

OPERATION AND MAINTENANCE



FOLDING VEHICLE

DI BLASI

MOD. R 7 (PATENTED)



## SELLING CONDITIONS

- The Producer, DI BLASI, in no event shall be liable for direct or indirect damages to
  persons or to properties, caused by the use of his own vehicles, also if these damages
  are caused by design or material faults.
- 2) The Producer, DI BLASI, is not liable toward the customers for eventual infringements of patents, trade-marks, pattern which could be found on his products.
- 3) The Producer, DI BLASI, is not liable for damages, losses or expenses occurring for eventual inefficiencies of his own vehicles.
- 4) The descriptions, the pictures, the accessories shown in this hand-book are not binding for the Producer, DI BLASI, so that in any moment he can bring modifications or changes to components or accessories for technical, commercial or legal reasons, without binding himself to bring up-to-date this hand-book.
- 5) Place of fulfillment and Court of Jurisdiction for all litigation is SIRACUSA Italy.

# 1 - TECHNICAL SPECIFICATIONS

#### 1.1 Dimensions

Open: length	128	3 mm - 50.51	in.	Folded: length	725 mm	- 28.54	in.
width	540	mm - 21.25	in.	width	330 mm	- 12.99	in.
wheel	base 93	mm - 36.61	in.	height	550 mm	- 21.65	in.

- .2 Weight Dry 32,5 Kg 71.6 lbs
- 1.3 Rim Size (Front & Rear) 1.7 x 8" 1.4 Tire Size (Front & Rear) 2½ x 8" R
- .5 Brakes (Front & Rear) 90 mm Diameter 3.54 in.
- .6 Electrical Wiring Diagram 6V-25W: see Fig. 18
- 1.7 Fuel Tank Capacity 3 litres 3.2 quarts
- 1.8 Fuel Consumption 1 litre every 50 Km 120 M. P. G. (approxim.)
- 1.9 Maximum Speed 40 Km/h 24.5 MPH

## 1.10 Engine

- DI BLASI manufactured-Model Designation M 1 Two stroke, single cylinder.
- Bore
   Stroke
   Total Volume
   39 mm 1.53 in.
   41,8 mm 1.64 in.
   49,9 cc 3.04 cu.in.
- Compression Ratio 8,65 : 1
- Maximum Power .92 KW 11/4 HP (at 3700 RPM)
- Maximum Torque 2,56 mN 1.88 ft lbs (at 3000 RPM)
- Spark Plug LODGE "HN" (or equivalent)
- Carburetor Dellorto SHA 14-12 main jet size 54
  - choke tube: 12 mm Diameter
- Fuel Mixture of regular fuel with 2% oil SAE 30
- Primary drive: automatic variator composed by:
   Expanding pulley, working also as automatic clutch
  - V-Belt
  - Reduction unit oscillating support.
  - Infinite velocity ratio: min. 1:1,577; max. 1:3,736
- Secondary transmission by  $1/2" \times 3/16$  Chain (Z 9/42 = 1:4,666).
- Starting: by foot kick starter.

# 2 - TO UNFOLD



When the vehicle is folded, it stands up on it's lateral support

Lift the handlebar until it is locked by the special hook.

Make sure that both springs which pull the hook are functioning properly.

Make sure the hook is properly positioned (sec. 5.2).

When lifting the handlebar, do not turn the wheel.

# THE VEHICLE



Unfold the vehicle holding the saddle, with both hands, on it's front and rear edges; lift upwards and backwards as far as possible.



Pull the saddle backwards until the frame is locked automatically by the little hook on it's right side (fig. 12).

Place the machine on the stand.

Unfold the foot rest.

Open the fuel valve located under the tank so that the lever is pointing down-on (fig. 9-A).

Open the air vent hole unscrewing the knurled nut on the tank cap (fig. 9-B).

Unfold the rearview mirror.

# 3 - TO FOLD



Release the frame hook located on the right side under the saddle (fig. 12) and push the saddle forward.



Close the fuel cap located under the tank so that the lever is pointing frontward to OFF. Close the air vent hole screwing the knurled nut on the tank cap (fig. 9-B). Run the engine until is stops, this uses all the fuel in the carburetor.

Fold the rearview mirror. Push the vehicle forward off it's stand. Turn the steering 90° to the right.

# THE VEHICLE



The saddle may be pushed down until it is almost level with the filler cap. Unhook the handlebars and lower them.



Fold the foot rests. The machine stands on it's lateral support.

# 4 - OPERATING INSTRUCTIONS

## 4.1 Breaking In:

During the break-in period, 500 Km or 300 Miles, use a mixture of regular fuel with 4% oil SAE 30.

Do Not Operate Engine above 3/4 throttle during this period. After the first 500 Km, check all bolts and nuts for proper tightness. Tighten the cylinder head nuts to 1 m Kg or 8 Ft lbs torque.

### 4.2 Fuel:

Use a mixture of regular fuel with 2% oil SAE 30. This mixture is for a broken in engine.

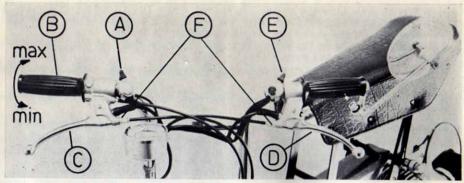
CAUTION: An improper mixture or just fuel without oil, will cause engine damage and voids all warrantees.

#### 4.3 Tire Pressure:

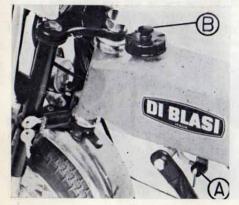
Front: 1,4 atm or 20 psi - Rear 2,75 atm or 40 psi.

#### 4.4 Ridings:

- a) Place the vehicle on it's stand and make sure that the rear wheel is rised from the ground.
- b) Open the fuel valve under the tank to ON, straight down (fig. 9-A).
- c) Open the AIR VENT HOLE unscrewing the knurled nut on the tank cap (fig. 9-B).
- d) Switch the ENGINE STOP SWITCH to RUN, located on right handlebar (fig. 10-A)
- e) OPEN THE THROTTLE SLIGHTLY, twisting action of right handlebar grip (fig. 10-B).
- f) If the engine is cold, push down the CHOKE LEVER mounted in the carburetor (fig. 11-A).
- g) Start the engine with moderate pressure on the KICK STARTER; if it jams, release and try again.



ig. 10



A O

fig. 9

fig. 11

- h) A few seconds after the engine has started, OPEN THE THROTTLE COMPLETELY to release the automatic return of the choke to it's open position. Prolonged operation with the choke on will cause spark plug fouling. Use caution to insure the vehicle is on the stand and apply the front brake while the throttle is opened completely.
- With the throttle in a CLOSED POSITION, apply the rear brake before pushing the vehicle off it's stand.
- The vehicle, once started, is driven at the desired speed solely by use of the TWIST GRIP THROTTLE (fig. 10-B).
- k) To slow down, CLOSE THE THROTTLE, and if necessary apply the brakes.
- I) The vehicle is equipped with two brakes. The front wheel brake is controlled by the lever on the RIGHT HANDLEBAR (fig. 10-C). The rear wheel brake is controlled by the lever on the LEFT HANDLEBAR (fig. 10-D). Under normal stopping conditions, use THE REAR BRAKE ONLY. If necessary, the front brake may be used but exercise extreme caution and apply VERY SOFTLY. Hard, sudden use of the front brake can be very dangerous.
- m) With the Throttle in the CLOSED POSITION, the engine will run while the vehicle is stopped.
- n) To stop the engine, CLOSE THE THROTTLE, SWITCH THE MOTOR STOP SWITCH TO OFF, located on the right handlebar.

## 4.5 Lights

The lights are turned on by the switch located on the left handlebar. ON is to the DOWNWARD POSITION. OFF is to the UPWARD POSITION.

#### 4.6 Horn

The push button for the horn is located on the left handlebar, it is incorporated with the light switch. Horn will not operate until engine is running.

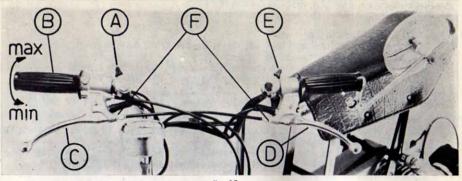


fig. 10

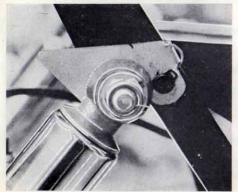


fig. 12

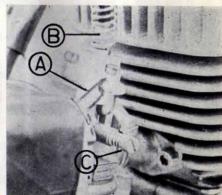


fig. 11

# 5 - CHECKS AND ADJUSTEMENTS

#### 5.1 Position of the handle bar

If the handle bar is not at right angles with the front wheel:

- loosen the cap lock nut of the head sets;

 turn the knurled metal ring (eccentric) located upon the handle bar hook in such a way as to obtain the correct position of the handle bar;

- tighten again the cap lock nut.

After this adjustement check the position of the handle bar hook (see sec. 5.2).

#### 5.2 The Handle Bar Hook

The locking hook mechanism is secured by two springs. Prior to riding, be sure that both springs are working properly.

The correct position of the hook is illustrated in fig. 14. If the hook goes out of adjustment (see fig. 13 & 15) it will require adjustment. TO READJUST:

- LOOSEN NUT B IN FIG. 14.

- If the hook is in the position indicated in fig. 13, turn the screw IN (only a fraction of a turn).
- If the hook is in the position indicated in fig. 15, unscrew the screw (only for a fraction of turn).

- Lock the lock nut (B - fig. 14).

 After this adjustment check that the position assumed by the hook is that indicated in fig. 14.

## 5.3 Handlebar Hinge (see fig. 16)

If the Handlebar hinge feels loose and requires adjustment proceed as follows:

a) loosen the lock nut (A).

- adjust the two countersunk screws (B) so to take up the slack but without overtightening.
- c) tighten the lock nut (A).

## 5.4 Brakes

The brakes may be adjusted in two locations:

- One adjustment is accomplished at the handbrake levers (fig. 10-F).

The other adjustment is accomplished at the brake backing plate (fig. 17-A).

After each adjustment be certain to tighten the lock nut.

With the brake levers in their normal position, the wheels must turn freely. .

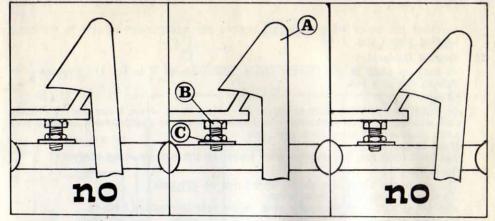


fig. 13

fig. 14

fig. 15

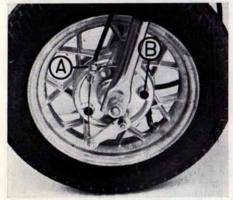
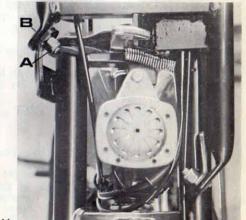


fig. 17



To check the brake lining thickness, remove the rubber plugs located in the brake backing plates (fig. 17-B).

#### 5.5 Throttle Cable

To take up slack in the Throttle Cable, adjust device B in fig. 11. Remember to tighten the lock nut.

## 5.6 Idling

To adjust engine idling mixture (fig. 11-C) turning in on screw, leans out the mixture and visa versa. This adjustment is factory set and if readjustment is necessary seek the aid of a competent mechanic.

5.7 Head Lamp

The head lamp may be adjusted after loosening the two mounting screws.

## 5.8 Spark Plug

The gap of the electrodes should be 0.5 mm or .020 inch. Clean spark plug with a wire brush.

Tightening torque of the spark plug on the cylinder head: 2,8 Kg m.

9 Flywheel Magneto

Ignition is provided by flywheel magneto. The spark advance is 22°-24° corresponding to 2,10-2,40 mm before the top dead center. It is possible to adjust contacts of the platinum points through suitable apertures. The gap of the contacts should be 0,42-0,45 mm or .016 to .018 inches.

#### 5.10 Air Vent Hole

Check that the air vent hole in the tank cap is not clogged with dirt.

### 5.11 Nuts and Bolts

All nuts and bolts are equipped with locking devices, (lock nuts, self locking nut, lock washers), neverthless check the tightening periodically.

#### 5.12 Electrical System

See wiring diagram figure 18. Make sure that the ground connection between the engine and frame is good.

#### 5.13 Chain

To adjust the tension of the chain (fig. 23):

- loosen the nut (E);

using a screw driver on the slot (F) turn the eccentric pin (G) in such a way as
to obtain the correct tension of the chain;

- keeping the screw driver on the slot (F), tighten again the nut (E).

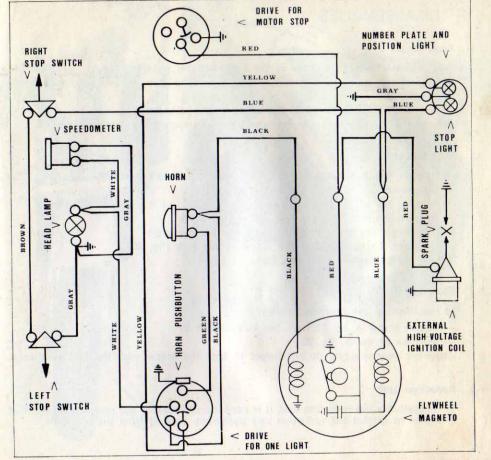


fig. 18

# 6 - DISASSEMBLIES

#### 6.1 Front Wheel

- Disconnect the brake cable at the brake-backing plate (fig. 19-A).
- -- Disconnect the speedometer transmission (for the models equipped with) (fig. 19-B).
- Unscrew the nuts clamping the wheel (fig. 19-C).

Attention: when reassembling the wheel, do not unscrew the chromed legs.

#### 6.2 Rear Wheel

- Remove the transmission guard by removing the three screws.
- Disconnect the chain at it's link (fig. 20-A).
- Remove the spring (fig. 20-D).
- Remove the belt from the rear pulley (fig. 20-B).
- Disconnect the brake cable at the brake backing plate.
- Unscrew the nuts holding the wheel to the fork (fig. 20-C).
- Remove the wheel from the fork.

#### 6.3 Expanding Pulley (fig. 22)

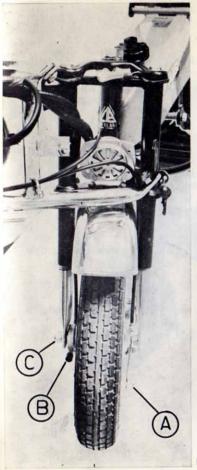
To disassemble the expanding pulley:

- loosen screw A, fig. 22 from the lock washer B;
- unscrew screw A, fig. 22.

Attention: reassembling do not forget to lock the screw with the lock washer B.

#### 6.4 Reduction Unit

To disassemble the reduction unit, it is necessary to remove the rear wheel (sec. 6-2) and then to extract the reduction unit oscillating support from the rear axle.



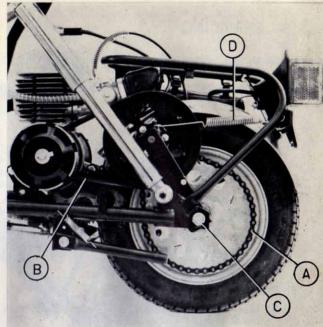


fig. 20

## SERVICING

- Clean and lubricate the Drive Chain often (fig. 21-A).
- Every 1000 1500 km or 650 1000 miles replace the V-Belt (A worn V-Belt causes only a starting in jerks).

#### Every 2500 km or 1500 miles

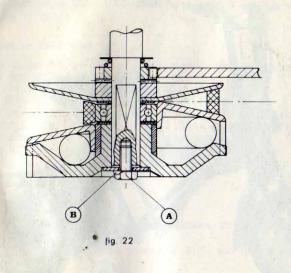
- a) Ask to a competent mechanic to disassemble the reduction unit (B) fig. 21 (sec. 6.4) and:
  - to fill the little tank (C) fig. 23 with soap grease;
    to fill the little tank (D) fig. 23 with litium grease.
- b) Lubricate the speedometer transmission device, located at the front hub, with grease (lubricating nipple (D) fig. 21) (only for the models equipped with speedometer).
- c) Clean the air filter and the carburetor with suitable cleaner.
- d) Disassemble the expanding pulley (sec. 6.3) clean with benzine, reassemble without greasing.

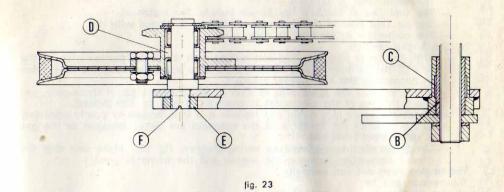
## Periodically

- a) Lubricate with a drop of oil the cables (brakes, throttle, speedometer) and the frame articulations.
- b) Clean with benzine the starting gears (fig. 21-B) and lubricate with grease.



fig. 21





## 8 - DIAGNOSIS

## 8.1 The engine do not start:

a) Check if the fuel is not reaching the carburetor because:

- The tank is empty: place fuel valve in reserve position (lever pointing up) and then refuel.
- The valve is closed.

- The valve filter is blocked.

- The fuel line is blocked (by an air bubble, for instance).

- The air vent hole in the tank cap is blocked or closed with dirt.

- The carburetor or air filter is dirty.

b) Check the Ignition:

 With the spark plug removed and resting with it's metal portion lying on the fins of the sylinder, check wheter there is a spark between the electrodes by depressing the kick starter manually.

 Check whether the spark plug is dirty in which case clean it thoroughly, and check the gap of the electrodes is correct (0.5 mm. or .020 inches).

Check the spark plug cable and replace it if it is broken or poorly insulated.
 Check whether the contacts of the magneto are dirty, damaged or the gap

is not correct (sec. 5.9).

 Check the electric system (see wiring diagram, fig. 18). Make sure that the ground connection between the engine and the frame is good.

# 8.2 The engine does not run normally

The reason can be:

a) One of the reasons listed on sec. 8.1.

- b) Carbon deposit at the piston and cylinder head, at the cylinder exaust port, at the exhaust pipe.
- c) The spark plug or the cylinder head or the induction manifold are not tightened.

8.3 Fouling at the electrodes

The reason can be a too poor carburation:

Clean the carburator; the cylinder exhaust port, the exhaust pipe.
 Tighten the sparking plug, the cylinder head, the induction manifold.

- Make sure that fuel is a mixture of regular fuel with 2% oil.

8.4 Jamming of the expanding pulley (fig. 22)
Disassemble and clean.

8.5 Jamming of the reduction unit oscillating support (fig. 23)
Disassemble as in sec. 6.4 and check if the bushings (fig. 23-B) is lubricated.

# INDEX

Breaking in	4.1
Chain	5.13
Diagnosis	8
Driving	4.4
Expanding pulley (disass.)	6.3
Flywheel magneto	5.9
Folding	3
Fuel	4.2
Front wheel (disass.)	6.1
Handle bar hinge (adj.)	5.3
Handle bar hook (adj.)	5.2
Headlamp (adj.)	5.7
Horn	4.6
Idling	5.6
Lights	4.5
Rear wheel (disass.)	6.2
Reduction unit (disass.)	6.4
Refuelling	4.2
Servicing	7
Sparking plug	1.10-5.8
Technical specifications	1
Tyre pressure	4.3
Unfolding	. 2
Wiring diagram	5.12

8.8-C111

# IceniCAM Information Service



www.icenicam.org.uk