496	Steering column	53	79152	Hub, front wheel (With parts Figs. 54 - 55).
28	70177	Cover, wheel hub	54	79154	Dust cover
29	S. 1112	Nut, securing steering column	55	S. 10870	Rivet securing dust cover
30	S. 3112	Washer, spring, securing steering column	56	91058	Jaw, brake
31	70176	Housing, front wheel hub	57	25990	Spring, return, of brake jaws
32	91321	Mudguard, with crest fig. 60.	58	61	Clip, spring, for brake jaws
33	57944	Washer, plain, securing steering column	59	99335	Washer, spacer, securing mudguard
34	90457	Roller cage	60	150070	Crest, with ring clamp fig. 61.
35	S. 14013	Packing, securing steering column	61	85508	Ring clamp, securing crest
36	90527	Screw, adjuster, of front brake	62	2/19556	Grease nipple, on steering column
37	S. 1205	Nut adjuster, of front brake	63	S. 13840	Washer, plain, for grease nipple
38	2036	Bolt, securing cable to brake links			



TABLE X



PARTS LIST FOR STEERING COLUMN

Front damper

(Table X)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	S. 12139	Nut, of shock - absorber	7	90151	Seal, of shock absorber
2	98538	Cap, upper	8	57884	Tube, inner, of shock - absorber and bush for stem
3	57895	Tube protection, of shock - absorber	9	53752	Stop buffer
4	70072	Spring, front suspension	10	57887	Stem, of shock - absorber (Parts: Figs. 18 - 19 - 20 - 21 - 22 - 23 - 24 - 25).
5	57894	Buffer			
6	26101	Cap, threaded, of shock - absorber	11	2/17304	Valve, discharge (Parts: Figs. 15 - 16 - 17).

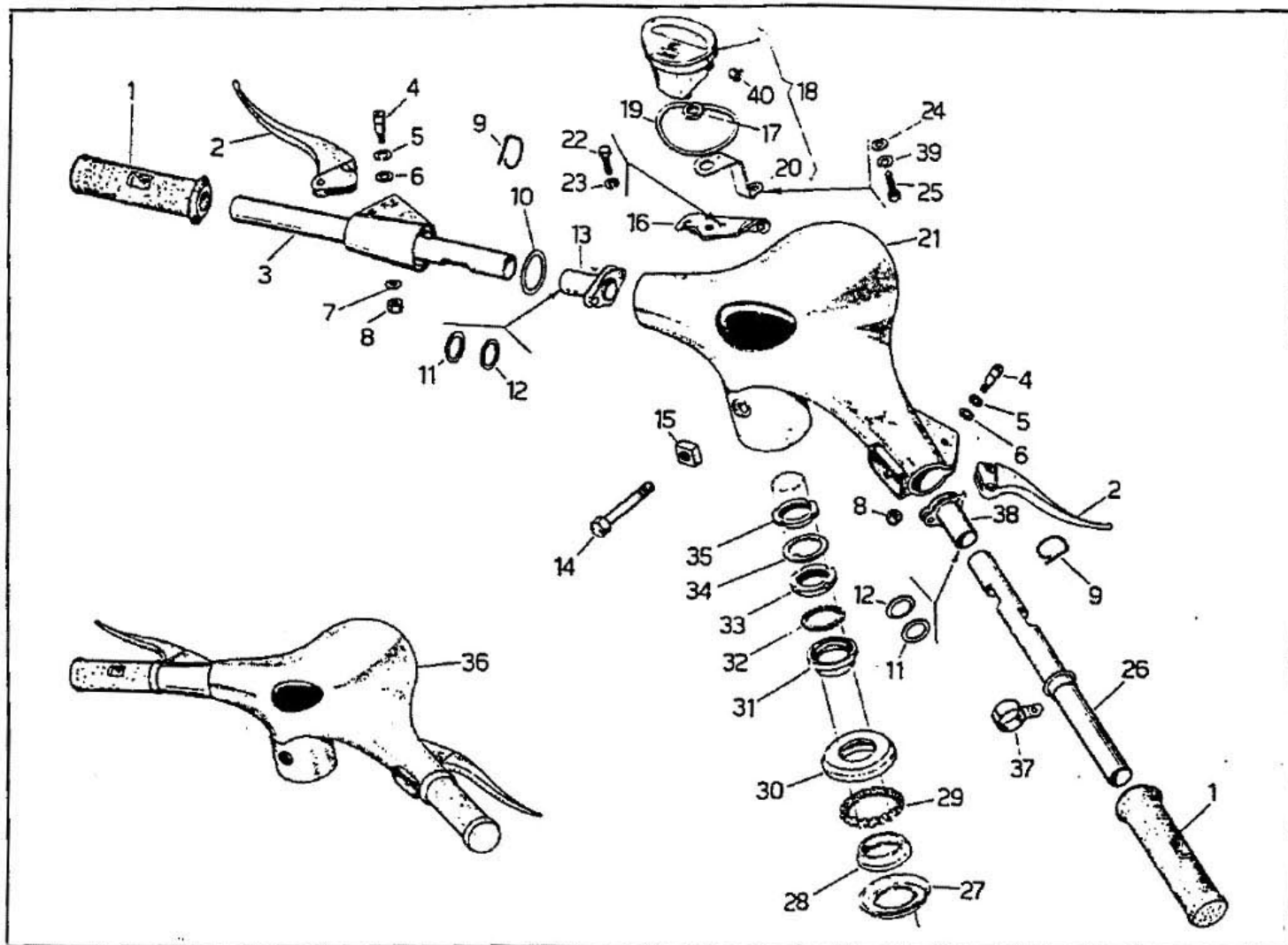
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Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
12	57878	Body , shock - absorber	25	57888	Stem of shock - absorber
13	57893	Buffer , lower	26	S. 12108	Nut , securing shock - absorber, upper side
14	57892	Buffer sleeve , securing shock - absorber bottom	27	S. 3108	Washer , spring
15	22759	Valve , discharging	28	55040	Washer , plain, securing shock - absorber, upper side
16	17385	Washer , seal	29	57012	Buffer , securing shock - absorber, upper side
17	84603	Spring , of seal washer	30	98673	Shock absorber , without spring and outer sleeve (Parts: Figs. 1 - 2 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14).
18	17122	Ring , lock of piston	31	S. 1108	Nut , securing shock - absorber, lower side
19	S. 13768	Washer , support, spring	32	57943	Washer , plain, sec. shock - absorber, lower side
20	22827	Spring , for valve pin	33	S. 14006	Packing , sec. shock - absorber, lower side
21	17285	Pin , valve			
22	97900	Piston , of shock - absorber			
23	32812	Spring , for valve pin			
24	S. 6018	Washer , support, spring			



TABLE XI



PARTS LIST FOR HANDLEBARS

Handlebars - Speedometer

(Table XI)

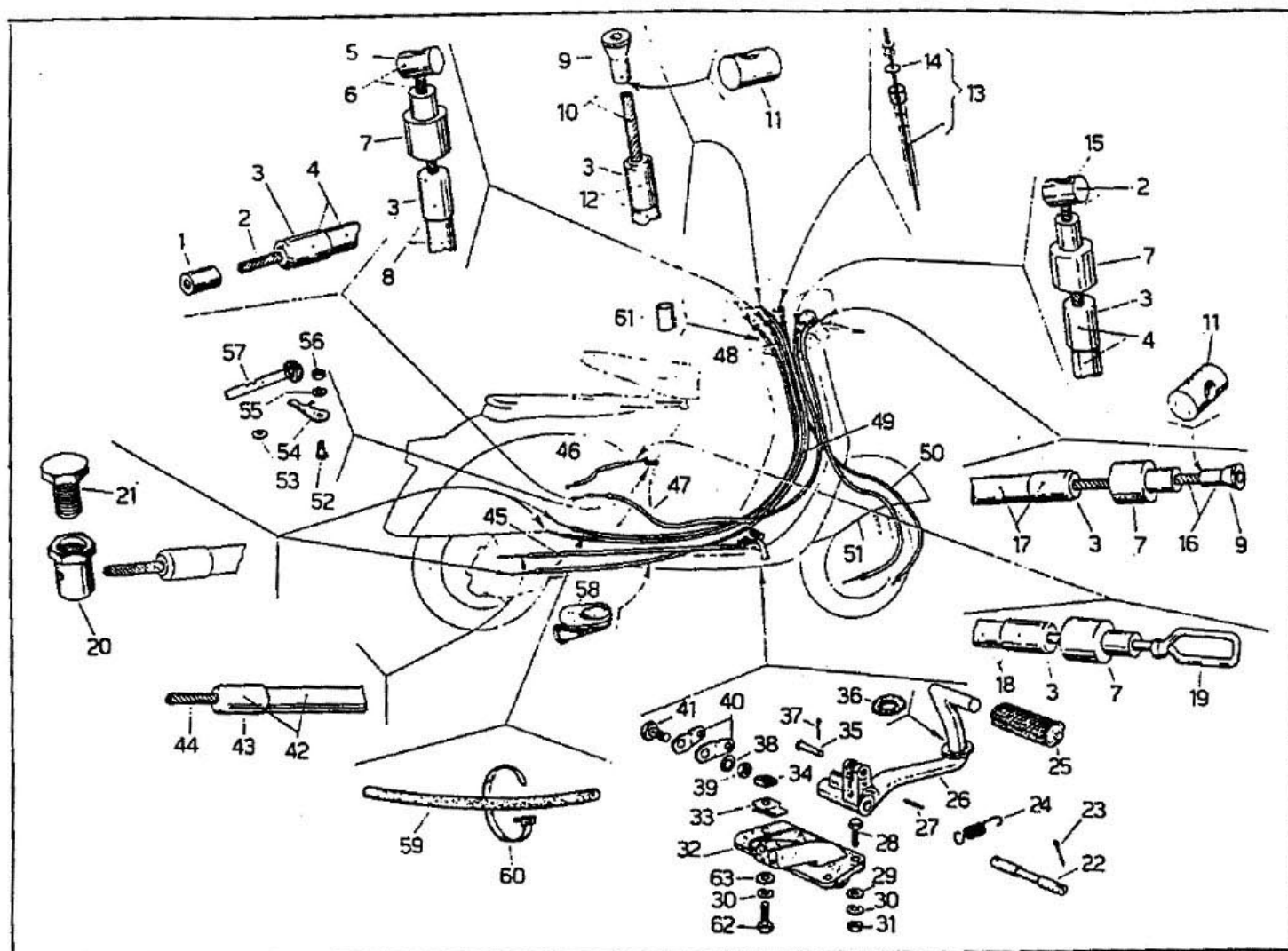
Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	70577	Twist grip, rubber	6	97734	Washer, plain, for securing levers
2	70578	Lever, clutch and front brake control	7	97733	Washer, plain, for securing levers
3	90538	Tube, for gear change control	8	S. 12136	Nut, for screw securing control levers
4	S. 14629	Screw, securing control levers	9	97356	Clip, spring
5	97492	Washer, spring, for securing control levers	10	70858	Washer, spacer, on gear change sleeve



Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
11	70568	Washer, plain	29	77023	Ball cage, for steering column bottom ball bearing
12	60565	Washer, spring	30	92667	Seat, outer, of steering column bottom ball bearing
13	101192	Lever, actuating, change gear	31	56641	Seat, lower, of steering column top ball bearing
14	70591	Bolt, securing handlebars	32	77024	Ball cage, upper, of steering column top ball bearing
15	70620	Nut, securing handlebars	33	55986	Ring threaded, of steering column top ball bearing
16	73555	Plate, anchor	34	3751	Washer, lock, of steering column top ball bearing
17	S. 12113	Nut, speedometer housing	35	11109	Ring, threaded, for locking steering column top ball bearing
18	91469	Housing, speedometer, mls. (With parts Figs. 17 - 20 - 40).	36	91350	Handlebars, g. a. (Figs. 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 21 - 22 - 23 - 24 - 25 - 26 - 37 - 38 - T. XI; 11 T. XII).
19	100618	Packing, speedometer	37	71039	Spring, plate, throttle control
20	100617	Plate, stop, for speedometer	38	70573	Lever, actuating, throttle side
21	100586	Body, handlebars	39	S. 3105	Washer, spring, securing speedometer
22	774	Bolt, securing bracket	40	150361	Plug, for socket housing on speedometer
23	S. 3105	Washer, spring sec. bracket			
24	S. 3055	Washer, plain, securing speedometer			
25	70583	Screw, securing speedometer			
26	70589	Twistgrip, throttle sleeve			
27	19264	Washer, protection of steering column bottom ball bearing			
28	55989	Seat, lower, of steering column bottom ball bearing			



TABLE XII



PARTS LIST FOR CONTROLS

Transmissions - Rear brake pedal

(Table XII)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	24929	Nipple , carburettor side	7	26249	Nipple , handlebars side
2	70891	Cable , throttle control (With part Fig. 15).	8	70874	Sheath , gear change control (With part Fig. 3).
3	a) 2174	Ferrule	9	2777	Nipple , handlebars side
4	70892	Sheath , throttle control (With part Fig. 3).	10	84783	Cable , clutch control (With part Fig. 9).
5	14657	Nipple , handlebars side	11	18699	Nipple , clutch and front brake controls
6	84781	Cable , gear change control (With part Fig. 5).	12	150321	Sheath , clutch control (With part Fig. 3).



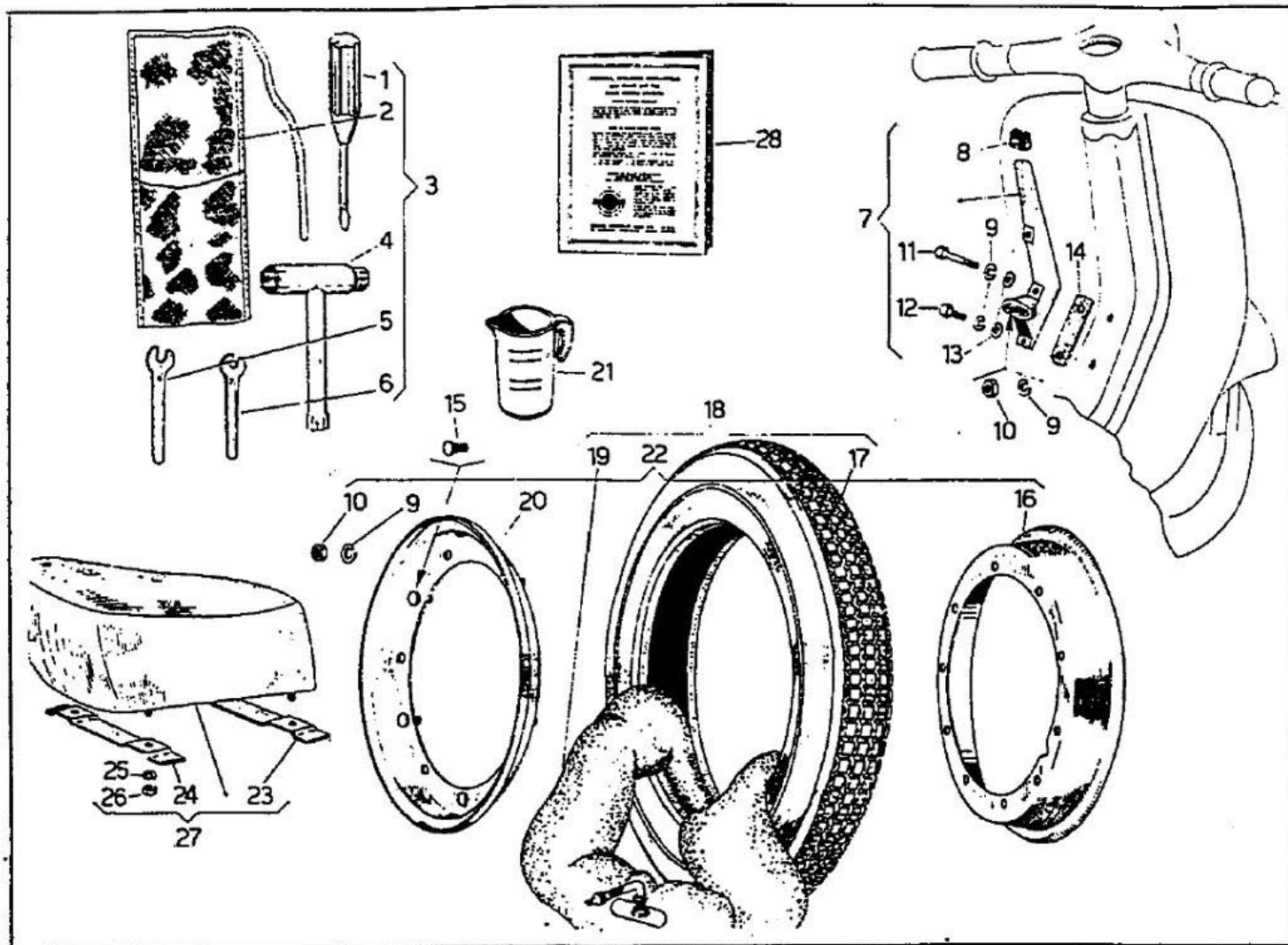
Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
13	97755	Cable , speedometer control (With part Fig. 14).	40	42047	Link , securing brake cable
14	97756	Washer , plain, transmission speedometer	41	85673	Bolt securing brake cable
15	26252	Nipple , handlebars side	42	70881	Sheath , rear brake control (With part Fig. 43).
16	150483	Cable , front brake (With part Fig. 9).	43	a) 23825	Cap , for sheath
17	150484	Sheath , front brake (With part Fig. 3).	44	25664	Cable , control, rear brake
18	70895	Sheath , starter control (With part Fig. 3).	45	70879	Cable , rear brake, g. a. (Parts Figs. 42 - 44).
19	70894	Cable , starter	46	70893	Transmission , starter control (Parts. Figs. 7 - 18 - 19).
20	15395	Nipple , screw	47	70890	Transmission , throttle control (Parts Figs. 1 - 2 - 4 - 7).
21	S. 10016	Screw , for nipple	48	70872	Transmission , gear change (Parts Figs. 6 - 7 - 8).
22	70122	Pivot , rear brake pedal	49	150320	Transmission , clutch control (Parts Figs. 10 - 12).
23	S. 12781	Split pin , pedal pivot	50	71059	Transmission , speedometer (With part Fig. 13).
24	70994	Spring , pedal	51	150485	Transmission , front brake (Parts Figs. 7 - 16 - 17).
25	100426	Sheath , rear brake pedal	52	78306	Pin , for starter
26	78930	Pedal , rear brake	53	78307	Washer , spring
27	S. 8818	Pin , rear brake pedal	54	78305	Lever , starter control
28	S. 793	Bolt , securing pedal support	55	S. 3106	Washer , spring, securing lever
29	S. 13878	Washer , plain	56	S. 1206	Nut , securing lever
30	S. 3106	Washer , spring	57	98568	Rod , starter
31	S. 1106	Nut , securing pedal support	58	70219	Grommet , for transmissions
32	70119	Pedal , support	59	b) 87406	Sleeve , protection
33	70146	Clip , for nut	60	3221	Clip , for cables
34	70147	Nut , square	61	97326	Strap , retainer, for sheath
35	71165	Pin , for link	62	S. 12281	Bolt , securing pedal support
36	78931	Washer , rubber	63	S. 13880	Washer , plain, securing pedal support to frame
37	S. 12761	Split pin , for pivot			
38	S. 6939	Washer , spring, sec. cable			
39	S. 1426	Nut , sec. brake cable			

a) Ferrules 2174 and 23825 must be lightly squashed on the cable sheath on assembly.

b) Order by meters or feet.



TABLE XIII



PARTS LIST FOR HAND TOOLS AND ACCESSORIES

Wheel - Tools - Accessories

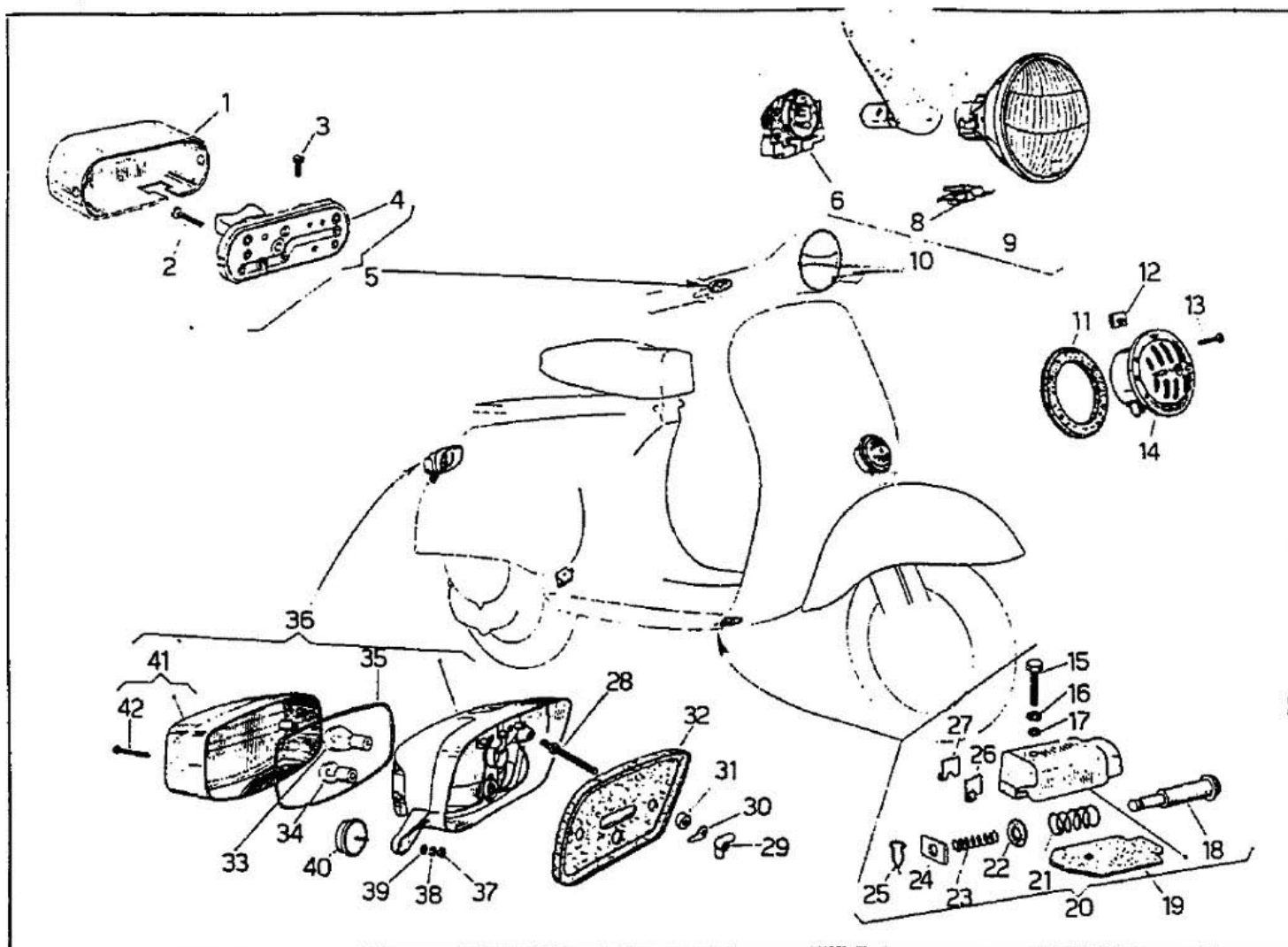
(Table XIII)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	3204	Screwdriver	6	84829	Spanner , single open end 7 mm.
2	11469	Roll , tool	7	100662	Bracket , spare wheel (With parts Figs. 8 - 9 - 10 - 11 - 12 - 13 - 14).
3	91422	Roll , tool g. a. (Parts Figs. 1 - 2 - 4 - 5 - 6).	8	51199	Cap , securing wheel
4	100511	Spanner , box (11 - 14 - 21 mm.).	9	S. 3108	Washer , spring, securing spare wheel and rim
5	17856	Spanner , single open end 8 mm.	10	S. 1108	Nut , spring, securing spare wheel and rim

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Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
4876	Bolt , securing spare wheel bracket	20	84630	Rim (With part Fig. 15).
S. 12277	Bolt , securing spare wheel bracket	21	85058	Measure , for fuel mixture
S. 3058	Washer , plain	22	150934	Rim , g. a. (Parts Figs. 9 - 10 - 16 - 20).
85083	Packing , securing spare wheel bracket	23	98708	Bar , front, for pillion seat
S. 12468	Bolt , rim	24	98707	Bar , rear, for pillion seat
150718	Flange	25	S. 3106	Washer , spring, securing pillion seat
97882	Tyre	26	S. 1106	Bolt , securing pillion seat
150717	Wheel , g. a. Parts Figs. 17 - 19 - 22).	27	98912	Pillion seat , rear (With parts Figs. 23 - 24 - 25 - 26).
150442	Tube , inner	28	153000	Booklet , « Operating instructions and parts list »





PARTS LIST FOR ELECTRIC EQUIPMENT

Head lamp - Tail lamp - Switch - Horn - STOP

(Table XIV)

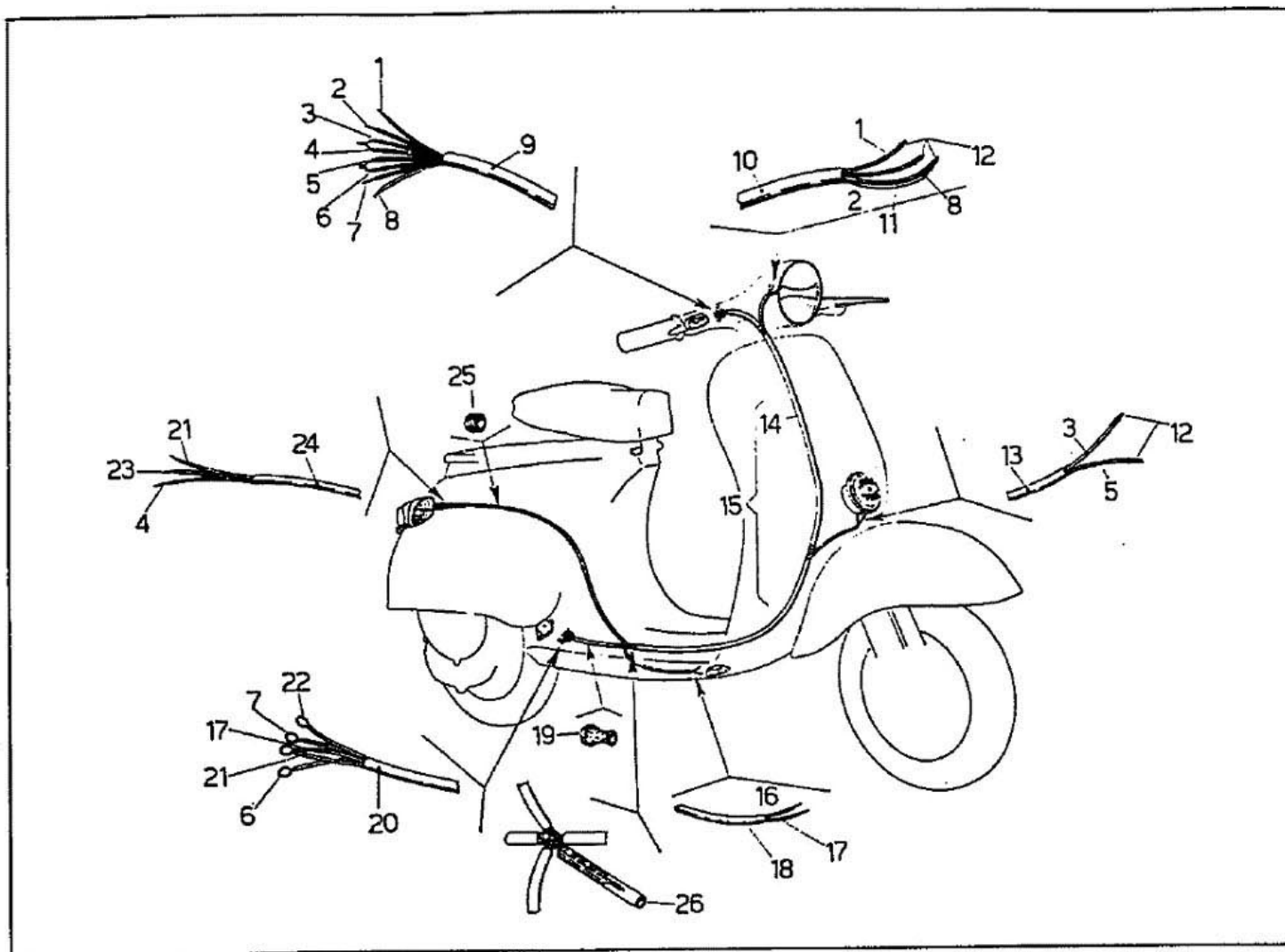
Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	92813	Cover, for switch	6	70806	Socket, for bulb
2	3213	Screw, securing switch	7	16583	Bulb, double filament
3	28334	Screw, switch clamps	8	70696	Spring, securing headlamp
4	92949	Board, clamp, g. a. (With part Fig. 3).	9	150139	Reflector
5	92654	Switch, g. a. (Parts Figs. 1 - 2 - 4).	10	150138	Headlamp, g. a. (Parts Figs. 6 - 8 - 9).



Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
11	70615	Packing , for horn	28	18425	Stud , for tail lamp attachment to chassis
12	S. 8088	Spring , securing horn	29	15178	Wing nut , for tail lamp attachment to chassis
13	S. 8431	Screw , self tappin	30	16627	Washer , spring, for tail lamp attachment to chassis
14	70300	Horn	31	21473	Spacer , tail lamp attachment to chassis
15	S. 14725	Bolt , securing stop switch	32	101060	Gasket , between chassis and tail lamp
16	S. 3104	Washer , spring	33	92184	Bulb , STOP
17	S. 3054	Washer , plain	34	92031	Bulb , registration plate
18	70140	Plunger , stop switch	35	150555	Packing , for glas
19	70144	Packing , for STOP switch	36	100772	Rear lamp , g. a. (With parts Figs. 28 - 35 - 37 - 38 - 39 - 40 - 41).
20	70138	Switch , STOP (With parts Figs. 18 - 21 - 22 - 23 - 24 - 25 - 26 - 27).	37	S. 1003	Nut , for red reflector
21	70141	Spring , for STOP switch	38	S. 3103	Washer , spring, for red reflector
22	55322	Washer , shoulder	39	S. 3053	Washer , plain, for red reflector
23	70726	Spring , STOP switch	40	70557	Red reflector , for tail lamp
24	55324	Thrust plate	41	150552	Glass , rear lamp with screws Fig. 42.
25	55325	Spring	42	150553	Screw , securing glass
26	70142	Lamella , R. H.			
27	70143	Lamella , L. H.			



TABLE XV



PARTS LIST FOR ELECTRIC EQUIPMENT

Cable harness

(Table XV)

Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
1	97527	Cable , from switch to head lamp	6	97656	Cable , from low tension socket to switch
2	97528	Cable , from switch to head lamp	7	97533	Cable , from low tension socket to switch
3	97531	Cable , from switch to horn	8	97939	Cable , from switch to head lamp
4	101114	Cable , from switch to tail lamp	9	97542	Tube , insulating, for switch cables
5	99114	Cable , from switch to horn			

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Figure Number	Spare Part	DESCRIPTION	Figure Number	Spare Part	DESCRIPTION
10	97689	Tube, insulating, for head lamp cables	18	57198	Tube, insulating, for STOP cables
11	97541	Cable, for head lamp earth	19	48170	Cap, insulating, for L. T. socket
12	26930	Plug, for headlamp and horn cables	20	97544	Tube, insulating, for L. T. socket cables
13	20970	Tube, insulating, for horn cables	21	97536	Cable, from L. T. socket to STOP light
14	97660	Tube, insulating	22	97538	Cable, for L. T. socket earth
15	101113	Wiring, g. a. (Figs. 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 16 - 17 - 18 - 20 - 21 - 22 - 23 - 24 - 26).	23	97539	Cable, for tail lamp earth
16	97540	Cable, for STOP switch	24	97545	Tube, insulating, for tail lamp cables
17	97537	Cable, from L. T. socket (coil Nr. 1) to STOP switch	25	15098	Grommet
			26	92848	Tube, insulating





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