Service Manual

MODEL # FFA 61-14001 B

SERIAL # 66

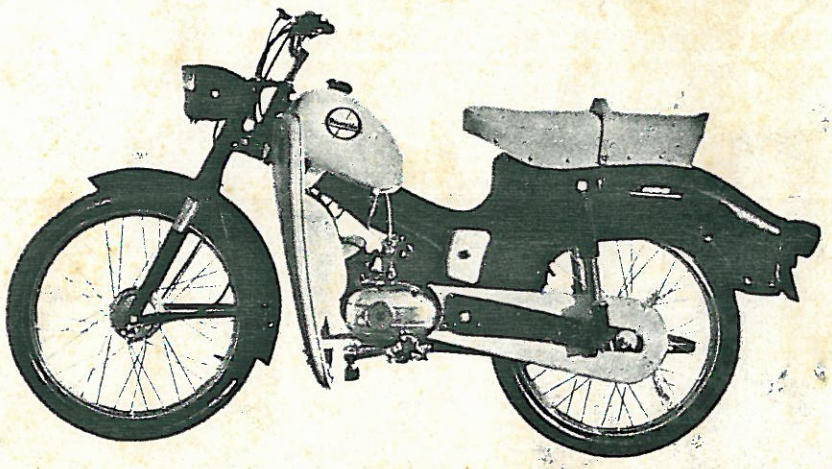
WARDS Riverside

MO-PEDS

MODELS FFA-14001 AND 14018

MODEL # FFA 61-14001 B
SERIAL# 66

DEPARTMENT 61



AUGUST 1965

CRS-6151

ISSUED BY THE CUSTOMER SERVICE DEPARTMENT, CHICAGO

$1.50

SERVICE MANUAL

WARDS Riverside

MO-PEDS

MODELS FFA-14001 AND 14018

FOREWORD

This Manual provides the necessary information and procedures for disassembly, reassembly, repair and adjustment of the basic components of the Riverside Mo-Peds.

Service procedures and techniques were prepared to take full advantage of special tools to make fast service possible.

The following subjects:

1. Assembly and Adjustment
2. Lubrication
3. Operation
4. Break-in
5. Maintenance
6. Specifications
7. Exploded Views with Parts Index
8. General Information

are covered in the Owner's Guide for the Mo-Peds which has been assembled within the covers of this Manual.

MONTGOMERY WARD
CUSTOMER SERVICE DEPARTMENT
CHICAGO

TABLE OF CONTENTS

Warranty

For a period of ninety days from date of purchase or 3000 miles, which ever occurs sooner, Montgomery Ward will replace for the original purchaser, free of charge, any part, or parts, found upon examination by any Wards Repair Service Representative to be defective in material and/or workmanship.

All transportation charges on parts submitted for replacement under this warranty or pick-up and delivery charges for a complete machine being returned for repair under this warranty must be borne by the purchaser.

There is no other warranty expressed or implied. Wards shali in no event be liable for consequential damage.

This warranty becomes null and void if:

1. Breakage of parts or damage to parts is due to abuse or failure to follow operating and maintenance instructions outlined in this Owner's Guide.
2. Any modifications are made to the frame or engine.
3. The machine is used in sporting competition.
4. The machine is used for rental.

Claims can be made thru any Wards Retail Store or Catalog House and must include evidence of purchase date, article number and serial number of frame and engine.

RIVERSIDE MOPED - MODEL NUMBER FFA - 14001
MODEL NUMBER FFA - 14018

MONTGOMERY WARD welcomes you to the rapidly growing numbers of discerning owners who have selected the precision-crafted Riverside. The Riverside is a superb quality machine and was assembled to exacting standards by "Old World" craftsmen.

Regular attention to simple maintenance procedures will keep your Riverside in prime condition to perform as the "thoroughbred" it is.

Careful carrying out of the assembly, adjustment, lubrication and maintenance instructions in Owner's Guide will also assure that you will not unintentionally abuse or neglect your machine and void the warranty.

IMPORTANT

To derive maximum satisfaction from your Riverside Moped, read and carry out the instructions under the following headings:

1. Assembly and adjustment
2. Lubrication
3. Operation
4. Break-in
5. Maintenance

ASSEMBLY AND ADJUSTMENT

Your Moped has been carefully and compactly crated to bring it to you in excellent condition. At a minimum shipping charge. Careful assembly of your Riverside will give you an excellent opportunity to become familiar with the workings and minor adjustments of the controls. The tools necessary for assembly and adjustment are packed with your machine. Follow the steps below for quick and easy assembly.

1. After removing the lid of the crate you will observe that packing braces are located at the handlebar and seat post. (Fig. 1). Remove the bolts fastening the packing braces to the side of the crate, and remove braces.

2. Remove handlebars and large boxes containing leg shield (model 14001) and seat from crate. (Figs. 2 and 3).

3. Remove machine and set on stand and rear wheel. (Fig. 4). Remove large box containing front wheel and fender. (Fig. 5).

4. During shipment the suspension spring inside each fork tube might have become jarred loose on the spring-block onto which the spring is spiraled. Both the spring and block are inside the fork and cannot be seen. The spring can be snugged onto the spring-block by simply turning each lower fork tube clockwise (to the right) You will feel the spring spiral onto the spring block and then butt against it. Further turning only twists the spring and you will sense the "springy-feel" as the spring resists the twist

5. Remove the tools from the tool carrier. (Fig. 6).

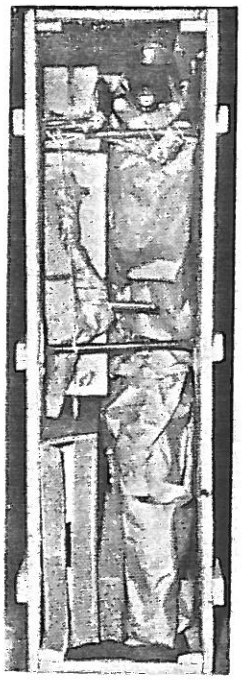


fig. 1

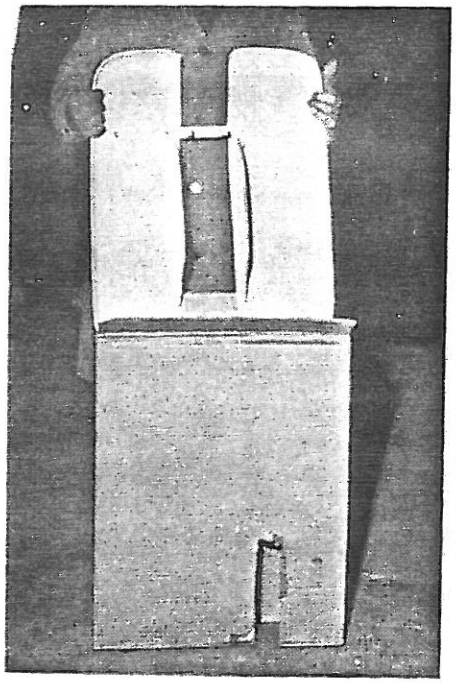


fig. 2

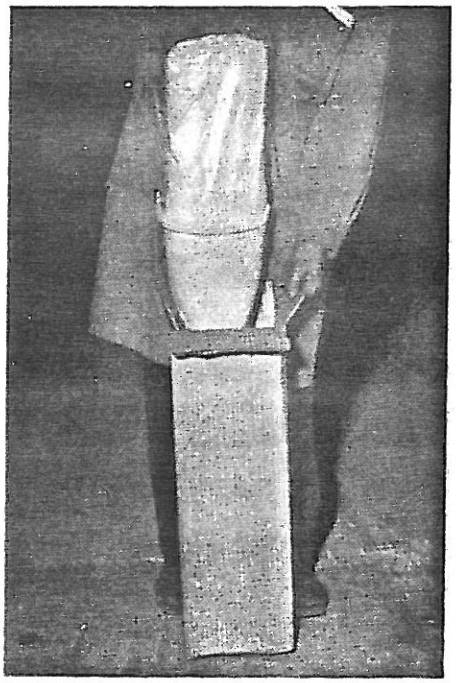


fig. 3

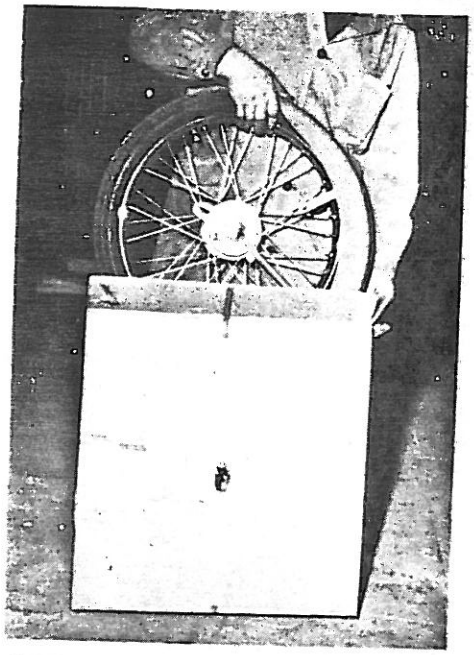


fig. 5

6. INSTALLATION OF FRONT FENDER: (Fig. 7)

a. There is a bolt on the lower tube of each fork about midway down. Slip one vertical fender brace over each of these bolts, then the flat washer, lock washer and nut. Leave nut loose.

b. Twist opposite lower fork so that the bolt swings into the other brace. Put on washers and nut as on other side and tighten nuts on both sides.

7. Remove the front wheel from its packing box and examine. On the right side (rider's view) of the wheel are the brake actuating lever and the torque arm. On Model 14001, a speedometer drive is on the left side. On the speedometer drive there is an "L" shaped drive arm which fits into a hole in the brake drum. Be sure this arm is in the drum hole and remains there as the wheel is mounted.

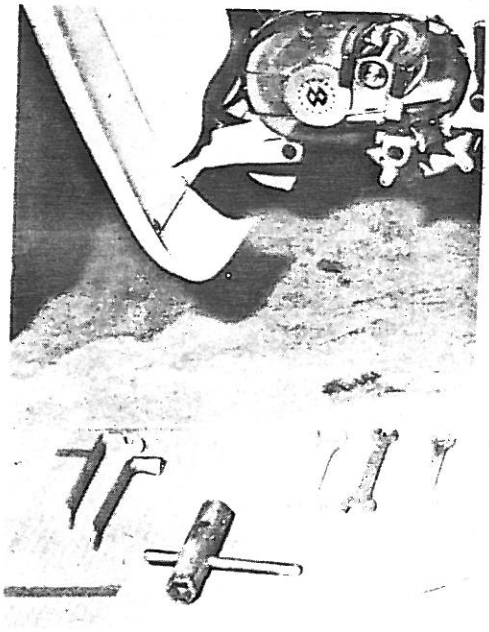


fig. 6

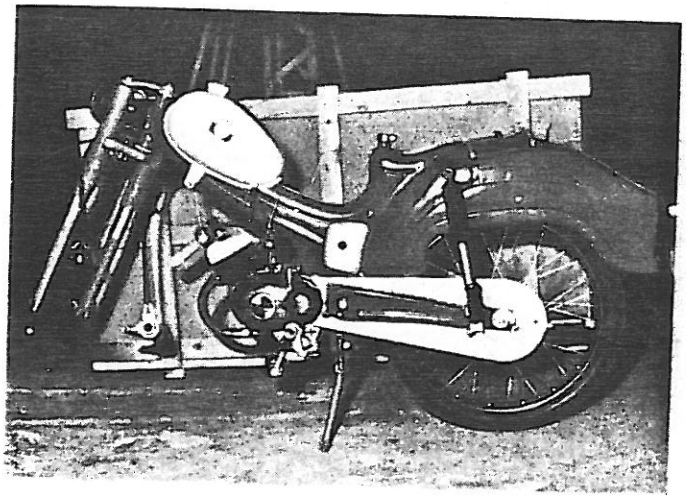


fig. 4

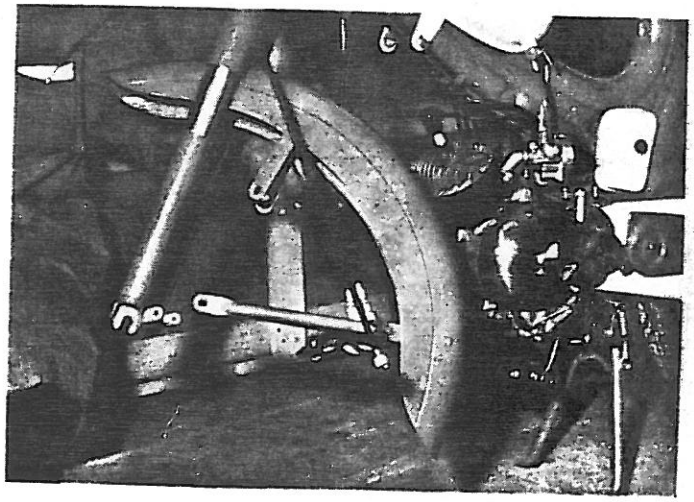


fig. 7

8. MOUNTING OF FRONT WHEEL:

a. Loosen outer nuts on each side of axle sufficiently to receive the fork. Don not remove.

b. Slip the axle snugly into the fork keeping the flat washers between the fork and the outer axle nuts. While mounting the wheel on the fork, slip the torque arm over the pin located about two inches above the bottom of the right (rider's view) fork. Keep the flat portion of the speedometer drive horizontal as shown. (Fig. 8).

c. Oil the speedometer drive through the ball-sealed hole at the bottom.

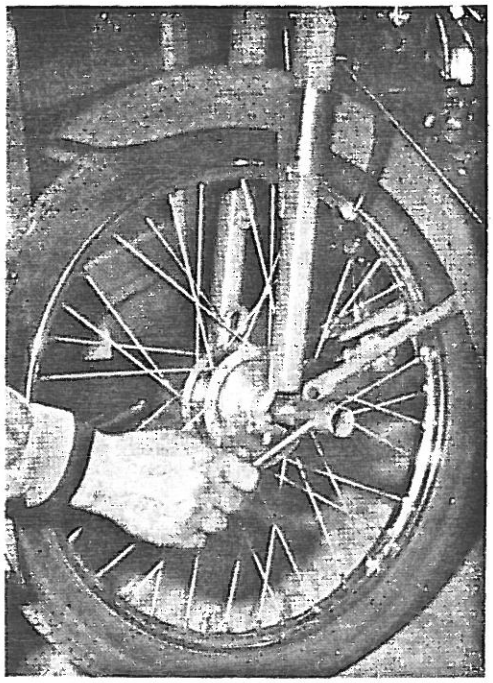


fig. 8

9. INSTALLATION OF HANDLEBARS:

a. Examine the gooseneck and note that a bolt goes down through the top of it and screws into an expander cone. When this bolt is tightened, the cone is drawn into the split bottom of the gooseneck and expands it. This expansion holds the gooseneck (and handlebars) firmly inside the top of the fork assembly.

To remove gooseneck from fork assembly, loosen bolt several turns and tap it down to knock the cone out of the split bottom of the gooseneck.

b. Insert gooseneck with the bolt and cone loose into the fork assembly **as far as it will go.** Tap the bolt head lightly, if necessary. Do not tighten bolt.

c. Slip left grip over handle bars. Do not tighten.

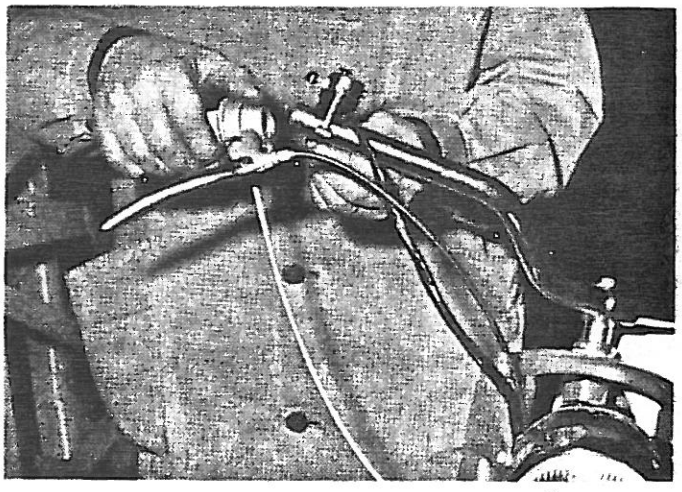


fig. 9

d. Slip the horn, light and motor switch assembly over the right handlebar. Slip right grip over handlebar as far as it will go on. Do not tighten. (Fig. 9). It is necessary to turn the handlebar in the fork to the point where the grip will slide over the end of the handlebar with the cables attached.

e. Raise handlebars to prefered height and tighten expander cone bolt with 10mm "socket-type" wrench furnished.

f. Push the left grip as far on as it will go. Position it so that the brake lever is directly in front of the grip and the grip and the lever are in a horizontal plane. Tighten as shown. (Fig. 10).

g. Position the right grip like the left grip and tighten. Position the horn, light and motor switch assembly as shown and tighten. (Fig. 10).

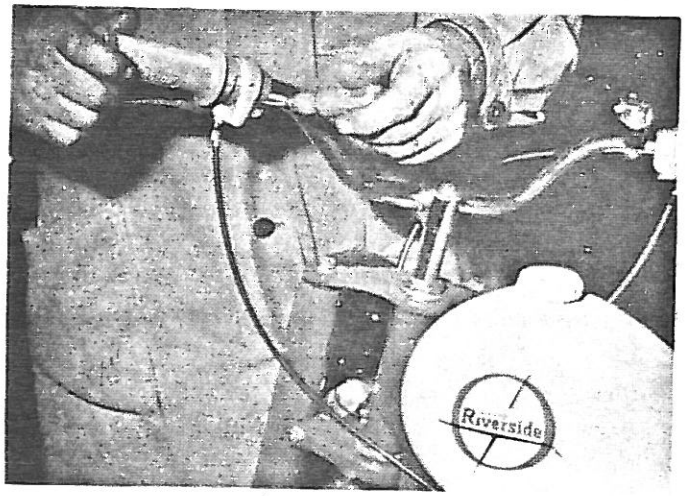


fig. 10

10. Trace the cable from the front wheel brake lever on the right handlebar down between the front forks through the cable loop on the right fork to the bracket on the right side of the wheel hub. Slip the plastic sleeve for retaining excess cable over the lower end of the brake cable. Put the cable end into the bracket as shown. (Fig. 11).

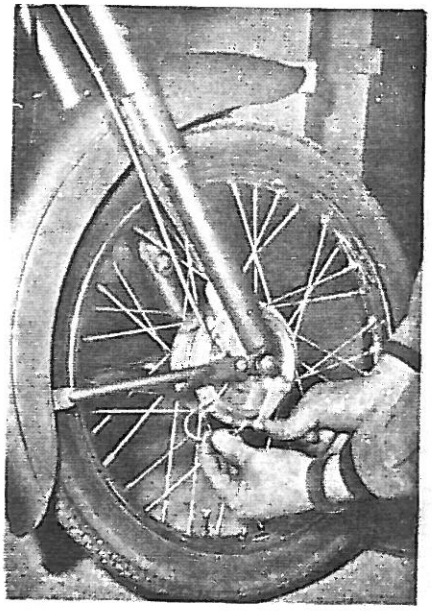


fig. 11

11. Draw cable down to brake actuating lever.

12. Use wrench on large nut of actuating lever to move lever upward and hold in this position while tightening cable clamp. (Fig. 12).

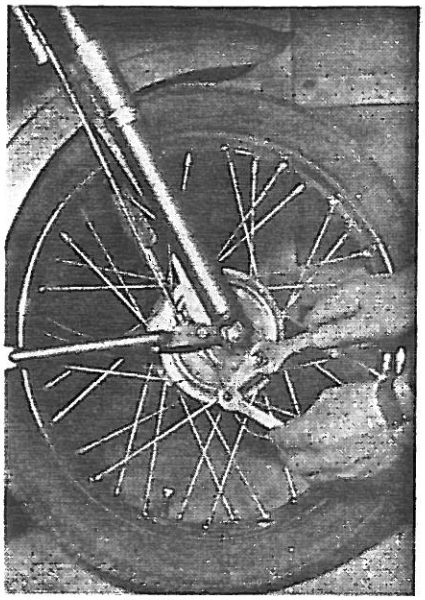


fig. 12

13. Slip cable through cable clamp and tighten clamp nut. Draw nut tight enough to bend and slightly flatten cable, but do not over tighten because the clamp or cable may be weakened and/or break. Bend excess cable back and slip end into plastic sleeve.

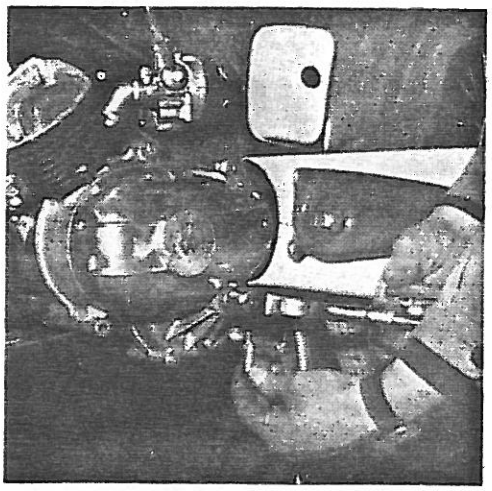


fig. 13

14. Remove pedal cranks and mount correctly as shown. (Fig. 13).

15. **INSTALLATION OF SEAT:**

a. Put seat post into frame as shown. (Fig. 14). On Model 14001, do not tighten clamp on frame.

b. Observe how latch on the rear of seat works. Latch is released by pushing in at the lower rear of seat thus sliding the latch pin out of the hole in the bracket bolted to the rear fender.

c. Make sure that the latch pin lines up with the bracket hole and tighten clamp on the seat post.

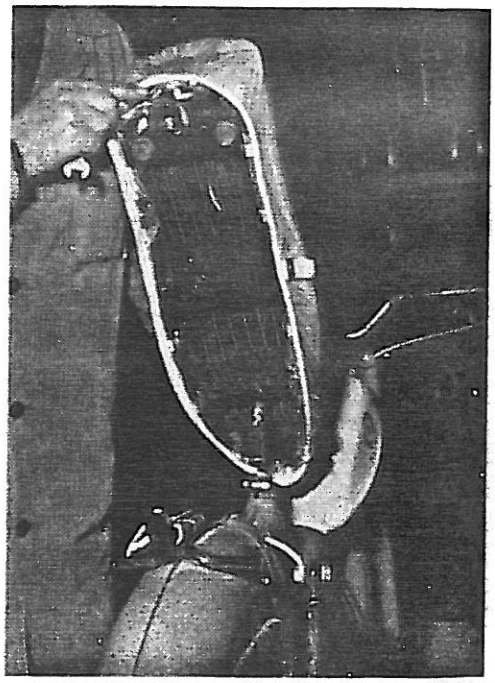


fig. 14

16. INSTALLATION OF LEG SHIELD (Model 14001):

a. First attach each shield to the two brackets but do not tighten. Then remove bolt on bracket under gas tank as shown (Fig. 15).

b. Install upper leg shield bracket on the outside of the gas tank bracket and insert bolt. (Fig. 16). Do not tighten nut.

c. Bolt lower leg shield bracket to engine as shown. Tighten both bracket bolt nuts (Figs. 17 and 18).

d. Note location of transmission oil filler in front of the base of cylinder. Picture shows wrench being applied to filler plug. (Fig. 17).

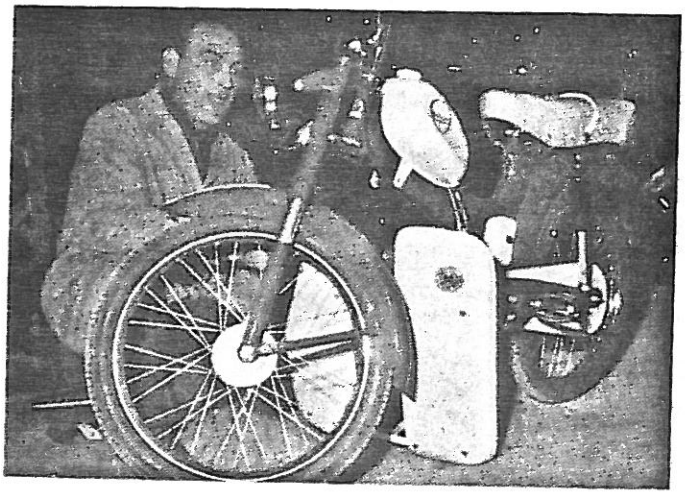


fig. 5

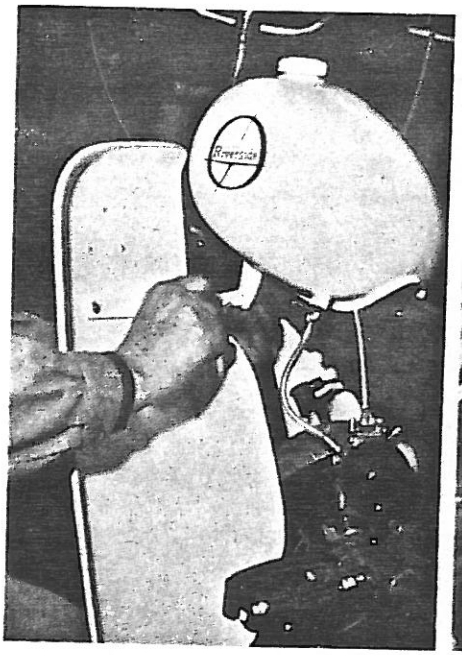


fig. 6

fig. 7

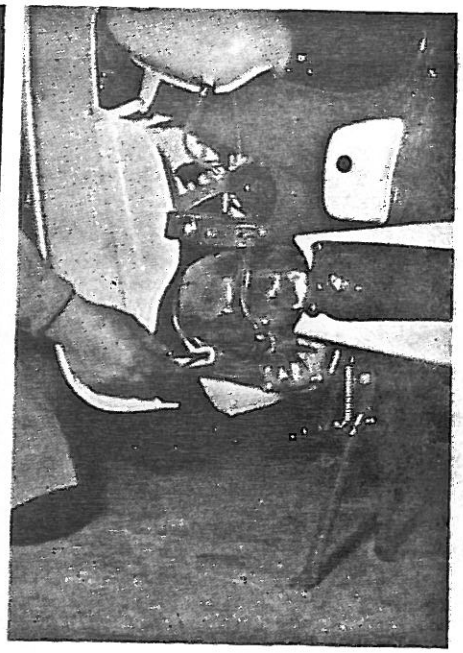


fig. 8

TIRES

Tire pressures are important to the safe handling of your Riverside. Check your tires at regular intervals and be sure to keep them at the following pressures (cold after standing):

Front Tire: 22 lbs. Rear Tire: 32 lbs.

LUBRICATION

Your Riverside Moped two-cycle engine never needs an "oil change"; a fresh supply of oil is continuously carried with the fuel to the vital inner parts of the engine. There is never any waiting for a warm-up of the oil for proper lubrication.

BREAK-IN PERIOD

Important - During the break-in period (1,000 miles) the amount of oil mixed with the gasoline is increased from 5% to 7%. Use the following chart in preparing the proper mixture.

Add Gallons of Regular Gasoline	To This Amount of Oil
5	48 oz. (1½ qts.)
2	16 oz. 1 pt.)
1	8 oz. (½ pt.)
1/2 (2 qts.)	3 capfuls

Use Wards Riverside Two-Cycle Outboard motor oil No. 61-8311 or equivalent, winter and summer. Be sure gasoline and oil are thoroughly mixed in the gas tank before starting engine.

AFTER BREAK-IN PERIOD

After 1,000 miles and for the life of your Riverside use a 5% mixture of oil and regular gasoline. There is a measuring cap built into the filler on your gas tank. For each **quart** of gas put into your tank add one capful of Wards Two-Cycle Outboard motor oil or equivalent, winter and summer. For mixing in larger quantities use the following chart.

Add Gallons of Regular Gasoline	To This Amount of Oil
5	32 oz. (1 quart)
2	12 oz.
1	6 oz.
1/2 (2 qts.)	2 capfuls

Be sure that gasoline and oil are thoroughly mixed in the gas tank before starting engine.

TRANSMISSION

Remove the oil filler plug located at the base of the front part of the cylinder (Fig. 17) and fill the transmission to just under the fill hole with Wards Riverside S.A.E. number 20 motor oil (approximately one pint or 16 fluid ounces). To drain the transmission, remove the drain plug located below the **left** pedal crank shaft on the transmission housing.

IMPORTANT:

Before operating your Riverside check to see that:

1. All controls function properly.
2. All nuts and bolts are tight.
3. Wheels spin freely.
4. There is oil in the transmission.
5. There is gasoline in the gas tank mixed with oil of the correct weight, in the proper proportion.
6. The tires are inflated properly.
7. Re-read all or any portion of this Owner's Guide for further information on the above.

OPERATION

Before starting the engine, see LUBRICATION instructions in preceeding section.

STARTING THE ENGINE

1. Open the petcock at the bottom of the gasoline tank by putting the lever in a vertical position. This petcock should be kept closed (lever horizontal) whenever the vehicle is not in use.

2. If the engine is cold, push down the choke lever **(see illustration)** on the upper portion of the carburetor.

3. Open (turn counter-clockwise) the right throttle twist grip slightly.

4. It is suggested that the engine be started by pedaling, either at rest on the stand or in motion. When sufficient speed is attained, turn the left grip to the rear (clockwise) to manually engage the automatic clutch. Keep pedaling momentarily until the engine starts.

   If in motion release the left grip and open the throttle additionally to accelerate. To open the choke, turn the throttle until choke lever pops up. If at rest, release the left grip, apply the rear brake at the left grip, roll the machine off the stand, release brake, and open throttle to accelerate. To release choke, open throttl until choke lever pops up.

5. The clutch and transmission are automatic. Accelerate to speed by simply opening the throttle. To start after a stop simply open the throttle and accelerate to speed.

CAUTION: If at any time a pedal crank is removed, never attempt to start the engine with only one remaining crank. Without the retaining effect of the second pedal crank, the thrust applied to the remaining pedal will tend to crack the transmission housing.

STOPPING

RELEASE THE THROTTLE AND APPLY BRAKES. LEARN TO USE BOTH FRONT AND REAR BRAKES FOR EVERY STOP. FOR SKILLED STOPS APPLY THE REAR WHEEL BRAKE MOMENTARILY BEFORE THE FRONT BRAKE. NEVER BRAKE IN A TURN. ON LONG DOWNHILL RUNS WHEN THE ENGINE IS USED AS A BRAKE, OPEN THE THROTTLE NOW AND THEN TO LUBRICATE THE ENGINE.

STOPPING THE ENGINE

To stop the engine, close the throttle and press the cut-out button on the right handlebar. When the engine is not running, always close the petcock at the bottom of the gas tank by turning the lever to a horizontal position.

BREAK - IN

Follow carefully for the first 1,000 miles the special break-in instructions under **LUBRICATION.**

A. FIRST 100 MILES

This is the most critical period. Keep engine speeds down, close the throttle frequently, and open the throttle slowly and never fully.

B. 100 TO 500 MILES

Between 100 miles and 500 miles, you may begin to increase engine speeds a little; and, as you approach 500 miles, you may go to full throttle now and then for very brief periods.

C. 500-1000 MILES

Remember your Riverside engine was precision crafted. Do not make your engine perform at its maximum, during this time except for very brief periods.

D. AFTER 1000 MILES

Enjoy the rewards of your early care and follow the maintenance procedures carefully for continued fine performance from your Riverside. **HAPPY CYCLING!**

MAINTENANCE

ADJUSTMENT OF CABLES

In general all cables on your Moped can be adjusted at one end by loosening the clamp on the inner cable and sliding the cable either way in the clamp. When re-tightening, do not overtighten the clamp. Final adjustment is made by taking up or loosening the outer cable cover. Provision for this adjustment is made at one end of the cable. Loosen the lock nut and turn the adjusting nut on the screw to proper position. Tighten the lock nut while holding the adjusting nut with a second wrench.

EVERY 300 MILES

Check brake cable adjustment and adjust if necessary. See **Adjustment of Cables.**

Lubricate chain and adjust if necessary by loosening the wheel axle nuts and turning the cams so that each end of the axle moves the same distance either forward or backward.

Check manual clutch adjustment and adjust cable if necessary. See **Adjustment of Cables.**

First 300 miles, only, drain and refill transmission. See instruction under **Transmission.**

EVERY 1,000 MILES

Remove and clean spark plug. Set gap at .024.

Check ignition breaker point gap. It should be .015 inches. This service should be obtained at Wards or you should procure the Shop Manual listed at the end of the Parts List before attempting this servicing.

Adjust chain if necessary as per 300 mile instructions.

Check cables and adjust if necessary. See **Adjustment of Cables.**

Clean engine cooling fins.

Clean gas cap air-vent.

EVERY 3,000 MILES

Drain and refill transmission. See instructions under **Transmission.**
Lubricate cables and controls.
Replace spark plug. Set gap carefully at .024 inches on the new plug.

Important - Your Riverside two-cycle engine delivers exceptional power for its size and weight because it provides as many power strokes per minute as many four-cylinder engines. You have only one spark plug to replace; but since a spark plug's life is determined by how many times it fires, you **must** replace your plug at a maximum of 3,000 miles. Keep in mind that new spark plugs actually pay for themselves three ways:
1. Better mileage, 2. Longer engine life, 3. More power.

EVERY 4,000 MILES

Clean carbon deposits from top of piston, cylinder head and exhaust system. Failure to perform this maintenance will result in sluggish performance, pre-ignition, overheating, and serious damage to the internal engine parts.

Remove, clean, and lubricate chain.

EVERY 10,000 MILES

Lubricate wheel bearings.

Inspect brake shoe linings.

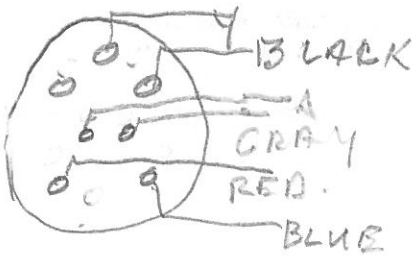
TROUBLE - SHOOTING

1. Check the procedures in the **Maintenance** section of this Owner's Guide. Most difficulties are a consequence of neglected maintenance.
2. Check to see if engine is getting fuel in the correct amount.
3. Check to see if current is reaching spark plug.
4. Take your Moped to Wards for proper service of purchase the Shop Manual listed at the end of the Parts List in this Owner's Guide to perform your own service and save money.

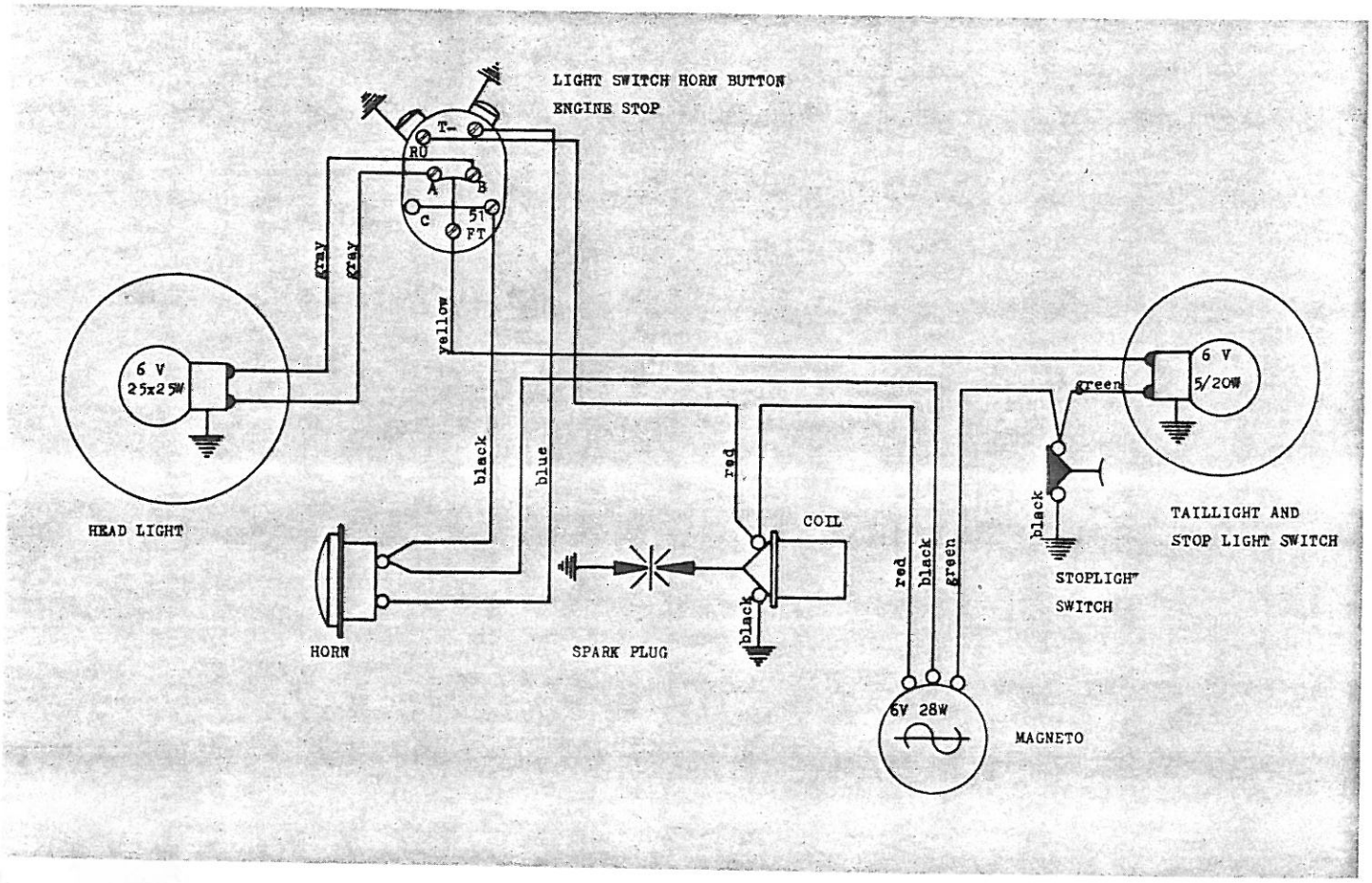
SPECIFICATIONS

Engine: Single cylinder. Two Cycle, Loop Scavenged; **Bore:** 40 mm.; **Stroke:** 39 mm.; **Displacement:** 49 cc.; **Ignition:** Flywheel Magneto;

Transmission: Automatic; **Clutch:** Automatic; **Tires:** 2¼ x 18".



MOPED WIRING DIAGRAM



NOTE - Stop lamp is wired in circuit. If bulb is defective, the engine may kill when rear brake is applied while engine is running.

HOW TO OBTAIN SERVICE

The merchandise you have purchased from us has been carefully engineered and manufactured under Wards rigid quality standards and should give you satisfactory and dependable operation.

However, like all mechanical merchandise, it may occasionally require adjustment or maintenance.

Should you ever need technical assistance, please contact or write your nearest Wards Retail Store, Catalog Store or Catalog House.

provide the following:

1. Model, serial number and all of the other data shown on the model number plate.
2. The date and the Wards branch from which you purchased your Riverside.
3. State briefly the trouble you are having.

HOW TO OBTAIN REPLACEMENT PARTS

Replacement Parts may be obtained from your Wards Retail Store, Catalog Store or Catalog House and will be made available at current prices. If requested, prices will be quoted in advance. When requesting replacement parts, be sure to give the model and serial number which is shown on the model number plate.

Also give the part number and the name of the part as shown in the parts list.

If you order by mail, you will pay the transportation charges from the shipping point.

SERVICING

The Owner's Guide for the Riverside Mo-Peds, included in this Manual, contains an insert with exploded views and a Parts List. This insert should be used with the following service procedures. Figure 1, is an additional exploded view of the engine-transmission unit that shows more clearly the relationship among the major parts identified in the Owner's Guide insert.

Figure 2, is a photograph of the set of special tools needed for servicing the engine-transmission unit. Each tool is identified with an index letter. These identifying letters are referred to in the following service procedures.

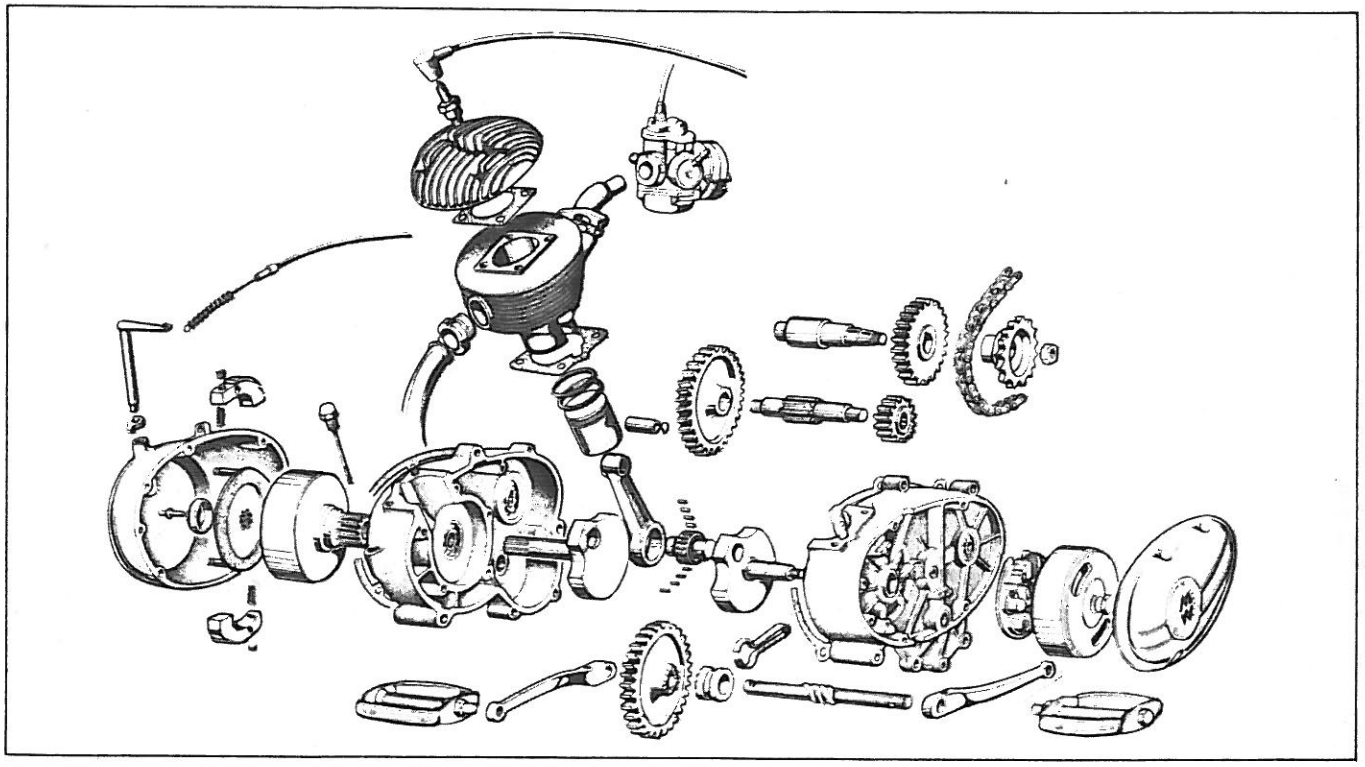


Figure 1.

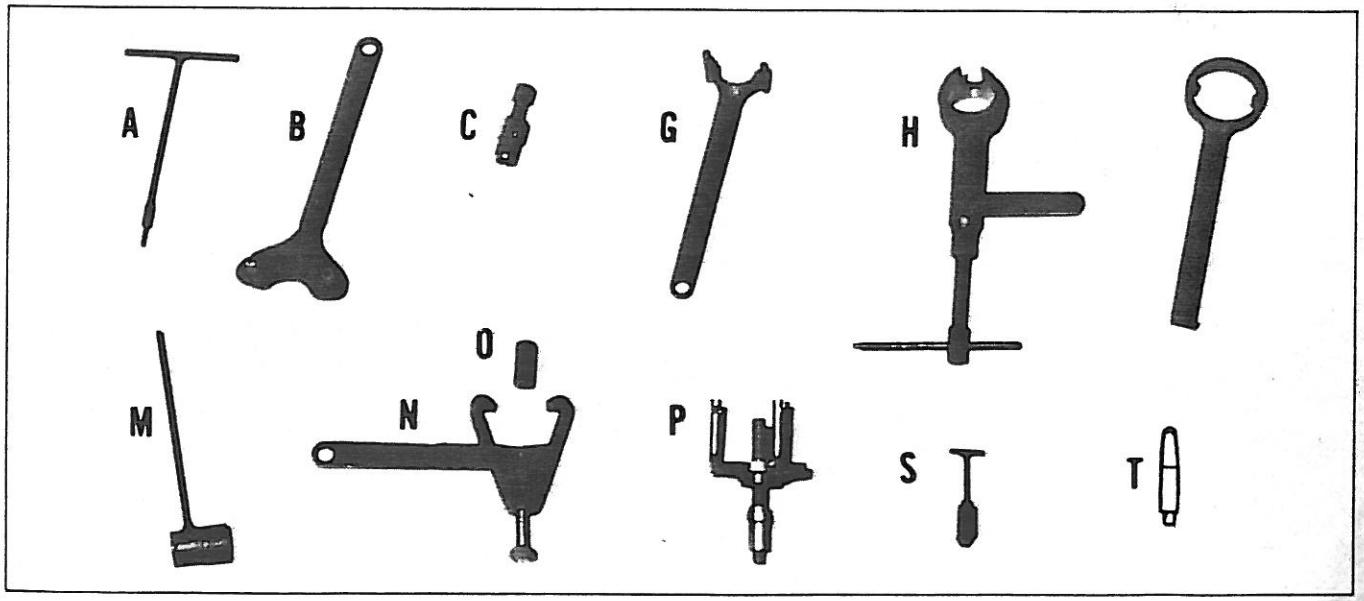


Figure 2.

Figure 3.

A. TIMING (Ignition)

1. Remove the spark plug as a precaution and to make engine turn-over easier.

2. Remove the left pedal crank. CAUTION- Never attempt to start the engine with a pedal crank removed. Without the retaining effect of the second pedal crank, the thrust applied to the remaining pedal will tend to crack the transmission housing.

3. Use tool A to remove the four screws holding the left flywheel cover and remove cover (Figure 3).

4. Check the condition of the points and replace if necessary. Adjust the gap at the high point on the cam to .016 in. or 0.4 mm. (Figure 4).

5. Spark advance is indicated by the distance in degrees betweeen the two reference marks on the flywheel. The "O" indicates TDC (top dead center) and the notch indicates the spark advance. When the "O" on the flywheel is lined-up with the "O" on the crankcase half, the piston is at TDC.

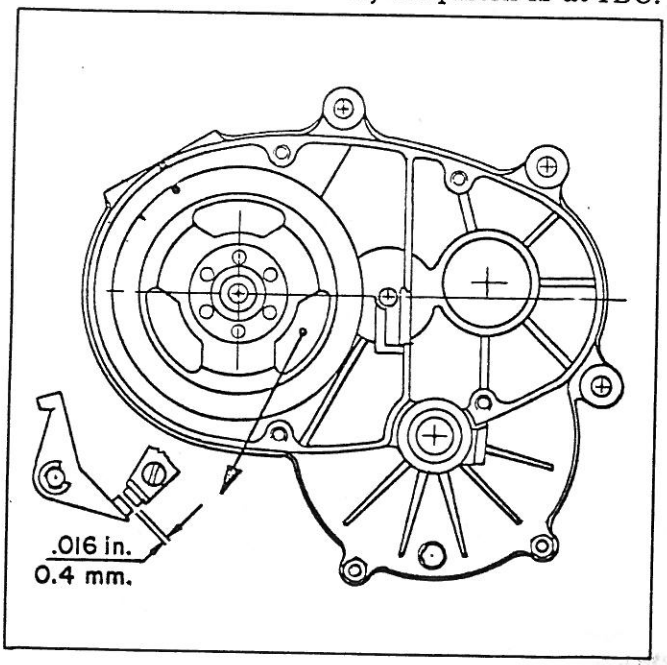


Figure 4.

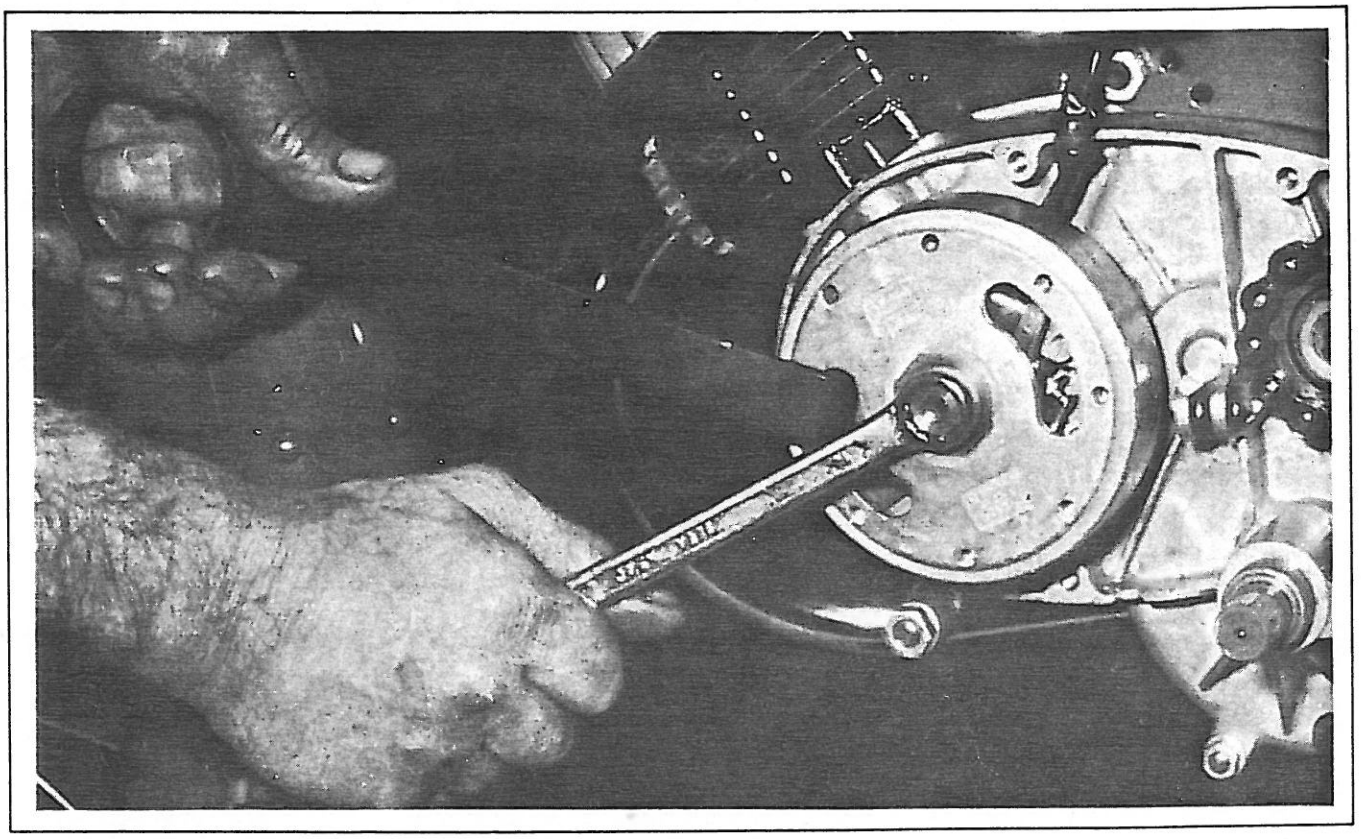


Figure 5.

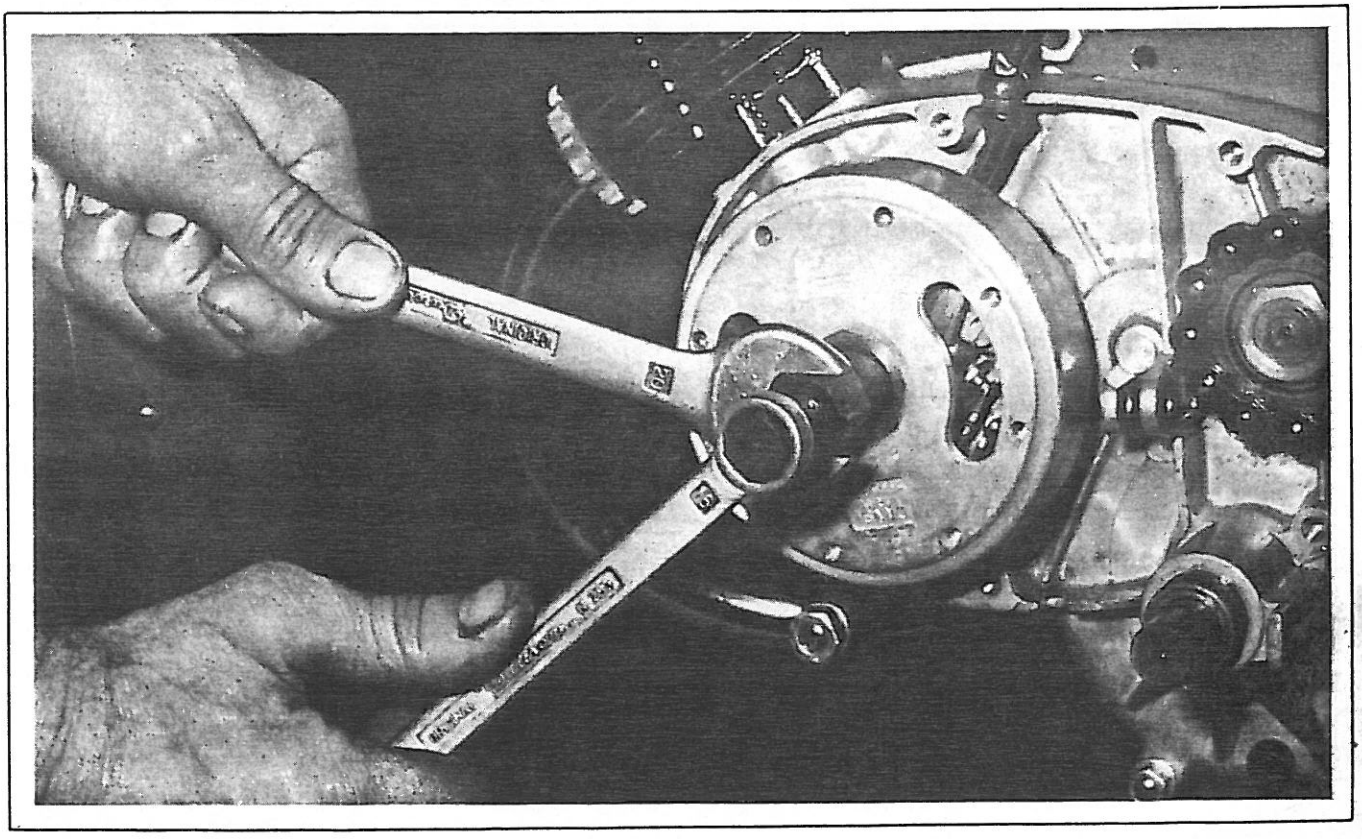


Figure 6.

When the notched reference point on the flywheel is lined up with the "O" on the crankcase half, the points should open. Use a continuity tester to determine when points open.

6. If the adjustment of the points in Step 4 is not sufficient to obtain the proper advance, it will be necessary to remove the flywheel.

7. Use tool L to lock flywheel and remove flywheel magneto lock nut (Right-hand thread) from crankshaft (Figure 5).

8. Use puller C to remove the flywheel (Figure 6).

9. Loosen the three screws holding the stator plate and turn the plate clockwise for advance and counterclockwise for retard.

10. Clean flywheel hole and tapered end of crankshaft thoroughly. Turn crankshaft until keyway is up. Replace key and flywheel on crankshaft.

11. Check timing and repeat Step 9 if necessary.

12. Replace flywheel-magneto lock nut.

13. Replace flywheel cover.

14. Replace pedal crank.

B. AUTOMATIC CLUTCH AND PRIMARY GEAR

1. Clutch:

   a. Remove right pedal crank. See Caution under A "Timing", Step 2.

   b. Use wrench A to remove screws holding right cover and remove cover.

   c. Pull out clutch push rod and remove thrust cap.

   d. Use Tru-Arc pliers to remove the retaining ring holding the starting clutch plate. Remove clutch plate with clutch shoes attached (Figure 7).

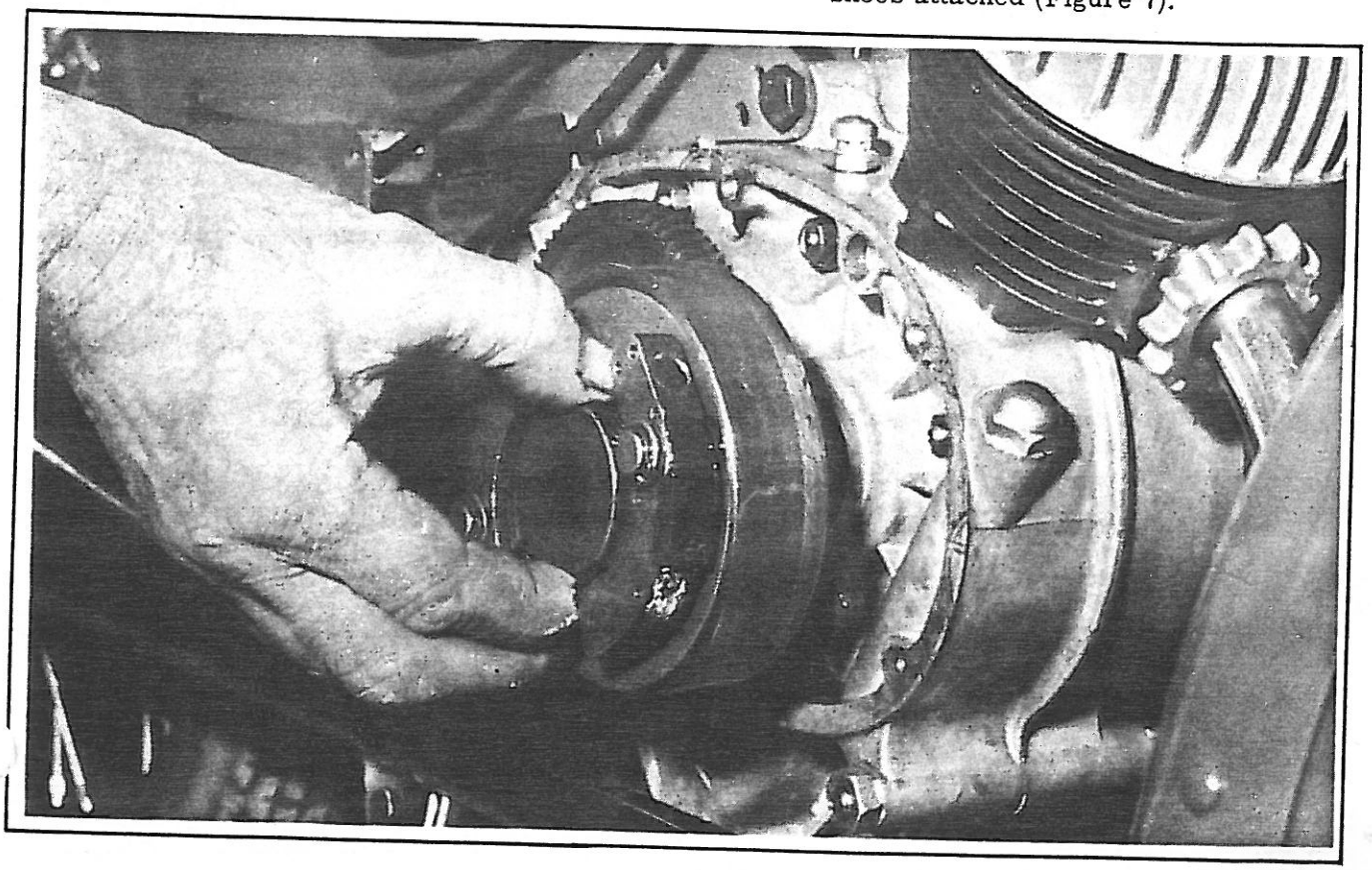


Figure 7.

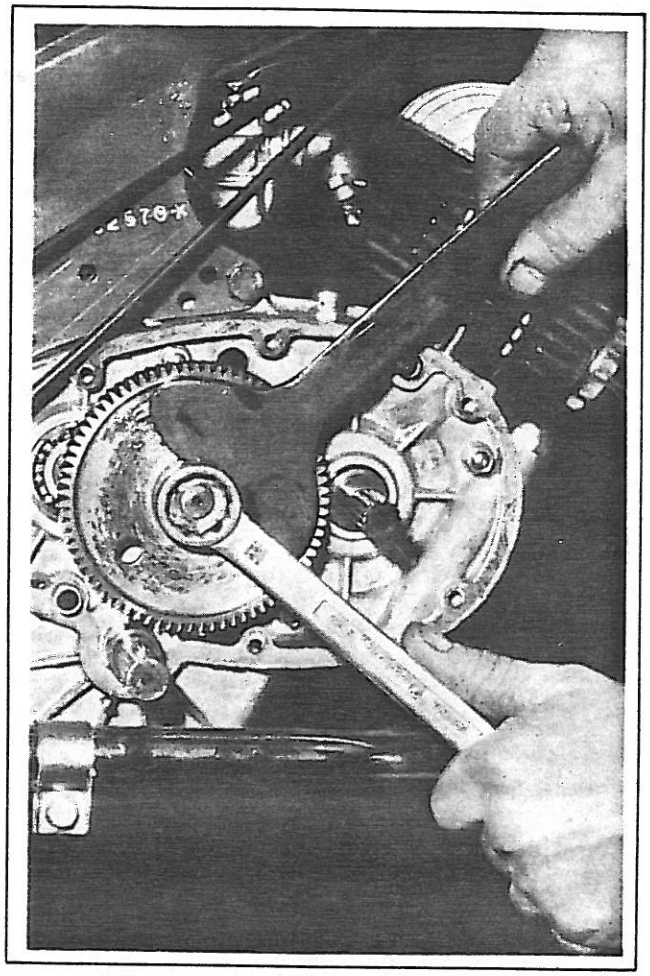


Figure 8.

e. Use Tru-Arc pliers to remove the retaining ring holding the clutch-drum and gear assembly and remove assembly.

When replacing clutch shoes, be sure that the clutch shoe screw is tightened. If the inside of the clutch drum is scored, replace the drum.

2. Primary Gear:

a. Use tool B to hold primary gear while removing gear nut from primary gear shaft (Figure 8).

b. Use puller P to pull off primary gear (Figure 9).

C. CYLINDER, CYLINDER HEAD, PISTON

1. To remove cylinder head, take off the four stud nuts and separate head from cylinder.

2. To remove cylinder:

a. Loosen the ring clamp holding the carburetor on the intake manifold (pipe). Pull off carburetor.

b. Use tool G to remove the exhaust pipe nut and separate exhaust pipe from cylinder (Figure 10).

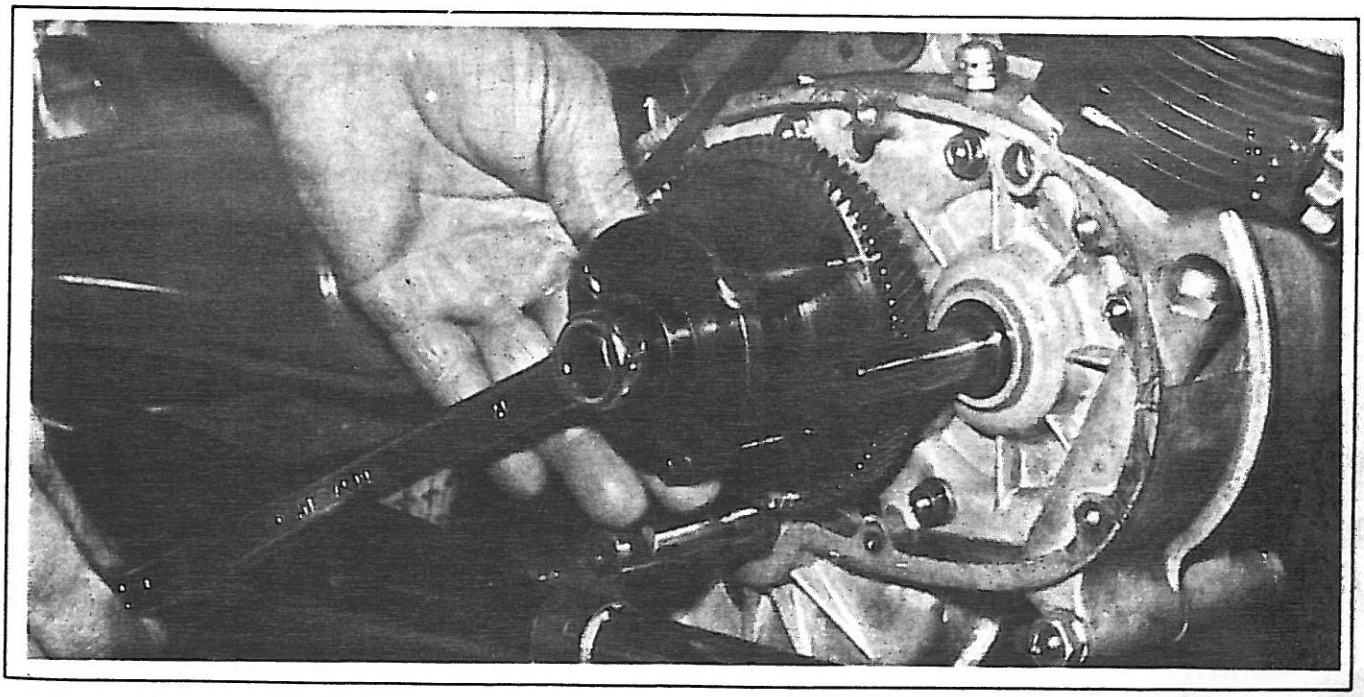


Figure 9.

c. Remove bolt fastening muffler to frame and pull out exhaust pipe and muffler. Slide cylinder off studs.

3. Use Tru-Arc pliers to remove the retaining rings from each side of the piston pin.

4. Use tool H to force out piston pin (Figure 11).

5. To reassemble piston pin into piston:

   a. Put one end of the piston pin on the shank of the screw on tool H.

   b. Withdraw the screw and piston pin and put the shank of guide (tool) T on the other end of the piston pin.

   c. Advance screw of tool H to push guide and then piston pin into piston.

6. See Figure 12 and Chart (Figure 13) for assembly tolerances and wear limits of cylinder and piston.

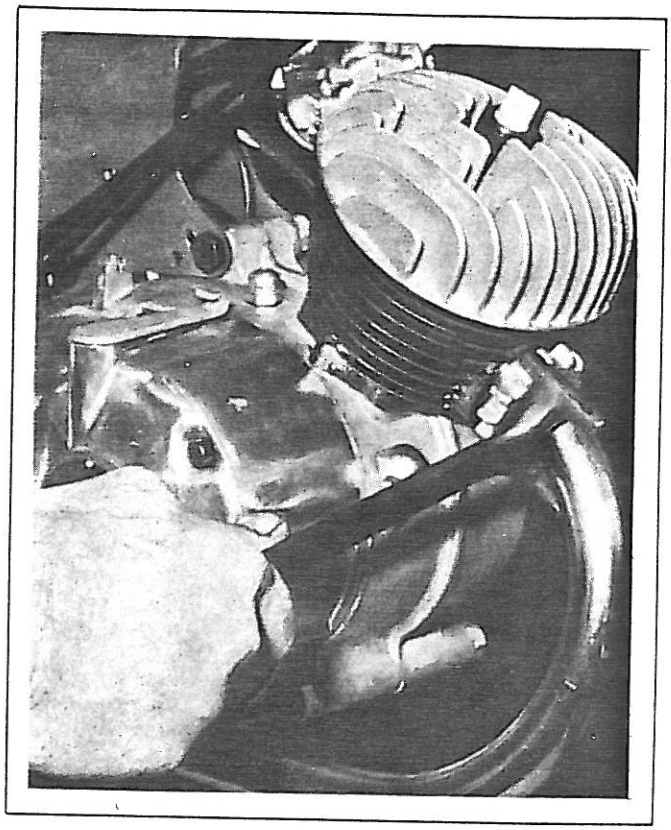


Figure 10.

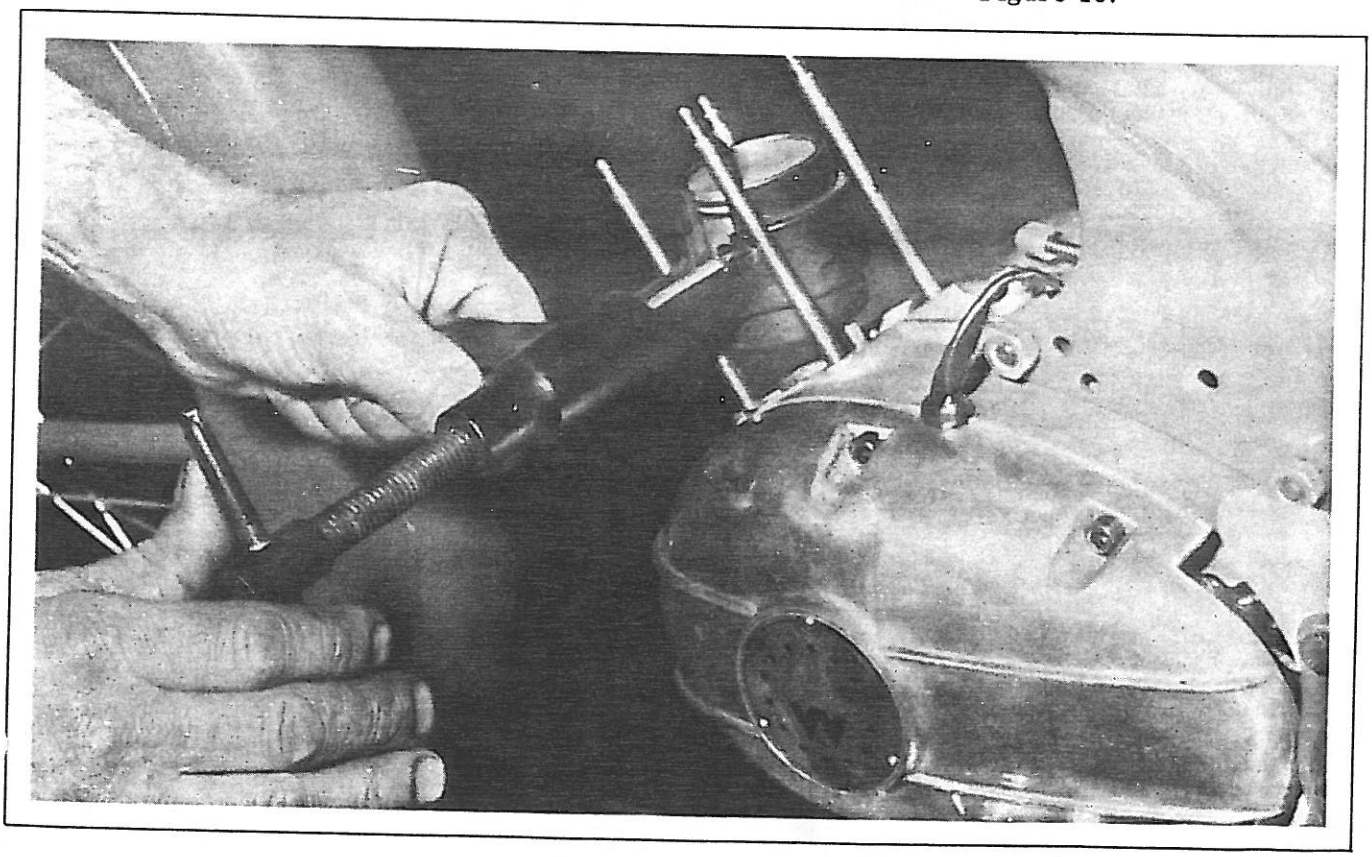


Figure 11.

D. ENGINE REMOVAL

1. Loosen the ring clamp holding the carburetor on the intake manifold (pipe). Pull off the carburetor.

2. Use tool G to remove exhaust pipe nut and separate exhaust pipe from the cylinder (Figure 10).

3. Remove clutch control cable.

4. Disconnect wires from terminal block and remove spark plug lead.

5. Remove the front upper bolt fastening the chain cover, take off master link and remove chain.

6. Take out the three engine mounting bolts and remove engine.

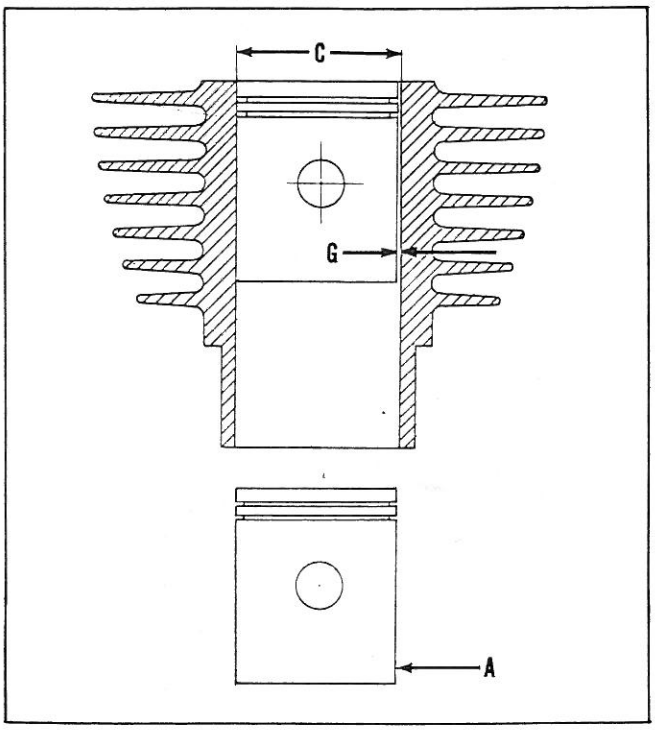


Figure 12.

ASSEMBLY TOLERANCES AND WEAR LIMITS OF CYLINDER AND PISTON

Tolerances UNDER or ABOVE the NOMINAL SIZES of the PISTON are checked at the POSITION MARKED WITH A (Figure 12).

Condition	Diameter of Cylinder C	Diameter of Piston taken at the A Position	Play between Cylinder and Piston (Maximum Wear) G
New	40 -0 / +0.015	40 -0.040 / -0.050	mm/0.10
1 st Oversize	+ 0.2 mm.	+ 0.2 mm.	Between Nominal
2 nd Oversize	+ 0.4 mm.	+ 0.4 mm.	Size of Piston
3 rd Oversize	+ 0.6 mm.	+ 0.6 mm.	and Cylinder

Figure 13.

2. TRANSMISSION OVERHAUL

1. Drain the lubricant from the transmission.

2. After carrying out steps A through D, use tool L to hold drive sprocket while removing sprocket nut with tool M (Figure 14).

3. Pull off the drive sprocket with puller N and adapter O (Figure 15). (Save the woodruff key.)

4. Remove the crankcase stud nuts.

5. Place tool S between the crankcase counterweights and turn the handle to apply a small amount of pressure to the counterweights.

6. Split apart the crankcase halves by striking the primary shaft on the clutch side with a soft-faced hammer (Figure 16).

7. With the crankcase halves separated, the crankshaft-connecting assembly, the pri-

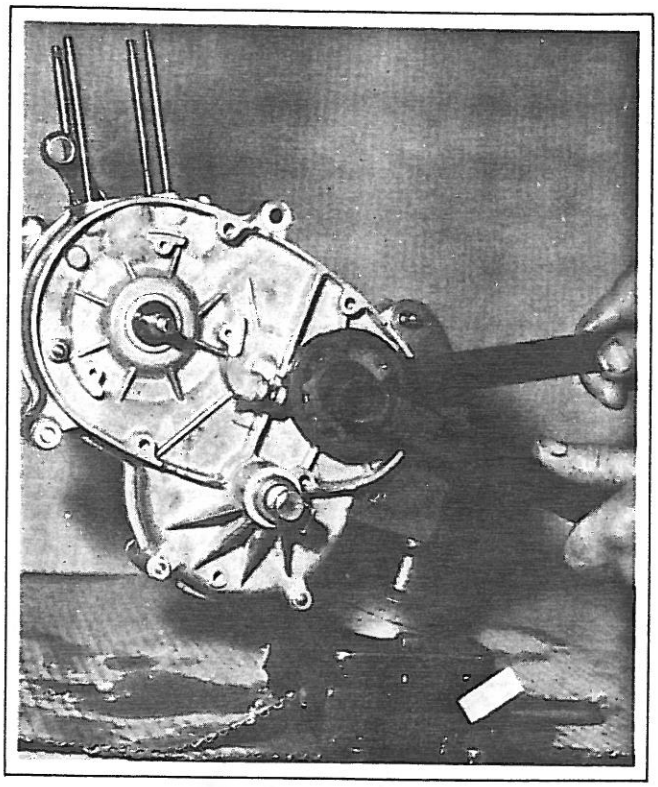


Figure 14.

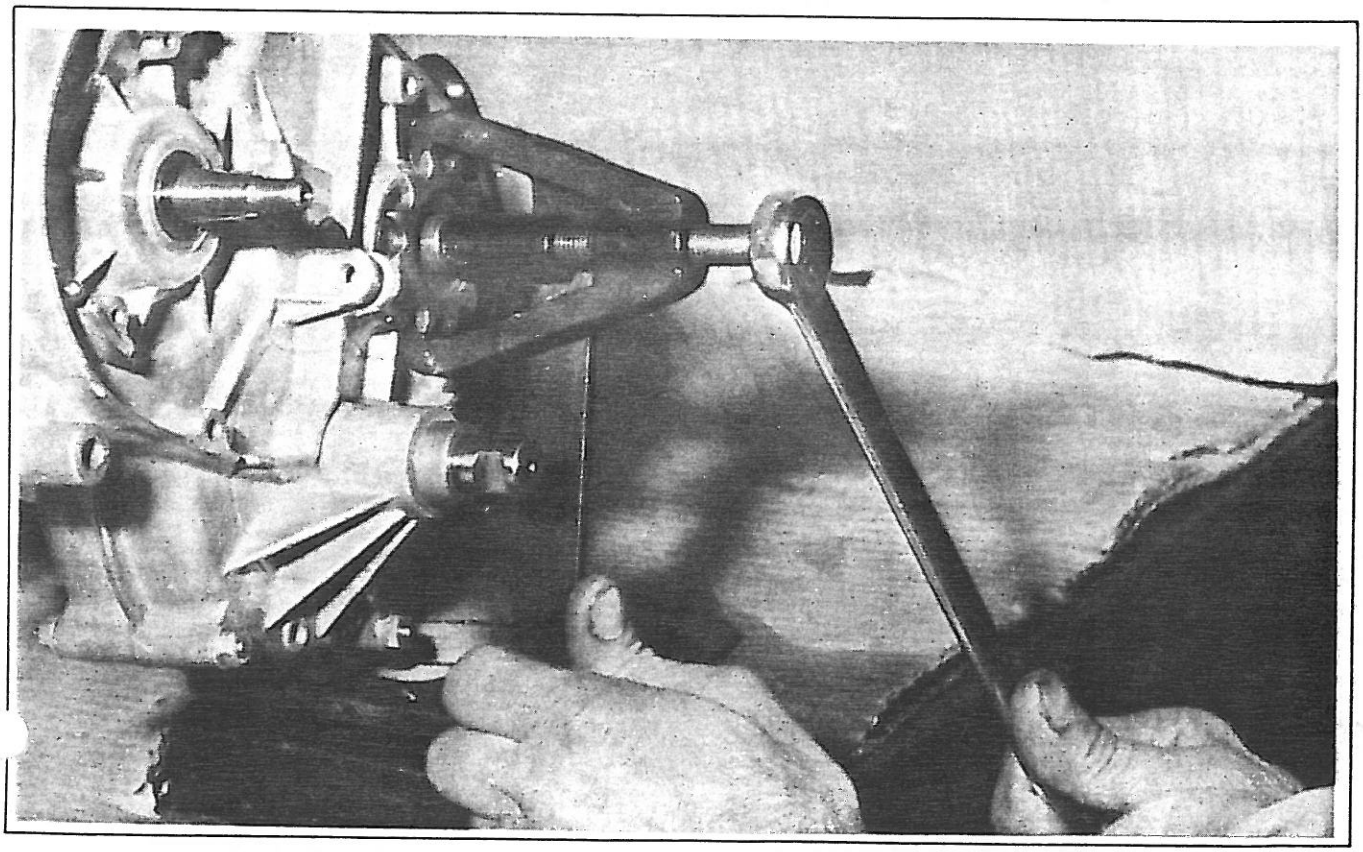


Figure 15.

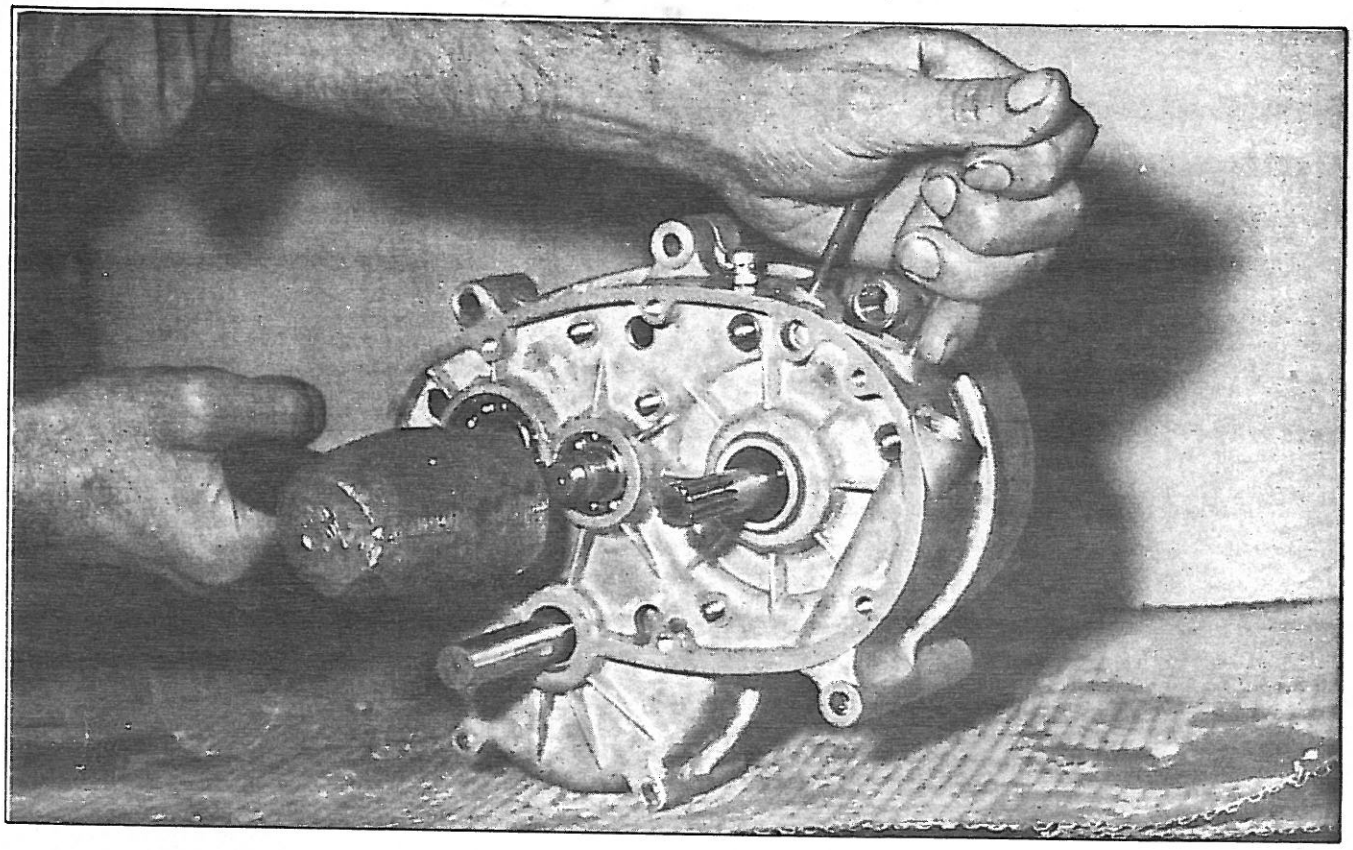


Figure 16.

mary and secondary gear shafts and the pedal crankshaft can be slipped out. Crankshaft-connecting rod assemblies are replaced as a single part.

8. Before replacing the crankshaft-connecting rod assembly in the crankcase halves, place tool S between the crankshaft counterweights and turn the handle to apply a small amount of pressure to the counterweights.

F. CARBURETOR

Type--Dell 'Orto SHA 14-12

Choke-Manual closing, opens with advance of throttle.

Throttle-Cable adjustment at carburetor end.

Idle Adjustment

This adjustment has no effect at operating speeds. However, it does affect the ease of starting the engine. If the engine cannot be started readily, turn the idle adjustment screw (the only adjustment screw on the carburetor) all the way in very carefully.

CAUTION -- the screw can be damaged by turning it in too far. Then back the screw out about one turn. Start engine and allow it to warm up; the engine must be hot to make idle adjustment.

Turn screw out (toward lean) until engine runs roughly and then in (toward rich) until it runs roughly again. Find the point (about midway between) where the engine runs the smoothest.

TROUBLE CHART

COMPLAINT	POSSIBLE CAUSE	POSSIBLE CORRECTION
Engine will not start	No fuel.	Fill tank with correct fuel mixture.
	Fuel valve not open.	Open fuel valve.
	Fuel flow not constant.	Clean fuel lines and filter.
	Flooded carburetor.	Remove and dry spark plug. Close fuel valve. Open throttle wide and start.
	Main jet hole clogged.	Remove jet and clean.
	No spark.	Start at spark plug and check ignition system.
Engine does not develop Normal Power or Speed	Restriction in fuel system.	Check fuel flow through lines. Check for partially plugged jet. Check for dirt in float chamber. See that carburetor valve opens all the way.
	Dirty air cleaner.	Remove and clean.
	Improper plug.	Replace with plug of proper heat range.
	Plug gap clearance wrong.	Correct gap.
	Breaker point arcing.	Check condenser and points, replace as necessary.
	Incorrect timing.	Time engine according to instructions.
	Exhaust ports clogged with carbon.	Remove exhaust pipe and muffler and clean port.
	Muffler dirty and clogged.	Remove and clean.
	Leaky crankcase gaskets.	Replace.
	Worn piston rings.	Replace rings.

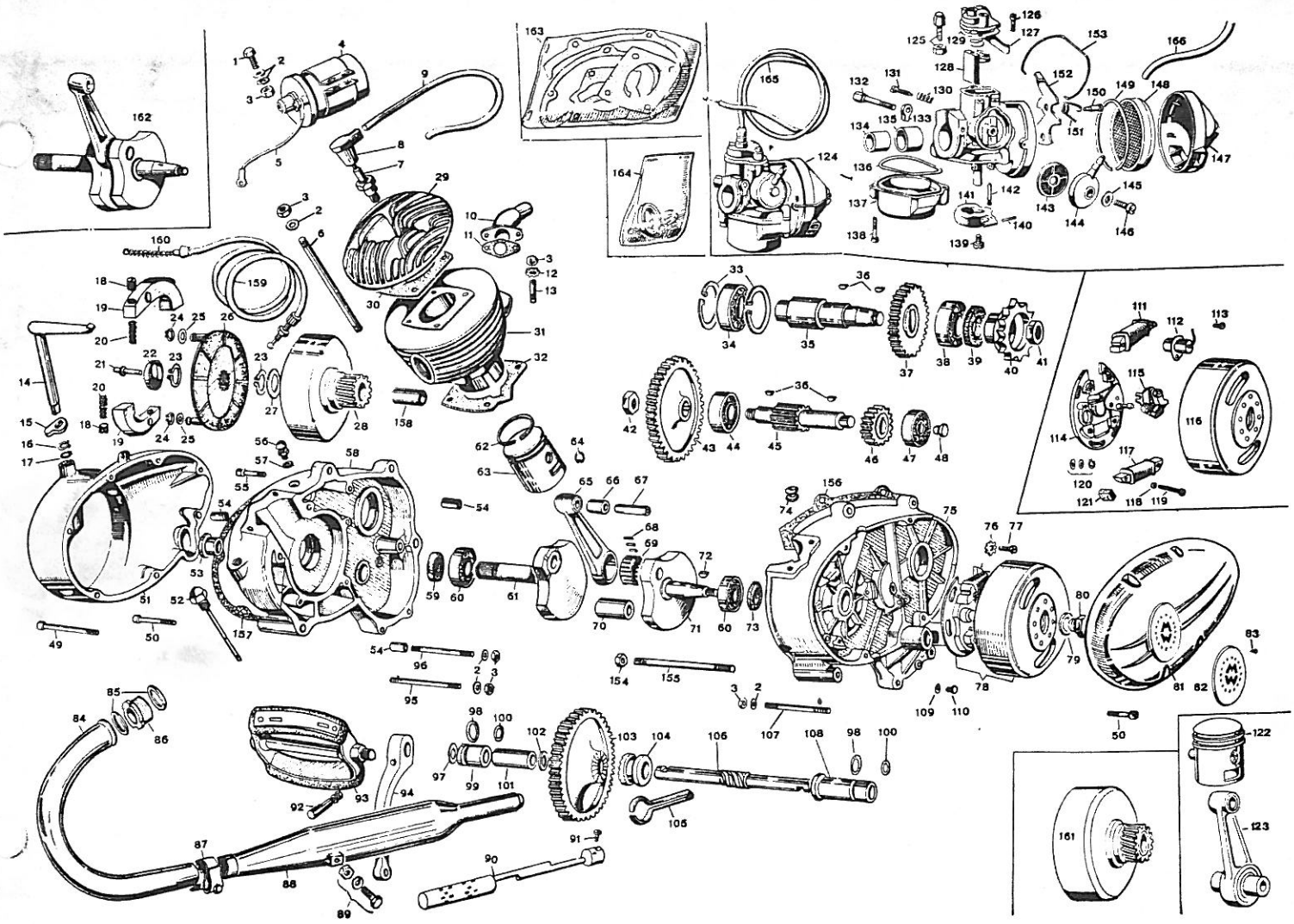
COMPLAINT	POSSIBLE CAUSE	POSSIBLE CORRECTION
Incorrect Ignition	Breaker points dirty.	Replace.
	Breaker points out of adjustment.	Adjust according to instructions.
	Breaker points not matching.	Adjust so that point surfaces match exactly.
	Poor breaker contact pressure.	Replace points.
	Poor connections at terminal or cables.	Inspect connections and tighten.
	Defective condenser.	Replace condenser.
	Magneto stator defective or damaged.	Replace magneto stator.
Engine misfires	Magneto contact points closed.	Check breaker contacts.
	Breaker arm locked on its pin.	Free breaker arm and lubricate.
	Defective condenser.	Replace condenser.
	Magneto stator shorted.	Replace stator or defective component.
	Loose connections at cables.	Inspect cables, terminals, and connections; tighten as required.
Light Magneto does not develop full power	Stator short circuited or grounded.	Check out lighting circuit or stator.
		Replace lighting coil or stator as re required.
	Poor connections.	Tighten all connections.
Light Magneto does not operate	Stator disconnected, shorted or grounded.	Replace stator.
Engine knocks	Plug is wrong type. May be too hot.	Replace with correct type plug.
	Ignition advanced too far.	Check timing.

spare parts list

MODEL NUMBER **FFA - 14001**

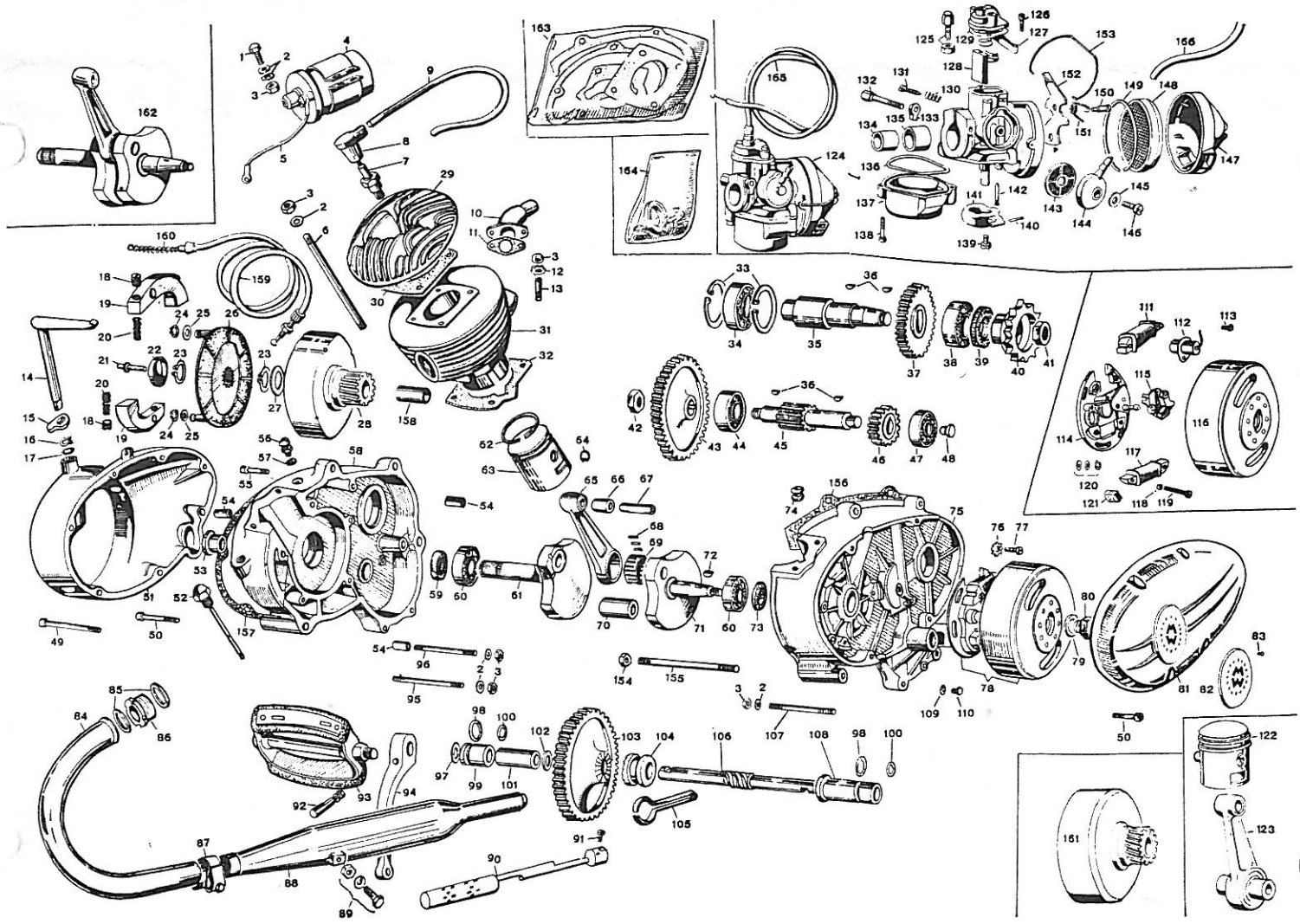
MODEL NUMBER **FFA - 14018**

Riverside – *SOLD EXCLUSIVELY BY* ***MONTGOMERY WARD***



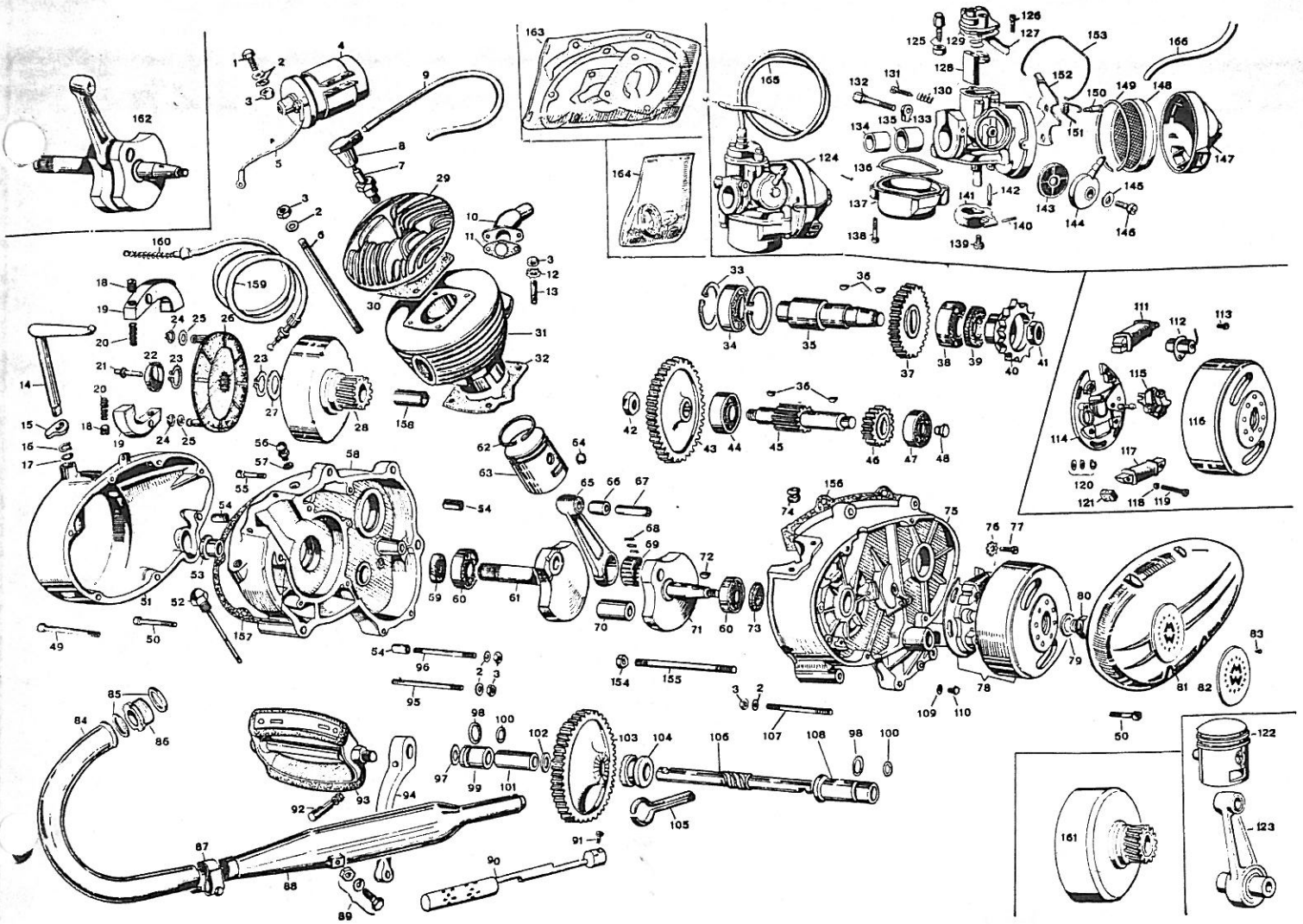
Engine

Ref.	Part. No.	Description
1	MU. 1476	Bolt
2	MU. 332	Washer
3	MU. 280	Hex nut
4	I. 9161	Ignition coil with bracket
5	I. 9161/1	Ground wire
6	G. 7483	Stud cylinder head
7	B. 1348/2	Spark plug
8	G. 7096	Rubber cap
9	G. 25	H. T. lead
10	G. 7350	Intake manifold
11	G. 7015	Intake manifold gasket
12	MU. 432	Lock washer
13	G. 7496	Stud-intake manifold
14	G.7947	Clutch lever
15	G. 7948	Lever arm
16	G. 7949	Retaining ring
17	G. 4	Washer
18	G. 7944/1	Clutch shoe screw
19	G. 7944/2	Clutch shoe
20	G. 7944/3	Spring clutch shoe
21	G. 7946	Clutch - push rod
22	G. 7945	Thrust cap
23	MU. 3813	Clutch ret. ring
24	MU. 8153	Clutch shoe retaining ring
25	G. 7944/5	Washer
26	G. 7944/6	Starting clutch plate
27	G. 5	Washer
28	G. 7944/7	Clutch drum gear assy
29	G. 7825	Cylinder head
30	G. 7010	Head gasket
31	G. 7438	Cylinder
32	G.7011/1	Cylinder base gasket
33	MU. 7062	Retaining ring
34	MU. 7056	Bearing
35	G. 7987	Secondary gear shaft
36	MU. 3817	Woodruff key
37	G. 7774	Secondary shaft gear
38	MU. 3061	Bearing
39	MU. 2265	Oil seal
40	G. 7340	Drive sprocket
41	G. 7344	Nut
42	L. 837	Nut
43	G. 9	Large primary gear
44	MU. 7038	Bearing
45	G. 7988	Primary gear shaft
46	G. 7039	Small primary gear
47	L. 746	Bearing left primary gear sft.
48	G. 7777	Plug



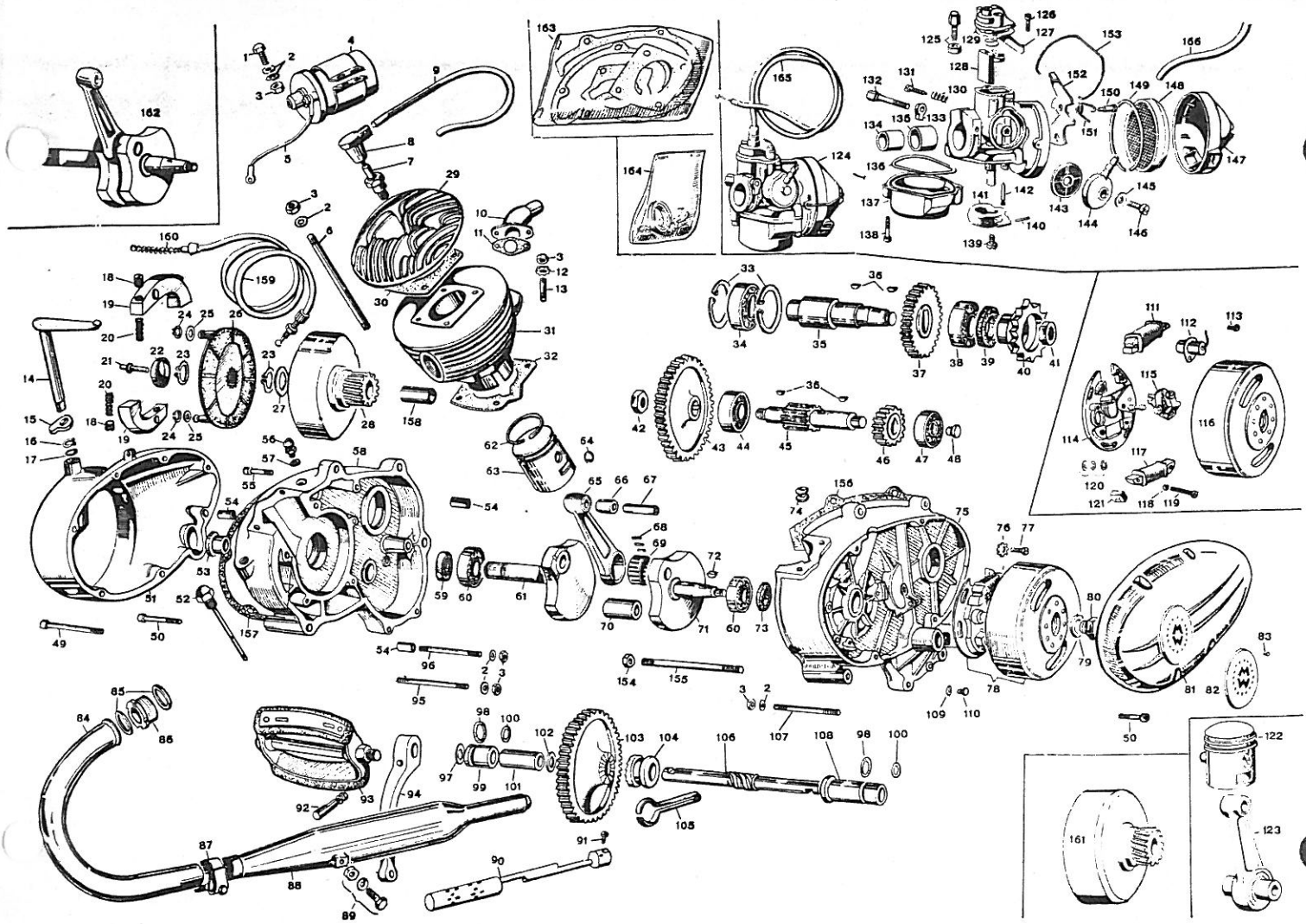
Engine

Ref.	Part. No.	Description
49	M. 79	Allen screw
50	MU. 1414/1	Screw
51	G. 1	Right cover
52	G. 7092/1	Dip stick
53	G. 8	Bushing
54	UI. 7080	Dowel
55	MU. 1224	Allen screw
56	L. 492	Breather
57	L. 493	Washer
58	G. 7861	Right hand crankcase half
59	MU. 7778	Oil seal
60	G. 7345	Bearing
61	G. 7943	Side right crankshaft
62	G. 7347	Piston ring
63	G. 7346	Piston
64	L. 339	Piston pin retainer
65	G. 7116	Connecting rod
66	G. 7019	Bushing
67	G. 7018	Piston pin
68	MU. 7112	Rollers
69	G. 7111	Cage (Shop use only)
70	G. 7115	Union pin (Shop use only)
71	G. 7119	Crankshaft left side
72	G. 7274	Woodruff key
73	G. 7342	Oil seal
74	UI. 281	Grommet
75	G. 7862/2	Left hand crankcase half
76	MU. 7084	Lock washer
77	MU. 1147	Screw
78	G. 221	Flywheel magneto comp.
79	UI. 7091	Washer
80	I. 9020	Flywheel magneto lock nut
81	G. 7767	Left cover
82	M. 93	Name plate
83	B. 1219	Drive pin
84	G. 7840	Exhaust pipe
85	G. 7009	Exhaust ring
86	G. 7763	Exhaust nut
87	G. 7841/1	Muffler clip
88	G. 7841	Muffler
89	MU. 614/C	Bolt washers & nut assy
90	G. 7918/2	Baffle
91	G. 7918/3	Screw
92	G. 7085/C	Pedal pin
93	G. 7087/C	Set of pedals
93	G. 7087/1	Left pedal
93	G. 7087/2	Right Pedal
94	G. 7923/C	Pedal crank pair



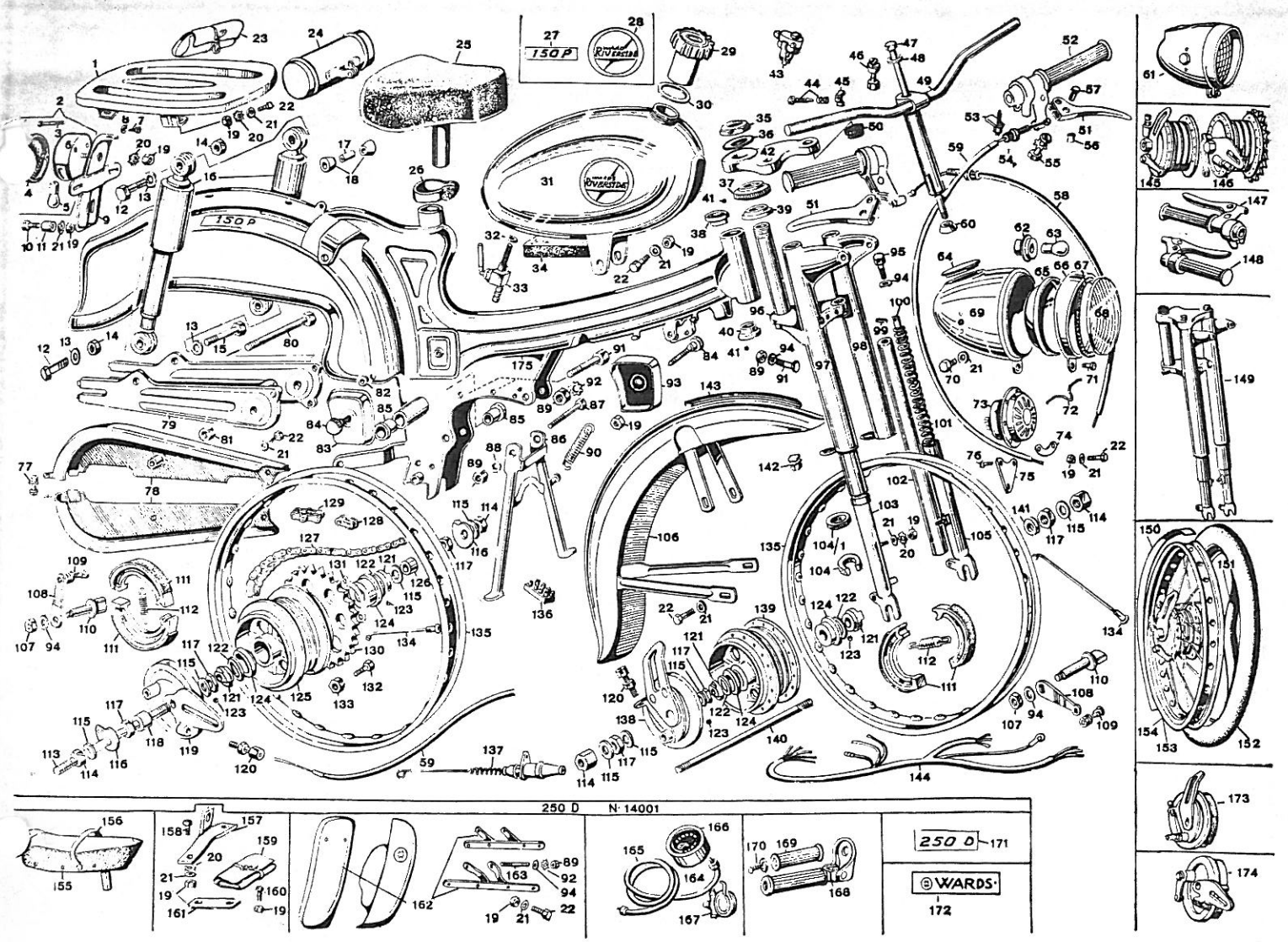
Engine

Ref.	Part. No.	Description
94	G. 7923/1	Pedal crank right
94	G. 7923/2	Pedal crank left
95	G. 7105	Crankcase stud
96	G. 7013	Crankcase stud
97	G. 7356	Spacer
98	MU. 7075	Outer seal
99	G. 7110	Kickstarter bushing - right side
100	MU. 3796	Oil ring
101	G. 7055	Kickstarter inner bushing
102	G. 7354	Washer
103	G. 7368	Pedal crank shaft gear
104	G. 7358	Engaging dog
105	G. 7072	Engaging dog spring
106	G. 7348	Pedal crankshaft
107	G. 7138	Crankcase stud
108	G. 7370	Bushing - pedal shaft
109	L. 419	Gasket washer - drain plug
10	MU. 324	Bolt - drain plug
11	G. 221/2	Magneto ignition field coil
112	G. 221/6	Condenser
113	G. 221/3	Screw
114	G. 221/1	Stator plate
115	G. 221/4	Breaker point assy
116	G. 221/10	Flywheel
117	G. 221/9	Lighting coil
118	G. 221/8	Washer
119	G. 221/7	Screw
120	G. 221/5	Set of screws and washers
121	G. 221/11	Lubricating wick
122	G. 7346/C	Piston complete
123	G. 7116/C	Connecting rod assy
124	G. 29	Carburetor
125	DE. 1104/C	Throttle adjusting screw w/ nut
126	DE. 3318	Carb. cover screw
127	DE. 6110/C	Carburetor cover
128	DE. 6108	Throttle slide
129	DE. 6111	Packing
130	DE. 3606	Slow idle screw spring
131	DE. 6140	Slow idle screw
132	DE. 6305	Clamp screw
133	DE. 6304	Nut
134	DE. 3724	Intake sleeve, inner
135	DE. 6448	Intake sleeve, outer
136	DE. 6123	Float chamber gasket
137	DE. 6107	Float chamber
138	DE. 3598	Float chamber screw
139	DE. 1486	Main jet
140	DE. 4560	Float spindle



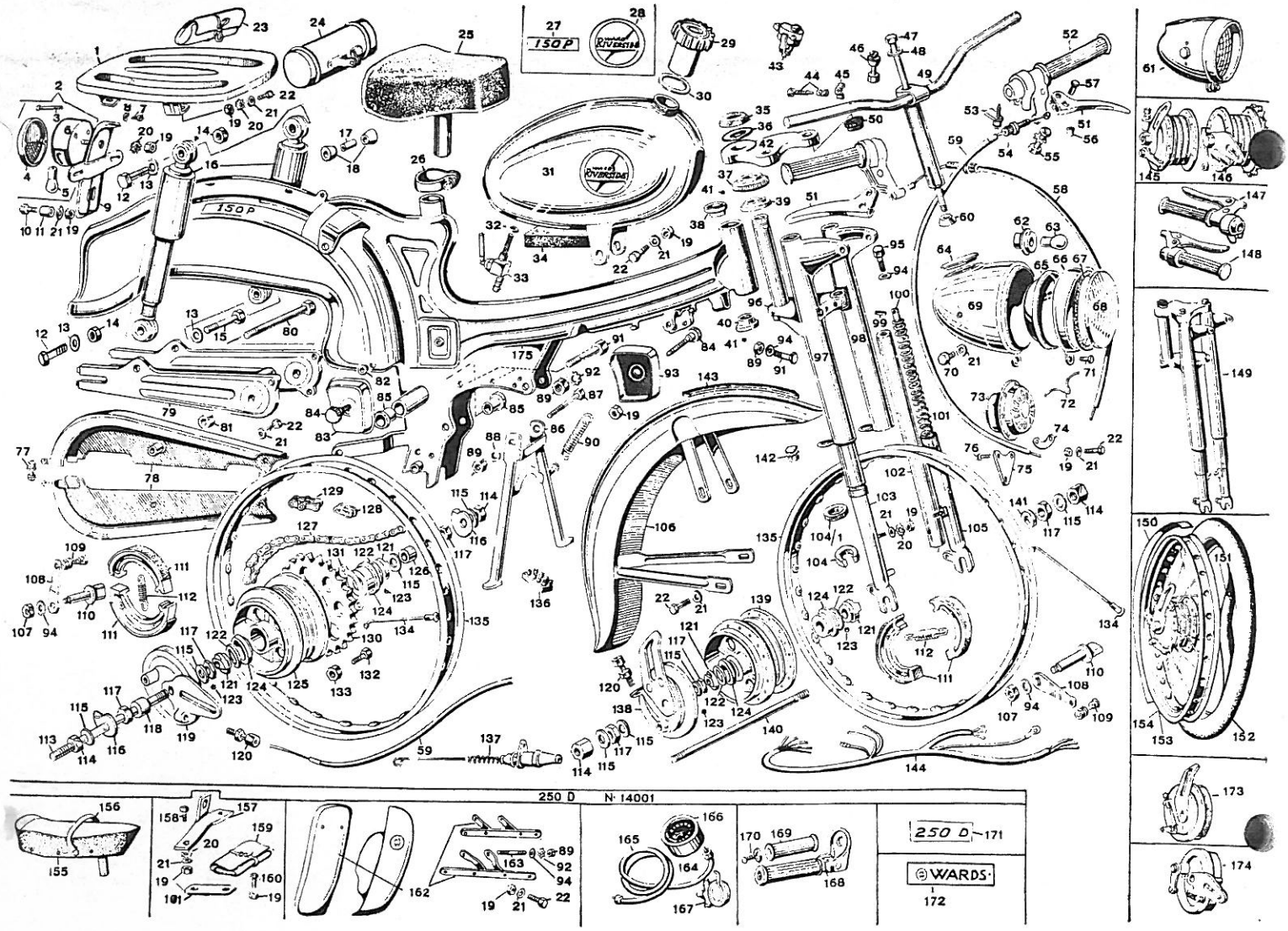
Engine

Ref.	Part. No.	Description
141	DE. 6122	Float
142	DE. 2838	Cut off needle
143	DE. 6109	Gas filter
144	DE. 6106	Gas inlet
145	DE. 3385	Gasket
146	DE. 4190	Screw
147	DE. 6183	Air filter cover
148	DE. 6117	Air filter
149	DE. 6159	Gasket air filter
150	DE. 5417	Choke pivot screw
151	DE. 6105	Choke spring
152	DE. 6114	Choke
153	DE. 6235	Air filter cover spring
154	MU. 187	Nut
155	H. 8256	Crankcase stud
156	G. 7830	Crankase gasket
157	G. 7835	Clutch housing gasket
158	G. 3	Bushing
159	G. 244/3	Manual clutch control cable
160	G. 10	Spring clutch control cable
161	G. 7944/C	Clutch assy
162	G. 79	Crankshaft connecting rod assy
163	G. 242/1	Complete set engine gaskets
164	G. 243/1	Complete set ring seals engine
165	G. 29/1	Gas control cable
166	G. 7187/3	Gas line



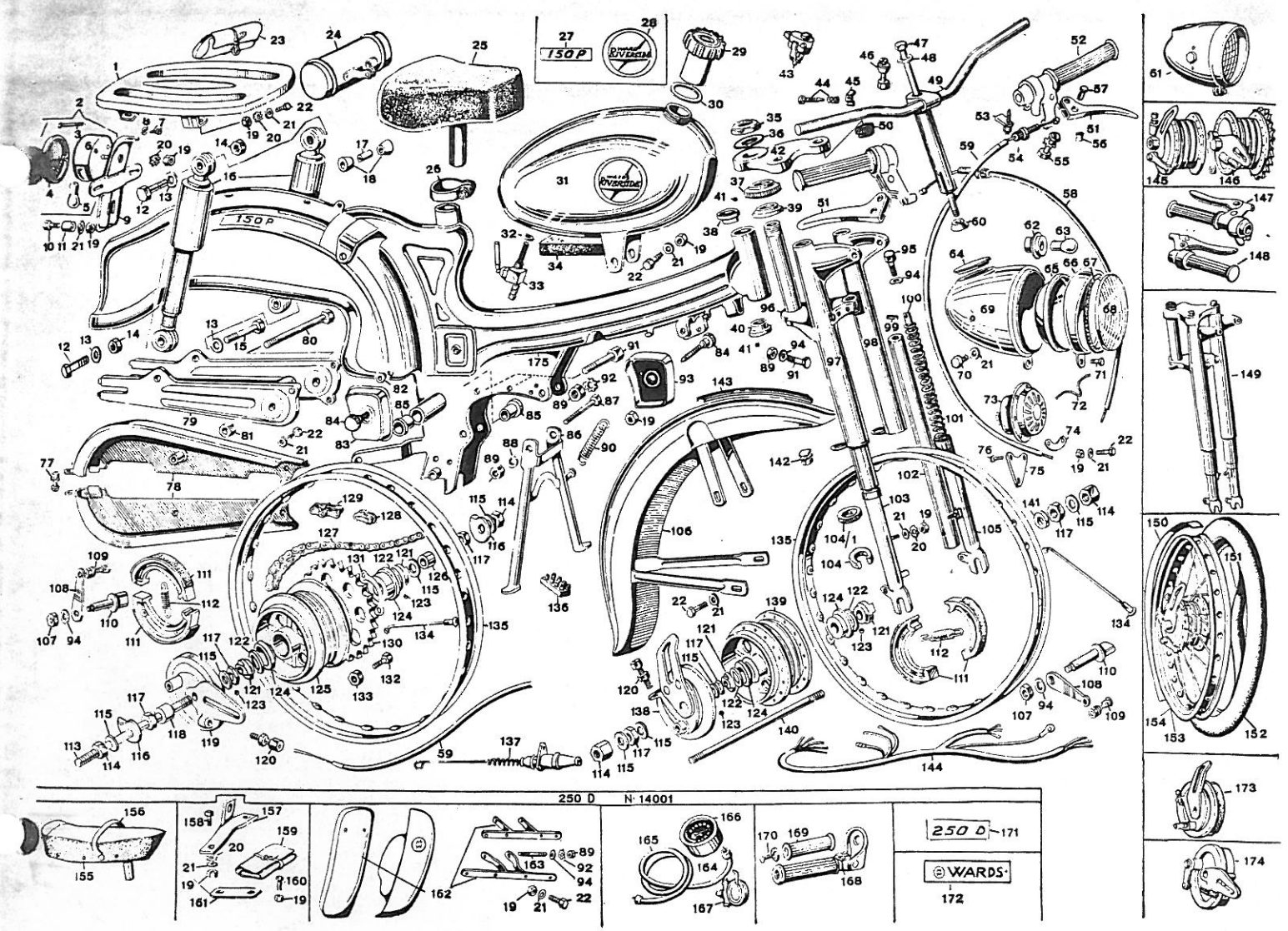
Frame

Ref.	Part. No.	Description
1	G. 7908	Carrier
2	G. 213/C-N	Rear light complete Blk.
2	G. 213/C-R	Rear light complete, red
3	G. 213/1	Screw
4	G. 213/2	Lens
5	G. 213/3	Bulb
6	G. 213/4-N	Body - rear light Blk. primed
6	G. 213/4-R	Body - rear light red primed
7	G. 213/5	License bracket screw
8	G. 213/6	Washer
9	G. 212/1-N	Taillight bracket, blk. primed
9	G. 212/1-R	Taillight bracket, red primed
10	MU. 330	Bolt
11	G. 228	Spacer
12	G. 7901	Bolt
13	MU. 282	Washer
14	MU. 1524	Nut
15	G. 7902	Bolt
16	G. 7141/1	Shock absorbers
17	G. 7141/A	Bushing
18	G. 7141/B	Rubber cone
19	MU. 280	Hex nut
20	MU. 432	Lock washer
21	MU. 332	Washer
22	MU. 235	Bolt
23	G. 142/1	Toolkit
24	G. 7927/1	Accessory container
25	G. 7615	Seat
26	G. 7610/C	Seat clamp
27	G. 226	Decal
28	G. 232	Decal Wards Riverside
29	G. 173	Gas cap
30	L. 3223	Gasket
31	G. 7881	Gas tank
32	L. 425	Gasket
33	G. 7186	Petcock
34	G. 7903	Gas tank cushion
35	G. 7899	Fork top nut
36	G. 7898	Washer - fork top nut
37	G. 7897/1	Upper cone
38	G. 7895/1	Top steering race
39	G. 7896	Lower cone
40	G. 7895	Bottom steering race
41	G. 7098	Bearing
42	G. 43	Fork top plate
43	G. 225/1	Control switch
44	G. 6/1	Screw & spring for throttle control
45	G. 6/2	Small nut



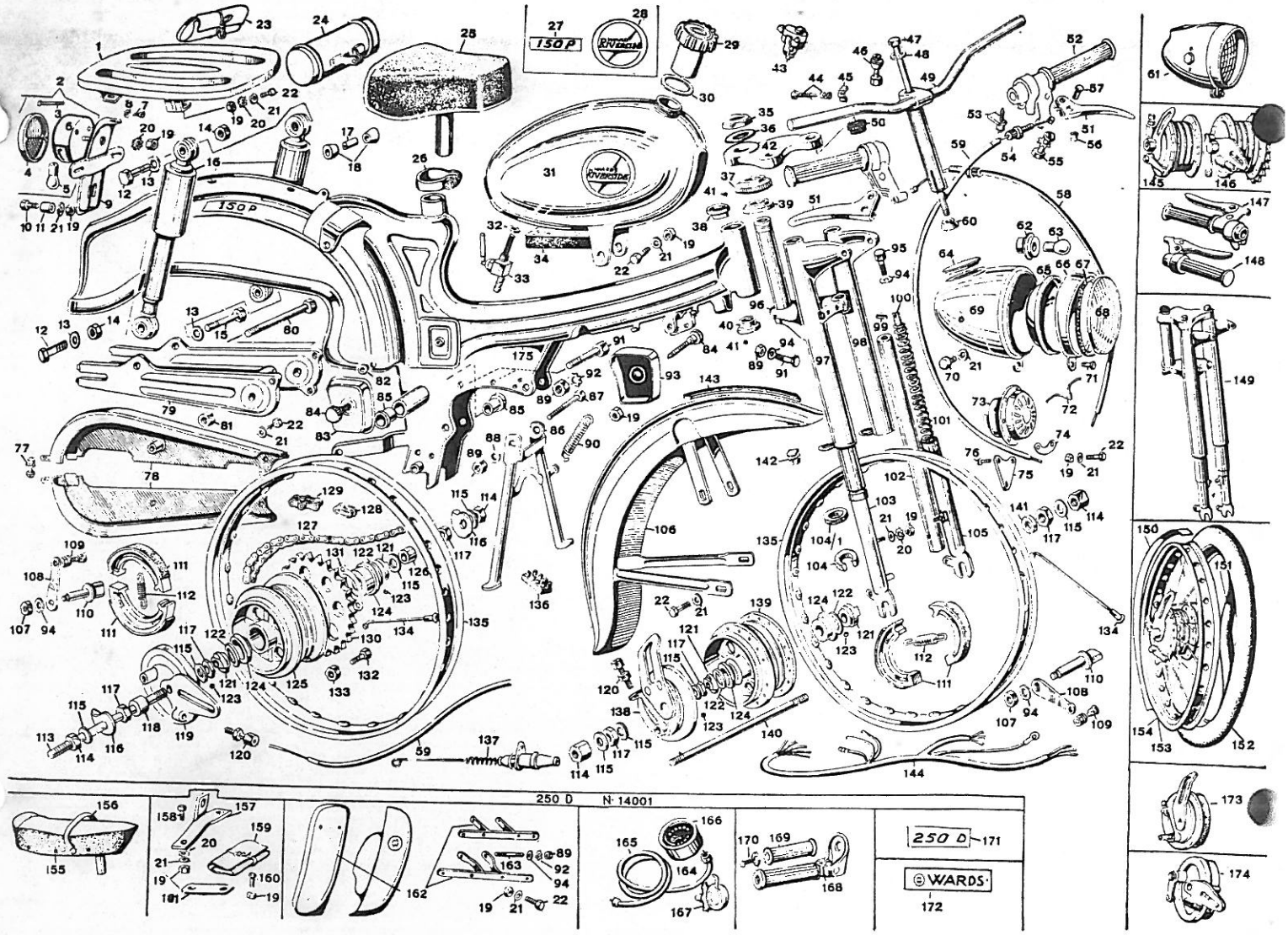
Frame

Ref.	Part. No.	Description
46	G. 6/3	Grip fastening assembly
47	G. 7181	Handlebar expander bolt
48	G. 7183	Washer for handlebar exp. bolt
49	G. 7144/C	Handlebar w/ expander tube
50	G. 50	Rubber grommet - top - fork
51	G. 7/1	Front brake lever
52	G. 7/2	Hand grip
53	G. 7/3	Clutch travel adjustment screw
54	G. 7/4	Cable adjuster
55	G. 7/5	Lever bolt with nut & washer
56	G. 7/6	Spacer
57	G. 7/7	Nipple
58	G. 244	Front brake cable
59	G. 244/6	Rear brake cable
60	G. 7182	Handlebar expander nut
61	G. 199/N	Headlight complete, black primed
61	G. 199/R	Headlight complete, red primed
62	G. 199/1	Bulb holder
63	G. 199/2	Bulb
64	G. 199/3	Hole cover
65	G. 199/4	Reflector
66	G. 199/5	Headlight bezel
67	G. 199/6	Headlight gasket
68	G. 199/7	Headlight lens
69	G. 199/8-N	Headlight shell, black primed
69	G. 199/8-R	Headlight shell, red primed
70	MU. 1476	Bolt
71	G. 199/9	Screw
72	G. 199/10	Spring
73	G. 240	Horn
74	G. 240/1	Gasket
75	G. 240/2	Horn mounting bracket
76	G. 240/3	Screw
77	L. 209/C	Bolt w/ nut & washer
78	G. 7884	Chain guard
79	G. 7882	Rear swinging arm
80	G. 7890	Bolt
81	G. 7891	Nut
82	UI. 7349	Nut
83	G. 7888	Tool box cover, right
84	G. 7888/1	Knob screw
85	G. 7892	Swinging arm frame bushing
86	G. 7886	Stand
87	L. 3166	Bolt
88	MU. 1556	Lock washer
89	MU. 187	Nut
90	G. 7886/1	Spring for stand
91	G. 7135	Bolt



Frame

Ref.	Part. No.	Description
92	MU. 589	Lockwasher
93	G. 7887	Tool box cover left
94	MU. 612	Washer
95	MU. 614	Bolt
96	G. 57/C	Steering column
97	G. 45	Upper fork right
98	G. 46	Upper fork left
99	G. 68	Pin - spring bracket
100	G. 67	Spring bracket
101	G. 70	Inner spring
102	G. 58	Fork tube
103	G. 42/1	Fork leg right
104	G. 7692	Felt
104/1	G. 49	Seal
105	G. 42/2	Fork leg left
106	G. 246	Front mudguard
107	G. 7885/A	Nut
108	G. 7885/B	Brake cam lever front & rear
109	G. 7885/C	Brake cable clamp bolt assy. f. & r.
110	G. 7885/D	Brake cam front & rear
111	G. 7885/E	Brake shoes front & rear
112	G. 7885/F	Brake shoe spring - front & rear
113	G. 7885/G	Rear wheel axle
114	G. 7885/H	Nut
115	G. 7885/I	Washer
116	L. 3814/3	Chain adjuster
117	G. 7885/L	Nut
118	G. 7885/M	Spacer
119	G. 7885/N	Rear brake anchor plate
120	G. 7885/O	Cable adjuster
121	G. 7885/P	Cone
122	G. 7885/Q	Washer cover
123	G. 7885/R	Ball bearing
124	G. 7885/S	Cup
125	G. 7885/T	Rear hub
126	G. 7885/U	Spacer
127	G. 7089/8	Chain
128	G. 7089/M	Link
129	G. 7089/F	Chain replacement link
130	G. 7885/V	Sprocket - rear wheel
131	G. 7885/Z	Rear sprocket retainer
132	G. 7885/K	Bolt
133	G. 7885/W	Nut
134	G. 7278	Spoke with nipple
135	G. 7630	Wheel rim
136	G. 225/2	Terminal block
137	CS. 0121/1	Stop light switch
138	G. 7852/B	Front brake anchor plate



Frame

Ref.	Part. No.	Description
139	G. 7852/C	Front hub
140	G. 7852/D	Front axle
141	G. 7852/E	Spacer
142	G. 7935/C	Bolt assy. front mudguard cushion
143	G. 7934	Cushion - front mudguard
144	G. 225	Wiring harness
145	G. 7852	Front hub assy.
146	G. 7885/1	Rear hub assy.
147	G. 7	Left control assy.
148	G. 6	Right control assy.
149	G. 42	Front fork assy.
150	G. 7625	Rim tape
151	G. 138	Tube
152	G. 140	Tire
153	G. 7852/A	Front wheel complete
154	G. 7885/AA	Rear wheel complete
155	G. 141	Seat with strap
156	G. 141/1	Strap for seat
157	G. 143	Rear seat bracket
158	MU. 84	Bolt
159	G. 142/2	Plastic pouch w/ tools
160	MU. 324	Bolt - drain plug
161	G. 247	Tool kit mounting brkt.
162	G. 169	Legshield assy.
163	G. 234	Stud bolt
164	G. 227	Speedometer complete
165	G. 227/1	Speedometer cable
166	G. 227/2	Speedometer
167	G. 227/3	Speedometer drive
168	G. 229	Rear foot rest
169	G. 229/1	Rubber rear foot rest
170	G. 229/2	Screw with washer plate
171	G. 230	Decal 250D
172	G. 248	Wards nameplate
173	G. 7852/F	Front brake plate complete
174	G. 7885/AB	Rear brake plate, complete
175	G. 7879	Frame