

**OPERATING  
OWNERS  
MANUAL**

**CALIFFO MOPED**  
**Engine type 119**

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This moped is manufactured in Italy by

**C. RIZZATO & C. s.p.a. 35100 PADOVA**

## TECHNICAL SPECIFICATIONS

Identification data of your moped are stamped into the metal plate fixed on the steering tube.

Single cylinder two-stroke engine

Engine size 49.95 c. c.

Stroke mm 41

Bore mm 39.4

Compression ratio 1:8

Max. power: HP 1.5 by 6,500 r.p.m. 1 HP by 4,500 r.p.m.

Flywheel magnet alternator ignition 25-15 W, 6 V

Spark advance:  $26 \div 28^\circ$  before TDC equal to 0,955: before TCD

Dell'Orto SHA 14-9 Jet 52 carburetor

Mix regular leaded or unleaded gas with SAE 30 oil in 20 to 1 ratio

Automatic 1 speed helical gear primary transmission

Centrifugal clutch in oil bath. Single speed automatic

Oil content in motor housing 18 oz.

Tank capacity: 2.5 US qts

Fuel consumption: 150 miles per gallon

Chain secondary transmission 1/2x3/16" with roller  $\phi$  7.75

Ignition by pedal start

Front and rear independently hand operated drum brakes

Frame: monotube - reinforced tubular steel

Suspension: telescopic spring loaded front and rear shock absorbers

Wheels: 2 1/4x16" with tube and tyre

Tyre pressure: front: 26 lbs (1.8 Kg/cm<sup>2</sup>); rear: 32 lbs (2.25 Kg/cm<sup>2</sup>)

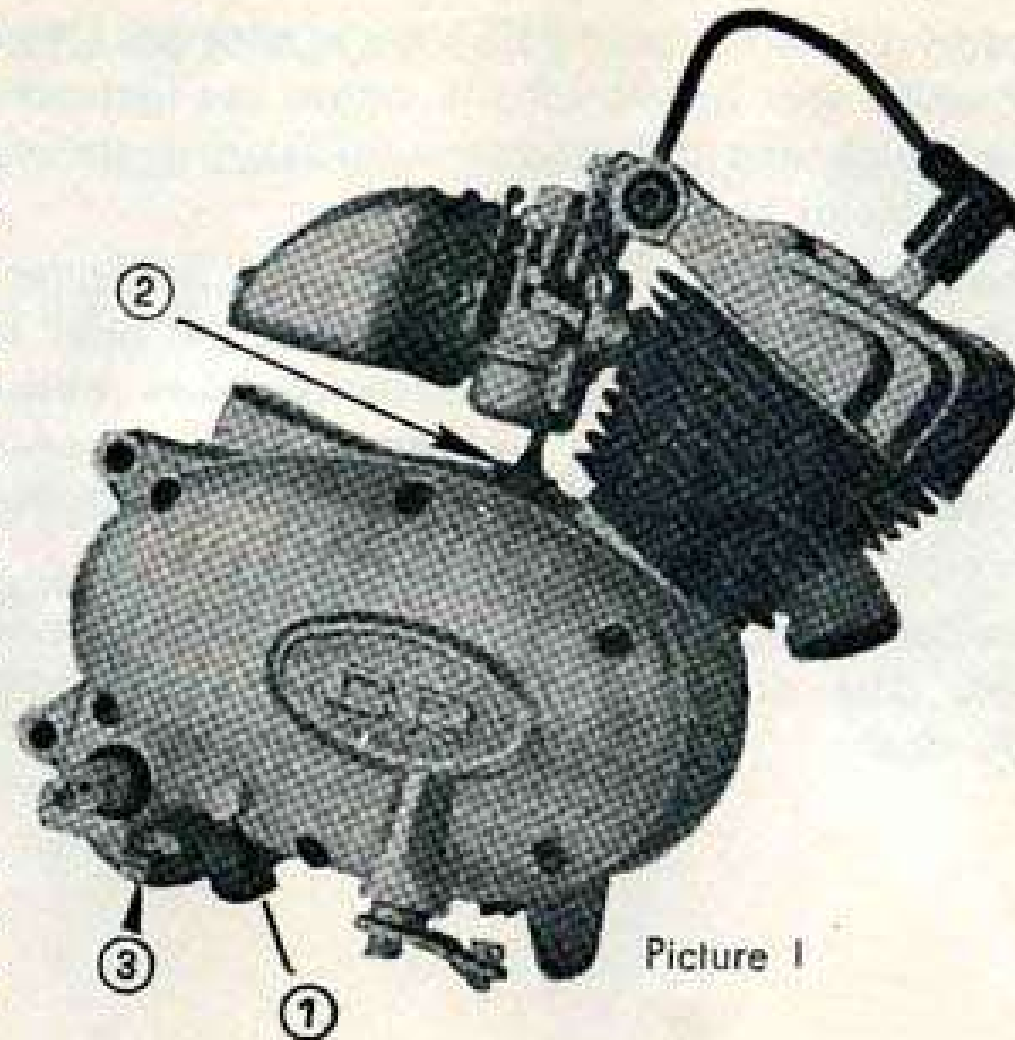
Weight: 105 lbs

Standard equipment: lighted speedometer and odometer security lock, storage box with plug range rear mirror, gas cup.

## FIRST MOTOR START

Before starting the motor, control if the oil level in the motor housing is right, by screwing out the screw on the right motor housing cover (No. 1 on pict. 1). In case the oil is at the right level it should flow out through this hole: if this does not happen, add some oil through the cap (No. 2 on pict. 1).

To obtain the best performances from the motor it is necessary to keep to the following instructions:



Picture 1

Motor: it is lubricated by oil mixed with gas. Apart from the running-in period, for which special instructions follow, use fuel mixture with 5<sup>0</sup>/<sub>0</sub> oil SAE 30.

The clutch and the inner transmission gears are lubricated by the shaking of the motor housing oil (18 oz.).

Change the motor oil as follows: the first time after 300 mi and afterwards every 3000 mi. Perform these operation after a long ride and, in any case, when the motor is warm (warm oil flows more easily), by screwing out the oil drain screw, (No. 3 on pict. 1) situated under the right side of the motor, below the cranks axle. Pour new oil through the beforementioned cap (No. 2 on pict. 1).

Besides changing oil, take care to check its level every 900÷1200 mi.

Take care not to use for this operation multigrade oils but normal SAE 30÷40 oil.

## **RUNNING IN PROCEDURE**

Motor components may have a long life if you are very careful during the running-in time.

- 1) don't exceed 18÷20mi/h for the first 700 mi.
- 2) avoid long climbs
- 3) use 7<sup>o</sup>/<sub>o</sub> (oil SAE 30) final mixture
- 4) after the first 150 miles tighten the head nuts to 4.5 foot-pound.

## **START**

If the motor is cold, open the mixture valve depress the choke lever which is situated on the right side of the carburetor. The engine can be started either with standing moped or while in motion, by pedalling.

### **a) Starting of standing moped:**

1. raise the vehicle on its stand
2. open the fuel cock and depress the choke lever
3. twist the grip to a "slightly accelerated" position (don't twist it completely, otherwise the choke lever returns to its normal position)
4. Before ending the downstroke of the pedal, release the start lever, allowing, in this way, the clutch to disengage and hence the starting of the motor.

### **b) Start of the engine by pedalling:**

1. open the fuel cock and depress the choke lever

2. start the moped by pedalling like on a bike
3. after gaining sufficient speed twist the grip and pull the starting-lever on the left of the handlebar, under the rear brake, and release it as soon as the motor starts working. As soon as the motor is warm, twist the grip completely and the choke lever will return to its normal position.

If you run out of fuel or if you, for other reasons, need using the pedals to go on, the vehicle will behave like a normal bicycle, but take care not to pull the starting lever. It is not advisable to run down slopes with turned off motor.

## **TO STOP THE ENGINE**

Twist off the grip and push the button which stops the motor. This button interrupts the current to the sparking plug and stops immediately the motor. Never stop the motor by pulling the starting lever. If the vehicle stops for a long time, close the fuel cock.



## DIFFICULT OR IMPOSSIBLE START

If the engine works normally, it starts without difficulties also if temperature is unfavourable. If after repeated trials it does not start, control if:

- 1) the fuel does not arrive at the carburetor
  - a) the tank is empty
  - b) the cock is closed
  - c) the fuel pipe is clogged
  - d) the air inlet, on the tank cap, is clogged
  - e) the carburetor is dirty
- 2) Lack of ignition
  - a) control the sparking plug: screw it out and touch the cylinder head with its metallic part while turning one pedal and pulling the starting lever: blue sparks should appear
  - b) verify if the sparking plug is clean: if not, clean it better with a metallic brush: if the points are too near or too apart, adjust the distance .020" to .024".
  - c) verify the sparking plug cable: replace it if it is broken or ill insulated.

## **MAINTENANCE**

### **Motor**

When the motor tends to diminish its efficiency, one of the main causes is the clogging of the exhaust pipe or of the silencer and often carbon deposits which accumulate in the exhaust parts of the cylinder, on the crown and on the head. It is therefore advisable to provide periodically to the decarbonizing of the cylinder and other inner components of the motor by turning to a specialized garage. It is absolutely inadvisable to decarbonize the motor without disassembling the cylinder, because not only can the piston be spoiled but the carbon deposits can also reach the motor housing and consequently lead to a quick wearing of the crankshaft bearings.

While reassembling the head, tighten the nuts gradually by passing from one to its opposite (4.5 ft. lb.).

Take care, in any case, after disassembling the head, to substitute the old gasket with a new one as the old one will surely lose compression.

The silencer should be cleaned every 3-4000 mi. by screwing out the rear cap and verifying that the exhaust pipe is open.

## Clutch

We feel it is necessary to describe carefully the operations of adjustment of the automatic clutch of the motor because this procedure requires particular attention.

It is therefore opportune, in case it is necessary to repair or to adjust the automatic clutch, to show the mechanic the following chapter "clutch".

### A) Adjusting

The clutch lever is actioned only when starting the engine.

It acts on a steel plate frontally covered with friction material whose adhesion on the external side of the friction makes integral the wheel and the cranks axle to the crankshaft allowing to obtain, in this way, the starting of the motor.

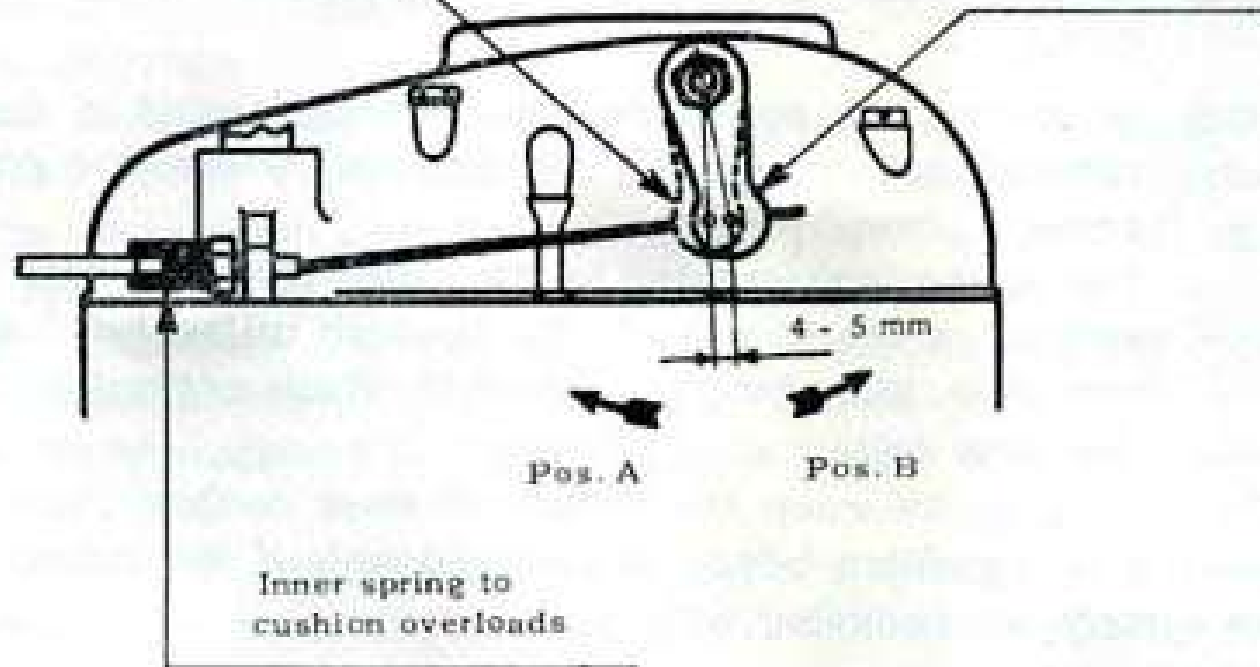
In case the motor has difficulty in idling and tends to drag the vehicle or to move the rear wheel when on the stand, this is due to a wrong adjusting of the clutch lever, which, in this case, turns out to have little idle stroke: adjust it as showed at the points 1, 2 and 3 of this paragraph. In fixing the lever control cable, make sure that in the correct position of rest it should have an idle stroke from  $5/32''$  to  $3/16''$  (position B on pict. 2).

Picture 2

Adjustment  
of the clutch  
control cable

Beginning of the right operation position (A). The driving shaft has to turn by turning the rear wheel.

Right not operating position (B). The driving shaft has not to turn by turning the rear wheel.



To do it, proceed as follows:

1. push with the hand the clutch lever in anticlockwise direction until it stops
2. release it  $5/32''$  or  $3/16''$  tighten slightly the cable and fix it with the proper clamp
3. to verify if the operation has been performed in the right way, put the vehicle on its stand and turn the rear wheel: the crankshaft should not move.

The spring incorporated in the clutch lever adjuster (overload absorbing spring) serves to absorb the strength of the hand which pulls the control lever, absorbing the strength which exceed that necessary to push the start plate.

The spring works when the sheath of lever control cable rests on it without loading it, condition which is reached only if the points 1, 2 and 3 of this paragraph are complied with.

## FLYWHEEL MAGNETO

After the first 300 mi. and every 3000 mi. control the contacts of the breaker, as an eventual corrosion for rubbing of the sliding shoe, which is directly in contact with the cam of the flywheel magneto, causes inevitably a phase displacement of the spark advance.

The contact breaker platinum points should start opening before the piston reaches the top dead center (TDC) and their distance. The proper spacing of the contact points, in position of maximum opening is .014" to .018" (0.35 to 0.45 mm.)

Moreover, make sure that they are not completely oxidated, eventually clean them with very fine grained emery cloth.

26÷28° spark advance correspond to 0,955" gauged on the external side of the flywheel.

Spacing of the points may be accomplished with aid of a contact screwdriver which must be loosened to allow the shifting of the contact support. This operation must be performed through the lits which are located in the rotating side of the magneto

- 1) loose the contact screwdriver
- 2) move the contact support as needed, measure their opening with a feeler gauge
- 3) lock the screwdriver
- 4) check the spark advance degree equal to 0,955" on the external side of the flywheel magneto.

Every 3000 mi. or so it is advisable to grease the lubricating felt cams with grease for bearings, without using too much grease to avoid the contact fouling. This operation can be performed through the lits of the flywheel without extracting it from the shaft.

In case of inner coil, contact or condenser troubles avoid taking off the rotating side by means of unfit tools in order not to damage the main shaft and call at a specialized garage which no doubt will be able to perform the operation safely, by means of a standard extractor.

The adjusting of the gap between the contact points is obtained by a fixing screw to be loosened to allow the shifting of the contact bearing.

The operation is carried out by introducing a screw-driver into the slits on the rotating part of the magneto

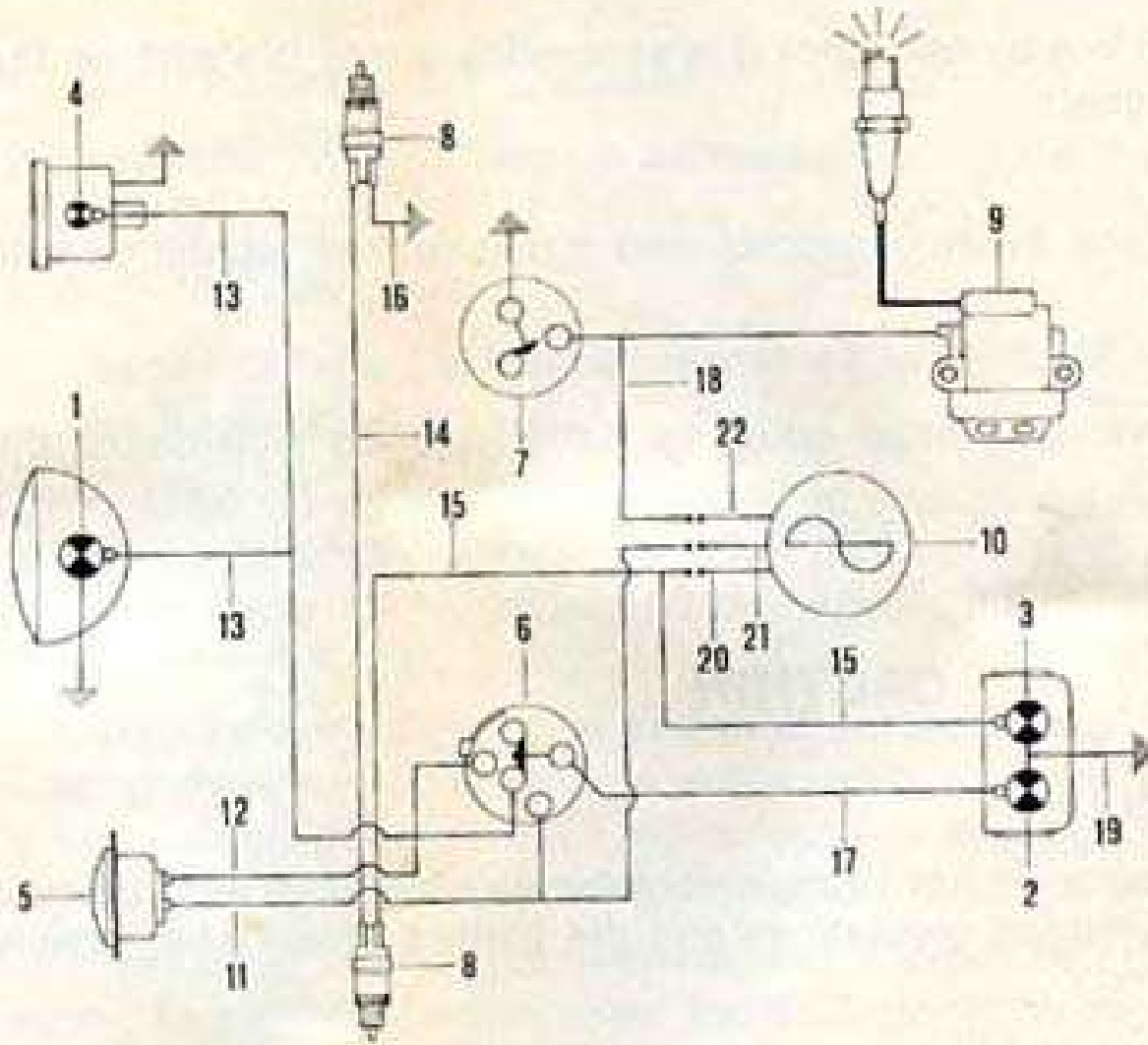
- 1) unscrew the screw
- 2) move, more or less, the bearing support and measure their openings with feeler gange
- 3) block the screw
- 4) check the spark advance ratings equal to 0.955" on the outside of the flywheel.

## **CAUTION**

### **PASSING INFORMATION**

The manufacturer recommends not to pass vehicles moving at 20 mph or over due to maximum speed federal regulations and the limited acceleration ability of your moped over 20 mph.





**LAYOUT OF ELECTRIC WIRING**

- 1) 6 V - 21 W bulb
- 2) 6 V - 5 W bulb
- 3) 6 V - 10 W bulb
- 4) 6 V - 1,5 W bulb
- 5) 6 V - 28 W horn
- 6) Light and horn switch
- 7) Engine stop switch
- 8) Stop lamp switch
- 9) Outer H.T. coil
- 10) Magneto 6 V/25+15 W
- 11) Black
- 12) Green
- 13) White
- 14) Brown
- 15) Blue
- 16) Grey
- 17) Yellow
- 18) Red
- 19) Brown
- 20) Black
- 21) Blue
- 22) Red

## LIMITED WARRANTY

Promark-Moped, Inc., warrants each "Califfo Moped" which is not leased, rented, or used for other than personal or household uses, to be free from defects in materials and workmanship for a period of ninety (90) days/4,000 miles, whichever comes first, with the exception of the "Califfo Moped" frame which shall carry a one (1) year warranty, subsequent to the first retail purchase with the following exceptions:

**Promark-moped's warranty shall not apply to any "Califfo Moped" that has been modified by the addition of parts, modified, repaired or altered in such a manner as to affect its stability, performance or operation. The warranty shall be void on any "Califfo Moped" which has been subjected to misuse, abuse, negligence or accident. It is the purchaser's responsibility to properly care for and maintain the "Califfo Moped" in the manner outlined in the owner's operating manual.**

**Purchased component parts (example: tires, tubes, sparkplugs, etc.,) are not warranted by Promark-Moped. Many of these component parts are warranted by the manufacturer of that component part and in many cases Promark-Moped will service the individual manufacturer's warranty.**

**Promark-Moped shall not be liable for any implied warranties, including the implied warranties of merchantability and fitness on the " Califfo Moped " after the ninety (90) days 4,000 miles, whichever comes first, warranty period (one (1) year on frame) subsequent to the first retail purchase. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.**

**Promark-Moped shall be under no liability whatsoever in respect to any loss, damage, injury, or expense arising from any defects in any of its products. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.**

The warranty period is for ninety (90) days/4,000 miles, whichever comes first (one (1) year on frame) from the original date of retail sale. The fact that the "Califfo Moped" is repaired or parts are replaced during the original warranty period does not extend the expiration date of the original warranty.

Your authorized "Califfo Moped" dealer will repair or replace, free of charge, any warranted parts that are found to be defective within the warranty period. The purchaser is responsible for delivery of the unit to the authorized dealer for the repairs. You may contact Promark-Moped concerning warranty performance by telephoning or writing to:

**Promark-Moped, Inc.**

P. O. Box 738

Norwalk, Ohio 44857

Telephone: 419/668-3721

**This warranty gives you specific legal rights and you may also have other rights which vary from state to state.**