

# **FOREWORD**

The procedures contained in this manual have been carefully prepared to acquaint you with all the proper handling and service techniques necessary to provide safe and reliable operation of your new machine.

If you have any question about your motorcycle at any time, your local Italjet dealer will be glad to assist you.

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# TECHNICAL DATA

4

Single cylinder, two stroke engine Bore

: 40.4 mm

Stroke : 39 mm : 49.9 cc Displacement



Compression ratio

: 7.5 : 1

Max power

: 1.3 HP at 4600 rpm

Ignition timing :  $2 \div 2.5 \text{ mm}$ 

before TDC

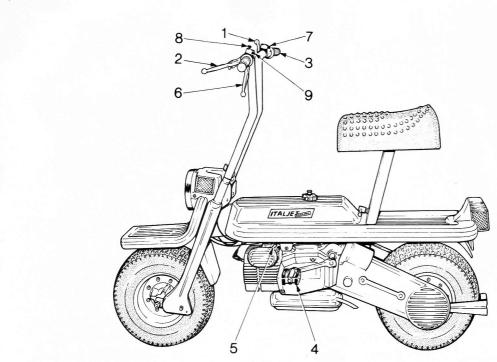
Spark plug heat range... : 225 (BOSCH)

Carburetor : Dell'Orto SHA 14

Petrol/oil mix ratio

: 20:1 (14:1

during running-in)



**Fig. 1** 

# CONTROLS (Figs. 1 - 2 - 3)

- 1 Front brake lever
- 2 Rear brake lever
- 3 Throttle twist grip
- 4 Kickstarter lever

- 5 Choke lever
- 6 Starting lever
- 7 Engine stop switch (kill button)
- 8 Horn button
- 9 Lights control switch

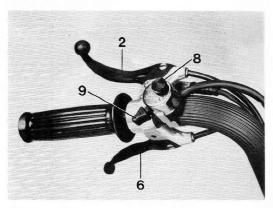


Fig. 2

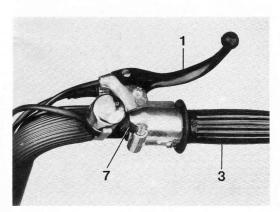


Fig. 3

1

# POSITIONING AND SECURING THE SEAT AND THE HANDLEBARS

Having raised and secured the seat and the handlebars, the motorcycle can be operated (Fig. 4).

Slightly raise the handlebars and rotate them to obtain the wide open position.

Move then the handlebars forwards as far as possible (Fig. 5).



Fig. 4 ន



Fig. 5

When any further forward movement is impossible, the handlebar base plates can be secured by means of the large wing headed screw, which should be tightened fully (Fig. 6).

Pull the seat upwards and adjust its height as needed.

Push securing pin A fully home into the lower side of slot B, as shown in Figs. 7 and 8.



Fig. 6

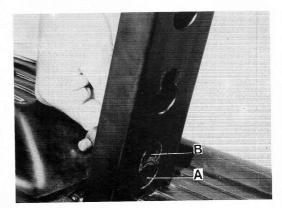


Fig. 7

Lower the seat until the upper edge of the slot contacts the seat securing pin (Fig. 9).

Turn bar C clockwise and lock the seat securing pin (right hand thread) (Fig. 10).

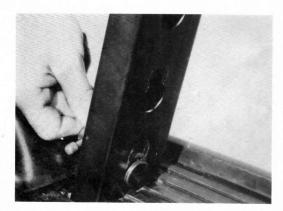


Fig. 8

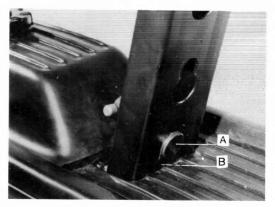


Fig. 9

# MOTORCYCLE OPERATION

# STARTING THE ENGINE

1) Slightly unscrew the breather valve knob located on the fuel tank filler cap (fuel starvation will occur if the vent valve is closed) (Fig. 11)

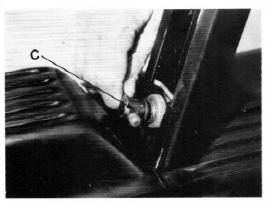


Fig. 10



Fig. 11

11

- 2) Turn the fuel tap lever in the open or reserve position (Fig. 12).
- 3) Depress the choke lever A. This is only needed when cold starting (Fig. 13).
- 4) Slightly rotate the throttle twistgrip; gently push on the pedals, and pull the starting lever releasing it immediately. The engine should start quite easily if this operation is carried out correctly.

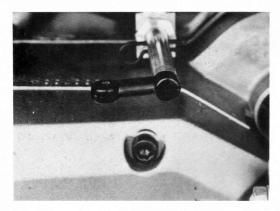


Fig. 12 12

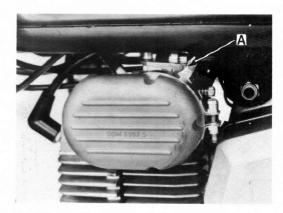


Fig. 13

Do not pull the starting lever longer than necessary.

The starting lever is located on left side handlebar (Fig. 14).

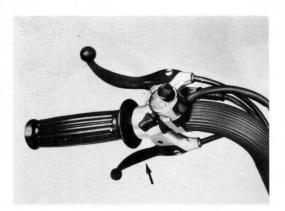


Fig. 14

- 5) Gradually open the twistgrip (the automatic transmission will start to operate).
- 6) A few seconds after the engine has started, open the twistgrip fully to release the choke lever, that will return in raised position (choke not operating).
  - It is very important to avoid running the engine for more than a few seconds with the choke lever depressed, in order to prevent spark plug fouling.
- 7) The motorcycle can now be operated; the speed will be controlled only by twistgrip and brake levers as the transmission is fully automatic.

Note: if engine is already warm, do not use choke.

#### STOPPING THE ENGINE

Turn the throttle twistgrip C (Fig. 15) in the closed position and push the engine stop switch (kill button) A (Fig. 15).

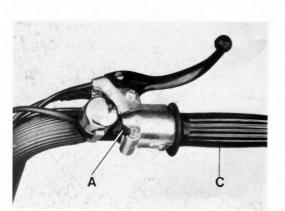


Fig. 15 14

Warning: never use the starting lever to stop the engine.

The fuel tank tap should be closed when the motorcycle is not in use.

Remember to close the breather valve on the fuel tank cap any time the motorcycle is going to be transported on a car.

## **MAINTENANCE**

## TRANSMISSION OIL LEVEL CHECK

The oil level can be inspected by unscrewing the oil filler plug, located on crankcase right side cover (Fig. 16).

When the level is correct it should be flush with the filler orifice lower edge (with the motor-

OLIC CHICAGO CONTROL C

Fig. 16

cycle upright and standing on a horizontal surface).

#### CHANGING THE TRANSMISSION OIL

The transmission oil should be changed after the first 300 miles, and then every 1200 miles. Use only SAE 20 HD engine oil.

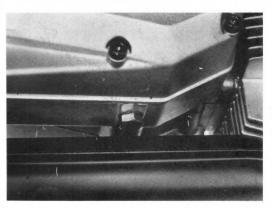


Fig. 17

To change the oil, unscrew the drain plug and let the old oil drain from the transmission case. Refit the drain plug and tighten it fully (Fig. 17).



Fig. 18

Refill the transmission case through the oil filler opening, and bring oil up to level.

#### **DRIVE CHAIN**

To gain access to the drive chain, remove the rear fork left side cover by unscrewing the two Phillips-headed retaining screws (Fig. 18).

- Periodically the drive chain should be lubricated using special spray lubricants or clean engine oil.
- 2) If chain is very dirty, remove it, clean it thoroughly using gasoline and then place it in a bath of molten grease or thick oil.

#### Caution

The drive chain spring link should be fitted the correct way round (the closed end of the clip should face the direction of travel).

This is very important!

3) Periodically check chain tension.

Drive chain normal slack should be 20 mm measured at midpoint between the sprockets, on bottom run of chain (Fig. 19).

Carry out this measurement with one person sitting on the seat.

If needed, adjust chain tension.

## **CHAIN TENSION ADJUSTMENT**

Remove both rear fork side covers.

Loosen wheel spindle securing nuts (Fig. 20).

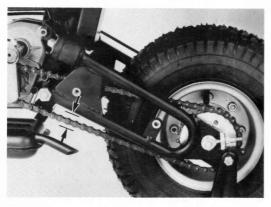


Fig. 19

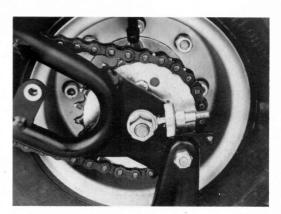


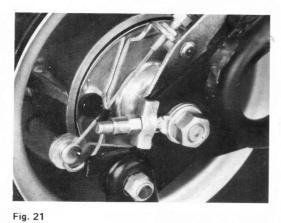
Fig. 20

17

Turn both adjusting nuts an equal amount (in order to maintain the rear wheel properly aligned) until the specified slack is obtained; retighten the spindle nuts (Fig. 21).

## **BRAKE CONTROLS ADJUSTMENT**

Front and rear brake levers free travel should be 2 mm, measured as shown in Fig. 22.



18 18

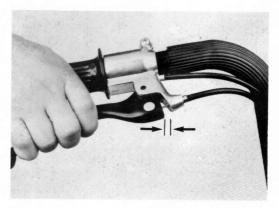


Fig. 22

Carry out any adjustment that may be needed by means of the brake cable adjusters A (Fig. 23) fitted on both brake plates (Fig. 24). Each adjuster is provided with a locknut which should be loosened before turning the adjuster and retightened after the adjustment has been made.



Fig. 23

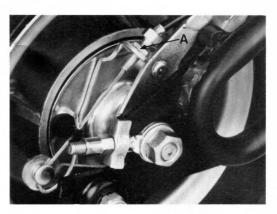


Fig. 24

# STARTING LEVER CABLE ADJUSTMENT

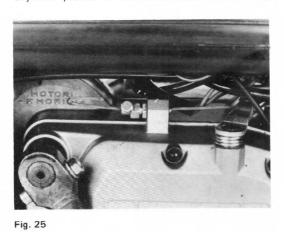
The starting lever specified free travel is 7  $\div$  8 mm, measured at the end of the lever. It is of utmost importance that the specified free travel is always maintained (Fig. 25).

Adjustments can be made by means of the adjuster placed on the crankcase. Slacken the

locknut, turn the adjuster to obtain the specified free travel and retighten the locknut.

## THROTTLE TWISTGRIP FREE TRAVEL

The throttle cable free travel should be 1.0 mm. Adjustments can be made by means of the adjuster A fitted on the carburetor cover (Fig. 26).



20

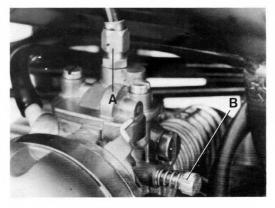


Fig. 26

Slacken the locknut, turn the adjuster until the correct free travel is obtained and retighten the locknut.

## **SLOW-RUNNING ADJUSTMENT**

This adjustment should be made with the engine at normal working temperature, and with the motorcycle on his stand (driving wheel raised from the ground).

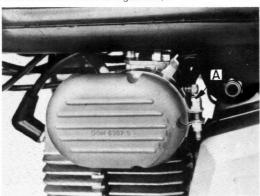


Fig. 27

Move the slow running adjusting screw B (Fig. 26) until an even idle is obtained (rear wheel not being driven by the engine).

#### AIR FILTER CLEANING

Slacken the clamp ring bolt A and remove the air filter, which should be cleaned by washing it in clean gasoline (Figs. 27 and 28).

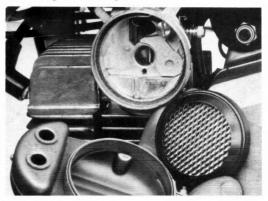


Fig. 28

Replace the filter and tighten the clamp ring bolt.

This operation should be performed every 1200 miles.

#### **SPARK PLUG**

Periodically remove the spark plug and inspect it for damages, wear or fouling.

The spark plug specified heat range is 225 (BOSCH).

The electrode gap should be adjusted to 0.5  $\div$  0.6 mm.

## **CONTACT BREAKER**

Loosen the Allen screws and remove engine left side cover.

Turn flywheel until the points are fully open and measure the contact breaker gap inserting a feeler gauge blade through one of the slots in the flywheel rotor.

Specified gap:  $0.35 \div 0.40$  mm.

The gap can be adjusted by loosening screw A and inserting a screwdriver tip into notch B (Fig. 29).

**Note:** each time the contact breaker gap has been adjusted, check ignition timing.

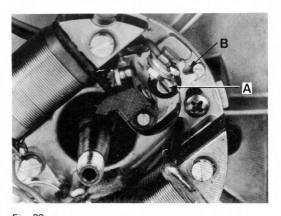


Fig. 29

22

#### **IGNITION TIMING**

Check ignition timing proceeding as follows:

- 1) Insert a strip of thin paper between the contact breaker points.
- 2) Rotate the flywheel: the strip of paper should slide between the points with light friction (points just starting to open) when

the mark A (Fig. 30) on the flywheel rotor is aligned with reference mark on crankcase C (Fig. 30).

Specified ignition timing: 2  $\div$  2.5 mm before T.D.C.

The ignition timing can be adjusted by slackening the screws D (Fig. 31) which

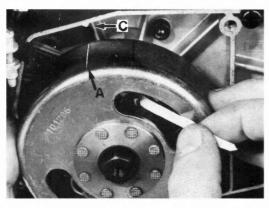


Fig. 30

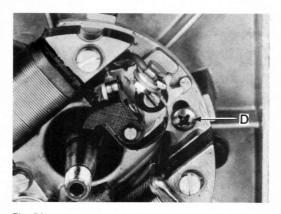


Fig. 31

secure the stator plate and by moving it until correct timing is obtained.

It is not necessary to remove the flywheel (in Figs. 29 and 31 it has been removed just for clarity).

Contact breaker gap and ignition timing should be checked every 600 miles.

With a screwdriver, apply a very small amount of grease to the contact breaker cam felt, every time points gap and ignition timing are checked.

#### CHECKING BOLTS AND NUTS TIGHTNESS

After the first 600 miles and every 2400 miles check the following nuts and bolts tightness.

- 1) Wheel spindle nuts.
- 2) Transmission oil drain bolt.
- 3) Engine to frame securing bolts.
- 4) Carburetor securing screws.
- 5) Cylinder head retaining nuts (this should be checked by a specialized service station).

# FRONT AND REAR WHEEL REMOVAL AND REPLACEMENT

Having loosened the wheel spindle nuts, the front wheel can be withdrawn from the front fork (Fig. 32).

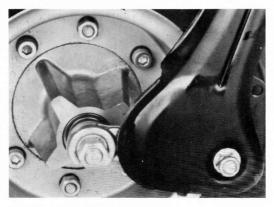


Fig. 32

The rear wheel can be removed proceeding as follows (Fig. 33):

- 1) Remove drive chain.
- 2) Loosen rear wheel spindle nuts.
- 3) Withdraw rear wheel and free it from brake shoe plate.

Follow the above steps in reverse order to replace the wheels.

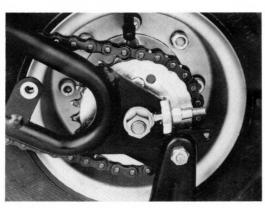


Fig. 33

#### **RUNNING-IN PROCEDURE**

During the running-in period the mixture proportion of oil in the fuel should be 7% (14 to 1 Ratio).

For the first 300 miles of motorcycle operation the engine should be run with care, avoiding slogging and hard revving. Do not use more than one-half throttle opening during the running-in period.

#### MAINTENANCE SCHEDULE

#### First 300 miles

- Change transmission oil
- Check and adjust contact breaker gap and ignition timing.
- Check bolts and nuts tightness.
- Adjust and lubricate the final drive chain.

# Every 600 miles

- Check and adjust contact breaker gap and ignition timing.
- Adjust and lubricate the final drive chain.
- Check transmission oil level.
- Clean and re-gap the spark plug.
- Check and adjust cables and levers.

#### Every 1200 miles

- Clean air filter.
- Change the transmission oil.

# Every 2400 miles

- Renew the spark plug.
- Check nuts and bolts tightness.

#### **ENGINE LUBRICATION**

SAE 30 engine oil should be added to gasoline, the proportion being 20 parts of gasoline to 1 part oil (14 to 1 during running-in period).



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