LML

Redefining mobility worldwide

OWNER'S MANUAL

STAR 125 DLX

- KNOW YOUR STAR 125 DLX
- HOW TO OPERATE YOUR STAR 125 DLX
- CARE AND MAINTENANCE OF YOUR STAR 125 DLX

IMPORTANT INFORMATION

1. Name : . . . . . .

   Address : . . . . . .

   . . . . . .

   . . . . . .

   . . . . . .

   Licence No : . . . . . .

2. YOUR DEALER. . . . . .

   Name : . . . . . .

   Address : . . . . . .

   . . . . . .

   . . . . . .

   . . . . . .

   Tel. No. : . . . . . .

3. **YOUR VEHICLE**

   Model LML | STAR *125 DLX* |

   Colour : . . . . . .

   Engine No. | E | 2 | 3 | | | | | | | | |

   Chassis No. | M | D | 7 | M | 1 | 0 | B | 0 | 7 |
   | | | | | | | | | |

   Key No. : . . . . . .

   Date of purchase : . . . . . .

   Date of Registration : . . . . . .

   Registration No. : . . . . . .

C-4723906 : STAR125 : 01:1000:1207

We thank you for choosing STAR *125 DLX* as your new scooter.

The STAR *125 DLX* comes to you from LML Limited - one of the fastest growing automobile companies in India. A company that endeavours to redefine mobility everyday, the worldover by exceeding customer expectations.

Born after years of understanding consumer needs, LML's STAR *125 DLX* comes to you with the promise of an unmatched riding experience.

To begin with, it's auto start lets you instantly thumb-start your heart. And at it's heart lies a potent 3-Port, Read valve 125cc Engine that delivers a phenomenal 6.3 BHP at 6250 RPM. Giving you the power to leave everything behind in an instant. And while you do that, it's side mounted stepny makes every ride a perfectly balanced one. Add to this, its two rear view mirrors, give you the incomparable pleasure of watching the traffic you'll always leave behind.

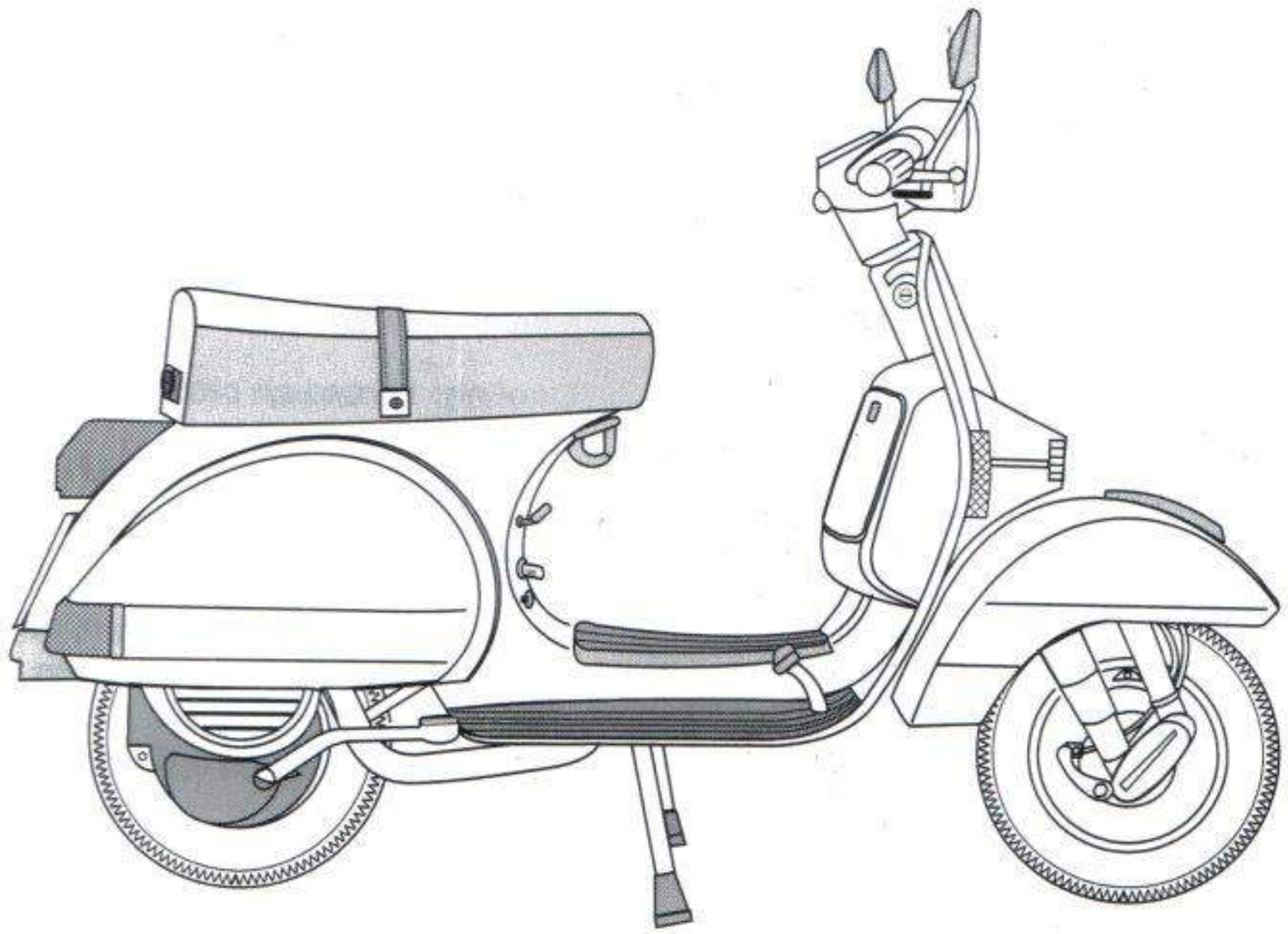
Besides giving you a smooth performance and extremely comfortable rides for years, the STAR *125 DLX* also makes you the envy of others. All thanks to its breathtaking style and metallic colours that people just can't ignore.

This owner's manual has been specially designed to help you understand your scooter better. It's important for you to go through this manual thoroughly to get the best performance out of your STAR *125 DLX* and maintain it in the best condition for years.

So read this manual, ride out on your new STAR *125 DLX* and discover what world-class mobility is all about.

CONTENTS

STAR 125 DLX



GENERAL SPECIFICATIONS

Engine: A new generation energy saving and most fuel efficient engine equiped with secondary air system is pivoted to the vehicle chassis through the crankcase swinging arm on the clutch side. The rear wheel (drive-wheel) is fitted on the outer side of the drive shaft.

Lubrication: Of engine (piston, cylinder, crank shaft, main bearings flywheel side) is effected by an automatic oil mixer device (AOM).

Fuel supply: Gravity fed petrol and oil. Oil is mixed in petrol with automatic oil mixer device. Carburettor provided with a throttle slide. Air intake located under the seat.

Fuel gauge (optional): Inbuilt with instrument panel indicates the quantity of petrol in the petrol tank by vertue of a float unit located inside the tank.

Ignition: By means of an electronic ignition device (CDI) which feeds the current to a high voltage transformer (HT coil) to generate the spark.

Starting: Push button for self start on right hand side of handlebar below head light switch. Kick start pedal for manual start located on the right hand side of scooter.

Cooling: Forced air provided by a centrifugal fan.

Clutch: A new heavy duty, multiplate oil bath type. The unit is cable operated by a lever located on the left hand side of the handlebar and is adjustable.

Gear box: Four speed forward drive with constant mesh gears immersed in oil bath are operated by hand on the left hand side of the handlebar which functions in conjunction with the clutch control lever.

Integral Chassis: Pressed steel sheet. Monocoque structure.

Wheels: Interchangeable and made out of pressed steel rim with 89 x 254 mm (3.50 x 10) tyres.

Handlebar: Aluminium casting base with headlamp, instrument panel and indicator lights. All transmission cables are concealed therein.

Steering column and suspension: The steering column is pivoted on the front wheel swinging hub. Front and rear suspensions are provided with helical spring and hydraulic dampers.

Security lock: On the steering column and operated by a key.

Saddle: Dual saddle, tip up type with push button control and key security lock.

Brakes: Cable operated drum brakes with dual expanding shoes.

Optional disc brake in front wheel.

Front Brake: Operated by hand lever placed on right hand side of handle bar.

Rear Brake: Operated by pedal on the right hand side footboard.

Rear view mirror: Stylish rear view mirrors on both side of handle bar.

Glove compartment: A sleek & spacious glove compartment for keeping personal belongings etc. secured with a lock.

Hook for Bag : For hanging a bag under the seat.

Foot mat: Moulded centre & side mat which protects entire foot rest area (Foot board strip optional).

Wheel cover(with Drum brake only): To enhance the look of the scooter, wheels are provided with newly designed covers. The front and rear wheel covers are secured rigidly to the wheel rims. There is also a protection cover for the spare wheel.

Battery: 12 Volt 9 Ah battery.

5. **Tool kit**:
   In a pouch containing:

   Box Spanner (13 X 21mm) with lever

   Double sided screw driver

   2 double ended spanners

   (7 x 8 mm and 8 x 11 mm)

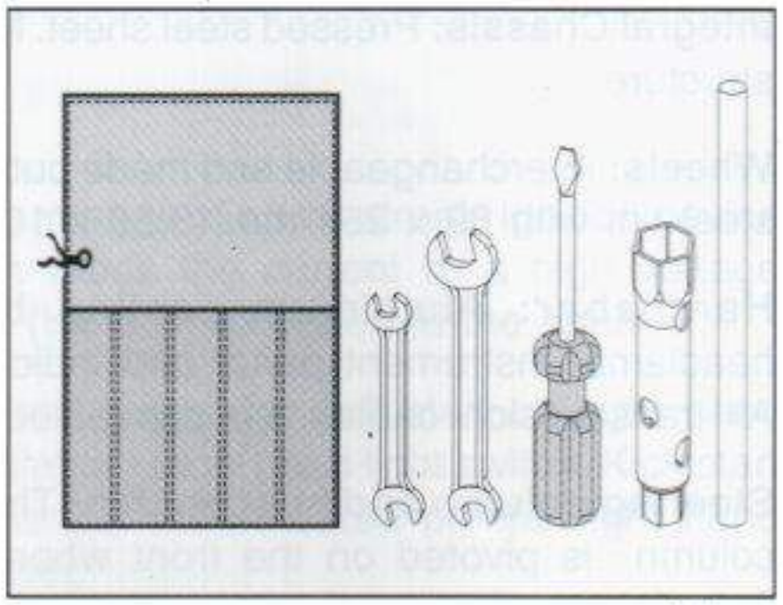


Fig. 1

VEHICLE IDENTIFICATION

The vehicle is identified by a number on the chassis and another number on the engine.

The chassis identification number is stamped on the right hand side of rear portion of the chassis frame (fig. 2). Chassis number has the prefix MD7M10B07 in first row and 8 characters number in second row.

A VIN plate is also riveted on the chassis (fig. 2)

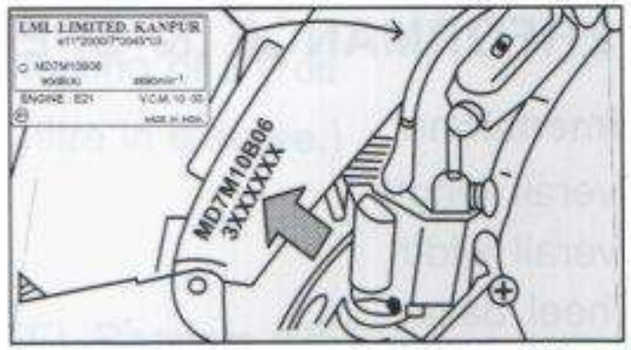


Fig. 2

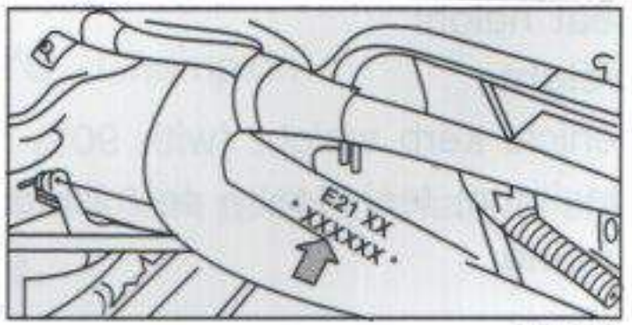


Fig. 3

The engine number is stamped on the crank case (fig. 3). The engine number has the prefix E23 followed by a 8 characters number.

Each LML STAR *125 DLX* has one set of duplicate keys. It has an identification number stamped on both the keys (fig. 4). Please keep your duplicate key carefully.

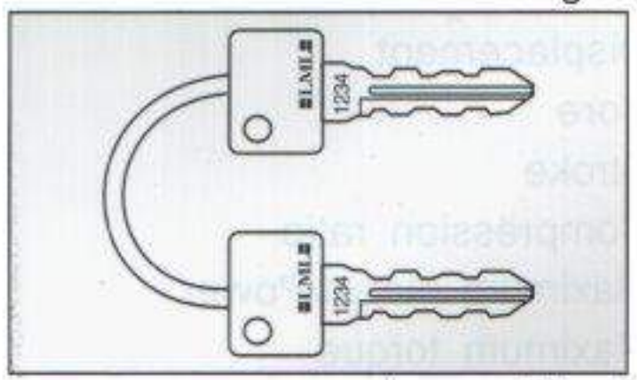


Fig. 4

PERFORMANCE & SPECIFICATIONS

Dimensions	
Overall length	1760 mm
Overall width	695 mm
Wheel base	1235 mm
Maximum road clearance	160 mm
Seat height	820 mm
Weights	
Vehicle kerb weight (with 90% fuel)	109 kg
Maximum technically permissible mass	270 kg
Engine	Single cylinder, two stroke, forced air cooled with rotary distribution, 3 transfer ports, read valve & air systems
secondary	
Displacement	125 cc
Bore	52.5 mm
Stroke	57.0 mm
Compression ratio	9 : 1
Maximum output/Power	4.9 kW at 5500 RPM
Maximum torque	9.5 Nm at 4000 RPM
Ignition system	Capacitor Discharge Ignition (CDI) Electronic
Ignition timing	$18^0 \pm 2^0$ before TDC

Fuel	Petrol with automatic mixing of 2T oil
Fuel tank capacity	8 Litres (inclusive of 1 litre in reserve.)
Oil tank capacity	1 Litre
Fuel cock	Three way tap. Open (ON); Close (OFF), Reserve (RES).
Carburettor	**SPACO**–20/20D, Downdraft, 20mm venturi
Spark plug	**BP8HS** - NGK, **P-L5YC** - Champion
Spark plug gap	0.7-0.8 mm
Starting	Push button for auto start & kick pedal for manual start.
Clutch	Multiplate, oil bath type.
Transmission	4 speed constant mesh
Overall Gear Ratio	
1st Gear	15.38:1
2nd Gear	10.46:1
3rd Gear	7.24:1
4th Gear	5.39:1

Chassis	Pressed steel sheet, monocoque structure
Steering column and suspension	The steering column is pivoted at the front wheel swinging hub.
Front & rear suspension	Front and rear suspension with helical spring and hydraulic dampers
Brakes	
Front brake	Front Disc brake(Optional), Drum brake, mechanical expanding shoe type
Rear brake	Drum brake, mechanical expanding shoe type
Tyres	
Front and rear tyres	89 x 254 mm (3.50 x 10) 4 Ply rating, interchangeable
Tyre pressure	
Front wheel	1.2 kg/cm² (17 psi)
Rear wheel	1.8 kg/cm² (25 psi) 2.5 kg/cm² (35 psi) with pillion rider
Controls	
Steering	By Handlebar
Accelerator	Twist grip type on right hand side of the handlebar
Gears	By hand on left hand side of the handlebar
Clutch	Lever operated on left hand side of the handlebar
Front brake	Lever operated by right hand
Rear brake	Pedal operated by right foot

Electricals

Generator system	12 Volt 96 Watt flywheel magneto
Head lamp	12 Volt 35/35 Watt
Front position lamp	12 Volt 5 Watt
Tail light	12 Volt 5 Watt
Stop light bulb	12 Volt 10 Watt
Speedolight bulb	12 Volt 1.2 Watt x 2
Turn signal light bulb	12 Volt 21 Watt
Tell tale lamp	12 Volt 1.2 Watt x 4
Horn	12 Volt DC Horn
Battery	12 Volt 9 Ah
Fuse	8 Amp
Maximum speed	80 km/h in 4th Gear

SPECIFICATIONS
(Auto start)

STAR *125 DLX* has the facility of a push button for auto start below the headlight switch (fig. 5) in addition to a kick start option. The auto start circuit is operated by a 12 volt - 9Ah battery.

A PRD relay **(Prevention of Restarting Device) is provided to avoid use of the self starter when the engine is running.**

A declutch switch has been provided to prevent starting of scooter when the clutch is engaged.

An 8 Amp fuse (Near spare wheel bracket, rear side fig. 6 & 7) is provided to avoid any damage due to short circuiting in auto start system.

A powerful **12 volt-96 watt magneto** charges the battery through a regulator with a built in charger.

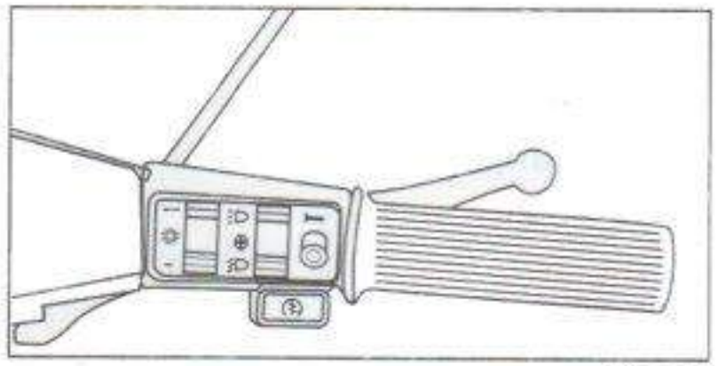


Fig. 5

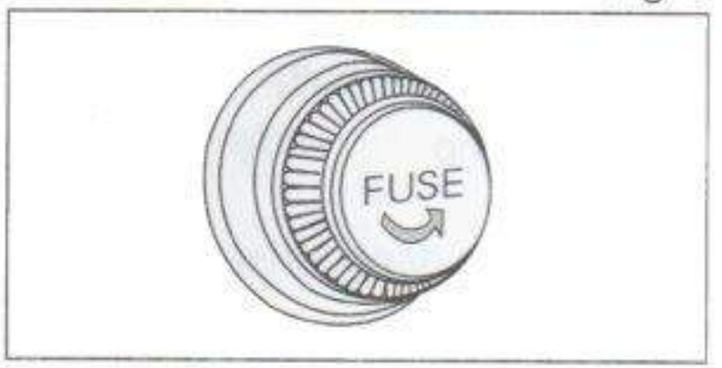


Fig. 6

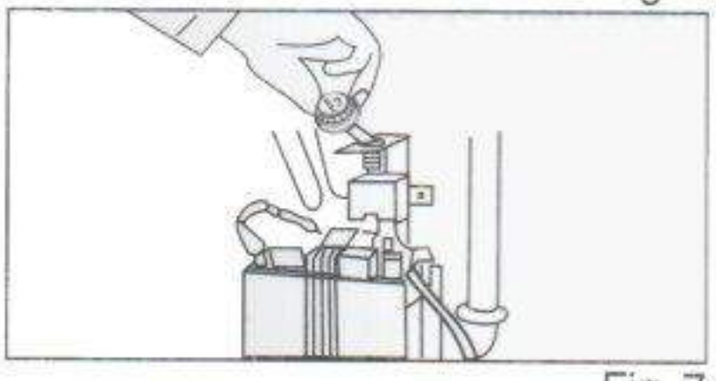


Fig. 7

Fuel supply: The fuel tank & oil tank are located under the saddle (fig. 8) and are accessible only when the saddle is unlocked and lifted.

STAR *125 DLX* scooters are produced with AOM (Automatic Oil Mixer) for engine lubrication. As such, STAR *125 DLX* has two separate tanks, one for petrol '**A**' and other for 2T oil '**B**' (fig. 9).

Don't fill-up the tank '**A**' with "petrol oil mixture". Only pure petrol is to be filled in tank '**A**'. The oil tank '**B**' should only be filled with 2T motor oil.

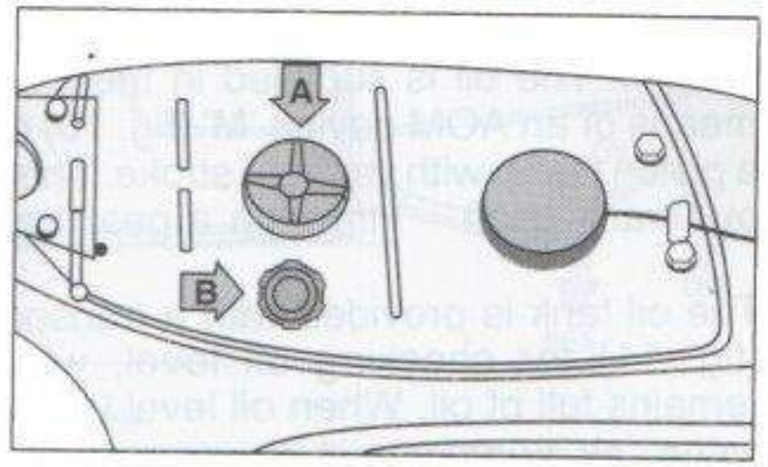


Fig. 8

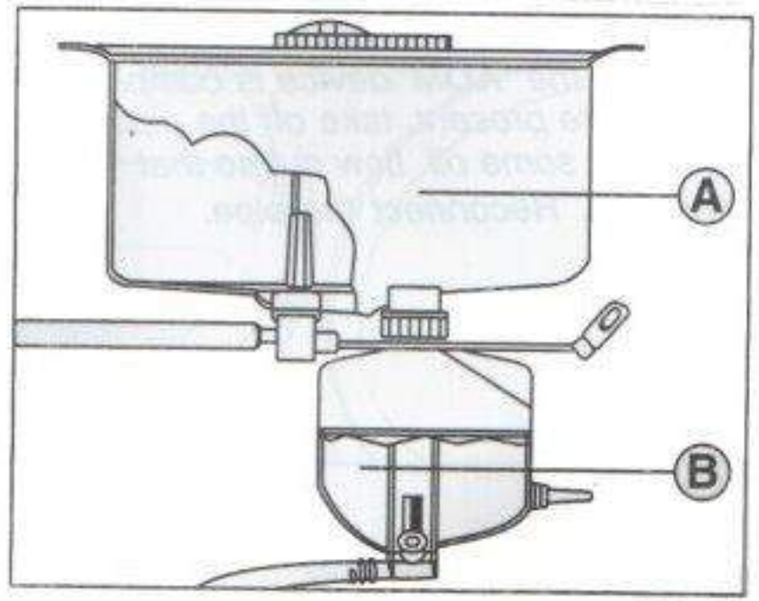


Fig. 9

The petrol is fed to the carburettor by normal gravity system. The oil is supplied in the suction pipe by means of an AOM device '**M**' (fig. 10) comprising of a piston pump with variable stroke. This is controlled by crank shaft through a gear transmission.

The oil tank is provided with a transparent cup '**C**' (fig. 11) for checking oil level, which normally remains full of oil. When oil level lowers to reserve value, air bubbles will appears in the cup. Refill recommended 2T Motor Oil.

Note: *Take care that the oil inlet pipe '**T**' (fig. 10) from oil tank to the '**AOM**' device is completely full of oil. If air bubbles are present, take off the pipe '**T**' from the '**AOM**' device, let some oil flow out so that the air bubbles are eliminated. Reconnect the pipe.*

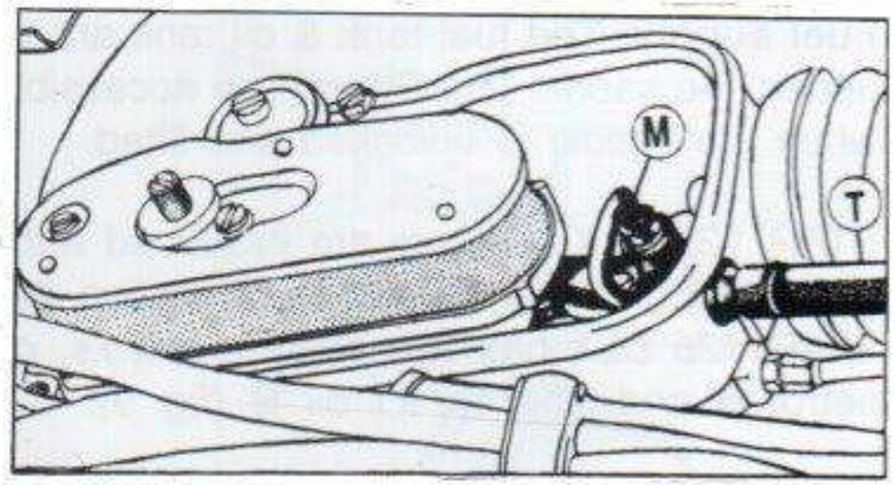


Fig. 10

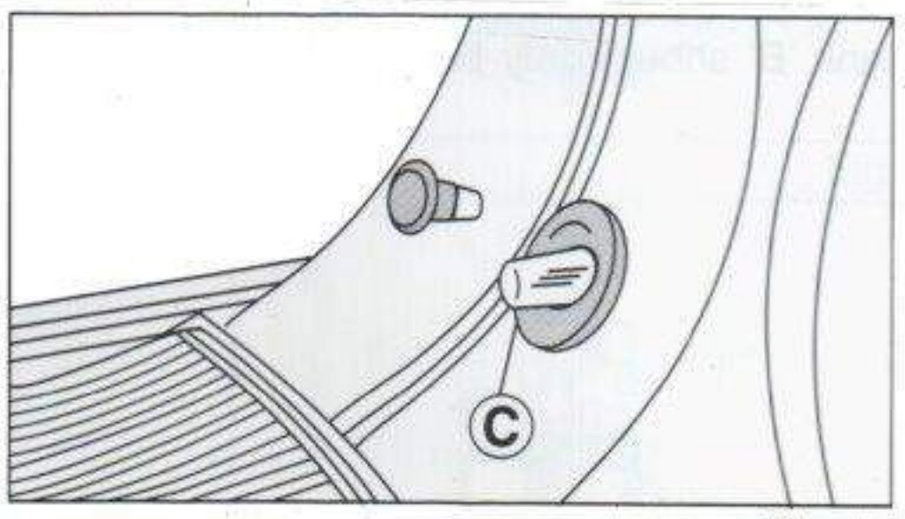
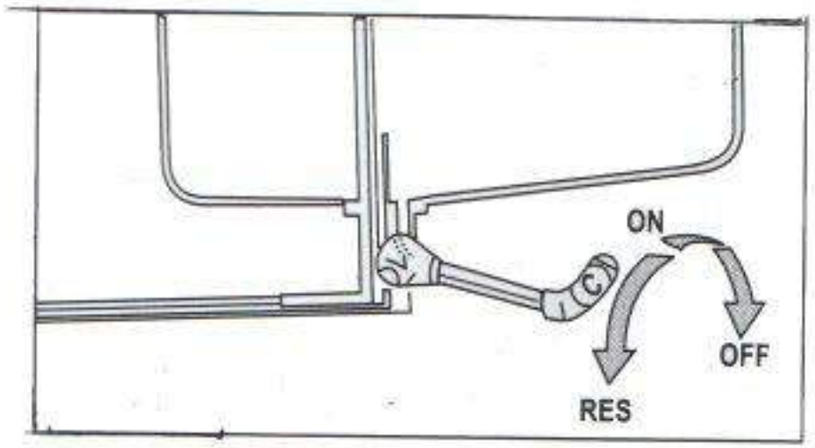


Fig. 11

Control of flow of petrol (fig. 12): There is a fuel cock below the saddle which has 3 positions; (**ON**) for regular flow of petrol from the tank to the engine; (**OFF**) for stopping the petrol supply and (**RES**) to be activated when the need arises. If the vehicle stops on account of lack of petrol, turn the cock to (**RES**) i.e. 'RESERVE' position. There is one litre of petrol kept in reserve in your tank for any emergency.



Choke knob (fig. 13): Located below the seat. To be used for starting the engine when it is cold. Pull the choke knob outwards for operation. It should be pressed back when the engine has started running normally.

Caution: *If the choke knob remains pulled out during running, it will lead to the flooding of petrol in the carburettor causing erratic running and high fuel consumption.*

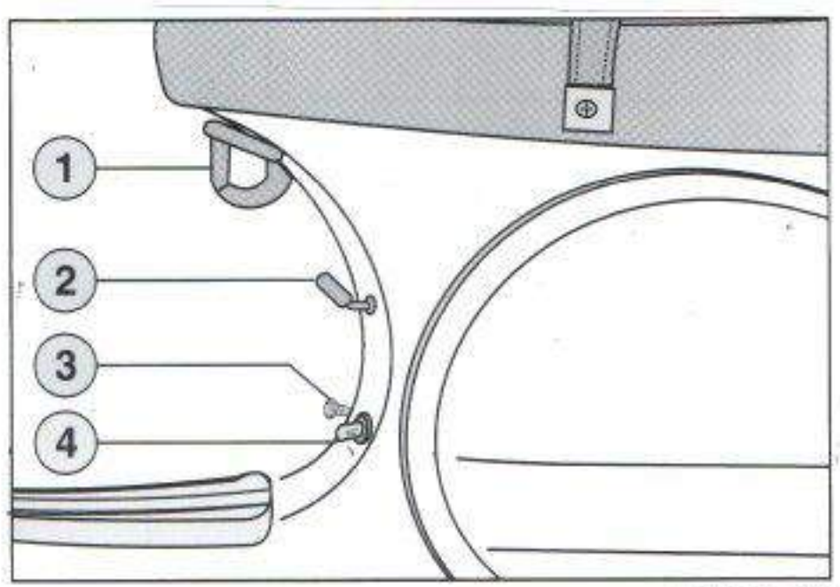


Fig. 13

1. Hook for bag
2. Fuel cock
3. Choke knob
4. Oil level indicator

Fuel Supply and Distribution

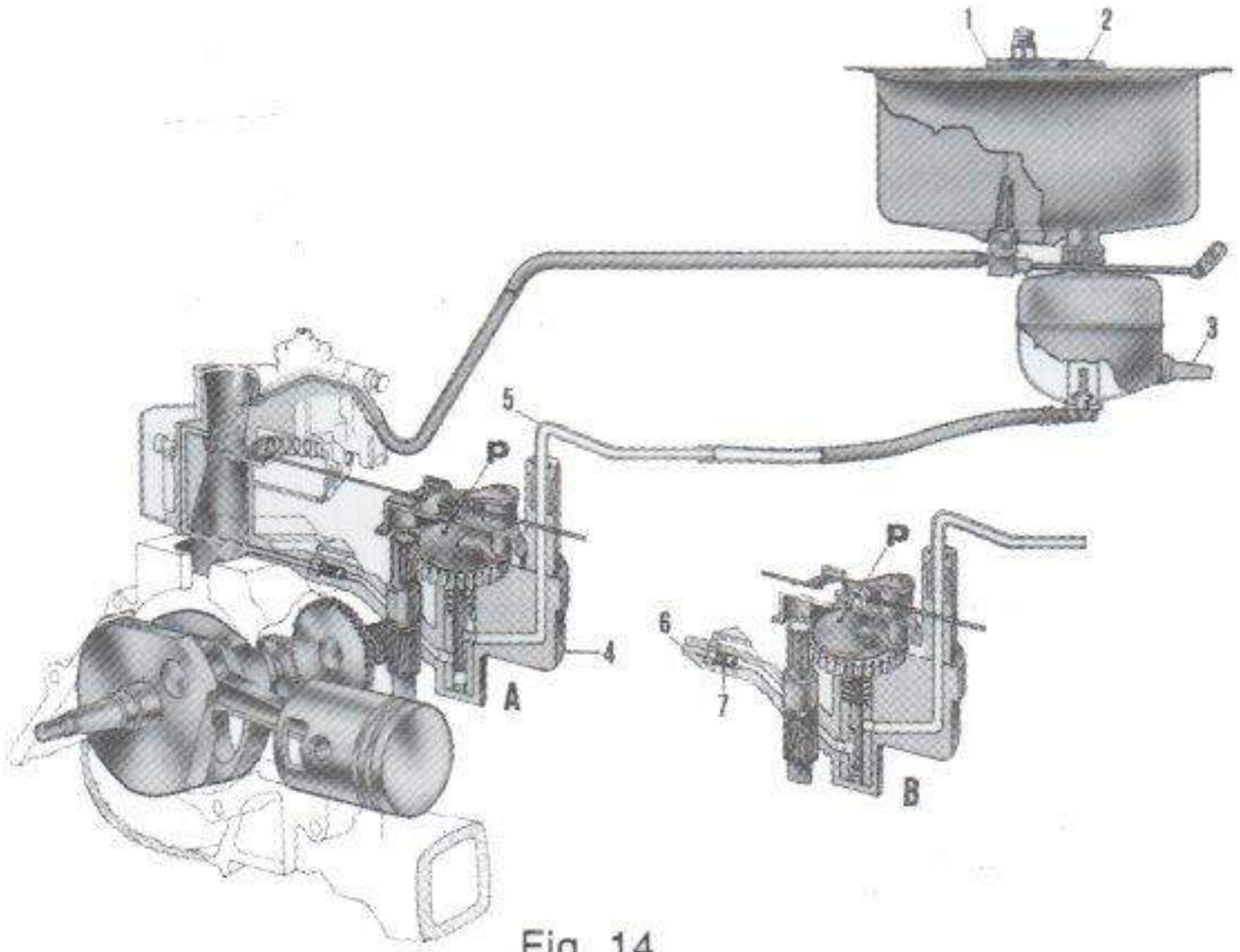


Fig. 14

1. Petrol tank cap
2. Oil tank
3. Oil level indicator
4. 'AOM' Device
5. Oil inlet pipe
6. Oil supply pipe
7. Oil supply valve
   A. Suction period
   B. Delivery period

LOCKING SYSTEM

The STAR *125 DLX* has a single key for locking the steering column, glove compartment and saddle, as well as for the ignition.

Locking the Handlebar: First turn the handlebar to the extreme left and then turn the key anticlockwise to lock position. Pull out the key after locking (fig. 15).

Un-locking the Handlebar: Insert the key in ignition switch and turn it clockwise to unlock the handlebar.

To switch on the ignition turn the key further clockwise to 'ON' position (fig. 16).

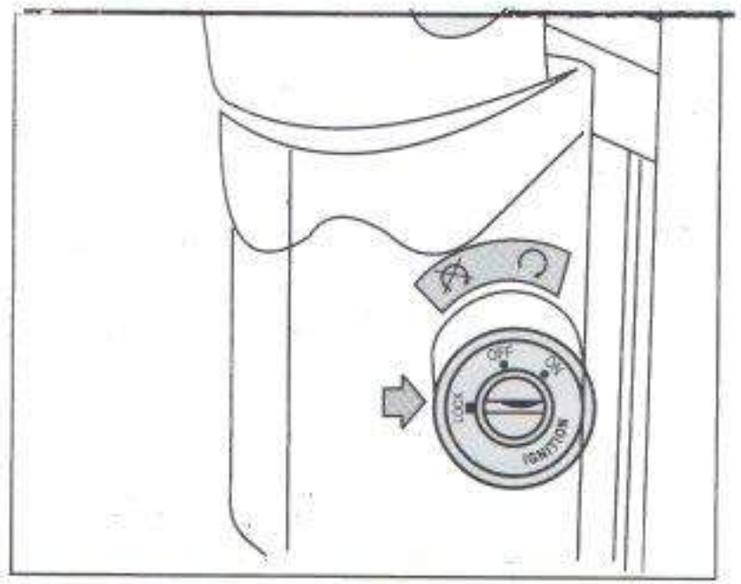


Fig. 15

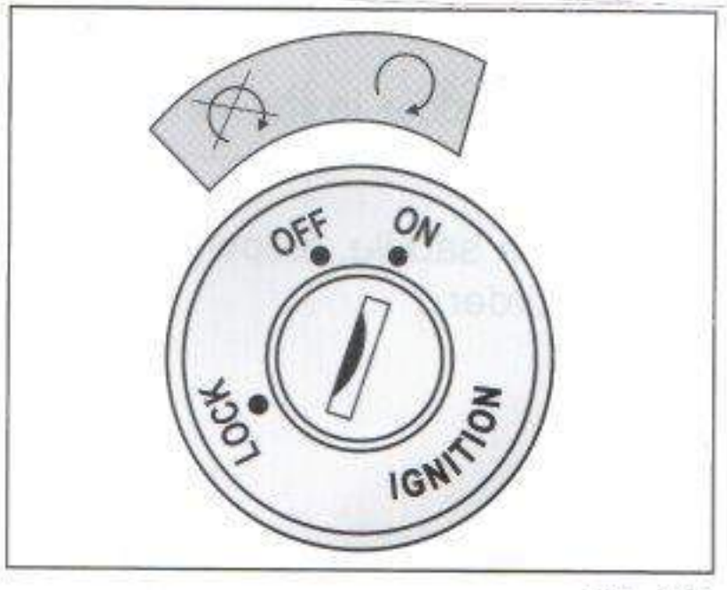


Fig. 16

Glove compartment lock: To open the glove compartment lid lock, insert the key into the lock and rotate anticlockwise till the end of stroke (fig. 17) and then press the lock downwards.

For closing, press the lid, turn the key clockwise and then take out the key.

Saddle Lock: Insert the key, rotate it clockwise till the end then take it out.

Push the lock with your thumb (fig. 18) and lift the saddle from the back.

Place the saddle in its normal position & press it down.

To lock the saddle, follow the above procedure in reverse order

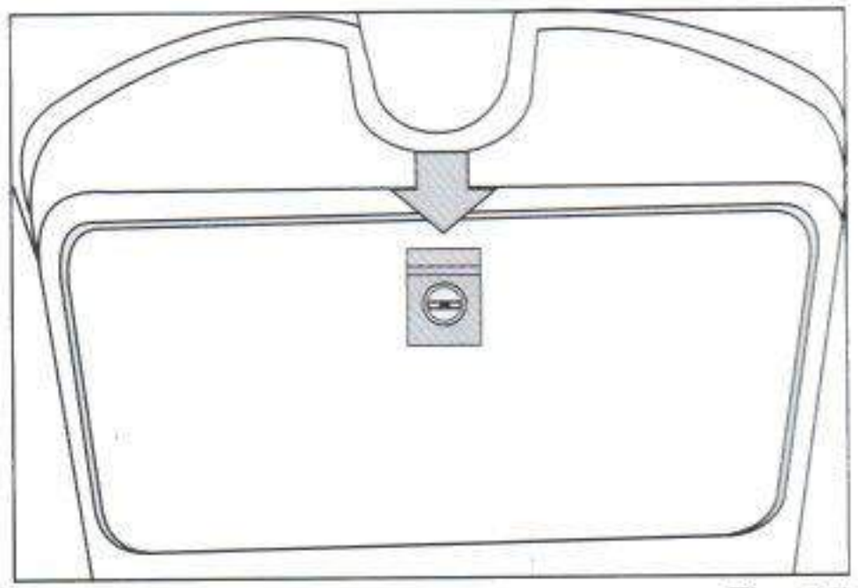


Fig. 17

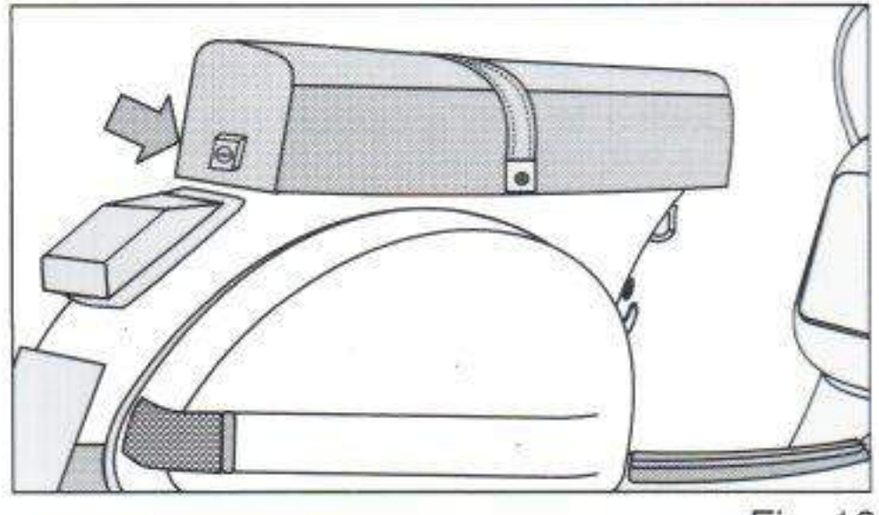


Fig. 18

INSTRUMENT PANEL

An elegantly designed instrument panel with the following indicators.

1. Head light high beam indicator
2. LH turn signal indicator
3. Speed indicator needle
4. Odometer
5. RH turn signal indicator
6. Head light low beam indicator
7. Fuel gauge (optional)

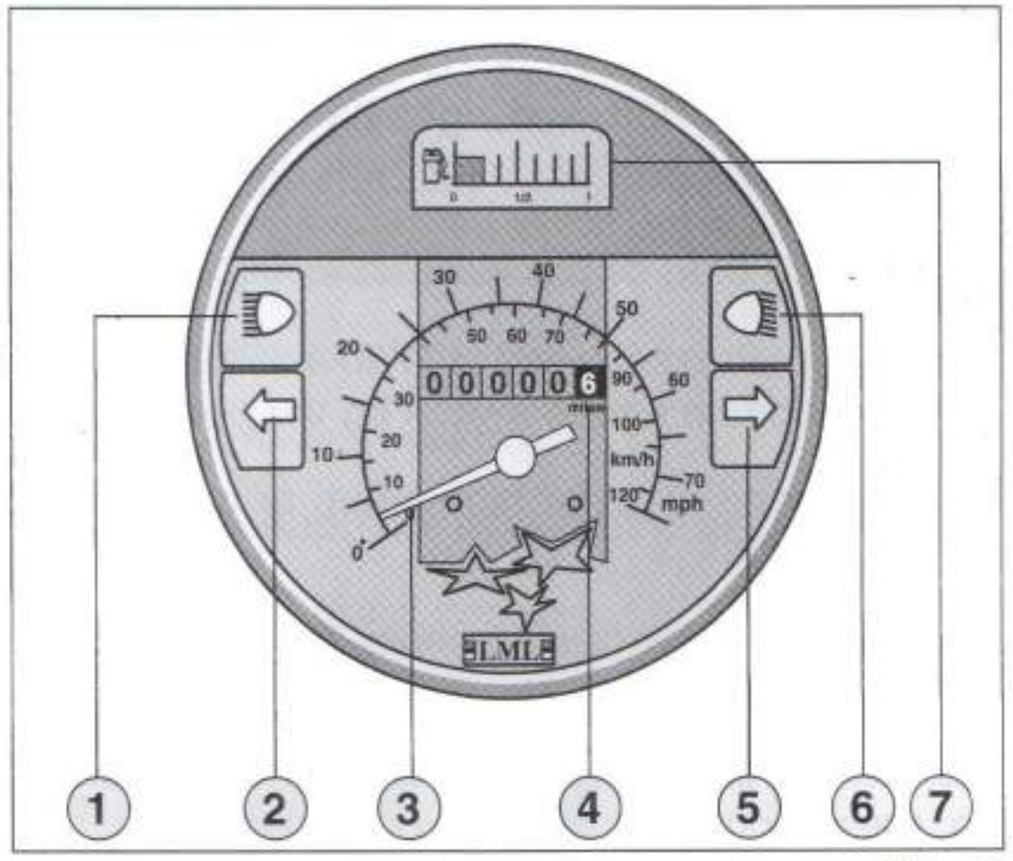


Fig. 19

CONTROL SWITCHES: Control switches are located on the left and right hand sides of the handlebar.

Right hand side of the handlebar (fig. 20) :

Headlight : Press top end of '**1**' to activate the head light and bottom end to switch on the parking light.

Press top end of '**2**' for high beam or bottom end for low beam.

Headlight high & low beam positions are indicated on the instrument panel.

Instrument panel light and tail lights : To switch on, press bottom or top end of **'1'** (fig. 20).

Stop light : Becomes operative when foot brake pedal or hand brake lever is pressed.

Horn : Press button '3' (fig. 20).

For auto start : Press push button switch '4' only after pressing clutch lever.

Left hand side of the handlebar (fig. 21).

Turn indicator switch : Press left hand end of switch for turning left and right hand end for turning right.

Left & right turn indicator is shown on the instrument panel.

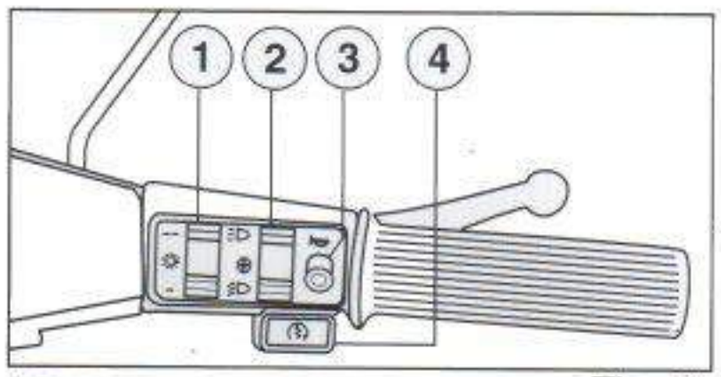


Fig. 20

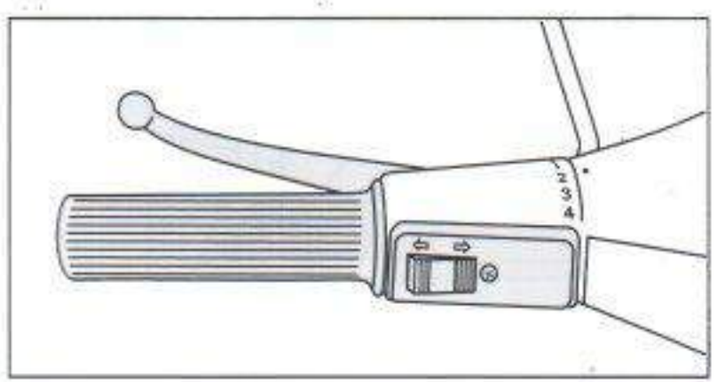


Fig. 21

OPERATING THE VEHICLE

Warning: Before driving your scooter make yourself thoroughly familiar with all operating controls and their functions.

Before starting the engine:

Check if tyres are properly inflated.

Check for correct play in the clutch lever and make sure that it operates properly.

Check for correct play in the foot brake pedal and hand brake lever.

Check if the accelerator throttle is operating properly and if the play is normal.

Ensure that 2T oil is available in the oil tank, taking the reference of oil level indicator.

Starting the engine (fig. 22)

Open fuel cock to "ON" position.

Turn "ON" the Ignition switch.

Put gear control in neutral position.

Pull out the choke knob (for cold engine start only).

Bring the throttle to idling position

If you are starting engine for the first time in the day, press the clutch lever and, keeping it pressed, kick the starter pedal a couple of times.

For starting the engine press clutch lever and then press the push button start switch.

When the engine is running normally, press the choke knob back to its normal position.

Caution:

1. *Do not use electric starter for more than 5 seconds at a time. Release the push button start switch for approximately ten seconds before pressing it again. If the engine fails to start after repeated attempts hold the throttle 1/8-1/4 open and use kick start option.*

2. *Before using the auto start switch ensure that you press the clutch lever.*

   A- Open fuel cock

   B- Switch on ignition

   C- Put gear in neutral position

   D- Pull the choke knob (with cold engine only.

   E- Bring accelerator throttle to idling position

   F- De-clutch

   G- Kick starter pedal or push auto button (for auto start).

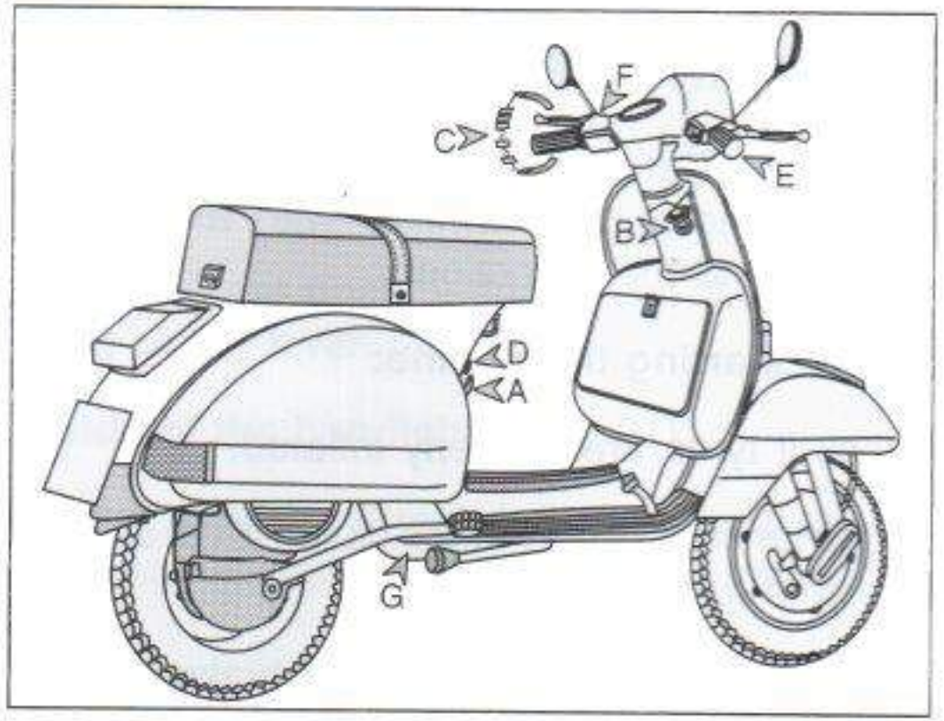


Fig. 22

ENGINE RUNNING-IN

Operation: The most important period in the life of your vehicle is its first 2000 kms. The engine is brand new and different moving parts of the engine need to be set to their correct operating tolerances. This ensures a longer life for your vehicle. It is, therefore, necessary to take some precautions so as not to overload the engine.

Keep to the following speed limits

1st Gear	:	0 to 10 kms/hr.
2nd Gear	:	10 to 20 kms/hr.
3rd Gear	:	20 to 35 kms/hr.
4th Gear	:	35 kms/hr. and above.

Vary the speed from time to time.

Do not drive with half (partially engaged) clutch. This will not only damage the clutch but will also cause overheating of the engine.

Avoid running the scooter on full throttle for long periods.

Allow a cooling off period of 5-10 minutes after each hour of use.

Ensure oil level in gear box to recommended level.

BATTERY CHECKING :

Battery requires periodic and thorough maintenance as advised below : The level of electrolyte must always be in between the upper and lower levels marked on the battery.

Normally a constant level in the specified range is maintained for about two months or approximately 2000 kms (fig. 23).

The level of electrolyte should be checked once in a month. In case of a normal decrease (0.5 cm) put in distilled water only so as to reach the upper level indicated on the battery. In case of a marked decrease (1 cm or more), please get the battery checked at an authorised Service Station .

Caution:

Battery should be removed if the vehicle is to be washed lying on its side.

Use only 8 Amp. fuse to prevent serious damage to the wiring harness & battery. Ignition switch should be in 'off' position while replacing fuse.

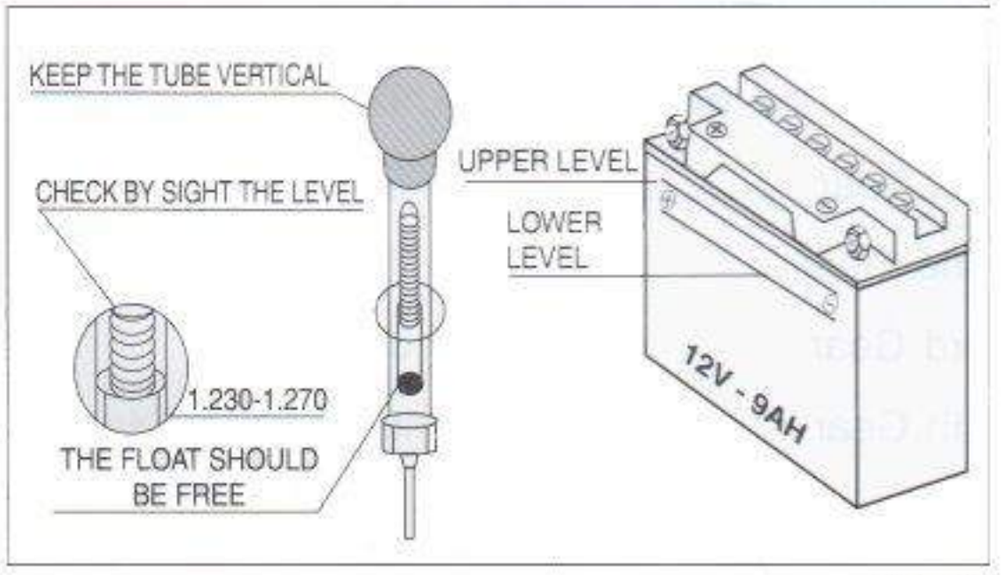
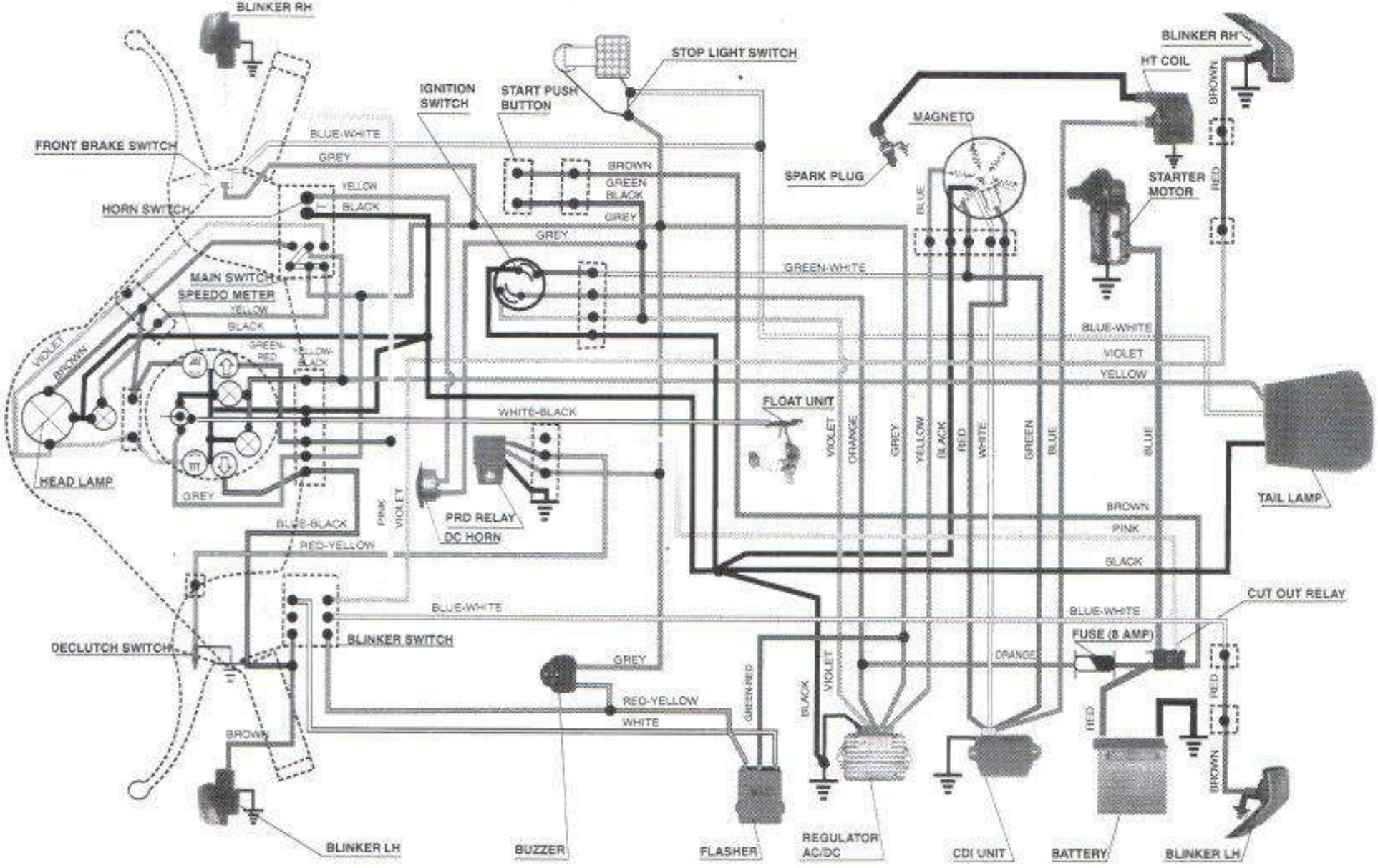


Fig. 23

WIRING DIAGRAM
AUTO START



RECOMMENDED OILS AND LUBRICANTS

S.No.	DESCRIPTION OF PARTS	APPLICABLE LUBRICANTS	RECOMMENDED BRAND OF LUBRICANTS
1.	Clutch & Brake levers	Grease	Esso Beacon 3-Fiat Jota 3-Shell Alvania Grease 3-Mobilux Grease 3
2.	Steering Column Bearing	"	"
3.	Front Wheel Bearings	"	"
4.	Speedo Drive Gear	"	"
5.	Front Suspension	"	Fiat Zeta - 2 or Jota - 3 Grease
6.	Control Cables	Grease & Oil (Both)	Use 50% mixture (in weight) grease FIAT Z2 & 2-T Motor Oil Esso-Shell Super Total Aral-Chevron
7.	Gear Control Assy.	Grease	Esso Beacon 3-Fiat Jota 3-Shell Alvania Grease 3-Mobilux Grease 3
8.	Disc Brake	Brake fluid	DOT 4 Fiat Tutela, Mobil Super Heavy Duty
9.	Gear Box *	Oil	2-T Motor Oil Esso-Shell Super-Total-Aral -Chevron
10.	Petrol oil mixture	Oil	2-T Motor Oil Esso 2-T Motor Oil Shell Super 2-T Motor Oil Total 2-T Motor Oil Chevron 2-T Motor Oil Aral

*** Recommended quantity of oil to be filled in Gear Box is 250 ml + 0ml**
- 5 ml

REMOVAL AND REFITTING OF COWLS:

The levers for opening the cowls are located under the saddle and can be operated only with the saddle is unlocked and lifted.

For removal of cowls lift the saddle as explained on page 18. Pull the lever '**1**' for engine cowl & '**2**' for spare wheel cowl so that the hook '**3**' is free from the cowl anchoring. Swing the cowl outwards so that the front locating pin '**4**' is free from its housing.

Lift the cowl upwards from the front pivoting on its rear section so that the clasp '**5**' releases from the chassis bracket.

Pull the cowl outward on the pin '**6**' so that the latter clears its housing, thus releasing the cowl.

For refitting the cowls follow the reverse procedure.

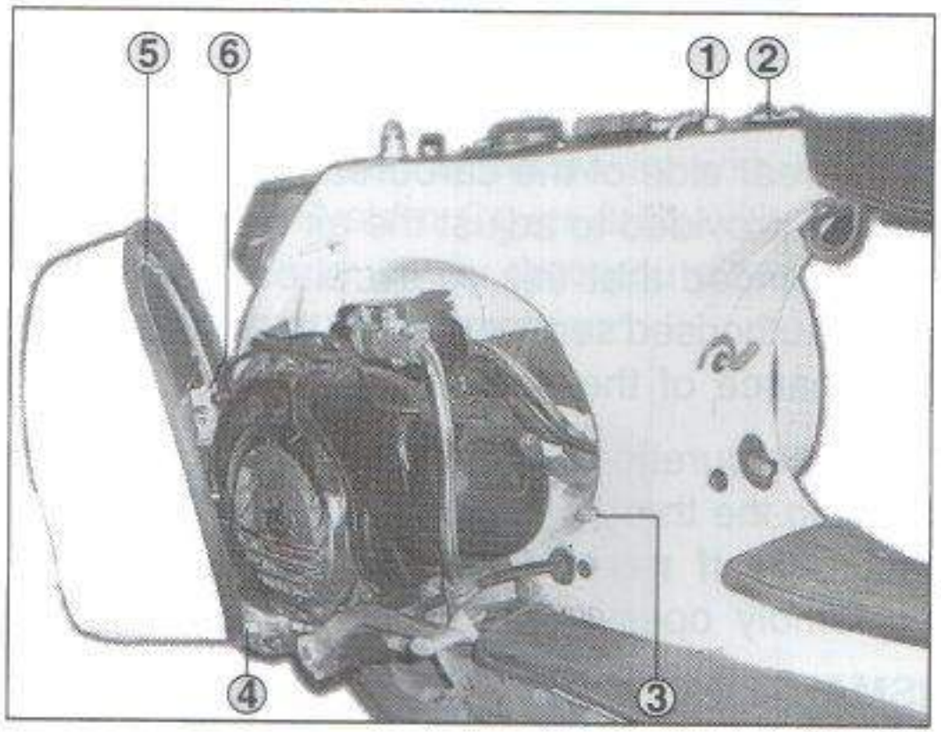


Fig. 25

1. Lever for engine cowl
2. Lever for LH cowl
3. Hook for locking
4. Front locating pin
5. Clasp securing cowl to chassis
6. Rear hooked pivot pin

TUNING OF CARBURETTOR :

Idling speed of the engine can be controled by turning the idle setting screw.

On the rear side of the carburettor a spring loaded screw is provided to adjust the air fuel mixture. It is recommended that this screw should be adjusted only at authorised service station, to ensure optimum performance of the engine.

On the carburettor body a set screw is applied for adjusting the throttle cable play; this screw is to be reset **only if necessary** or on dismantling and reassembly operations.

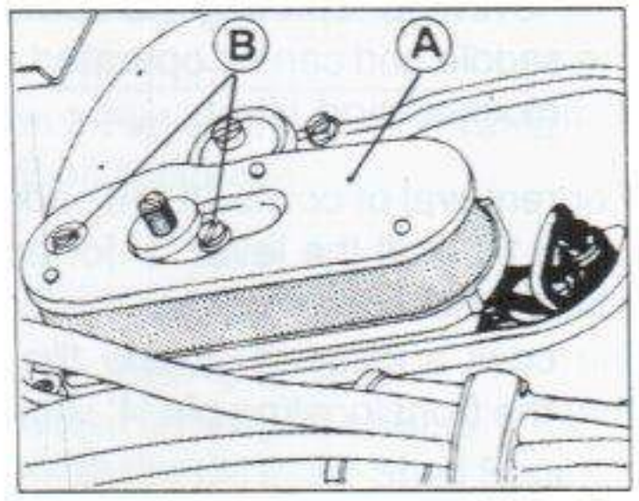


Fig. 26

DISMANTLING AIR CLEANER AND AIR FILTER :

AIR CLEANER : For removing the air cleaner **'A'** (fig. 26) remove the engine cowl (fig. 25) and air cleaner case cap. Unscrew the two screws **'B'** and take out the air cleaner.

Note: *When air cleaner case is taken off, the carburettor is accessible.*

For cleaning and washing air cleaner use fuel oil mixture.

Air filter: Air filter is fitted over air in-take hole on chassis below dual seat and requires cleaning during each periodical service (fig.30) & more frequently when riding in dusty areas.

SECONDARY AIR SYSTEM :

Unscrew the two screws 'A' (Fig. 27) and take out the aluminium Secondary Air System Cover alongwith reedvalve. After releasing the pipe from the rubber tube fixed on the cover. Then remove the plastic cover, extract the filter 'B' (Fig. 28) and wash it with water and soap solution & below dry with air. Re-fit the filter properly in its place. Place the reedvalve in Secondary Air System Cover & fix with screws properly. Ensure replacement of O-Ring given in the box for proper sealing, every time you disassemble the filter.

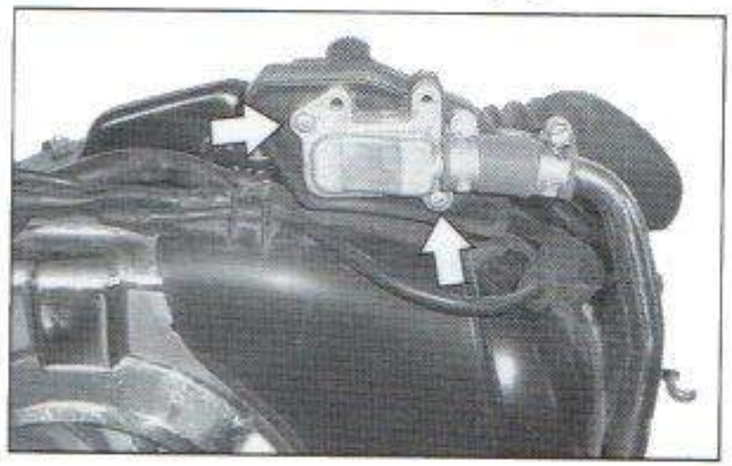


Fig. 27

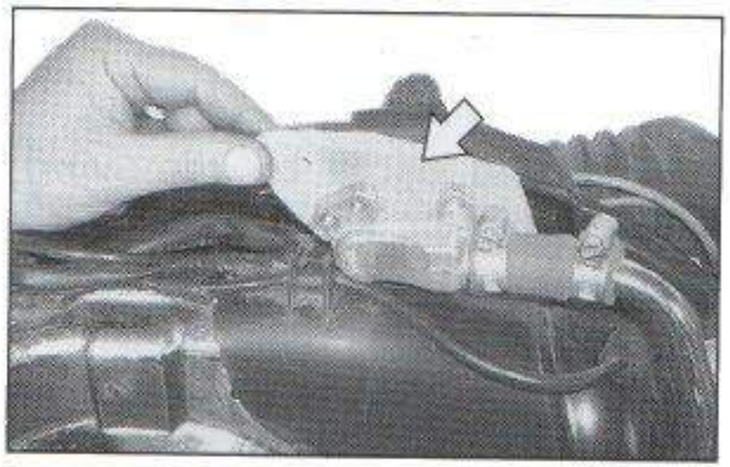


Fig. 28

Remove the sponge filter 'C' (Fig. 29) from intake pipe & wash with soap and water. Dry it with air before refitting.

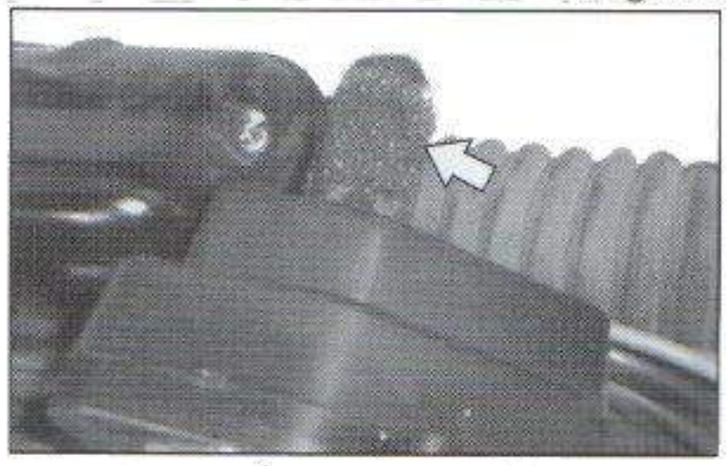


Fig. 29

Procedure for air filter cleaning :

- Lift the seat and take out the air filter by unscrewing it from support plate.
- Rinse the filter in **kerosene or petrol only** till same is fully cleaned.
- Blow dry the filter with low air pressure.
- Refit the filter ensuring proper positioning of its gasket.

SPARK PLUG CLEANING:

Disconnect the HT lead cable by removing the suppressor cap away from the spark plug.

Wipe & clean the area around the spark plug and extract the spark plug using the box spanner (fig. 31).

Clean in pure gasoline (petrol) and wire brush (or emery cloth) the electrodes.

Adjust the gap 0.7 ~ 0.8 mm. (fig. 32).

Check porcelain insulation, if cracked or broken change plug. Refix the spark plug back to its position.

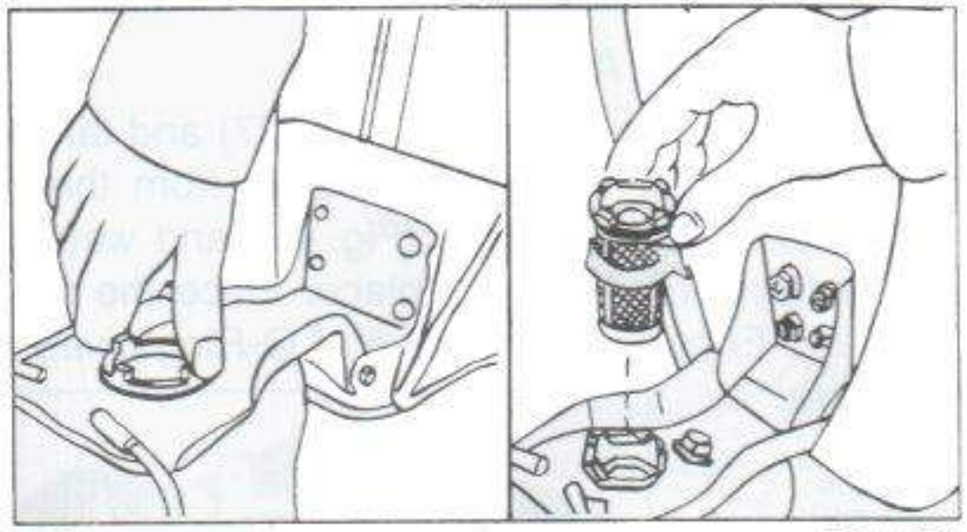


Fig. 30

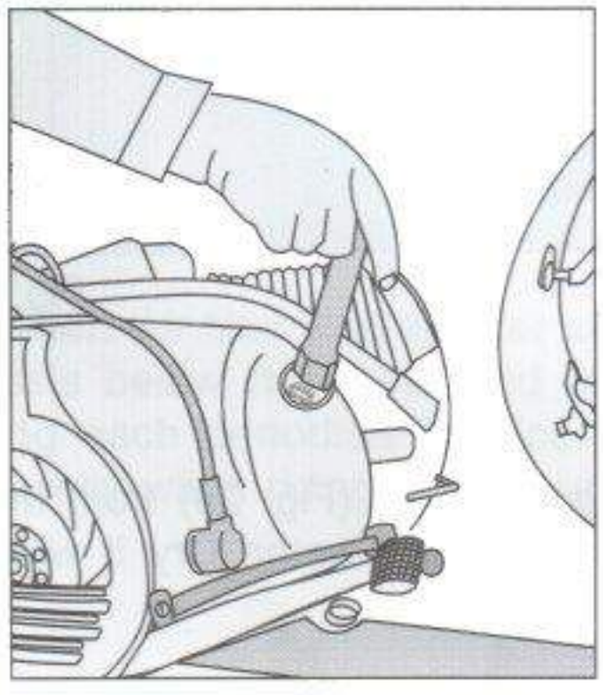


Fig. 31

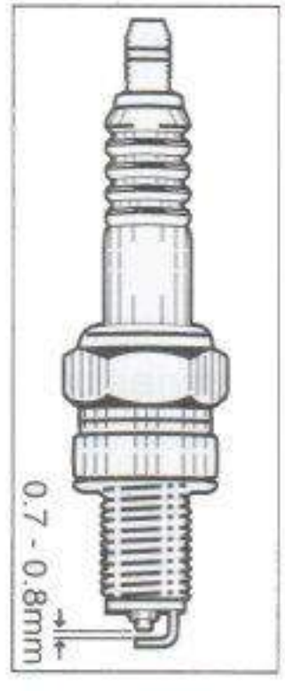


Fig. 32

CHANGING OIL IN GEAR CASE: Drain off the crank case by unscrewing the drain plug **'2'** (fig. 33).
Introduce a small quantity of flushing oil, run the engine for few minutes and drain off again.
Refill 250 ml of new 2T motor oil in gear box (up to level of filling hole by removing level plug **'1'** fig. 30).
Changing of oil should be carried out with warm engine.

DISMANTLING COOLING HOOD AND CYLINDER HEAD:

Strip off engine cowl, (fig. 25) disconnect HT lead, dismantle 'cooling hood' after removing of mounting screws as shown in fig. 34 and unscrew the 4 nuts by means of a box wrench (fig. 35).

For refitting, tighten retaining nuts alternately.

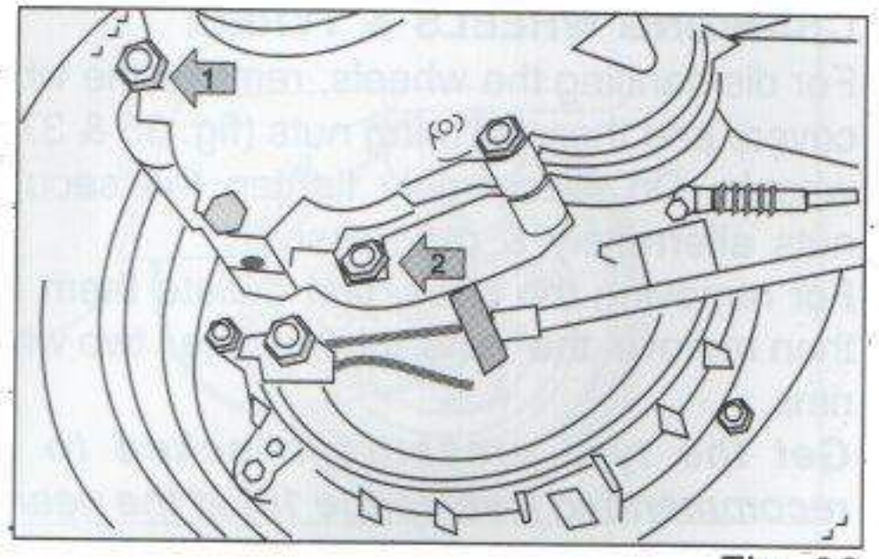


Fig. 33

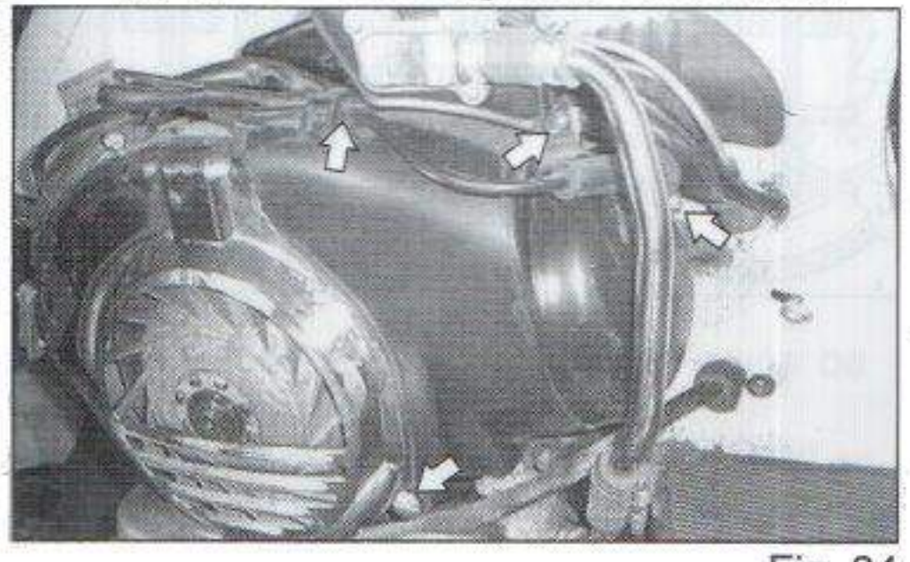


Fig. 34

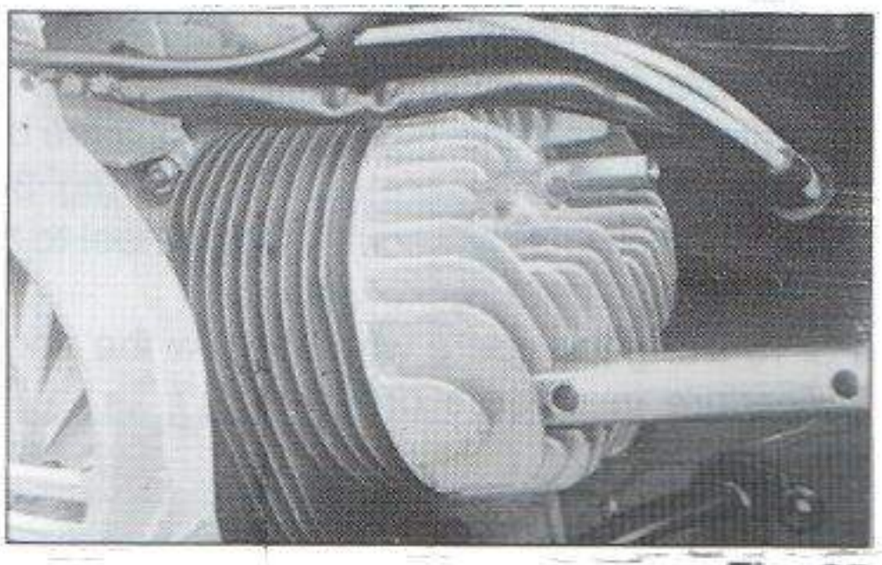


Fig. 35

CHANGING WHEELS & TYRES:

For dismantling the wheels, remove the wheel covers and then securing nuts (fig. 36 & 37) of wheels. On reassembly tighten the securing nuts alternately & progressively.

For removing the tyres, first deflate them and then remove the nuts joining the two wheel rims.

Get the tyre pressure checked to the recommended level (page 10) at the nearest service station.

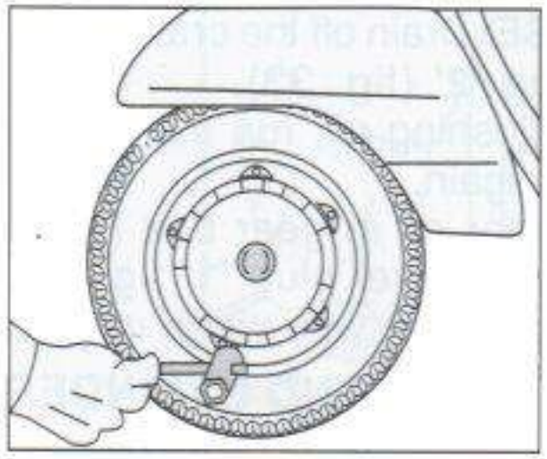


Fig. 36

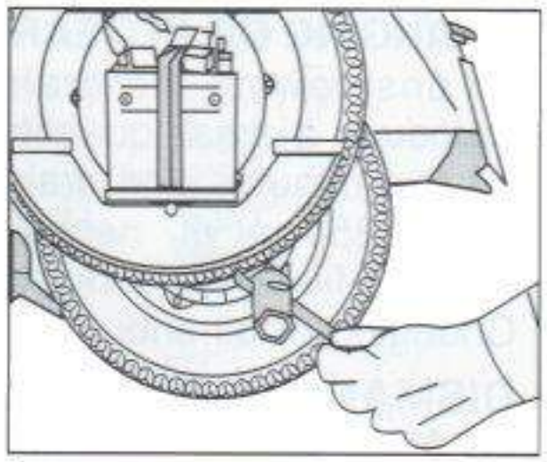


Fig. 37

REMOVING AND REFIXING THE SPARE WHEEL: For removing the spare wheel, remove the spare wheel cowl, following the procedure given on page 27.

For removing the spare wheel unscrew the bolt securing spare wheel protection cover (fig. 38), then the two nuts **'A'** securing the wheel to the upper part of the bracket (fig 39).

For re-fixing the spare wheel follow the above procedure in reverse order.

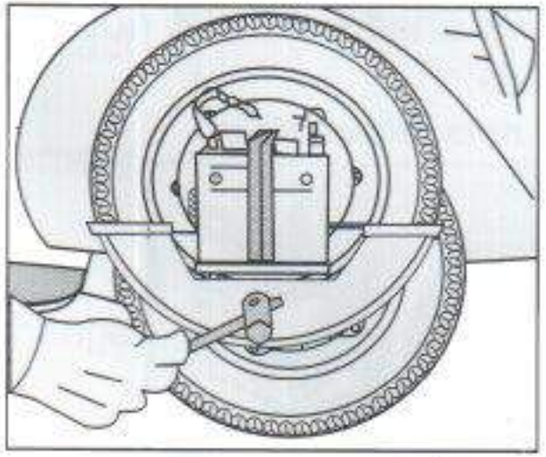


Fig. 38

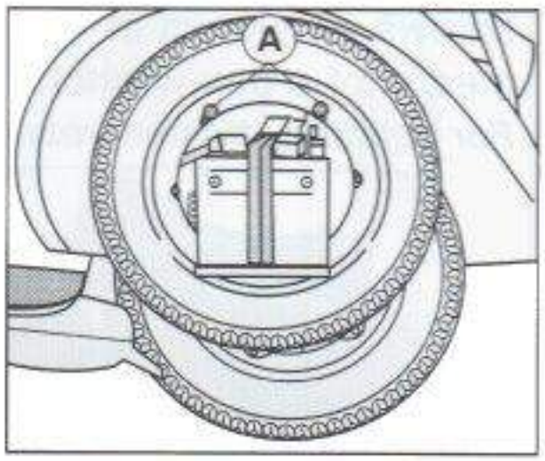


Fig. 39

FRONT DISC BRAKE: OPTIONAL

STAR 125 DLX scooters are also produced with Disc brake in front wheel (Fig. 40).

The disc brake functions on hydraulic system. Maintaining correct level of brake fluid in the 'master Cylinder Assy.' is very essential for proper functioning of brake.

Check the level of brake fluid in the Master Cylinder located on the RH side of the handle bar (Fig. 41), which should never be lower than the 'MIN.' mark on the transparent level indicator provided in Master Cylinder.

If the fluid level is found low, approach the nearest authorised Service Station for topping up.

Under normal climatic conditions, it is advisable to change the brake fluid every 20,000 Kms. or every 2 years.

Precautions:

Level of fluid in the Master Cylinder must never be lower than the 'MIN' mark.

Use recommended brake fluid (Fiat Tutela DOT 3 or DOT 4 / Mobil Super Heavy Duty brake fluid).

Brake fluid is highly corrosive. Avoid contact with painted parts.

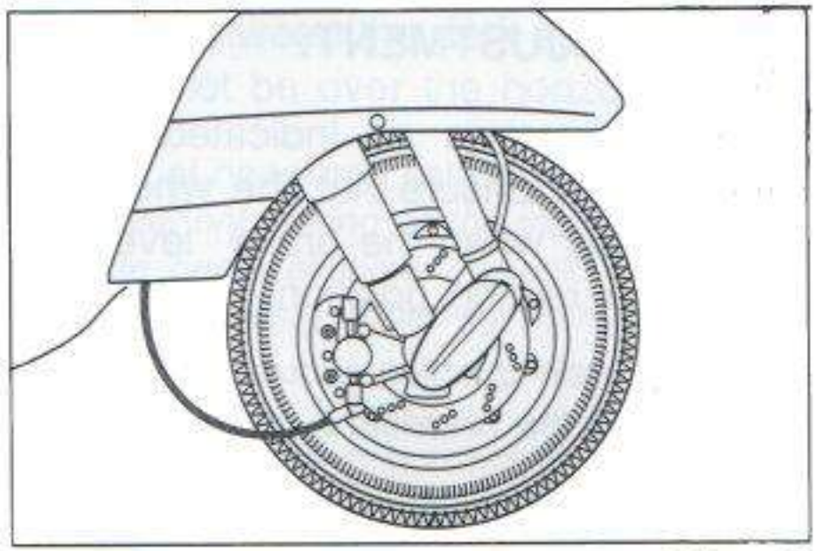


Fig. 40

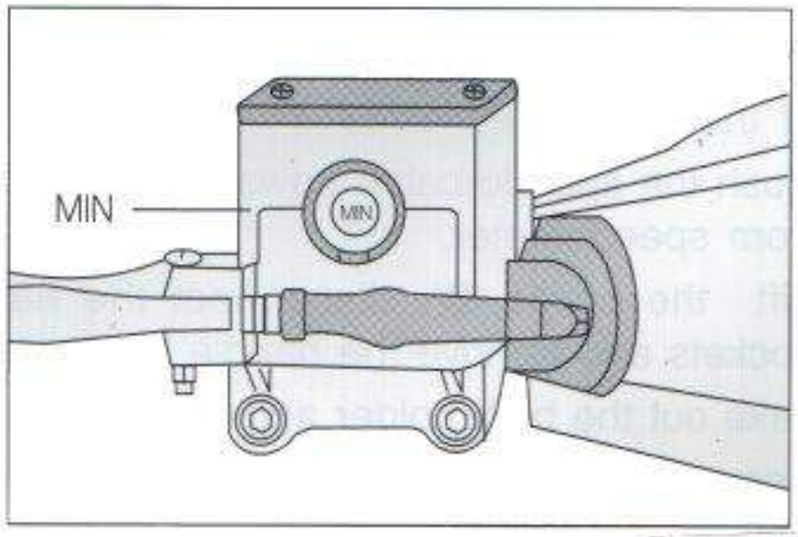


Fig. 41

BRAKE ADJUSTMENT:

Adjust the screws as indicated with arrow in fig. 42 & 43. Ensure that **the wheels should rotate freely** when the brake lever or pedal are in their resting position.

Note: *The braking action should begin immediately on operating the respective controls.*

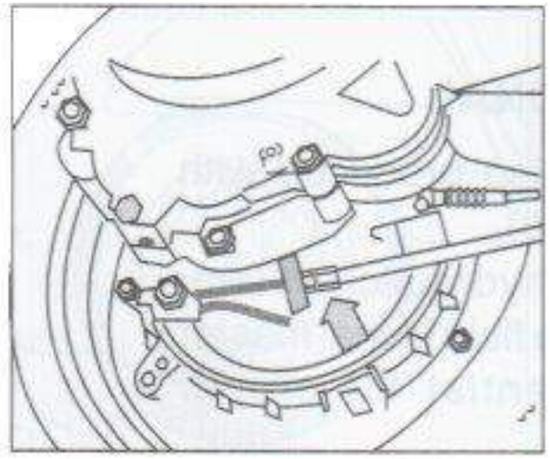


Fig. 42

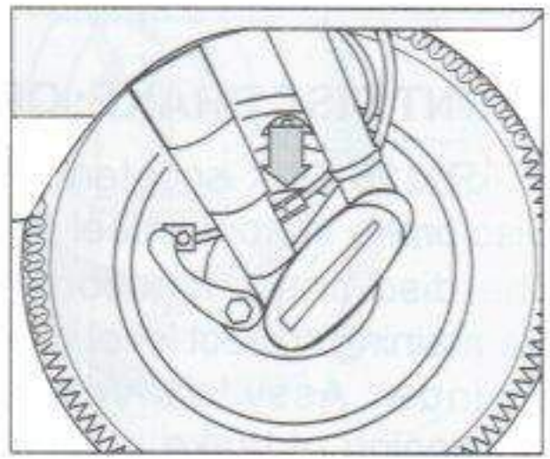


Fig. 43

REPLACING BULBS (fig. 44) :

In order to approach to the headlamp bulbs, follow the procedure as under:

Remove the four screws '**A**' from the lower part of the handlebar.

Push the speedo cable upwards & disconnect from speedometer.

Lift the cover '**B**', disconnect the harness sockets and remove the handle bar top cover.

Take out the bulb holder and replace the bulb.

For assembling of the cover '**B**' follow the reverse procedure.

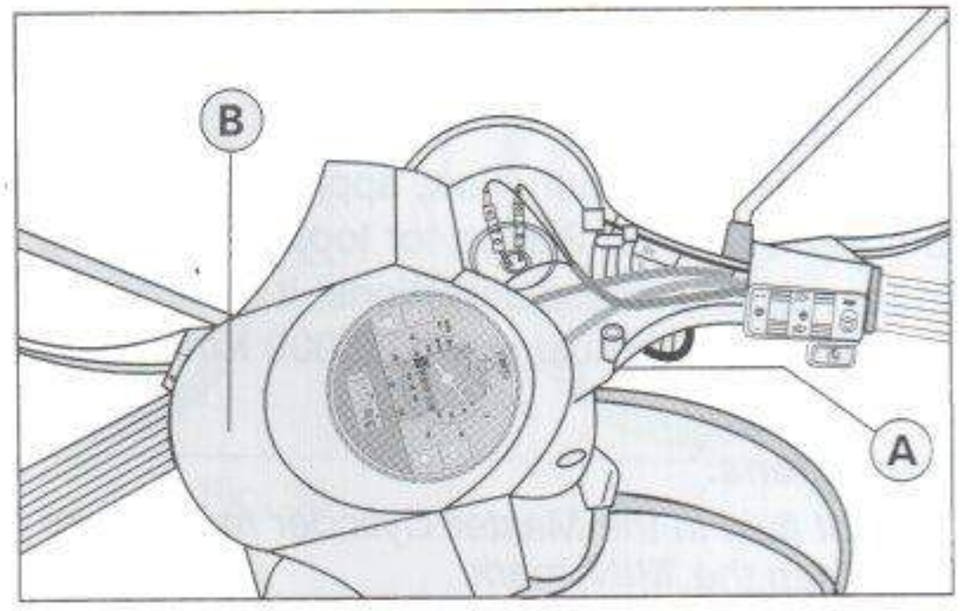


Fig. 44

HEAD LAMP SETTING: Place the unloaded vehicle on a level floor at 10 meters from a twilight white screen and take care that the vehicle axis is perpendicular to the screen.

Draw a horizontal line 'b-b' at a height of 'B' from the ground corresponds to 0.9xC with the headlamp switched on the low beam position, the horizontal line of demarcation between the dark zone and the lighted one should not be over the horizontal line.

Note: *The operation of headlamp setting can be carried out also with the driver only sitting on the machine. In this case, of course, the beam alignment should be altered whenever the scooter is being ridden by both driver and passenger.*

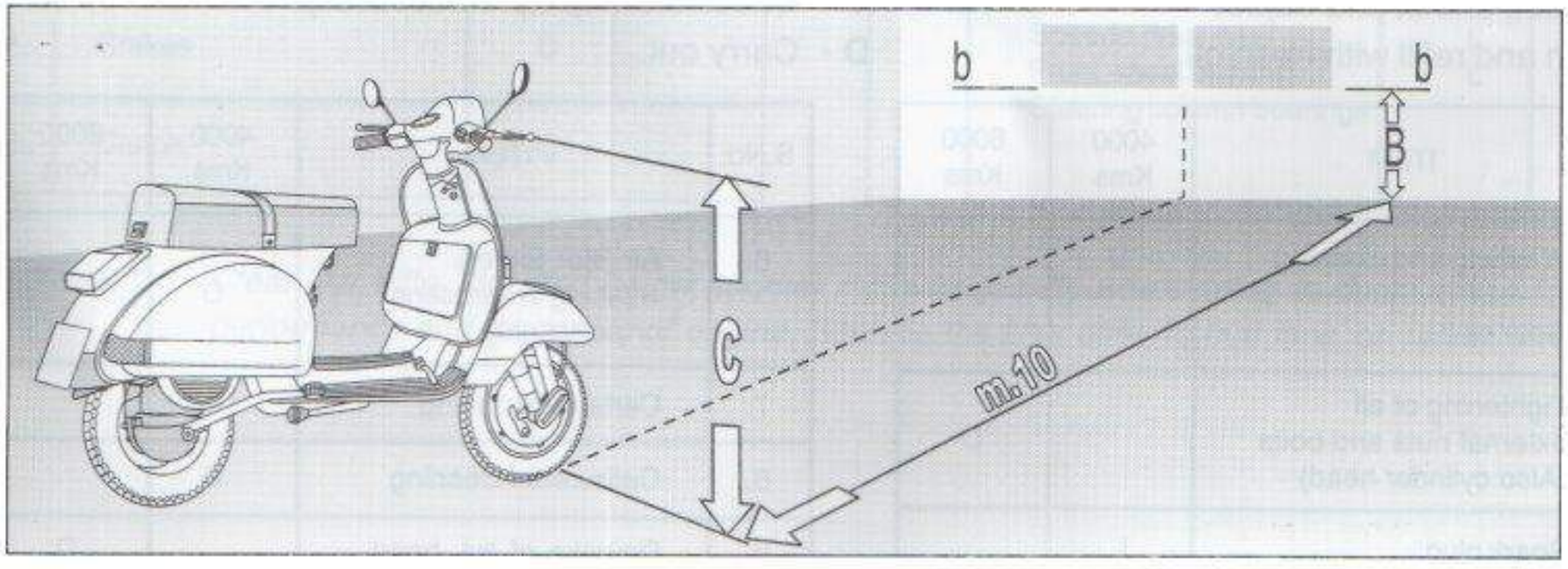


Fig. 45

B=Cx0.9-C = Height from the ground to headlamp centre.

B=Cx0.95 when the setting of the headlamp is carried out with the vehicle at 5 meters from the screen.

PERIODICAL MAINTENANCE

Preventive maintenance:

In order to get best performance from STAR *125 DLX*, it is important to under take maintenance of your vehicle periodically. The following table gives the suggested action for different items of maintenance and their schedule.

Code of suggested action is:

C - Check
I - Inspect, check and adjust
F - Drain and refill with fresh oil
L - Lubricate
T - Check and top up if necessary
D - Carry out.

S.No.	ITEM	4000 Kms	8000 Kms
1.	Washing and cleaning	D	
2.	Gear oil	F	
3.	Tightening of all external nuts and bolts (Also cylinder head)		D
4.	Spark plug	I	
5.	Air cleaner (cleaning and washing in fuel oil-mixture	D	

S.No.	ITEM	4000 Kms	8000 Kms
6.	Air filter (outer) washing in kerosene or petrol only	D	
7.	Carburettor tuning	I	
8.	Carburettor cleaning	D	
9.	De-coke of cyl. head of engine and silencer		D
10.	Ignition timing		C

S.No.	ITEM	4000 Kms	8000 Kms
11.	Functioning of electrical electronic systems	C	
12.	Battery (Top up, check sp. Gravity and bleeder tube)	D	
13.	Control cable adjustment	I	
14.	Brakes	C	
15.	Clutch	C	

S.No.	ITEM	4000 Kms	8000 Kms
16.	Front and rear shocker		C
17.	Tyre rotation		D
18.	Lubricate: Gear control assembly Speedo drive gear Front wheel bearing Steering column bearings	 L L	 L L.

Caution : *Clean Air Filter (located below saddle) more frequently when riding in dusty areas for better performance and longer life of engine. Replace the filter after 10,000 kms. or earlier, if required.*

CLEANING & POLISHING:

The painted surfaces of the vehicle should be sponged down with water as explained in the following section and dried off with soft cloth or chamois leather.

BODY WASHING

Painted parts should be first washed down using a low pressure hose so that the dirt and grime become soft.

When the dirt and grime become soft, sponge off using one of the 'car type' shampoos available; for instance 'Rolence' of Teepol' (water solution 3-5% weight).

Dry off using a clean chamois leather to eliminate water marks.

Note : *For cleaning the exposed surfaces of the engine use paraffin (for drying up the vehicle use a brush and soft cloth or chamois leather).*

Spots : After having washed and dried the body as explained above, eventual spots caused by tar, grease, oil etc. can be removed by rubbing gently with a soft cloth or cotton-wool dipped in oil or turpentine.

After this operations rinse immediately the surface with the above mentioned shampoo (in the correct solution), and with plenty of water.

The insects squashed on windshield, on headlamp etc., if dried, can not be removed with the simple water, but with a solution of warm water and car shampoo.

Polishing : If after the operations, as previously described, the original condition of the painted surfaces is not restored or if for an insufficient care for sun, rain or dust effects the paint is damaged it is necessary to carry out the polishing.

Polishing is carried out in the following manner, apply a thin coat of good quality wax, polish and shine with a soft cloth.

Rub gently the surfaces to be polished in a side to side manner.

Note: *Washing and polishing operations should not be carried out in the sun, particularly during the summer when the bodywork is warm. Under no circumstances should petrol or Diesel oil be used for washing painted surfaces or plastic material as they will deteriorate.*

CARE OF YOUR VEHICLE WHEN NOT IN USE FOR LONG PERIODS :

If you are not going to use your vehicle for more than two month then you should store it properly as per the following advices.

With the help of a pipe, syphon out the petrol from the fuel tank. Start the engine for some time and exhaust the petrol in the carburettor.

Remove the spark plug as explained on page 29 and put a few drops of 2T oil in the spark plug hole. Press the kick lever a couple of times. Refix the spark plug.

Clean the vehicle thoroughly and apply antirust grease on all unpainted metallic parts.

Remove battery.

Raise the wheels off the ground by placing wooden planks and deflate the tyres so that they do not touch the floor.

Cover the scooter.

TROUBLE SHOOTING

Engine fails to start or stops immediately after starting

Possible Cause	Remedy
Fuel	
Fuel cock in OFF position	Bring the fuel cock to ON position
No petrol in fuel tank	Refill
Irregular flow of petrol to the carburettor	Clean fuel lines, fuel cock and filters
Air lock in fuel tank	Check and clean fuel tank cap air vent hole
Dirty carburettor	Clean carburettor
Carburettor flooded (presence of unvapourised fuel in the engine cylinder)	Close fuel cock, open throttle and kick over the engine several times, or remove the spark plug, clean, kick over the engine several times, refit spark plug and start
Electrical	
Ignition off	Switch on ignition
Spark plug terminal disconnected	Connect the terminal properly
Dirty spark piug	Clean and re-set gap
Weak spark	Contact authorised dealer
Engine Misfires	
Irregular flow of fuel to the carburettor	Check and clean, fuel lines, fuel cock and filters

If the suggested remedies are not sufficient in eliminating the trouble please contact the nearest dealer.

The descriptions and illustrations in this booklet are not to be taken as binding on the manufacturer. The essential features of the model described and illustrated herein remaining unaltered, LML Limited, reserves the right to carry out at any moment, without being obliged to bring this booklet up-to-date, modifications to the machine, its parts, or accessories, that the company deems to be convenient for improvement purposes or for what may be required for manufacturing or commercial purposes.

LML

Redefining mobility worldwide

C-3 Panki Industrial Estate, Kanpur 208 022. INDIA