ALP 200

Thanks for you preference, and have a good time! This handbook contains the information you need to properly operate and maintain your motorcycle.

Code 017.44.018.83.00

IMPORTANT

We recommend checking all the tightenings after the first one or two hours' ride over rough ground. Special attention should be paid to the following parts:

- rear sprocket
- ensure that the footrests are properly fixed
- front/rear brake levers/calipers/discs
- check that the plastics are properly fastened
- engine bolts
- shock absorber bolts/swingarm
- wheel hubs/spokes
- rear frame
- pipe connections
- tensioning the chain

IMPORTANT

In the event of interventions on the vehicle, contact Betamotor after-sales service.

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OPERATING INSTRUCTIONS

- The vehicle must be accompanied by: number-plate, registration document, tax disc and insurance.
- Any modifications of the engine or other parts are punishable by severe sanctions including the confiscation of the vehicle.
- To protect your safety and that of others, always drive carefully and with your helmet on and always keep low beams on.
- Do not sit on the vehicle when it is on its stand.
- Do not start the engine in closed places.

WARNING
Any modifications and tampering with the vehicle during the warranty period exempt the manufacturer from all responsibility and invalidate warranty.

SYMBOLS


SAFETY/ATTENTION
Failure to respect information marked with this symbol can entail a personal hazard.


INTEGRITY OF THE VEHICLE
Failure to respect information marked with this symbol can entail serious damage to the vehicle and termination of the warranty.


FLAMMABLE LIQUID HAZARD


Read the use and maintenance manual carefully.


MANDATORY TO WEAR PROTECTIVE CLOTHING
Use of the vehicle is subject to wearing specific protective clothing and safety footwear.


PROTECTIVE GLOVES MANDATORY
To perform the operations described, it is mandatory to wear protective gloves.


FORBIDDEN TO USE NAKED FLAMES OR POSSIBLE UNCONTROLLED IGNITION SOURCES


NO SMOKING


DO NOT USE MOBILE PHONE


CORROSIVE SUBSTANCES HAZARD
Liquids marked with this symbol are highly corrosive: handle with care


POISONING HAZARD

RIDING SAFETY

- Observe the Highway Code.
- Always wear approved personal protective equipment.
- Always ride with the low beam on.
- Always keep the crash helmet visor clean.
- Avoid wearing garments with hanging ends.
- Do not keep sharp or brittle objects in your pockets while riding.
- Properly adjust the rearview mirrors.
- Always ride in a seated position, with both hands on the handlebars and both feet on the footrests.
- Never ride abreast with other vehicles.
- Do not tow and avoid being towed by other vehicles.
- Always keep a safe distance from other vehicles.
- Do not start off while the vehicle is on its stand.
- Avoid swaying and wheelies as they are extremely dangerous for your own and other people's safety as well as for your vehicle.
- Always apply both brakes on dry roads with no gravel and sand. Using one brake may be dangerous and cause uncontrolled skidding.
- To reduce the braking distance, always apply both brakes.
- On wet roads and in off-road riding, drive with care and at moderate speed. Take special care in applying the brakes.

CHAPTER 1 GENERAL INFORMATION

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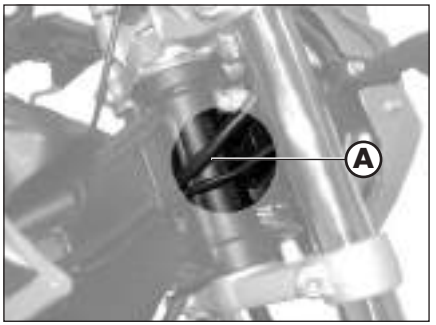


VEHICLE IDENTIFICATION DATA

FRAME IDENTIFICATION

Frame identification data **A** are stamped on the right side of the steering head tube.

ENGINE IDENTIFICATION

Engine identification data **B** are stamped in the area shown in the picture.

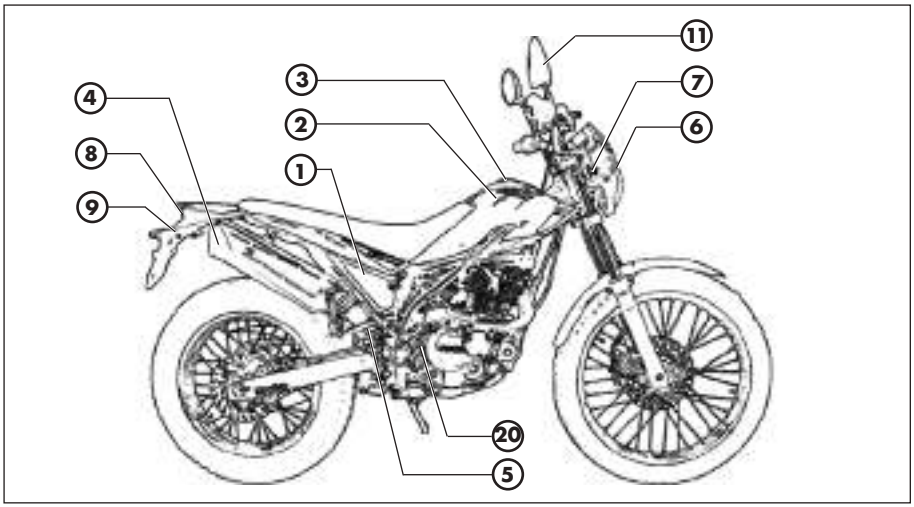
TOOLKIT

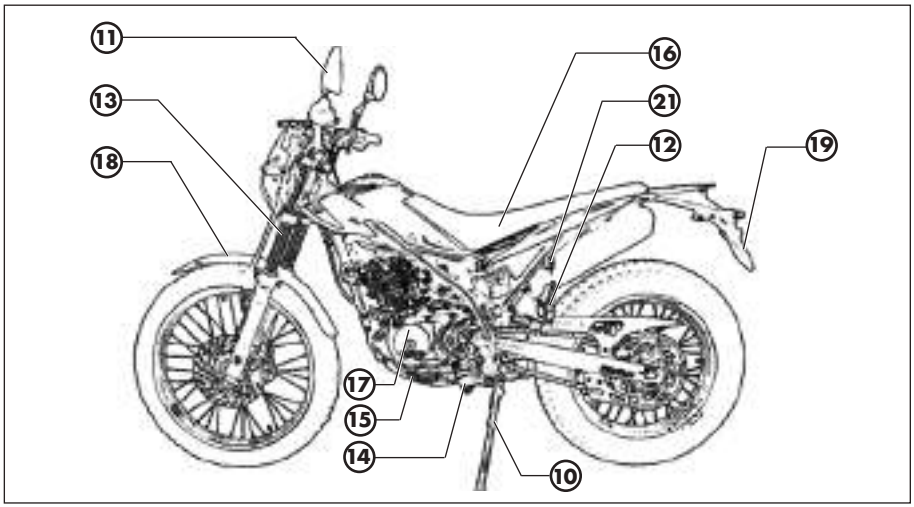
The following items are supplied as standard: maintenance manual and tool kit (see picture).

FAMILIARIZING WITH THE VEHICLE

Main parts:

1 - Air filter
2 - Fuel tank
3 - Tank cap
4 - Silencer
5 - Rear shock absorber
6 - Headlight
7 - Front turn indicators
8 - Rear light
9 - Rear turn indicators
10 - Side stand
11 - Rearview mirror
12 - Foot rests passenger
13 - Fork
14 - Foot rests rider
15 - Engine protection
16 - Saddle
17 - Engine
18 - Front mudguard
19 - Number-plate holder
20 - Kick-start
21 - Helmet lock





SPECIFICATIONS

WEIGHT

Weight in running order with full fuel and optional.....118 kg
front.....57 kg
rear.....61 kg

VEHICLE DIMENSIONS

maximum length..... 2125 mm
maximum width ..... 820 mm
wheelbase..... 1355 mm
ground clearance..... 350 mm
saddle height..... 900 mm

TYRES

Dimensions		Pressure [Bar]	
Front tyre	Rear tyre	Front tyre	Rear tyre
2,75 - 21 45L	4,00 R18 64L	1,0 ÷ 1,2 bar	1,0 ÷ 1,2 bar
2,75 - 21 45P	4,00 R18 64P	1,0 ÷ 1,2 bar	1,0 ÷ 1,2 bar
Dimensions		**Pressure [Bar]**	
Front tyre	Rear tyre	Front tyre	Rear tyre
90/90 - 21 54S	120/80-18 62S	1,0 ÷1,2 bar	1,0 ÷1,2 bar
90/90 - 21 54R	130/80-18 66R	1,0 ÷1,2 bar	1,0 ÷1,2 bar

CAPACITIES

fuel tank.....6 liters

including reserve.....1,5 liters

Engine oil

only oil change.....0,85 liters

with filter change .....0,95 liters

FRONT SUSPENSION

Shaft diameter ..... ∅ 37mm

Type of oil ..... SAE 15

Oil quantity (for each stem) 280ml

REAR SUSPENSION

Spring K K12,5

Spring preload 139mm

FRONT BRAKE

Ø 245 mm disc brake with hydraulic control

REAR BRAKE

Ø 220 mm disc brake with hydraulic control

ENGINE

Type ..... single-cylinder, 4-stroke

Bore x stroke [mm] 66x58,2

Displacement [cm^3] 199

Pressure ratio 9,4:1

CO2 * ..... 76 g/km

Fuel consumption * 3,4 l/100km

Fuel system ..... carburetor

CARBURETOR

Carburetor type	MIKUNI BST31 42AD

Cooling system ..... Air-cooled

Spark plug ..... NGK DR8 EA

Clutch ..... wet, multidisc

* WMTC cycle related data, for class L vehicles

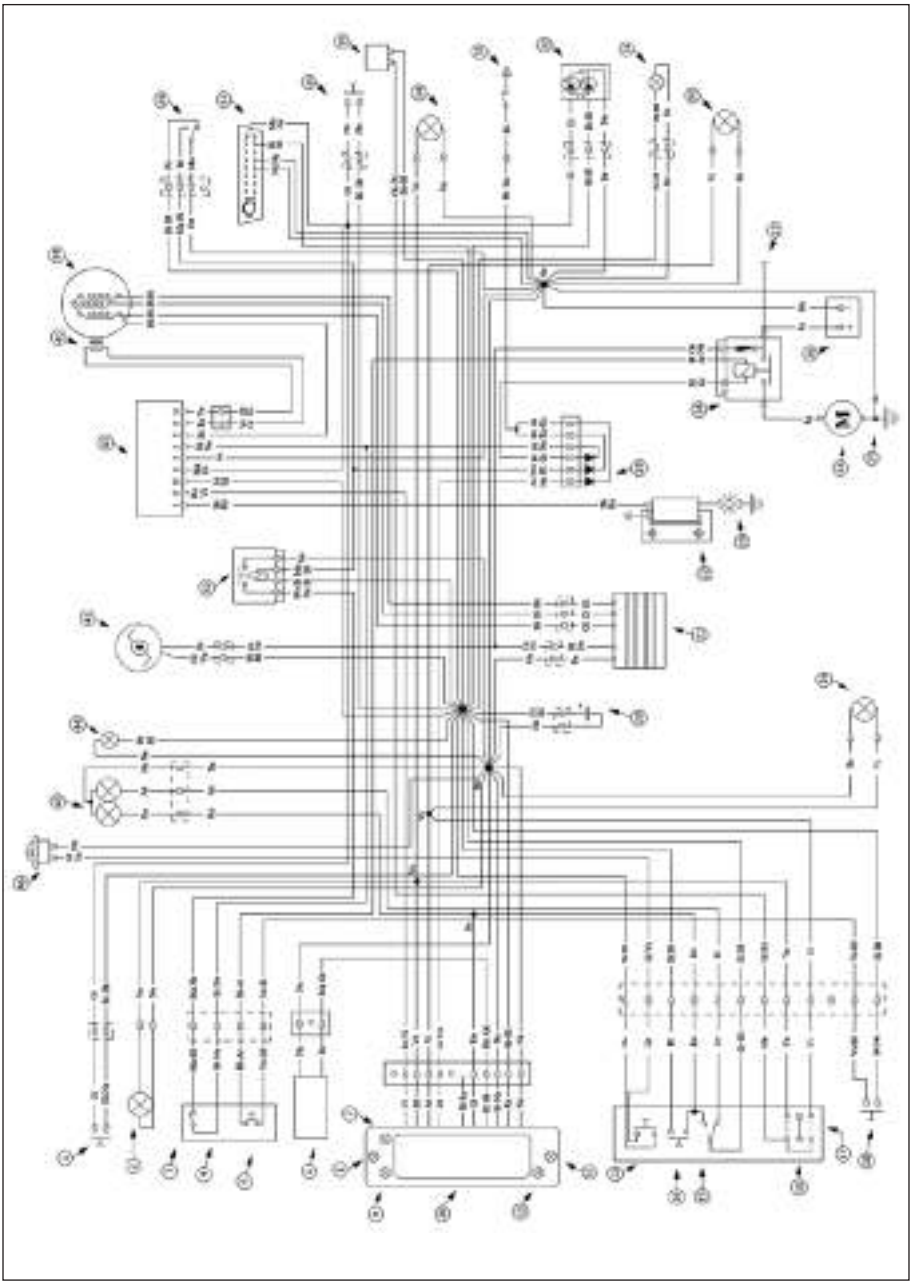
TRANSMISSION

Primary drive	60/19
Gear ratio 1st gear	33/11
Gear ratio 2nd gear	29/15
Gear ratio 3rd gear	23/16
Gear ratio 4th gear	23/21
Gear ratio 5th gear	21/23
Secondary drive	48/15

Starting.....electric starter and kickstart

1 ELECTRICAL SYSTEM

ELECTRICAL DIAGRAM



LEGEND ELECTRICAL DIAGRAM

1) FRONT STOP PUSH BUTTON
2) FRONT R.H. BLINKER WITH BULB 12V-6W
3) RIGHT CONTROL SWITCH
4) ENGINE STOP BUTTON
5) STARTING BUTTON
6) SPEED SENSOR
7) ENGINE DIAGNOSIS TELL TALE LAMP
8) RIGHT SIDE BLINKERS TELL TALE LAMP
9) NEUTRAL TELL TALE LAMP
10) DASHBOARD
11) HIGH BEAM TELL TALE LAMP
12) LEFT SIDE BLINKERS TELL TALE LAMP
13) HORN BUTTON
14) FLASH BUTTON
15) HEADLIGHT SELECTOR
16) BLINKERS SWITCH
17) LEFT CONTROL SWITCH
18) CLUTCH SENSOR
19) FRONT L.H. BLINKER WITH BULB 12V-6W
20) CONDENSER 25V 4700µF
21) REGULATOR
22) COIL
23) SPARK PLUG
24) STARTER MOTOR
25) FRAME EARTH
26) BATTERY 12V 4AH
27) RECHARGE SOCKET
28) STARTER RELAY
29) DIODES GROUP
30) REAR L.H. BLINKER WITH BULB 12V-6W
31) PLATE ILLUMINATION WITH BULB 12V-5W
32) REAR STOP LIGHT, LED
33) NEUTRAL POSITION SENSOR
34) REAR R.H. BLINKER WITH BULB 12V-6W
35) BLINKERS CONTROL DEVICE
36) REAR STOP PUSH BUTTON
37) PORT OBD2
38) STAND SENSOR
39) STATOR
40) PICK-UP
41) ELECTRONIC CONTROL UNIT
42) STAND RELAY
43) KEY OPERATED SWITCH
44) POSITION LIGHT - BULB 12V 5W
45) HEADLAMP WITH BULB 12V 55/60W
46) HORN

Key to colours

Bi = White
Ve = Green
Ma = Brown
Vi = Purple
Bl = Blue
Ne = Black
Gi = Yellow
Rs = Red
Ar = Orange
Az = Sky-blue
Ro = Pink
Gr = Grey

BULBS

High beam/low beam .....H4 12V - 60/55W
Parking/daytime ..... 12V - W5W
Turn indicators ..... 12V - H6W
License plate light..... 12V - W5W
Fuses (two) 20A

RECOMMENDED LUBRICANTS AND LIQUIDS

For better operation and longer vehicle life, we advise you to use the products listed in the following chart:

TYPE OF PRODUCT	TECHNICAL SPECIFICATION
FUEL	GASOLINE E5 (or GASOLINE 95 RON)
TRANSMISSION OIL	LIQUI MOLY RACING 4T 10W-40
BRAKE OIL	LIQUI MOLY BRAKE FLUID DOT 4
FORK OIL	AGIP ARNICA SA32
GREASE FOR RODS	LIQUI MOLY SCHMIERFIXIX

CHAPTER 2 OPERATION

2

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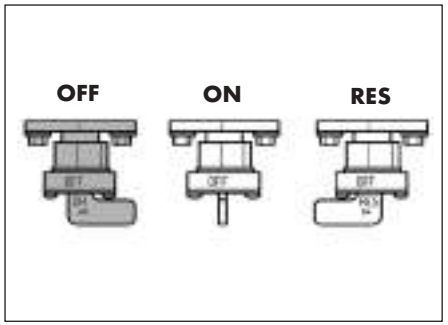
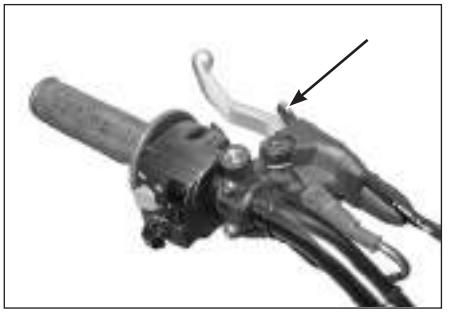


MAIN PARTS

FUEL COCK

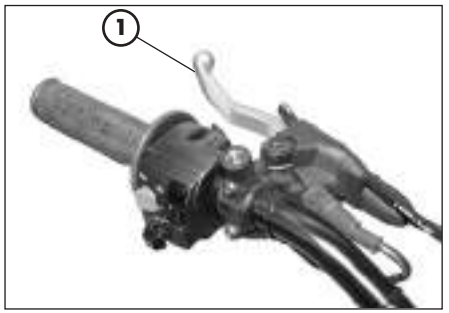
Fuel cock has three positions:

OFF: fuel supply closed. Fuel cannot pass from the tank to the carburettor.
ON: fuel supply enabled. Fuel flows from the tank to the carburettor. The tank empties until it reaches the reserve level.
RES: reserve fuel supply. Fuel flows from the tank to the carburettor and the tank empties completely.



STARTER

The starter lever is located on the left side of the handlebar. Turn the lever counter-clockwise to operate.

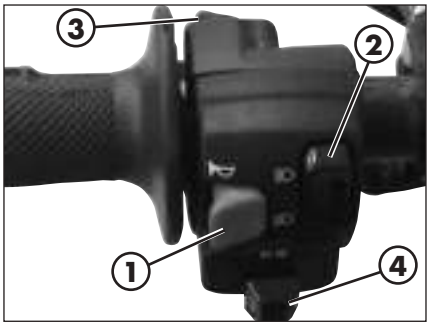


CLUTCH LEVER

Clutch lever **1** is fitted to the left-hand side of the handlebars.

LH SWITCH

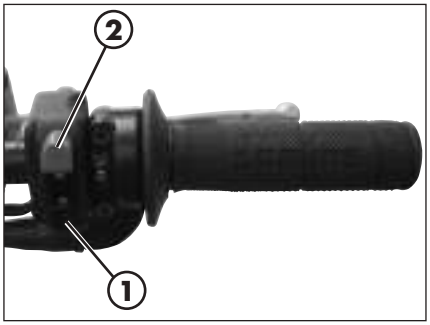
The dip and service switch is located on the left side of the handlebar and is composed as follows:
1 Horn button;
2 Dip switch
(high beam ; ow beam)
3 High beam switch;
4 Turn signal light switch: Shifting lever left or right activates the left or right indicators. When released, the lever returns to the central position. Press it to turn the indicators off.



RH SWITCH

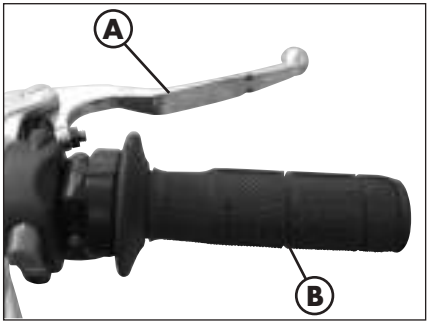
The start/stop switch is located on the right side of the handlebars and is made up as follows:

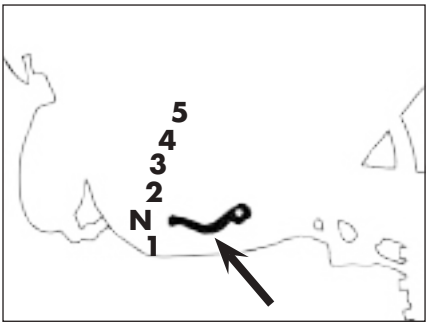
1 Starter button. Push the button until the engine starts. Do not press the button **1** while the engine is running.
2 Shut-down: press the button until the engine stops.



FRONT BRAKE LEVER AND GAS CONTROL

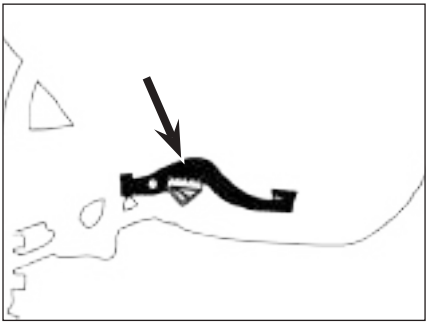
The front brake lever **A** and the gas throttle **B** are located on the right side of the handlebar.





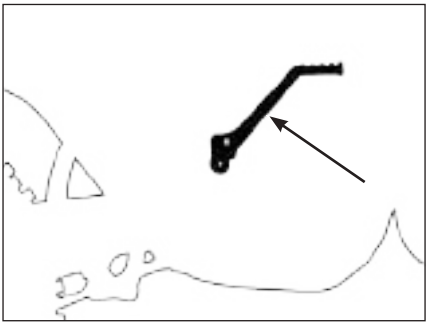
GEARCHANGE LEVER

Gearchange lever is fitted to the left side of the engine.
The positions corresponding to the different gears are shown in the figure.



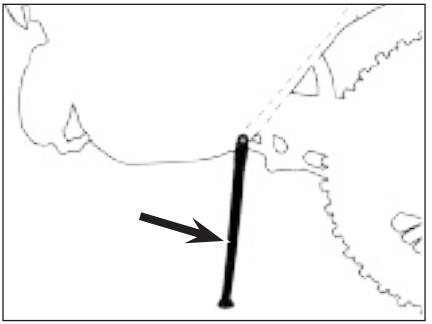
BRAKE PEDAL

Brake pedal **A** is located in front of the right-hand footrest.



KICKSTART

The kick-starter pedal is located on the right side of the engine. The upper part is rotatable. To start, depress the kick-starter outward and with a quick movement downward. The pedal will automatically return upwards. After starting, manually fold the pedal in the rest position.



SIDE STAND

Press down side stand with the foot and lean the vehicle against it.
Ensure that the ground is solid and the vehicle stands steadily.

The stand is fitted with a safety device. This device results in the vehicle being switched off if the stand is lowered when the same is in gear.

KEYS

The vehicle is supplied with two keys (one key and its spare), for the ignition switch/ steering lock and the helmet lock.

- Turn the key to to start up the engine.
- Turn the key to to switch off the engine.

STEERING LOCK

To activate the steering lock:
- turn the handlebar counter-clockwise;
- push the key and turn counter-clockwise; the steering lock is inserted in position **A**.

Remove the key from this position. The engine cannot be started.
To deactivate the steering lock:
- turn the key clockwise;
- turn the handlebar clockwise;

From this position, the handlebar is free to move, the key can be removed and the engine cannot be started.

HELMET LOCK

Insert the key into the lock located on the left side under the saddle, and then rotate it anticlockwise to open the helmet hook.

WARNING: Do not keep the spare keys in the vehicle.
Keep the keys in a safe and easy-to-reach place. The code number stamped on the keys should be copied on this manual (or elsewhere) so it can be used to ask for duplicates should both keys be lost.

2 DASHBOARD OPERATING INSTRUCTIONS

MAIN PARTS

Time
Clock: 12/24 MODE
Stopwatch: According to setup distance to record the testing time.
Speed Log: Average speed and max speed record.

Speedometer
Display range: 0~360km/h (0~225 MPH)
Display unit: km/h or MPH

Battery
Inner Battery Level:
Display range: 4 levels.

Indicator lights
High beam light (Blue)
MIL (Engine management system fault)
Turn indicators (Green)
Neutral (Green) N

Adjust Button
Press the **Adjust button** in the main screen to switch between ODO, TripA/B, Total Hour meter, Hour meter A/B.
Press and hold the **Adjust button** for 3 seconds in Trip A/B screen to reset.
Press and hold the **Adjust button** for 3 seconds in Hour meter A/B screen to reset.

Select button
Press the **Select button** in the main screen to switch between 12/24 hour mode, speedometer record, topwatch , and MAX record.

Odo meter
Display range: 0~99999 km (miles), reset automatically after 99999 km (miles).
Display unit: 1 km (mile).

Trip meter
Display range: 0~9999.9 km (miles), reset automatically after 999.9 km (miles).
Display unit: 0.1 km (mile).

WARNING LIGHTS

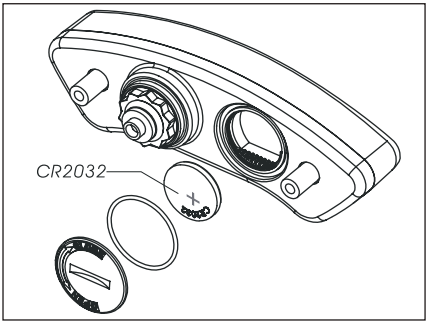
1 Headlight indicator
The system activates the indicator in synchrony with the activation of the mains beams.

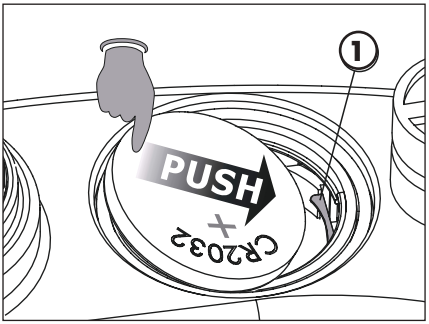
2 Turn indicator lights
The system activates the indicator in synchrony with the activation of the turn indicators.

3 Neutral indicator light
The system activates the indicator in synchrony with the engaging of the neutral.

4 MIL indicator light (Engine management system fault)
Indicates a fault in the engine management system. Contact as soon as possible an authorized Betamotor.

When the key is set to  :
- the backlighting of the instrument is activated;
- all the lights turn on for about 3" to perform the initial check.





BATTERY REPLACEMENT

Follow this procedure for proper installation.
The meter includes an internal battery (CR2032). This battery shall be replaced only when power runs out.

For replacement remove the headlight mask. Remove the battery cover located behind the instrument and pull out the battery.

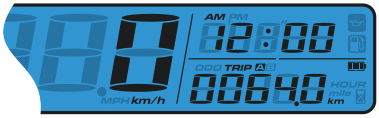
In order to install the battery properly, push the battery as shown on figure to make sure the battery is placed underneath the metal tab (**1**).

WARNING:
Not following this procedure could result in permanent damage to the meter.

2 ADJUST BUTTON FUNCTION INSTRUCTION

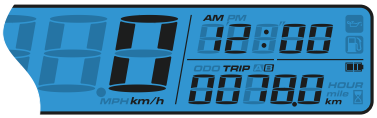
In main screen, press the **Adjust button** once to switch the function from odometer to trip.

In main screen, you could hold pressing the **Adjust button** for 3 seconds to change the speed unit.



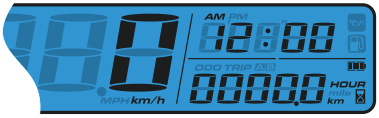
Press the **Adjust button** to switch from trip A to trip B.

Hold pressing the **Adjust button** for 3 seconds to reset the trip A.



Press the **Adjust button** to switch from trip B to total hour meter.

Hold pressing the **Adjust button** for 3 seconds to reset the trip B.



Press the **Adjust button** to switch from total hour meter to hour meter A.

Press the **Adjust button** to switch from hour meter A to hour meter B.

Press and hold the **Adjust button** for 3 seconds to reset the hour meter A.

OPERATION

EN

Press the **Adjust button** to switch from Hour Meter B back to the main screen.

Press and hold the **Adjust button** for 3 seconds to reset the Hour Meter B

The main screen.

SELECT BUTTON FUNCTION INSTRUCTION

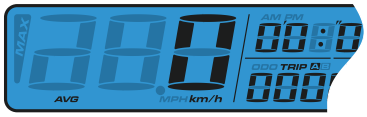
Press the **Select button** during main screen to switch from Clock to Stopwatch.

Press and hold the **Select button** for 3 seconds to change between 12/24hour mode.

NOTE: If 24hour mode is chosen, then the AM/PM symbol will not be displayed.

Press the **Select button** to switch from Stopwatch to Speed Record.

Press and hold the **Select button** for 3 seconds to reset the Stopwatch.



Press the **Select button** to switch from Speed Record back to main screen.

Press and hold the **Select button** for 3 seconds to reset the Speed Record.

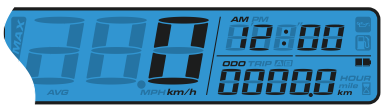
NOTE: If Engine Oil Light goes up, reset the Engine Oil Light in this screen to re-calculate the mileage.

NOTE: Average speed and the Max speed display in the 3 seconds rotation.

The main screen.

2 TO ENTER THE SETTING MODE

Adjust+SelectX3 function instruction



In main screen, press down the Adjust+SelectX3 to enter the tire circumference and sensing point setting (for changing different size tire.)

The tire circumference and sensor point setting.

Press the **Adjust button** to enter the tire circumference setting.

The tire circumference and sensing point setting

EX. The tire circumference is 1890 mm.

Press the **Select button** to change the setting.

NOTA: The tire circumference setting range 2400mm / 2100mm.

EX. The tire circumference setting is changed from 2190 mm to 1890 mm.

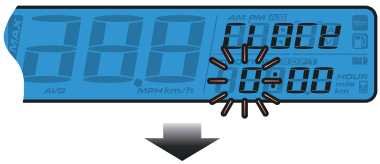
Press **Adjust button** to go back to tire circumferences value setting screen.

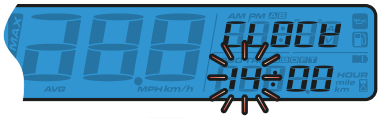
From **a 1** switch to **a 2** screen.

Press the **Adjust button** to enter the clock (Hour) setting

Press the **Select button** to enter the clock (Hour) setting.

The clock (Hour) setting





EX: You want to set the hour at 14.

Press the **Select button** to choose the hour you want to set.

NOTE: Setting range: 0~23 H.

NOTE: The sequent of cursor movement:
Hour>Ten-Digit of Minute>Single Digit of Minute

EX. Now the setting is changed from 0:00 to 14:00.

Press the to enter the **Adjust button** minute setting.

The clock (minute) setting

EX. To change the setting to 14:05.

Press the **Select button** to choose the minute you want to set.

NOTE: Setting range: 0~59 minutes..

EX. Now the minute is changed from 14:00 to 14:05.

Press **Adjust button** to get back to Clock setting screen.

Switch from d 2 to d 3

Press **Select button** to switch to Stopwatch distance setup entering screen.

Press Adjust button to enter the distance setup for Stopwatch.

Distance setup for Stopwatch

Press the **Select button** to choose auto/ manual stopwatch function.

If Auto is chosen, press the **Adjust button** to exit the stopwatch setting function.

NOTE: Default:AUTO

Switch from a 3 to a 4

Press **Select button** to switch to Engine Oil Light Mileage setting screen.

Press **Adjust button** to enter the Engine Oil Light Mileage setting.

Maintenance Light Mileage Setting

Press the **Select button** to choose maintenance mileage ON or OFF.

NOTE: Default: OFF

If ON is chosen, press **Adjust button** to enter the maintenance mileage setting

Press the **Adjust button** to move the cursor to the digit that would like to set.

If OFF is chosen then press the **Adjust button** to exit the maintenance mileage setting.

Press Select button to switch the ODO setting. screen from a 4 to a 5

Press the **Adjust button** to enter the Backlight Brightness setting

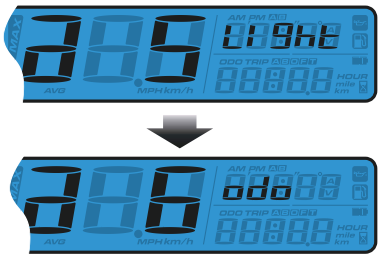
Backlight brightness

Press the **Select button** to adjust the brightness of the backlight

NOTE: Adjustable Range: 1 ~ 5

NOTE: Default: 5

Press the **Adjust button** to exist from the Backlight Brightness setting.



From **a 5** switch to **a 6** screen

Press **Adjust button** to enter the mileage setting.

ODO setting.

Press the **Adjust button** to enter the actual ODO viewing display (ODO).
Press the **Select button** to enter the User ODO setting (user).

Press **Adjust button** to enter the User ODO setting.

Press the **Adjust button** to back to ODO adjust function

Press **Select Button** to switch to ODO viewing adjusting function.

In Setting Screen, press and hold the both **Adjust** and **Select button** for 3 sec. to exist the setting.

CHECKS BEFORE AND AFTER USE

For safe driving and long vehicle life you should:

1 Check all fluid levels.

2 Check the correct operation of the brakes and brake pad wear (page 44).

3 Check pressure, general condition and thickness of tread (page 10).

4 Check that the spokes are properly tightened.

5 Check the tensioning of the chain (page 51).

6 Check the adjustment and the operation of all the cable controls.

7 Inspect all the nuts and bolts.

8 With the engine running, check the operation of the headlight, the rear and brake lights, the indicators, the warning lights and the horn.

9 Wash the motorcycle thoroughly after off-road use (page 57).

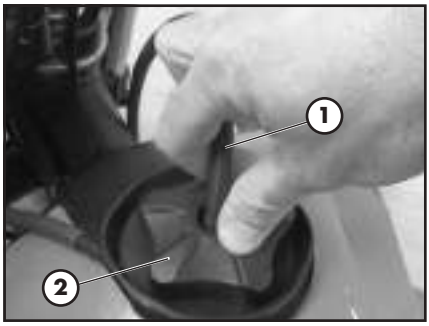
BREAKING IN

Breaking in takes approximately 1000 km/350 miles.
During this time:

- Avoid travelling at constant speed.
- Avoid turning the throttle more than 3/4 of the way.

WARNING:
After 1000km change the oil and perform all the checks detailed on page 59.

FUELLING



See page 16 for the fuel specifications.

Disconnect the ventilation pipe **1**.

To open the tank turn the cap **2** anticlockwise.

To close the fuel tank's cap, set it on the tank and crew it clockwise.

WARNING! Refuelling must be carried out with the engine switched off.

WARNING:
Fire hazard. Fuel is highly flammable.

Always stop the engine when refuelling and keep open flames and lighted cigarettes away.

Do not top up fuel while using a mobile phone.

Refuel in an open well ventilated area.

Pay special attention so that the fuel does not come into contact with hot parts of the vehicle. Immediately clean up any spilled fuel.

WARNING: Risk of poisoning.

Fuel is poisonous liquid and a health hazard.

Fuel must not come into contact with the skin, eyes, and clothing. Do not breathe in the fuel vapours. If contact occurs with the eyes, rinse immediately with plenty of water and seek medical advice. If contact occurs with skin, immediately clean contaminated areas with soap and water If fuel is swallowed, contact a doctor immediately. Change clothing that is contaminated with fuel.

WARNING: Environmental pollution hazard.

The fuel must not contaminate the ground water, the ground, or the sewage system.

STARTUP

Set the fuel tank tap to ON or RES (see page 18).

- Position the key to  (see page 21).
- Make sure the right switch on the handlebar is on  (page 19)
- Check that the gears are in neutral (page 20).
- Pull the clutch lever (page 18).

WARNING!
If you do not pull the clutch lever the vehicle will not start.

- Retract the stand (page 20).

WARNING!
If the stand is not retracted, the engine will stall when the gears are engaged.

ELECTRIC START (page 19):
Push the button until the engine starts. Do not press the button while the engine is running.

KICKSTART (page 20):
Depress the kick-starter with a sharp movement of the foot.

ATTENTION!
Once the pedal has been depressed, release it immediately. This avoids jolts to the entire ignition group and to the foot.

COLD STARTING:
Turn on the starter (page 19), when the engine is cold, start the vehicle, wait a few minutes, then move the starter back to its starting position.

ENGINE SHUT-DOWN

To shut-down the engine, proceed in one of the two following ways:

- turn the key to  (see page 21).
- press the button  on the switch unit (see page 19).

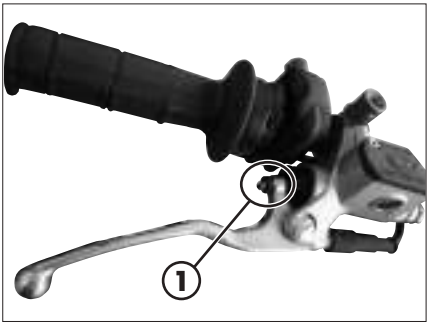
NOTE:
With the engine stopped, always set the fuel tap to OFF (page 18).

CHAPTER 3 ADJUSTMENTS

CONTENTS

KEY TO SYMBOLS

Tightening torque

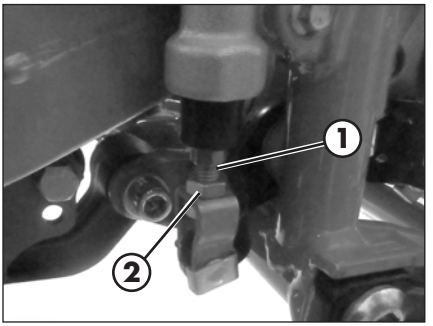


BRAKES

FRONT BRAKE

The front brake is disk type with hydraulic control.
Use the adjusting nut **1** to vary the intervention point.

WARNING: reduced play causes brake overheating leading to sudden lockup.

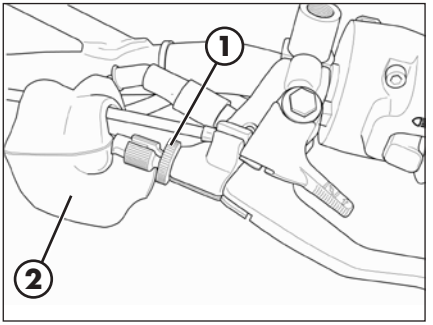


REAR BRAKE

The home position of brake pedal can be altered by turning adjusting screw **1**.

Adjust by loosening locknut **2** and adjusting screw **1**.

Retighten the locknuts **2** after completing the operation.



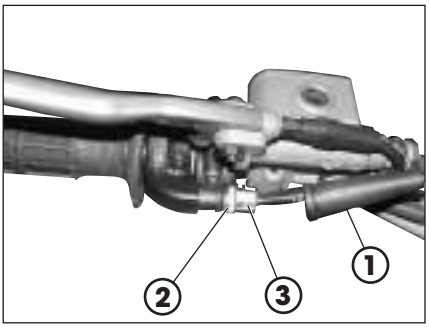
ADJUSTMENT OF CLUTCH LEVER

To perform the adjustment, lift rubber dust cover **1** and turn adjuster **2**.
The lever must have 5 mm of idle stroke.

ADJUSTMENT OF GAS CLEARANCE

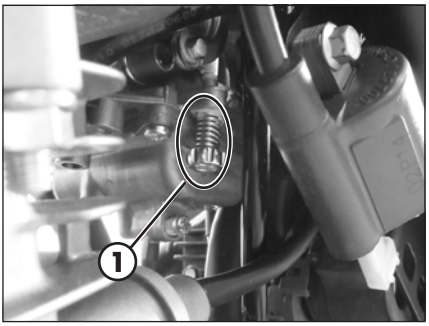
The throttle control cable should always have a 3-5 mm play. In addition, the idle speed should not change when the handlebars are fully rotated to the left or right.

Push back protective cap **1**. Loosen counternut **2** and turn adjusting screw **3**. Tighten the counternut and check that the throttle twist grip turns smoothly.



ADJUSTING THE IDLE SPEED

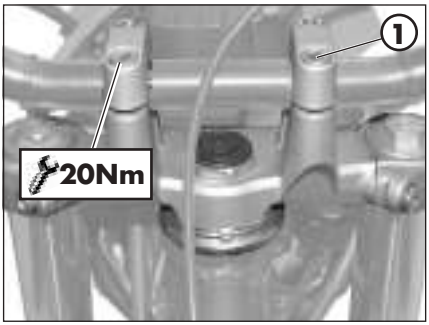
The slow running should be adjusted when the engine is hot. Connect an electronic revolution counter to the spark plug cable. Then use a screwdriver on register screw **1** to calibrate the minimum with 1700÷1800 rpm



HANDLEBAR

The handlebar can be adjusted by rotating it back and forth.

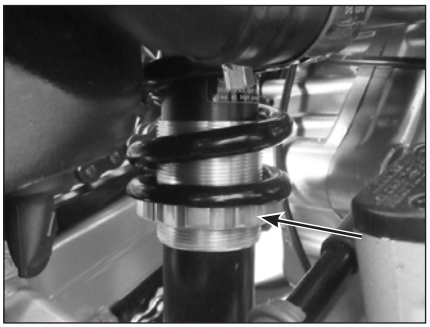
- To adjust the handlebar loosen screws **1**
- Position the handlebar according to requirements.
- Tighten to the torque indicated.

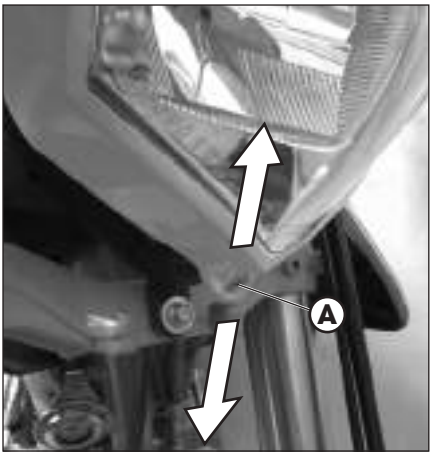


REAR SHOCK ABSORBER

ADJUSTING THE SPRING PRELOAD

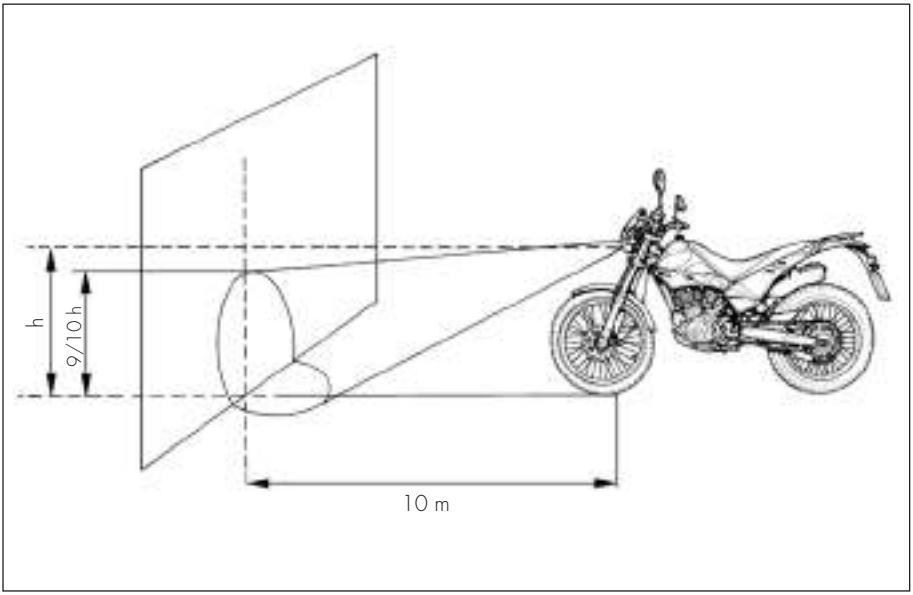
To adjust the spring preload, use the procedure described below. Rotate ring clockwise to increase the spring preload (and consequently the shock absorber preload) or anticlockwise to decrease it.





HEADLIGHT

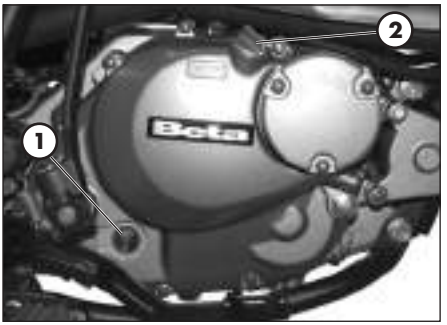
- The light beam is adjusted by unscrewing or tightening screw **A**.
  By tightening screw the light beam is lowered; loosening screw raises the light beam.
- Place the vehicle on level ground (but not on the stand) 10 metres from a vertical wall.
- Measure the height of the headlight centre above the ground and then draw a cross on the wall at 9/10 of the height of the headlight centre.
- Turn on the low beam, get on the motorbike and check that the headlight beam on the wall is slightly lower than the cross drawn previously. Where this is not the case, proceed to adjustment.
- Periodically check the direction of the beam. The beam can only be adjusted vertically.

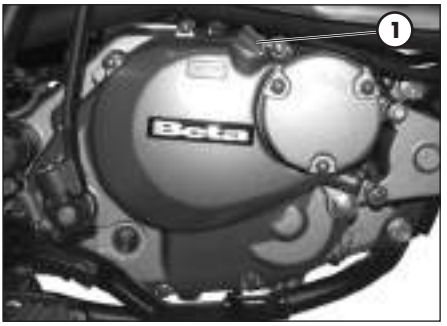


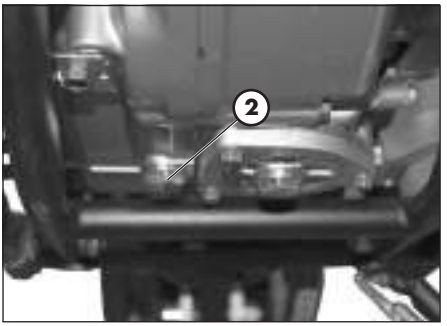
CHAPTER 4 CHECKS AND MAINTENANCE

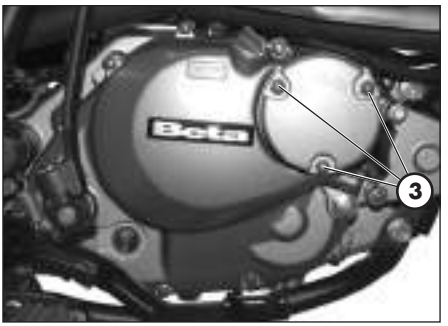
4

CONTENTS









ENGINE OIL

CHECK THE LEVEL

When engine is cold check the oil level by means of porthole **1**. The oil level must be always visible from the porthole. In contrary case restore the oil level through cap **2**.
Use the oil indicated on page 16 in the "Recommended lubricants and liquids" table.

REPLACEMENT

Always perform the replacement when engine is hot:
- Position the drive on a flat base ensuring stability.
- Place a container under the engine.
- Unscrew filler plug **1** and drain plug **2**.
- Drain all the oil from the crankcase.
- Close plug **2** .

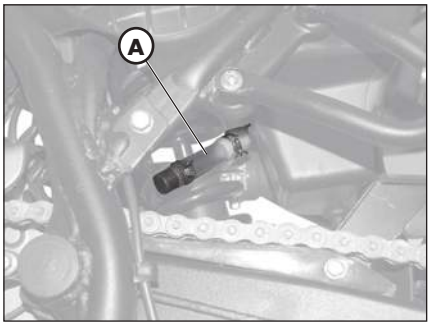
- Remove the oil filter cover after unscrewing the three nuts **3**.
- Remove the oil filter and replace it with a new one.
- Apply a thin film of engine oil to the filter cover O-ring before insertion.
- Fit the oil filter cover after fitting the spring and the O-ring, and then tighten the three fastening nuts **3**.

- Pour in the quantity of liquid indicated on page 16.
- Screw on filler cap **1** again.
- Start the engine and run at idle for a few minutes.
- Turn off the engine and wait for about one minute, then check the level and top up if needed.

WARNING:
Hot oil can cause severe burns!

ATTENTION:
Dispose of used oil in compliance with the regulations in force.

FUME COLLECTING TUBE

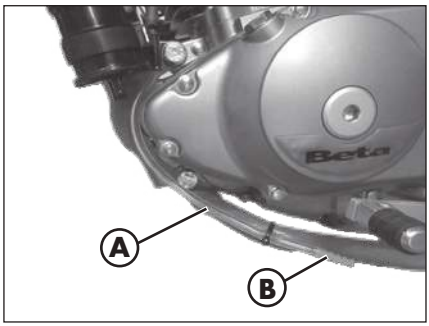


Fume collecting tube **A** is located as shown in the picture.
Should any oil be found in the tube, remove the cap at the lower end of the tube and drain the oil, or the mixture of oil and petrol, into a suitable container.

Note:
Empty the fume collecting tube every 3000 Km.

WARNING:
Disposal is to be made according to the regulations in force.

PETROL FUMES EXHAUST PIPE



Check the transparent pipe **A** periodically.

If petrol builds up, take cap **B** off and drain it.

WARNING:
Fire hazard. Fuel is highly flammable.

Pay special attention so that the fuel does not come into contact with hot parts of the vehicle. Immediately clean up any spilled fuel.

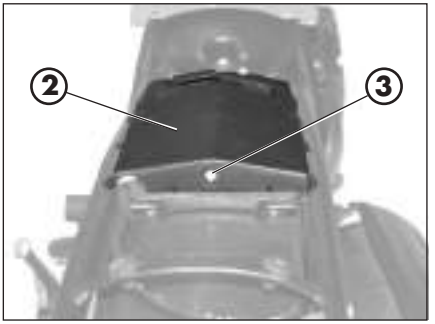
WARNING: Risk of poisoning.

Fuel is poisonous liquid and a health hazard.

Fuel must not come into contact with the skin, eyes, and clothing. Do not breathe in the fuel vapours. If contact occurs with the eyes, rinse immediately with plenty of water and seek medical advice. If contact occurs with skin, immediately clean contaminated areas with soap and water If fuel is swallowed, contact a doctor immediately. Change clothing that is contaminated with fuel.

WARNING: Environmental pollution hazard.

The fuel must not contaminate the ground water, the ground, or the sewage system.



AIR FILTER

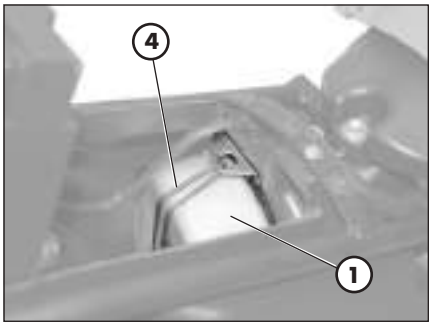
Check after every ride.

REMOVING AND FITTING AIR FILTER

Remove the saddle, the tank cover and the under-saddle plastic shield, as described in "Body disassembly and reassembly" on page 62.

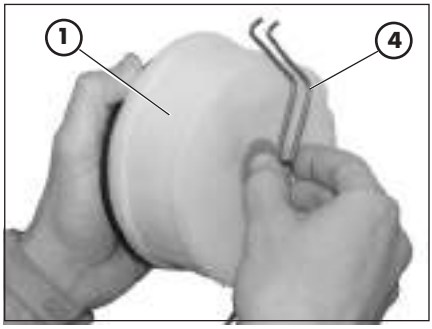
- Remove the cover **2** by loosening the screw **3**.
- Lift the battery holder, as shown in the figure.

- Release the filter holder **4**.
- Remove the filter unit **1**.



WARNING:
After every intervention, check that nothing has been left inside the filter box.

Reassemble following the dismantling sequence in inverse order.



WARNING:
Never use the vehicle if the air filter is not in place. The infiltration of dust and dirt can cause damage and considerable wear.

AIR FILTER CLEANING

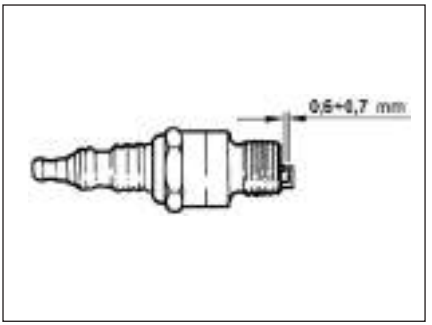
- Thoroughly wash the filter with water and soap.
- Dry the filter.
- Wet the filter with filter oil and then remove the excess oil to prevent it from dripping.
- If necessary also clean the interior of the filter box.

WARNING:
Do not clean the filter with gasoline or petrol.

NOTE:
If the filter is damaged, replace it immediately.
To replace, contact authorised Betamotor customer service.

WARNING:
Never use the vehicle if the air filter is not in place. The infiltration of dust and dirt can cause damage and considerable wear.

WARNING:
After every intervention, check that nothing has been left inside the filter box.



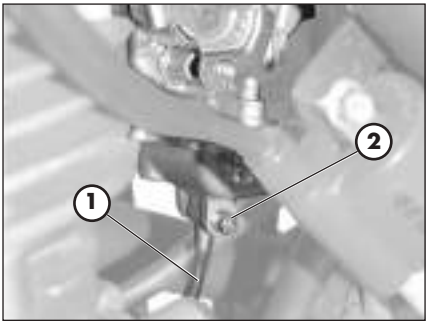
SPARK PLUG

Keeping the spark plug in good condition will reduce fuel consumption and increase engine performance.

To perform the check, simply slide off the electrical connection tube and unscrew the spark plug. Examine the distance between the electrodes with a feeler. This distance should be from 0.5 to 0.6 mm. If it is not, it may be corrected by bending the earth electrode.
Check as well that there are no cracks in the insulation or corroded electrodes. If so, replace immediately.

When replacing the spark plug, screw it in by hand until it stops, then tighten with a wrench.

WARNING:
Do not check while the engine is hot.



CARBURETTOR

DRAINING THE CARBURETTOR FLOAT CHAMBER

If the carburetor tank needs to be emptied, proceed as described. Perform the operation once the engine is cold.
Turn the fuel cock to OFF position (see page 19)
Place tube **1** in a container to gather the fuel that flows out.
Open drain screw **2** and drain completely the fuel.
Close the drain screw **2**.

WARNING:
Follow action on a cold engine.

WARNING:
Fire hazard! Fuel is highly flammable.

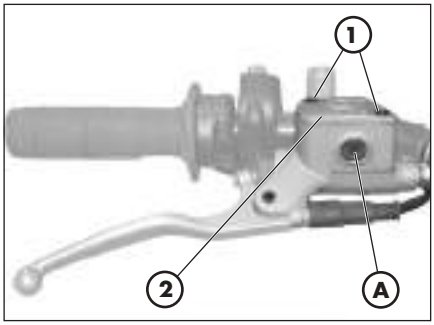
Always stop the engine when refuelling and keep open flames and lighted cigarettes away.

Immediately clean up any spilled fuel.

FRONT BRAKE

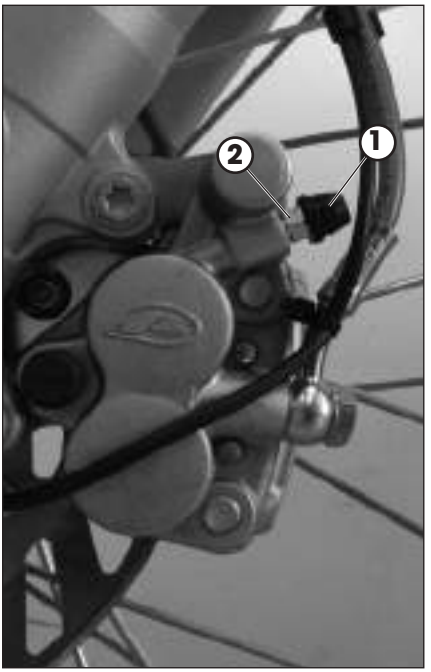
CHECK THE LEVEL OF THE FRONT BRAKE FLUID

Check the level of the brake fluid through sight **A**. The level of the fluid should never fall below the mark in the sight.
To restore the level of the brake fluid, loosen the two screws **1**, lift cap **2** and add brake fluid until its level is 5 mm below the upper rim of the reservoir.



Use the liquid indicated on page 16 in the "Recommended lubricants and liquids" table.

WARNING:
The brake fluid is extremely corrosive. Take care not to spill it on the paintwork.



BLEEDING THE FRONT BRAKE

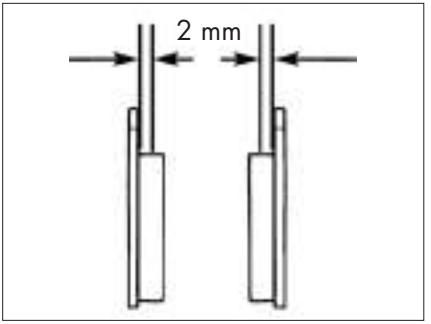
To bleed air from the front brake circuit, proceed as follows:

- Remove the rubber cap **1** from the valve **2**.
- Open the sump cap.
- Insert one end of a transparent tube into a container.
- Pump with the brake lever 2/3 times and keep the lever pressed.
- Unscrew the valve and let the oil drain.
- If are still visible in the tube repeat above operation until obtaining a continuous outflow of oil within no air bubbles.
- Close the valve and release the lever.

NOTE:
During this procedure, continuously top up the brake pump thank to replace the oil that is out flowing.

- Remove the tube.
- Replace the rubber cap.

Close the oil reservoir cap.



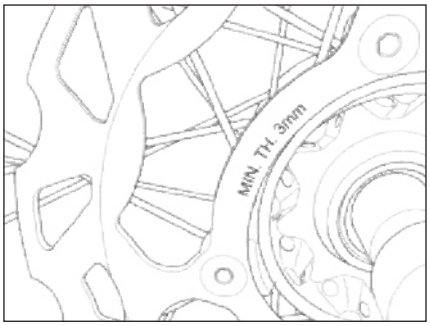
FRONT BRAKE LINING CONTROL

In order to verify the wear condition of front brake is enough to view the caliper from the bottom, where is possible to glimpse the brake lining tails which will have to show a brake of 2 mm in thickness. If the stratum is lesser let's start replacing them.

NOTE:
Perform the check according to the times shown in the table on page 59.

To replace, contact authorised Betamotor customer service.

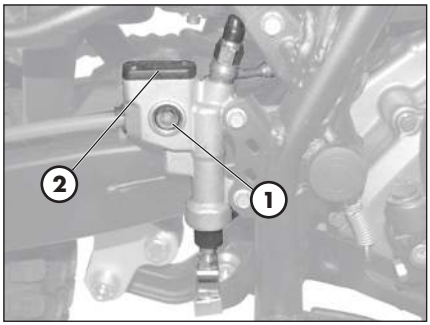
BRAKE DISC THICKNESS CONTROL



Periodically verify disc condition. In case signs of damage , veins, or deformations are present, proceed with replacement.
Verify disc thickness. The minimum thickness is engraved on the disc.
Once the limit is in proximity or has been reached, proceed with brake disc replacement.
For replacement, contact an authorised Betamotor after-sales service centre.

REAR BRAKE

CHECK THE LEVEL OF THE REAR BRAKE FLUID



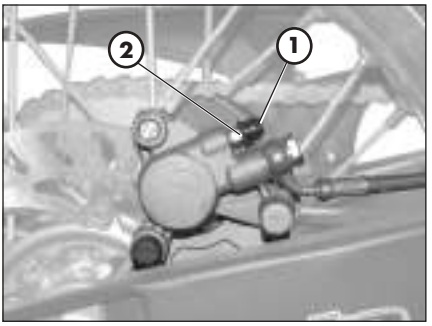
Check the level of the brake fluid through sight **1**. The level of the fluid should never fall below the mark in the sight.

RESTORING THE LEVEL OF THE REAR BRAKE FLUID

To restore the oil level, top up by means of oil filler cap **2**.

Use the liquid indicated on page 16 in the "Recommended lubricants and liquids" table.

WARNING:
The brake fluid is extremely corrosive. Take care not to spill it on the paintwork.



BLEEDING THE REAR BRAKE

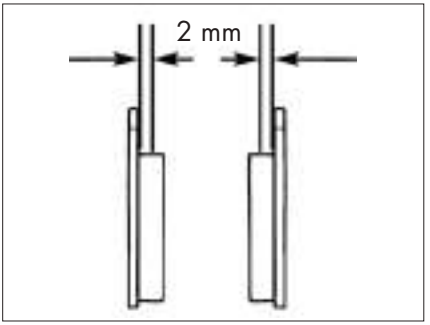
To bleed air from the rear brake circuit, proceed as follows:

- Remove the rubber cap **1** from the valve **2**.
- Open the sump cap.
- Insert one end of a transparent tube into a container.
- Pump with the brake lever 2/3 times and keep the lever pressed.
- Unscrew the valve and let the oil drain.
- If are still visible in the tube repeat above operation until obtaining a continuous outflow of oil within no air bubbles.
- Close the valve and release the lever.

NOTE:
During this procedure, continuously top up the brake pump thank to replace the oil that is out flowing.

- Remove the tube.
- Replace the rubber cap.

Close the oil reservoir cap.



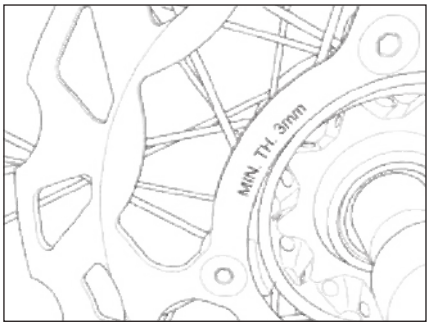
REAR BRAKE LINING CONTROL

In order to verify the wear condition of rear brake is enough to view the caliper from the back side, where is possible to glimpse the brake lining tails which will have to show a brake of 2 mm in thickness. If the stratum is lesser let's start replacing them.

NOTE:
Perform the check according to the times shown in the table on page 59.

To replace, contact authorised Betamotor customer service.

BRAKE DISC THICKNESS CONTROL



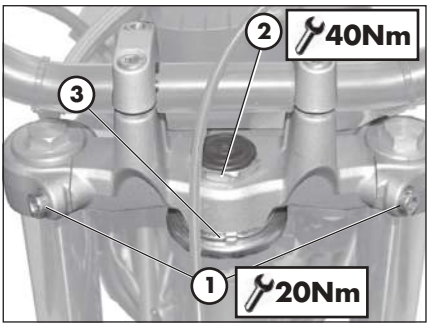
Periodically verify disc condition. In case signs of damage , veins, or deformations are present, proceed with replacement.
Verify disc thickness. The minimum thickness is engraved on the disc.
Once the limit is in proximity or has been reached, proceed with brake disc replacement.
For replacement, contact an authorised Betamotor after-sales service centre.

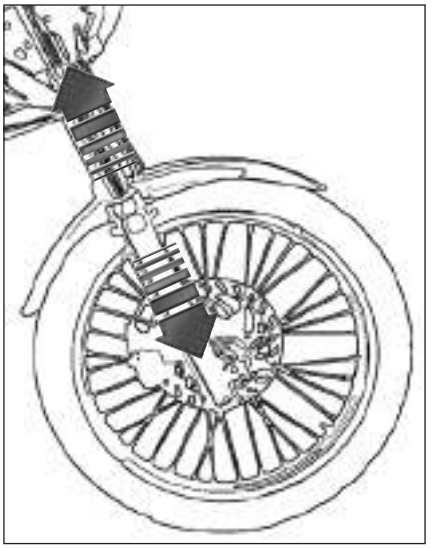
CHECK AND ADJUSTMENT OF STEERING PLAY

Periodically check the play in the steering sleeve by moving the fork back and forth as shown in the figure. Whenever you feel play, adjust as described below:

- Loosen the screws **1**
- Loosen nut **2**
- Reduce the play by turning ring **3**

Tighten the bolts to the prescribed torque values.



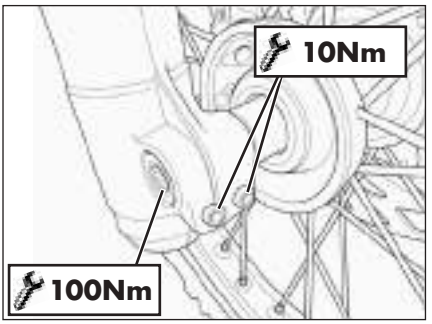


FRONT WHEEL

TIGHTENING

Following removal of the wheel:

Compress and release the fork 3-4 times.



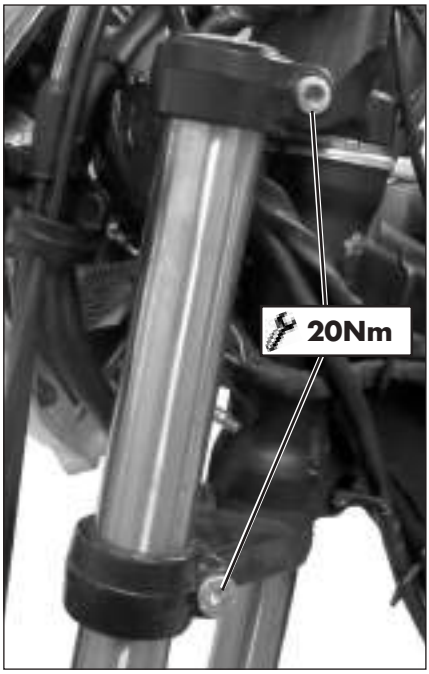
- Tighten the wheel bolt and the screws of the foot-leg.

FORK

To maintenance refer at an authorized service centre Betamotor.

To check the tightening torques see as shown in the figure.

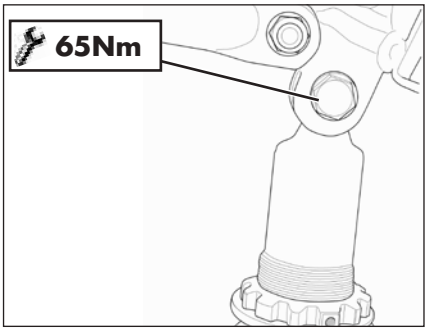
WARNING:
Tightening of the screws should be carried out by adjusting the torque wrench to the stability torque with repeated tightening until stability torque has been achieved.

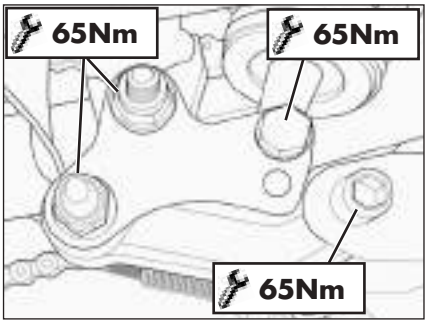


REAR SUSPENSION LEVERAGE

In order to guarantee optimal operation and duration over time of the progressive leverage of the rear suspension, it is recommended to periodically check correct tightness of nuts and bolts.

Verify that suspension nuts and bolts are at the indicated torque.





TYRES

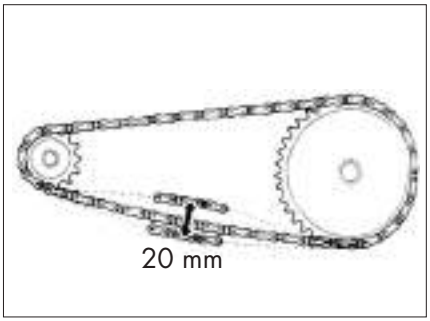
Only fit tyres approved by BETAMOTOR. Unsuitable tyres can adversely affect the road holding of the vehicle.

- To protect your safety, immediately replace any damaged tyres.
- Slick tyres adversely affect the road holding of the vehicle, especially on wet roads and in off-road riding.
- Insufficient pressure results in abnormal wear and overheating of the tyres.
- The front and rear tyres must have the same tread design.
- Always measure the inflating pressures when the tyres are cold.
- Keep the tyre pressures within the prescribed range.

CHAIN

Checking the drive chain periodically to ensure longer chain life.
Always keep it lubricated and clean of deposited dirt.
If play exceeds 20 mm adjust the chain.

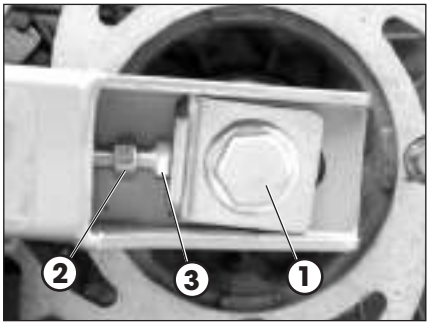
Take special care in preventing the lubricant from coming into contact with the rear tyre or brake disc, otherwise the tyre grip and the action of the brake would be greatly reduced, making it very difficult to control the vehicle.

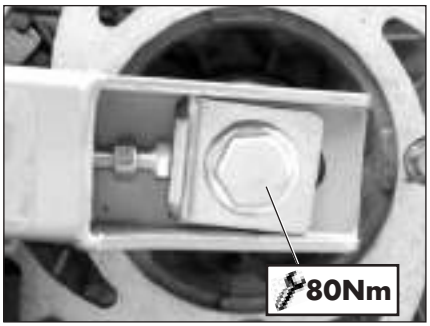


CHECK AND ADJUST TIGHTENING CHAIN

Position the vehicle on a flat base ensuring stability.
If the chain play exceeds 20 mm, tension the chain by following these steps:

- Loosen the pin **1**
- Loosen the counternut **2**
- Adjust by turning screw **3**
- Use the same procedure on the other side.
- Check wheel alignment.
- Check the tension of the chain.
- If chain clearance is not as expected, proceed to readjustment.
- Tighten the pin to the torque indicated.
- Retighten counternut **2**.

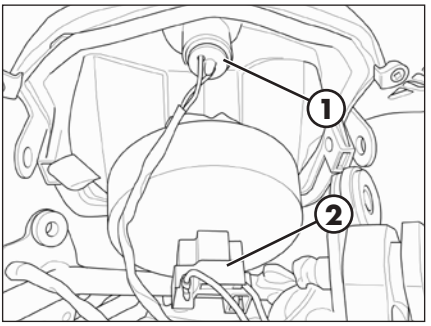


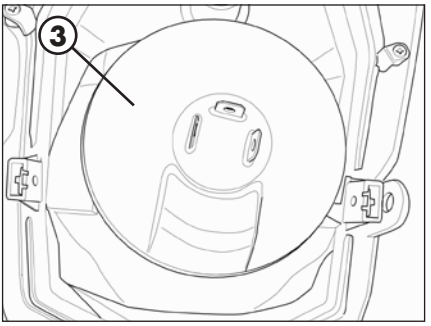


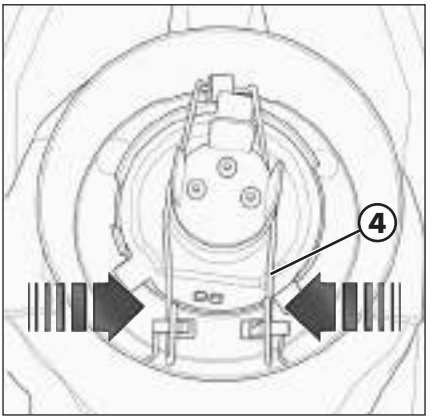
HEADLIGHT

Keep the headlight glass clean at all times (see page 57).

Periodically check the correct angle of the light beam (chapter 3).







REPLACING THE HEADLIGHT BULBS

Remove the fixing screws and move forward the lamp holder front cowl.

Carefully remove lamp **1** complete with the lamp holder.

Replace the day/position **1** light by removing the lamp from the lamp holder and replacing it with a new one (page 16 for the type of lamp).

Replace the high/low beam light as follows:

-disconnect connector **2**;

-remove the rubber cap **3**;

-unhook spring **4** and remove the lamp..

Replace with a new lamp (page 16 for lamp info).

Warning: do not touch the bulb so as to avoid compromising the efficiency of the lamp.

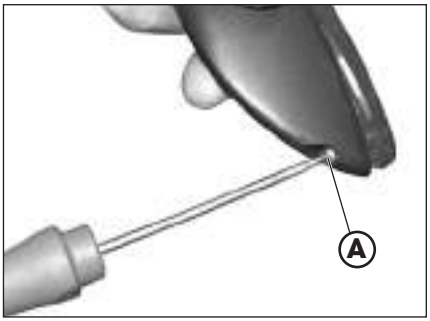
To refit, follow the procedure above but in reverse order.

NOTE: When you have completed this operation, check the direction of the beam (page 36).

TURN INDICATORS

To reach the bulb, remove the glass cover by loosening screw **A**.

Remove the bulb from the connectors and carry out replacement.



TAIL LIGHT

Keep the headlight glass clean at all times (see page 57).

The LED tail light is sealed. In the case of burnout of one or more LEDs it is necessary to replace the entire group.

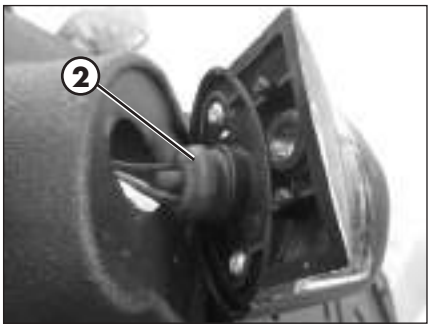
To replace, contact authorised Betamotor customer service.

PLATE LIGHT

To replace the plate light:
- remove screw **1**;
- remove the unit from the mudguard;

- Remove the entire lamp holder **2** from the license plate light;
- Remove the bulb from the lamp holder.
- Replace with a new lamp (page 16 for lamp info).

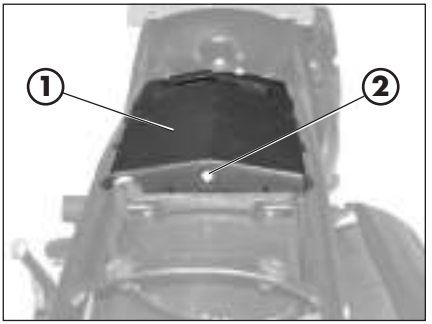
To refit, follow the procedure above but in reverse order.



BATTERY

Battery is located under the saddle and requires no maintenance.

Keep the battery terminals clean. If necessary, protect them with a thin film of acid-free grease.



REMOVAL

Remove the saddle, the tank cover and the undersaddle plastic shield, as described in "Body disassembly and reassembly" on page 62 .

Remove the cover **1** by loosening the screw **2**.

Release rubber band.

FIRST disconnect the negative connector (black) from negative (-) pole and THEN positive connector (black) from negative (+) pole.

Remove the battery.

When fitting the battery, insert it with the terminals as shown in picture.

FIRST connect the positive connector (red) from positive (+) pole and then negative connector (black) from negative (-) pole.

⚠ WARNING:
Exercise extreme caution if, for any reason, the electrolyte (sulphuric acid) should come out of the battery. The electrolyte can cause serious burns. In case of contact with the skin, rinse abundantly with water.

Should the electrolyte come into contact with the eyes, rinse with water for at least 15 minutes and immediately seek medical attention.
Even though the battery is sealed, there is a possibility that explosive gases may leak out.
Keep sparks and open flames away from he battery.
Keep spent batteries out of the reach of children and dispose of them as prescribed by law.
Do not remove the protections.
When installing the battery, be sure to observe the polarity of the terminals.

INACTIVITY

If the vehicle is not going to be used for a long time, remove the battery and charge it every 15 days using a suitable charger.

Store the battery in a dry place at a temperature of 5 to 35°C and out of the reach of children.

CHARGING THE BATTERY

The operations to check the status of battery charge as well as the operation of battery recharging or maintenance can be performed by removing the battery from the vehicle or by connecting the negative (-) to the safe earthing of the vehicle and the positive (+) to the specific connector visible in figure.
In this case the test should be carried out with the key set in position.

Using an open-circuit multimeter (10-12 hours after the activation), check that the voltage is greater than 12.6 V. If it is lower, it is advisable to recharge the battery.

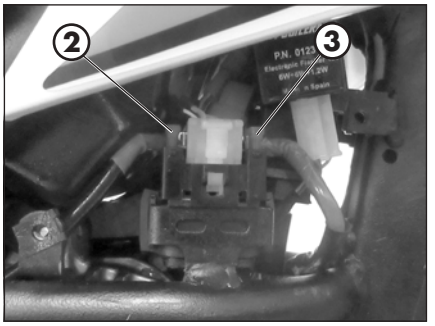
Based on the type of charger available, charge the battery using either of the following procedures:

- Constant voltage (14.4-15 V) - Charge the battery for about 12 hours. Check the voltage 10-12 hours after the end of recharge as described above.
- Constant current: Charge battery at 0.5-0.8 A until the voltage between the terminals stabilizes at ~14.5 V.

WARNING:
The battery is sealed. When recharging it, do not remove the seal nor add any liquid.

FUSES

The vehicle has a fuses set located under the right side panel.
To reach it:
- remove the right side panel **1** (page 62).
- remove the protective cap.



Fuse **2** (10A) protects the electrical services circuit.
Fuse **3** (10A) is a spare one.
In case of fuse failure:
- the vehicle stops/does not start.
- all the electrical services are inactive.

CLEANING THE VEHICLE

GENERAL PRECAUTIONS

WARNING: Do not clean your vehicle with a high-pressure device with a strong jet of water. Excessive pressure can reach electrical components, connectors, flexible cables, bearings, etc and can damage or destroy them.

WARNING: Wash motorbikes frequently with cold water that are used near the sea (salty air) and on roads subject to salt spreading in winter. Cover with a film of oil or silicone spray unpainted parts and the most exposed parts such as wheels, forks and swingarm. Do not treat rubber parts and brakes.

When cleaning, avoid direct exposure to sunlight.

Close off the exhaust system to prevent water from entering.

Avoid directing the jet of water onto the air filter box cover and the throttle body.

WASHING MODE

Use water jet to soften the dirt and mud accumulated on the paintwork, then remove them with a soft bodywork sponge soaked in water and shampoo. Subsequently rinse well with water, and dry with air and cloth or suede leather.

Detergents pollute water. Always wash the vehicle in areas equipped for collection and purification of the washing liquids.

AFTER WASHING

Proceed to the emptying of the filter box using the appropriate ventilation and drying.

After cleaning, ride a short distance until the engine reaches operating temperature.

WARNING: braking effect is reduced with wet brakes. Operate the brakes cautiously to allow them to dry.

Push back the handlebar control covers, so that water can evaporate.

When the bike is completely dry and cooled down, lubricate all moving parts.

Treat all plastic and painted components with non-aggressive detergents or products that are specific for the care of the motorcycle.

To prevent malfunction of the electrical system, treat electric contacts and switches with electrical contact spray.

ATTENTION: any oxidation of electrical contacts may result in serious malfunctioning to the power supply system.

PROLONGED INACTIVITY

A few simple operations should be performed to keep the vehicle in good condition whenever it is to remain inactive for a long period (e.g. during the winter):

- Thoroughly clean the vehicle.
- Reduce the tyre pressures by approximately 30 percent, and if possible raise the tyres off the ground.
- Remove the spark plug and pour a few drops of engine oil into the spark plug hole. Make the engine turn a few times by operating the kick-start (where available) and then replace the spark plug.
- Cover the unpainted parts, excepting the brakes and the rubber parts, with a film of oil or spray silicone.
- Ensure the battery is always charged.
- Protect the vehicle with a dust cover.
- Drain the carburetor tank as described on page 42.

AFTER PROLONGED INACTIVITY

- Restore the tyre inflating pressures.
- Check the tightening of all the screws having an important mechanical function.
- Start the vehicle for the first time by means of the (kick-start).

SCHEDULED MAINTENANCE VEHICLE

		End of running-in **1.000** Km	Coupon **1** **5.000** Km - **12** months	Coupon **2** **10.000** Km - **12** months	Coupon **3** **15.000** Km - **12** months	Coupon **4** **20.000** Km - **12** months	Coupon **5** **25.000** Km - **12** months	Coupon **6** **30.000** Km - **12** months	Coupon **7** **35.000** Km - **12** months	Coupon **8** **40.000** Km - **12** months	Coupon **9** **45.000** Km - **12** months
Engine	Spark plug		**C**	**S**	**C**	**S**	**C**	**S**	**C**	**S**	**C**
	Engine oil filter	**P**	**P**	**P**	**P**	**S**	**P**	**S**	**P**	**S**	**S**
	Clutch	**C**	**C**	**C**	**C**	**S**	**C**	**C**	**C**	**S**	**C**
	Valve clearance	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Engine oil and oil filter	**S**	**S**	**S**	**S**	**S**	**S**	**S**	**S**	**S**	**S**
	Idling setting	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
Vehicle	Rear shock absorber	**C**		**C**		**C**		**C**		**C**	
	Battery		**C**	**C**	**C**	**S**	**C**	**C**	**C**	**S**	**C**
	Nuts and bolts	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**	**T**
	Steering bearings and steering play	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Air filter (paper)	Clean every 1000 Km		**S**		**S**		**S**		**S**	
	Fork	**C**		**C**		**C**		**C**		**C**	
	Electrical system/lights	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Braking system	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Brake fluid (renew every 2 years)	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Tyre condition and pressure	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Drive chain tension and lubrication (every 1000 km)	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Brake piping (replace every 2 years)	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**
	Fuel piping (replace every 2 years)	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**

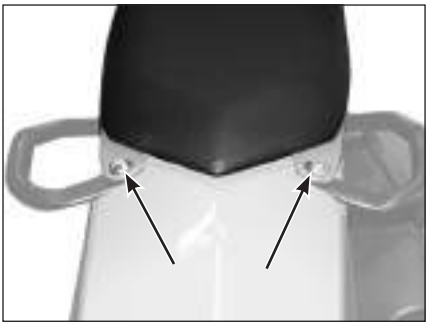
* Tightening recommended after each off-road ride.

Key

C **Check** (Clean, adjust, lubricate, replace as necessary)
S **Replace/renew**
R **Adjust**
P **Clean**
T **Tighten**

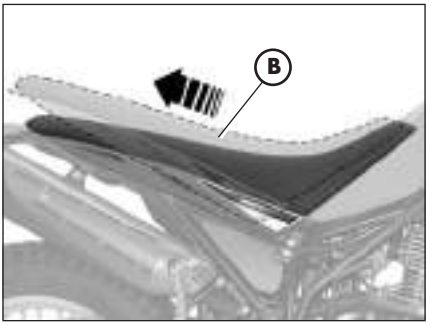
CHAPTER 5 BODY DISASSEMBLY AND REASSEMBLY

CONTENTS



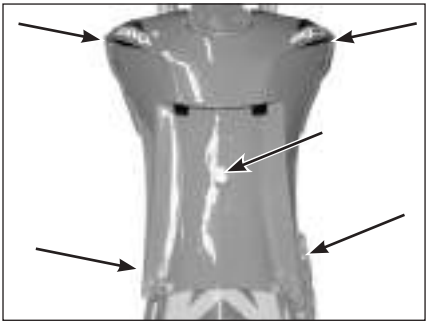
REMOVAL AND REFITTING OF THE SADDLE

Remove the screws indicated in figure.



Remove the saddle towards the rear of the motorcycle.

Reassemble proceeding in the reverse order.



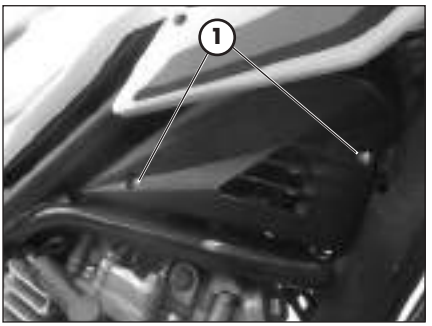
REMOVAL AND REFITTING OF THE TANK FAIRING

After removing the saddle it is possible to remove the tank fairing.

Remove the screws indicated in figure.

Remove the tank fairing.

Reassemble proceeding in the reverse order.



REMOVAL AND REFITTING RIGHT SIDE PANEL

To remove the right side panel, unscrew the two screws **1**.

Reassemble proceeding in the reverse order.

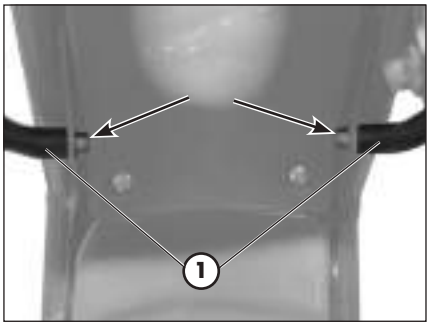
REMOVAL AND REFITTING OF THE PASSENGER HANDLES

After removing the saddle it is possible to remove the two passenger handles **1**.

Remove the screws indicated in figure.

Remove the handles.

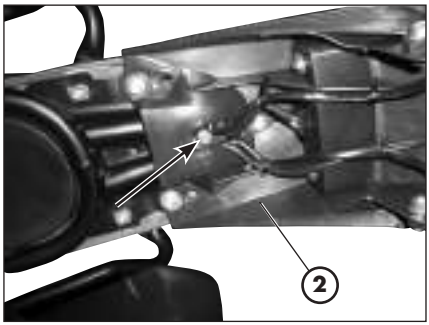
Reassemble proceeding in the reverse order.



REMOVAL AND REFITTING OF THE UNDER-SADDLE PLASTIC SHIELD

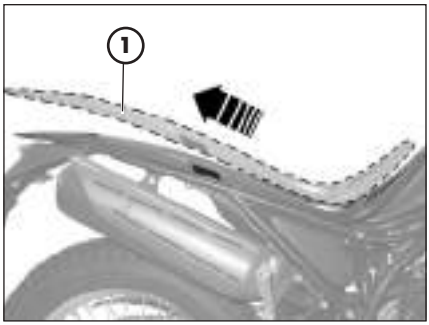
After removing the saddle, the tank cover and the passenger handles, the under-saddle plastic shield **2** can be removed.

Remove the screw indicated in figure.



Remove the under-saddle **1** towards the rear of the motorcycle.

Reassemble proceeding in the reverse order.



WARNING:
If these parts are improperly reassembled, they might suddenly come off while driving, and the driver might lose control of the motorbike.

CHAPTER 6 TROUBLESHOOTING

CONTENTS

PROBLEM	CAUSE	REMEDY
The engine starts but the telltale "MIL" lights on	Engine management system fault	Contact authorised BETAMOTOR customer service
The electric starter does not turn	Key in position	Move the key on
	Flat battery	Check the battery
	Blown fuse	Replace
	Defective relay	Contact authorised BETAMOTOR customer service
	Defective starter motor	Contact authorised BETAMOTOR customer service
The engine turns over but will not start	Fuel cock in OFF position	Move the fuel cock to ON or RES position
	Dirty carburettor jets	Contact authorised BETAMOTOR customer service
	Spark plug oily or wet	Clean and dry the spark plug, replace if necessary
	Spark gap wrongly adjusted	Restore the spark gap
	Fault in the ignition system	Contact authorised BETAMOTOR customer service
The power delivered by the engine is insufficient	Tank vent obstructed	Check the tank vent
	Fuel system dirty	Contact authorised BETAMOTOR customer service
	Air filter dirty	Clean air filter
	Defective ignition system	Contact authorised BETAMOTOR customer service
The motor stops or splutters	Lack of fuel	Move the fuel cock to RES
		Refuel
	Poor carburettor seal	Make sure that the hose between carburettor and engine is intact
	Loose or oxidized connector or ignition coil	Check the connector. Clean and treat with specific spray
Engine overheats	Insufficient air flow	Stop the engine when vehicle is stationary
	Silencer partly clogged	Contact authorised BETAMOTOR customer service
	Carburation too lean	Contact authorised BETAMOTOR customer service
Front braking poor	Brake pads worn	Contact authorised BETAMOTOR customer service
	Air or humidity in the hydraulic circuit	Contact authorised BETAMOTOR customer service
Rear braking poor	Brake pads worn	Contact authorised BETAMOTOR customer service
	Air or humidity in the hydraulic circuit	Contact authorised BETAMOTOR customer service

ALPHABETICAL INDEX